



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

REASONABLE ACCOMMODATION FOR STUDENTS WITH DISABILITIES/LEARNING DISABILITIES: PERSPECTIVES OF UNIVERSITY FACULTY, STAFF AND STUDENTS

By

Screen Talal Bakri

A Dissertation Submitted to Trinity College Dublin
In Fulfilment of the Requirements for
the Degree of Doctor of Philosophy


Supervised by
Prof. Michael Shevlin

School of Education
Trinity College Dublin
2019

DECLARATION

I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and that it is entirely my own work .

I agree to deposit this thesis in the University's open access institutional repository or allow the library to do so on my behalf, subject to Irish Copyright Legislation and Trinity college library conditions of use and acknowledgement.



Sreen Talal Bakri

SUMMARY

This study contributes to higher education and disability studies by advancing our understanding of the treatment afforded to students with disabilities (SWDs) and students with learning disabilities (SLDs) in post-secondary education.

Against a background of multiple international legislative and post-secondary education environments as they pertain to SWD/SLDs, the central research questions focus on understanding (1) the extent to which female faculty at two prestigious institutions of higher education, King Saud University (KSU) and Princess Nourah University (PNU), are willing and able to provide reasonable accommodations and (2) the perspectives of three key groups in regard to how well such students are being served primarily in relation to the faculty's attitudes toward them, the views of Centre of Disability Services (CDSS) management in regard to the faculty's willingness to and effectiveness in providing accommodations, and the views of the SWD/SLDs on this same issue.

A mixed-methods research methodology was used. First, after a pilot study, a questionnaire survey with open-ended and closed-ended questions using a Likert-type scale was distributed by email to collect data from all the faculty teaching at the College of Education or the College of Arts at KSU (305 faculty) and PNU (352). A total of 58.9% responded (387 surveys were completed) ($n = 176$ from KSU and $n = 211$ from PNU). Faculty at these colleges were targeted, as most SWD/SLDs at these universities, at least, are studying through those colleges. The faculty represented all ranks from lecturer to full professor and were not selected according to any other criteria.

Additional information was subsequently collected from 14 faculty members via a semi-structured interview format. Similarly, 12 SWD/SLDs registered with their Centre for Disability Support Services (CDSS) and eligible for reasonable accommodations were interviewed, as were two members of CDSS management. Based on quantitative data

analysis (ANOVA) in which the faculty's willingness to provide reasonable accommodations was considered in relation to a number of faculty variables, age, nationality, experience teaching SWDs/SLDs, rank, and training relevant to teaching SWD/SLDs, a number of major findings are presented. No findings of significance arose in relation to the variables. However, based on qualitative data analysis (Thematic analysis) the most significant findings related to the faculty as a whole.

Faculty willingness and training. Most faculty members who have direct interactions with SWD/SLDs report being very willing to provide reasonable accommodations. Yet, faculty do not have sufficient training to identify which reasonable accommodation to provide. Further, most faculty have insufficient knowledge of the disability legislation pertaining to the educational rights of SWD/SLDs, which means that the latter are not receiving reasonable accommodations as often as or to the extent that the legislation allows. Most faculty members reported that they lack a relationship with the CDSS; they felt the CDSS should provide training and ensure that they are aware of relevant legislation. There is also disagreement over the best course of action for given students between the centre and the faculty.

SWD/SLDs: Most SWD/SLDs reported that CDSS is valuable in supporting their education. However, many reported that the faculty were not sympathetic to their needs and required training in this regard. Further, they reported being unhappy with admission policies that prevent them from studying in some departments.

If the two universities are representative, most Saudi universities do not have sufficient services for SWD/SLDs. Despite considerable Ministry of Education funding for this purpose, SWD/SLDs are still being neglected.

ABSTRACT
**REASONABLE ACCOMMODATION FOR STUDENTS WITH
DISABILITIES/LEARNING DISABILITIES: PERSPECTIVES OF
UNIVERSITY FACULTY, STAFF AND STUDENTS**

Sereen Talal Bakri
Doctor of Philosophy
School of Education
Trinity College Dublin, 2019

In recent years, in Saudi Arabia, students with disabilities (SWDs) including students with a learning disability (SLD) have been enrolling in post-secondary education in growing numbers. The growth of this population within the overall student body presents new challenges at institutions of post-secondary education given that collaboration between faculty members and disability services staff is necessary if the needs of these students are to be accommodated.

It is mandated by law that post-secondary educational institutions must provide dedicated support services for SWD/SLDs. This requirement is set out in the Disability Code and the Regulation of Students with Disabilities' Rights in Higher Education Institutions in the Gulf Cooperation Council (GCC), which stipulates that these students must have access to educational programs equal to that afforded to their peers. Further, SWD/SLDs should be provided with other forms of services to minimize disadvantages arising from a disability.

The purpose of this research is to analyze feedback on this topic collected from three target groups: female faculty members, female SWD/SLDs, and female Centre for Disability Support Services (CDSS) staff. A survey with open-ended and closed-ended questions and semi-structured interviews were used to collect their feedback.

Female faculty members of various academic seniority levels ranging from lecturer to full professor (non-nationality-specific) at King Saud University (KSU) and Princess Nourah University (PNU) were the first group targeted. The faculty members belong to the Education and Art Schools, where most SWD/SLDs are enrolled. Surveys were distributed to all 305

female faculty members at KSU and all 352 at PNU, of whom 58.9% responded (387 surveys were completed) (n = 176 from KSU and n= 211 from PNU). To obtain greater insight, fourteen faculty members were interviewed regarding their experience in relation to providing reasonable accommodations to SWD/SLDs.

Female SWD/SLDs from these same two universities comprised the second target group. To be included in this research, the students had to be registered with their Centre for Disability Support Services (CDSS), and they had to be eligible for reasonable accommodations in the academic context. Six students from each university were interviewed in order to gain insight into their experiences in post-secondary education and the challenges they face in that context.

Two members of CDSS management were the third group targeted. These staff members are charged with providing information regarding the support services the CDSS provides to SWD/SLDs and creating training programs for other faculty and staff, often with a focus on the faculty.

The findings of this study reinforce Bronfenbrenner's ecological systems theory. It was observed that faculty members who directly interact with SWD/SLDs report being very willing to provide reasonable accommodations. However, the majority felt that they did not have adequate formal training to confidently meet the needs of the SWD/SLDs in their classrooms. A deficiency was also found in faculty members' awareness and knowledge of disability legislation addressing the rights of SWD/SLDs, which is often a barrier to the provision of reasonable accommodations. Another issue identified in this study is the existence of a communication gap between faculty members and CDSS staff. For example, the faculty who participated in the interviews conducted for this study reported that the CDSS could do much more in regard to providing training courses and ensuring that the faculty are aware of relevant legislation.

However, the majority of SWD/SLDs who were interviewed commended the services they had received directly from the CDSS. Yet, these students also stated that faculty members often lack understanding of both their disabilities and their specific educational needs—which are related issues that should be addressed. The students also raised another concern: They stated that some courses are deemed unsuitable for SWD/SLDs such that they still cannot enrol in all the courses open to their peers.

This study presents the conclusion that, despite significant funding, most of Saudi Arabia's institutions of higher education still lack adequate services for SWD/SLDs, which means that this student population is not adequately supported academically. There is vast room for improvement, especially regarding female students. Hence, it is proposed that disability legislation should become a requirement for all institutions of higher education in order to safeguard these students' rights and secure equality for students of both genders.

DEDICATION

To those whom I carry in my heart;

My greatest teacher and compassionate heart, my Mother, Maryam Rajeh;

My idol, whom I have always aspired to be like, my father, Dr Talal Bakri;

My twin spirit and companion on the path I take, my husband, Dr Omar Agail;

My brothers and sisters, Dr Haytham, Ayman, Suha, Hasan, and Semat;

My three stars, my dear children, Yara, Mohnnad, and Leen.

Thank you all for enabling me to complete my doctoral degree, as I could not have done it

without your prayers, love, and support.

I love you all more than you will ever know.

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to Allah the Almighty, the greatest of all, for his help and for giving me the strength to endure all stages of my personal and academic life.

I wish to extend my special thanks and appreciation to those who have been true supporters and who have helped me to accomplish this goal of completing my dissertation.

My sincere gratitude also goes to my supervisor and committee chair, Professor Michael Shevlin, who has been a fantastic and patient guide. He has been very supportive and encouraged me to do my best and not give up. I can never thank him enough for his motivation and inspiration. My good fortune in having such a supervisor is beyond words.

I would also like to thank my committee members (Prof Conor Mc Guckin, Dr Joyce Senior, and Dr Joanne Banks) for their technical guidance, valuable recommendations, and insightful advice pertaining to this study and for their assistance with my professional development.

Further, I am grateful to the Saudi Ministry of Education and to King Khalid University for giving me the opportunity to continue my educational career by offering me a full scholarship to obtain my doctorate. I hope to continue to fulfil and exceed their expectations of me. I owe them my sincerest thanks for this opportunity.

Finally, my warmest thanks must go to my family. I heartily acknowledge my parents, Talal and Maryam, who have always loved me unconditionally. They have been a constant source of support and encouragement during dark days along this path. I thank them from the bottom of my heart for their prayers. Also, my heartfelt and profound thanks go to my beloved husband, Omar, who has always been there for me as we have taken this journey together. He has given me the extra strength needed to overcome all the challenges of the doctoral degree. Without his support, it would not have been possible. I must also mention

the light of my life, my beautiful children, Yara, Mohnnad, and Leen, they have given me so much joy and in doing so inspired me to achieve my dreams. I trust that my hard work will be an inspiration to them, in turn, as they grow up.

TABLE OF CONTENTS

		Page
DECLARATION-----		I
SUMMARY-----		II
ABSTRACT-----		IV
DEDICATION -----		VII
ACKNOWLEDGMENTS-----		VIII
LIST OF TABLES-----		XIII
LIST OF FIGURES-----		XIV
LIST OF APPENDICES-----		XV
 CHAPTERS		 Page
I	INTRODUCTION-----	1
	Introduction-----	1
	Purpose of the Study-----	3
	Significance of the Study-----	4
	Theoretical Framework-----	5
	Limitations-----	15
	Research Questions-----	16
	Definition of Terms-----	17
	Organization of the Study-----	19
	Summary-----	20
II	BACKGROUND OF THE KINGDOM OF SAUDI ARABIA---	21
	Introduction-----	21
	Background of the Kingdom of Saudi Arabia-----	21
	History of General Education in the Kingdom of Saudi Arabia---	23
	Special education in Saudi Arabia-----	26
	Background of Higher Education in the Kingdom of Saudi Arabia-----	28
	Saudi Women in Higher Education-----	29
	Summary-----	32
III	LITERATURE REVIEW-----	33
	Introduction-----	33

	Global Models and Disability Classifications-----	33
	Overview of International Disability Legislations-----	41
	Key International Disability Legislation in the United States, the Republic of Ireland, and Saudi Arabia-----	43
	Students with Disability (SWD) in post-secondary Education----	53
	Women with Disabilities at the post-secondary level-----	57
	Students with Learning Disability (SLD)-----	58
	Students with Learning Disabilities (SLDs) at the Post- Secondary Level-----	62
	Centres for Disability Support Services (CDSS) in post- secondary Institutions-----	65
	Reasonable Accommodation-----	69
	Providing Reasonable Accommodations in Post-Secondary Institutions-----	72
	Willingness of Faculty Members to Provide Reasonable Accommodation-----	73
	Factors that Affect Faculty Members' Willingness to Provide Reasonable Accommodation-----	75
	Previous Surveys Instruments to Measure Faculty Member's Willingness to Provide Reasonable Accommodation-----	86
	Perspectives of SWDs and Students with an SLD on the Effectiveness of Accommodation-----	90
	Summary-----	94
IV	RESEARCH METHODOLOGY-----	96
	Introduction-----	96
	The Key Research Issue-----	96
	Purpose of the Study-----	97
	Research Questions-----	98
	Targeted Population-----	99
	Research Design-----	100
	Survey Instrument-----	103
	Validity and Reliability of Whisenhunt's Survey-----	103
	Preparing the KSA-SBAKRI Research Instrument-----	104
	Research Instrument (KSA_SBAKRI) -----	106
	Validity of the KSA-SBAKRI Survey in the Pilot Study-----	109
	Reliability of the KSA-SBAKRI Survey in the Pilot Study-----	111
	Data Collection-----	112
	Data Analyses-----	114
	Trustworthiness of the Interviews and Open-ended Items-----	118
	Description of the Interviews' Participants-----	118
	Ethical Considerations-----	128
	Summary-----	129
V	ANALYSIS AND FINDINGS-----	130
	Introduction-----	130

	Data Entry Reliability-----	131
	Sample Characteristics-----	131
	Measures-----	133
	Faculty Members' Level of Willingness to Provide Reasonable Accommodation-----	134
	Factors That Affect the Faculty Members' Willingness to Provide Reasonable Accommodations-----	137
	Faculty Members Perspectives' of Having SWD and SLD in Their Class-----	140
	Faculty Members' Experience of Having SWD and SLD In Their Class-----	149
	Opinion of SWD and SLD of the Reasonable Accommodations they Receive in their Institutions-----	169
	CDSS Management' Perspectives on Supporting Reasonable Accommodations Offered Within Their Institutions-----	173
	Summary-----	178
VI	DISCUSSION-----	179
	Introduction-----	179
	Summary of findings-----	180
	Discussion of the Research Findings-----	181
	Students with Disabilities/Learning Disabilities-----	182
	Faculty Member-----	186
	Students without Disabilities-----	191
	Centre for Disabilities Support Services (CDSS)-----	192
	Universities-----	195
	Legislation and Culture-----	196
	Summary-----	197
VII	RECOMMENDATIONS AND CONCLUSIONS-----	198
	Introduction-----	198
	Recommendations-----	199
	Limitations of the Study-----	205
	Future Studies-----	207
	Summary-----	210
REFERENCES	-----	211
APPENDICES	-----	235

LIST OF TABLES	Page
TABLE 1: Proportion of Students in Public and Private Universities-----	29
TABLE 2: Total Number of Students in Private and Public Universities in 2010 and 2014-----	29
TABLE 3: Proportion of Men to Women Undergraduates In 2013-----	31
TABLE 4: Disabilities Categories by Country-----	42
TABLE 5: Names of Special Education Categories in the US, Ireland, and Saudi Arabia -----	53
TABLE 6: Key Types of SLD-----	60
TABLE 7: Students' Reports of Accommodation Effectiveness in Kurth and Mellard Study-----	92
TABLE 8: Total and Sample Number for Each Group of Study Participants -----	99
TABLE 9: Professionals who Examined and Revised the Survey for Validation---	110
TABLE 10: Kirk's Classification of Cronbach's Alpha-----	111
TABLE 11: Cronbach's Alpha for the Pilot Study of KSA-SBAKRI and the Subscales-----	112
TABLE 12: Population and Sampling-----	114
TABLE 13: Mid-point of the level of Knowledge and CDSS-----	115
TABLE 14: Mid-Point of Willingness to Provide Reasonable Accommodations to SWD, and Willingness to Provide Reasonable Accommodations to SLD-----	116
TABLE 15: Biographical Information of faculty member interview participants ---	119
TABLE 16: Biographical Information of SWD/SLD interview participants-----	123
TABLE 17: Descriptive Statistics for Demographic Information-----	132
TABLE 18: Mean, Standard Deviation and Reliability of Participial Measures----	134
TABLE 19: Frequencies and Percentages of Willingness to Provide Reasonable Accommodation Subscale for SWD-----	134
TABLE 20: Frequencies and Percentages of Willingness to Provide Reasonable Accommodation Subscale for SLD-----	136
TABLE 21: Correlations between Faculty Members Experience in Teaching SWD/SLDs and Willingness to Provide Reasonable Accommodations (N=387)----	138
TABLE 22: Faculty Knowledge Regulations, Faculty assessment CDSS, and Willingness to Provide Accommodations-----	139

LIST OF FIGURES	Page
FIGURE 1: Bronfenbrenner's ecological model-----	8
FIGURE 2: Increase in Girls' Elementary Schools from the 1960s-1980s-----	25
FIGURE 3: Number of Female Undergraduates Attending Public Universities-----	30
FIGURE 4: Undergraduate Female Students Between 2012 and 2013 Attending Private Universities-----	31
FIGURE 5: Interaction between components in ICF-----	37
FIGURE 6: Number of female SWDs by the academic department at KSU-----	56
FIGURE 7: Rise in the Proportion of SLD in the US Post-Secondary Education----	63
FIGURE 8: Availability of Different Reasonable Accommodation In 74 Post- Secondary Institutions in New York State-----	71
FIGURE 9: Categories of Translation for Quantitative Research Instruments-----	105
FIGURE10: Main groups arranged according to the frequency of answers of faculty members' concerns in teaching SWD/SLD-----	144
FIGURE11: The main groups arranged to the frequency of answers of faculty members' recommendations-----	147
FIGURE 12: Main groups arranged to the frequency of answers of faculty members' experience-----	150
FIGURE 13: Main groups arranged according to the frequency of answers of SWD/SLD opinion. -----	169
FIGURE 14: The main groups arranged according to the frequency of answers of CDSS managements' perspectives on support SWD/SLD.-----	174

LIST OF APPENDICES	Page
APPENDIX A: Map of Saudi Arabia-----	235
APPENDIX B: Private& Public Universities in Saudi Arabia-----	236
APPENDIX C: Whisenhunt's Survey-----	238
APPENDIX D: Consent Letter for Faculty Members-----	247
APPENDIX E: KSA-SBAKRI Survey-----	249
APPENDIX F: Faculty Members Semi-Structured Interview-----	257
APPENDIX G: Consent Letter for SWD and SLD-----	259
APPENDIX H: SWD and SLD Semi-Structured Interview-----	261
APPENDIX I: Consent Letter for CDSS Managements-----	263
APPENDIX J: CDSS Managements Semi-Structured Interview-----	265
APPENDIX K: Answers of Open-Ended Questions-----	267
APPENDIX L: Transcripts of the Faculty Members Interviews-----	285
APPENDIX M: Transcripts of the SWD and SLD Interviews-----	322
APPENDIX N: Transcripts of the CDSS Management Interviews-----	346
APPENDIX O: PNU Approval Letter-----	351
APPENDIX P: KSU Approval Letter-----	352
APPENDIX Q: TCD Approval Letter-----	353

CHAPTER ONE

INTRODUCTION

Introduction

Currently, approximately one billion people (15% of the world's population) are experiencing at least one kind of disability that limits their participation in family, community, political, and/or educational life. Most of those with disabilities (65%) are living in low- and middle-income countries where access to basic health and social services is limited (World Health Organization, 2015). Generally, people with disabilities do not have opportunities equal to those of their peers in terms of educational achievement and economic opportunity. This is mainly due to the lack of services available to members of this population and the many obstacles they face in daily life (World Health Organization, 2014).

The subject of special education has become increasingly important in many countries worldwide such that some level of disability services has become the norm. It is clear that community perceptions of people with disabilities have positively changed over time from rejection and non-acceptance, isolation and inpatient institutions, to the eventual recognition of their health, social, educational, and rehabilitative, along with the professional aspects of their lives (Alrossan, 2001).

In many countries, the government works to ensure the rights of people with disabilities by enacting and activating legislation to provide them with access to post-secondary education, just like the majority of students without disabilities. Universities implement such legislation by setting up specialised centres to provide support services for people with disabilities (Alkhashrami, 2015). Recently, the number of students recognised as having a disability at the

post-secondary level has increased, particularly in the Western world, due to the support provided by post-secondary institutes (Ostrowski, 2016).

Many post-secondary institutions provide reasonable accommodations such as adaptive technology, additional time for exams, and tutors. Government funding is required for assistive technology and materials in order to help SWD/SLDs graduate in a timely way (Betz, Smith, & Bui, 2012). However, reasonable accommodations are sometimes difficult to obtain or do not fit the student's needs. It is evident that there are a variety of issues affecting the provision of reasonable accommodations: First, faculty members' knowledge of disabilities and related legislation. Second, the experience of faculty members in dealing with SWD/SLDs and attendant support services. Third, the characteristics of faculty members and how these affect the provision of accommodations (Hoffman, 2013; Rao & Gartin, 2003; Sniatecki, Perry, & Snell, 2015; Worthy, 2014).

Despite improvements in disability services in certain countries, at present, it is still the case that one of the most significant challenges facing SWD/SLDs in the Arab world (including Saudi Arabia) is the lack of specialised services and reasonable accommodations in post-secondary education. In this context, post-secondary institutions have failed to keep pace with the growth in enrolment of SWD/SLDs (Alkhashrami, 2015).

Many Saudi universities do not provide services to SWD/SLDs, a lack that is even more evident in relation to female students. Further, only a few Saudi universities have small units to provide limited support services for students who have visual, physical, and health impairments. However, KSU and PNU have two sophisticated and relatively well-equipped centres to help SWD/SLDs succeed in their academic careers. Known as Centres of Disability Support Services (CDSS), these facilities provide services for post-secondary female students who have various

kinds of disability, including SLDs—the category of disability most recently added to the mandate for the CDSS at both Saudi universities. As a result of the severe shortage of disability support services at Saudi post-secondary institutions, there are significantly fewer SWDs in higher education than in secondary education. Therefore, most SWD/SLDs who graduated from general education have remained at home without continuing their education in the post-secondary context.

This study examines in depth the provision of reasonable accommodations for students with disabilities (SWDs) and students with learning disabilities (SLDs) at Saudi universities.

Purpose of the Study

This study was conducted with the purpose of making a significant contribution to the field's understanding of the landscape of reasonable accommodations offered by Saudi universities. The study focuses on three main subjects: faculty members, CDSS management, and SWD/SLDs.

The first questions are whether faculty members are willing to provide reasonable accommodations to meet the unique needs of SWD/SLDs. Are they aware of disability legislation and CDSS at the university where they teach? In addition, this study examines the concerns, recommendations, and experiences of faculty members who have SWD/SLDs in their classes.

Second, this research is undertaken to understand the experiences of SWD/SLDs in receiving or not receiving reasonable accommodations at their post-secondary institution.

Its final purpose is to discuss with CDSS management the services provided to SWD/SLDs and the training programmes provided to faculty members.

Significance of the Study

In general, the findings of this study provide information on the effectiveness of the reasonable accommodations offered at KSU and PNU and the improved special education services at the post-secondary education level. It is hoped that the results will influence the Saudi educational system at the post-secondary level in regard to designing appropriate and effective reasonable accommodations for SWD/SLDs. This study examines the extent to which and how faculty are willing to provide reasonable accommodations as well as students' perceptions of the reasonable accommodations provided at KSU and PNU. As such, the study results should be of interest to post-secondary institutions, planners, policy-makers, CDSS management, and academics in Saudi Arabia who are committed to helping SWD/SLDs to complete their academic careers as smoothly as possible. Overall, the study findings provide valuable insights for further research in terms of understanding what affects the willingness of faculty members to provide reasonable accommodation in post-secondary education, such as limited knowledge of and training in regard to disabilities and ways to support SWD/SLDs and limited knowledge of relevant legislation pertaining to these.

Further, the results of the present study highlight the experiences of SWD/SLDs, thereby providing a basis for post-secondary institutions to make improvements to the services they provide to this population, including reasonable accommodations to enable this cohort to increase their academic success. For example, interventions are identified that can influence the development of CDSS services in supporting SWD/SLDs both in terms of more effective outreach to this population and assistance and training for faculty members focused on supporting these students. Overall, the data and finding can be used in training programmes and

workshops to develop the concept of reasonable accommodation provision and support for students.

Theoretical Framework

The researcher considered two of theoretical frameworks for this study, including grounded theory and Bronfenbrenner's ecological model. However, through the open coding stage of analyzing the interviews and survey open-ended questions to generate the concepts the researcher concluded that Bronfenbrenner's ecological model was more appropriate for the study than the grounded theory, since the aim of this study was not to test a hypothesis based on existing theory, but rather to develop an extension to theory. Also, the researcher concluded that the Bronfenbrenner ecological model was appropriate for the consideration of SWD/SLDs reasonable accommodation as part of their development, as it takes into account students' interactions with a range of influences beginning at the most immediate level and extending toward the more distant but nevertheless important influence of the larger environment (Swart & Pettipher, 2011). Other investigators (Renn & Arnold, 2003) have also found such an ecological approach to be useful in respect to the field of higher education.

Urie Bronfenbrenner has been one of the most noted researchers in the field of developmental psychology. Bronfenbrenner has always had a natural inclination towards development of individuals. However, his belief that the field was primarily focusing on short term measures and investigations regarding what was wrong with the person themselves, rather than what was wrong with the environment around them, he put off his interests for some time.

Bronfenbrenner's believed that without giving due consideration to the surroundings and environment of a person, human behaviour and assessing its change over a certain period is incomplete. He stated in one of his books 'The Ecology of Human Development (1979) that "the

properties of the person and of the environment, the structure of the developmental settings, and the processes that take place within and between them must be viewed as interdependent and analyzed in systems terms" (p. 41).

Bronfenbrenner's ecological model is employed as a way to consider individual systems and their interactions with each other (Bronfenbrenner, 1979, 1989). That is, the model "focuses on the dynamic relationship between the organism and its surroundings, with both the person and the environment engaged in reciprocal tensions and activities" (Bronfenbrenner, 1977, p. 276). This bio-ecological framework (Bronfenbrenner, 2005, 1979), therefore, it is suitable for representing the factors that influence the provision of reasonable accommodations to SWD/SLDs.

Ecological models such as Bronfenbrenner's are commonly found in the literature as recommended approaches for developing an optimal educational framework. McGuckin and Minton (2014) commented on the relative simplicity of such models, yet they add significant value as professional tools. Thus, this type of model is deemed suitable for the specific application of understanding how reasonable accommodation is constructed, conceptualized, and implemented.

This model works on multiple levels of analysis rather than focusing on a single aspect, which should be a goal in future research directions. The model (Figure 1) is visually represented as a series of multiple layers of nested circles with the objective featuring at the centre. The circles each represent aspects of influence and starting at the centermost circle consist of the following:

- 1) The micro-system is the innermost layer at the center of Bronfenbrenner's ecological model, which relates to the student's surrounding environment, which is influenced by people who are close to him/her, like parents and other family members.
 - 2) The meso-system consists of others with whom the student interacts directly, like, peers without disabilities, CDSS staff, and faculty members. Also, it refers to interactions between interfacing parties in the student's surrounding environment.
 - 3) The exo-system can be described as indirect environmental influences of student learning, such as the availability of support services or facilitators.
 - 4) The macro-system encompasses aspects within the bigger picture, i.e. laws and culture that could have a direct or indirect impact on the student's learning.
 - 5) The chrono-system is the last layer of the five systems in Bronfenbrenner's ecological systems theory. It refers to changing environmental events that may influence a student's life, including socioeconomic status, family structure, and disability status.
- According to Bronfenbrenner, all these systems and their interactions or interdependencies have an overall influence on the learning and development of students.

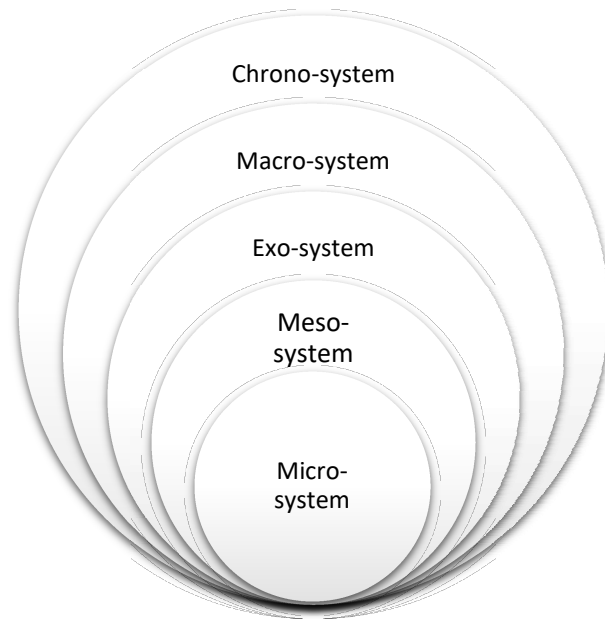


Figure 1: Bronfenbrenner's ecological model (1979, 1989).

In the interviews and open-ended survey questions for this study, it became apparent that the participants understand their own experience in terms that are more-or-less analogous to this model. They do not, of course, use Bronfenbrenner's terminology: none describe the influence of the meso-system or the exo-system. They do, however, describe the immediate impact of those with whom they come into daily contact, and at least some of them address the impact of the larger educational system and the broader culture within which they and university staff, faculty members and policy-makers must operate. Bronfenbrenner's model is, therefore, a useful way to depict students' understanding of the forces that impact them.

Application of Bronfenbrenner's Ecological Systems in This Study

The researcher interviewed 12 SWD/SLDs about their interactions with faculty members and the CDSS at their respective institutions and how they cope with difficulties securing adequate reasonable accommodations. The researcher also surveyed and interviewed faculty members and two CDSS managers to more fully understand their interactions with each other and with larger

factors (such as legislation, financial support, services, and faculty willingness to provide accommodations) that affect the provision of reasonable accommodations, which in turn affect the educational progress of SWD/SLDs in post-secondary institutions. For the purpose of this study, Bronfenbrenner's model was used to focus on three vital ecological systems—meso, exo, and macro—which figured prominently in the survey and interview responses.

The Meso-system Layer

The second innermost layer of the model is the meso-system, which represents the interactions between departments or individuals in the student's immediate environment (relating to the student's learning and development) (Bronfenbrenner, 1979). Bronfenbrenner's model enables us to understand the complex factors that influence how these interactions are shaped and experienced by all the participants involved.

Post-secondary education of SWD/SLDs could be affected by their interactions with those involved at this level (faculty members, the CDSS, and peers without disabilities), and/or by interactions between these three kinds of participants in this layer. For example, faculty members need training from the CDSS, and the opinions of peers without disabilities could mean that SWD/SLDs are reluctant to identify themselves to the CDSS, which would have a negative effect on the latter's ability to secure a reasonable accommodation.

First, faculty members play a vital role in the current system for reasonable accommodations and their rationale and belief systems around reasonable accommodations is critical. Faculty members are tasked with providing reasonable accommodations for SWD/SLDs, and are hence the first point of success should they provide reasonable accommodations and other kinds of needed support or the first point of failure should they fail to do so. Further, faculty members must understand that the specific needs of SWD/SLDs vary in nature, and as

such, reasonable provisions should be tailored to suit each student, where possible. Trends in faculty members' willingness to provide reasonable accommodation have been shown to relate to their personal characteristics in many instances, such as their age, knowledge level, academic rank, college/discipline, training, beliefs, and nationality (Alhossein, 2014, Lombardi, Murray, & Dallas, 2015; Murray, Flannery, & Wren, 2008; Skinner, 2007).

Second, the CDSS has a vital role to play in encouraging a positive and supportive relationship between faculty members and the SWD/SLDs in their classes. This can be achieved through education or training, promoting its services, maintaining regular communication with faculty members, and coordinating activities (Alkhashrami, 2015; Lombardi et al., 2013).

It has been demonstrated that there is a direct relationship between faculty members' knowledge level in regard to SWD/SLDs and their willingness to provide reasonable accommodations to this population. Those who have received more training from the CDSS tend to be more willing to provide the accommodations needed (Basilice, 2015; Bigaj, Shaw, & McGuire, 1999; Leyser, 1989). Two studies concluded that although faculty members are usually open to providing reasonable accommodations to students where necessary, they do not feel adequately trained to provide it properly (Basilice, 2015; Kurth, & Mellard, 2006). As such, many faculty members welcome the services provided by the CDSS to assist them in delivering the right support to their students. Training provided by the CDSS is important because faculty members' lack of awareness/knowledge about the importance of and the requirement to provide reasonable accommodations to SWD/SLDs is a major challenge (Zhang, Landmark, Reber, Hsu, & Benz 2010), which is perhaps the single greatest obstacle in regard to SWD/SLDs receiving these provisions in the post-secondary educational context in Saudi Arabia. Although there has been a significant improvement in recent years, faculty members still need to know how to adapt

their teaching methods for SWD/SLDs, because the former lack understanding of the importance of doing so and/or are not aware that it is their duty to do so (Alkhashrami, 2015). The role of the CDSS in this context is to ensure that the necessary support is in place for faculty members in order to educate them and support them in providing reasonable accommodations, including by offering training courses and specific guidance on a case-by-case basis.

Third, peers without disabilities could play an essential role in SWD/SLDs academic life. For example, to ensure that they receive appropriate support in academia, the onus is on the SWD/SLDs themselves to become educated in regard to their rights and the services available to them. They must also provide the necessary evidence of their disability and its nature to the CDSS if they are to avail themselves of the services designed for them (Alkhashrami, 2015). Disability disclosure, however, can be very problematic because of the discrimination, stigma, and marginalization that SWD/SLDs can be subject too. It is reasonable to expect that at least some SWD/SLDs are determined not to access reasonable accommodations for exactly this reason (Thompson-Ebanks & Jarman, 2018). Also, SWD/SLDs may choose not to disclose their disability in order to prove themselves among their peers and to show that they can succeed unaided (Timmerman & Mulvihill, 2015). However, students without disabilities may present an obstacle: it has been shown that because they do not have high expectations of SWD/SLDs' abilities, students without disabilities reject the idea of working with SWD/SLDs in groups. This can, in turn, have a negative effect on the confidence of SWD/SLDs and their self-esteem (Ainscow, 1991).

Exo-system Layer

The exo-system layer influences the environment external to the student, directly concerning interactions and processes relating to departments or individuals in the student's immediate

environment. These interactions affect the student's learning and development but are not within the student's control (Bronfenbrenner, 1979). As a result, student learning may be positively or negatively influenced by interactions between individuals in these settings.

In this study, university support is represented within the exo-system. Universities are required to support SWD/SLDs by having a CDSS facility in place in order to help SWD/SLDs adjust and integrate and to support them where they experience disadvantages in comparison with their post-secondary peers (O'Shea & Meyer, 2016; Ostrowski, 2016).

Despite the significant budget allocated to Saudi universities, many are not yet committed to providing the necessary support services for SWD/SLDs. Only two universities have a CDSS to serve female SWD/SLDs, both of which are located in a single city. A CDSS should be present at all universities, and not limited to major cities only.

Macro-system Layer

As the outermost layer, the macro-system consists of culture and disability legislation. First, despite the importance of education for women and its prevalence during the early Islamic periods, female education in Saudi Arabia emerged seven years after male education. This delay was not confined to formal education only but extended to higher education and various life services, including those available for persons with disabilities. Males, therefore, have generally had precedence, which remains the case today, in regard to educational opportunities (the development of female education in Saudi Arabia will be discussed later in this study). Mainly consequences of culture, the delay of female education can be attributed to four main reasons (Al-Sadhan, 2012; Hadlaq, 2014):

- The political unrest that hit the region during the end of the Second Saudi State and the beginning of the Third Saudi State and the wars fought to unite the Kingdom resulted in

the deterioration of security and economic conditions and a proliferation of ignorance and poverty, thus leading to a decline in the scientific and cultural level of all segments of society.

- The status of women in Arab culture in general, whereby they are seen as directly responsible for the management of the household and bringing up children, which diminishes their chances of leaving the home to embrace other pursuits.
- The variations in economic activities across the regions of Saudi Arabia, such as dependence on farming or grazing, and the major role played by women in contributing the family's livelihood and their participation with men in such economic activities.
- The situation of women in certain Arab counties in terms of freedom from some precepts of Islam, including allowing the removal of the hijab as a result of the enrolment of girls in foreign schools, and the consequent calls for the liberation of women based on the need to educate them in order to increase their participation in political, scientific, and cultural activities. This has led to many areas of the Arab world having concerns about or even opposing girls' education for fear of them becoming liberal in their outlook through education.

Since the founding of Saudi Arabia, the first Saudi Kings were keen to educate women and were aware of their role in the new emerging society, while adhering at the same time to the teachings of Islam. They felt realized that women's education ought to take place on a gradual basis, given that it was difficult for the culture of society to accept it. In fact, Saudi society still fears anything new with respect to women, such as women driving, although this does not conflict with Islamic rulings.

For this reason, CDSS's are still limited to large universities in major cities. This has been a major impediment to female SWDs receiving appropriate education, meaning that they have been obliged either to move to a major city in order to pursue their education or to drop out after high school. It has been found that female SWD/SLDs are at a particular disadvantage, with reports of limited services being offered to them due to the existence of small, poorly-equipped dedicated university departments that are not fit for purpose.

Second, disability legislation is usually established at a national level, with the aim of protecting the rights of individuals with disabilities, including their rights to education. In Saudi Arabia, the legislation was put in place within the last decade by the Ministry of Education as a way to guarantee adequate education for those with disabilities and promote a good quality of life for them in general. Unfortunately, these regulations are not being adhered to, and SWD/SLDs continue to be a greater disadvantage than is necessary as a result. Without enforcement and proper, timely implementation of legislation, access to much-needed special education services is limited so that many SWD/SLDs in Saudi Arabia continue to struggle as a result (Alquraini, 2010).

To summarize, in order for this support framework to function successfully and meet the needs of the students, communication and interaction between various departments, stakeholders, and individuals is necessary. In particular, there must be open channels and cooperation between faculty, the CDSS, and the individual students themselves, who must each have their specific needs met if they are to complete their academic programs.

Limitations

Location

An important limitation of this study is that only two universities were identified that provide services for SWD/SLDs. These are King Saud University (KSU) and Princess Nourah University (PNU), which have two of the biggest CDSS's in Saudi Arabia for female students, meaning that female students with different types of disabilities must move there in order to study and receive the support they require. These institutions were chosen due to their location in the capital city of Riyadh and the types of disabled students who attend, which enabled the researcher to take a comprehensive look at the factors that affect the willingness of faculty members to provide reasonable accommodations to female SWDs.

This research follows a mixed-methods design: The researcher used a survey instrument and based on the results several semi-structured interviews were conducted.

Quantitative Methodology

The methodology is limited to a survey instrument called 'The Willingness of Female Faculty Members to Provide Reasonable Accommodations in Saudi Postsecondary Institutions', which was designed to measure the factors that may affect the willingness of faculty members to provide reasonable accommodations to SWD/SLDs attending Saudi institutions of post-secondary education. Faculty members were selected according to the following characteristics: All held positions in either the College of Education or the College of Art at KSU or PNU, and each held an academic rank across the range of lecturer to full professor.

Qualitative Methodology

The qualitative methodology was limited to open-ended questions for faculty members and semi-structured interviews for three groups: faculty members, SWD/SLDs and members of the CDSS management:

1. All the faculty members held a position with the College of Education or the College of Art at KSU or PNU.
2. All the female SWD/SLDs attended either KSU or PNU and had at least one disability (e.g. a learning disability, hearing impairment, visual impairment, physical impairment, ADHD, autism), and all had accessed the CDSS service at their university.
3. All members of CDSS management held a position at either KSU or PNU.

Participation, either by survey or interview, was voluntary, and no incentives were provided to the participants, with the exception that the researcher expressed her appreciation for their time and effort.

Research Questions

The research questions were based on a literature review and personal knowledge of the post-secondary educational context in Saudi Arabia. Six questions were formed:

- 1) To what extent are faculty members at Saudi universities willing to accommodate Students with Disabilities (SWDs) and Students with Learning Disabilities (SLDs?)
- 2) What factors affect faculty members' willingness to provide reasonable accommodations to SWD/SLDs?
 - Faculty age, college, academic ranking, and nationality
 - Level of faculty member knowledge of disability legislation and the extent of their experience working with SWD/SLDs

- Level of faculty member training relating to disability legislation and the extent of their experience working with SWD/SLDs
- 3) What are the perspectives of female faculty members on having female SWD/SLDs in their classes?
 - 4) What experiences do female faculty members report of having female SWD/SLDs in their classes?
 - 5) What opinions do SWD/SLDs express of the reasonable accommodations they receive at their institutions?
 - 6) What are the perspectives of CDSS management on the reasonable accommodations offered by their institutions?

Definition of Terms

For the purposes of this study, the following definitions are used. The researcher developed all the definitions that are not accompanied by a reference:

- *Persons with disabilities*: A persons with disabilities' shall refer to individuals who have one or more of the following disabilities: a visual disability, hearing disability, cognitive disability, motor disability, learning disability, speech and language impairment, behavioral problem, pervasive developmental delay, multi-disabilities, and other disabilities which require special care (King Salman Center for Disabilities Research, 2000).
- *Student with Disability (SWD) group 1*: The definition of a student with a disability (SWD) adopted for the purpose of this study is as follows: a student who has any type of disability—such as a visual disability, hearing disability, cognitive disability, motor disability, speech and language impairment, behavioural problem, pervasive

developmental delay, or multi-disabilities—who has requested assistance from the CDSS (not including learning disabilities).

- *Learning disability*: A disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. This term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. It does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage (Special Education Guide, 2018).
- *Students with a learning disability (SLD) group 2*: The definition adopted for the purpose of this study of a student with a learning disability is one who has any type of documented learning disability and has requested assistance from the CDSS.
- *Faculty member*: Faculty members who are employed at post-secondary institutions, with various academic ranks from lecturer to professor.
- *Reasonable accommodation*: A reasonable accommodation involves providing special treatment or facilities or making adjustments in order to enable access to a service. A reasonable accommodation is a required facility outside the mainstream provision, to allow the student with a disability to participate fully, and without an educational disadvantage in comparison with his/her peers (Mullan & Treanor, 2013).
- *Centre for Disability Support Services (CDSS)*: This kind of centre is a designated service at post-secondary educational institutions that facilitates reasonable accommodations for SWD/SLDs. It is responsible for approving documentation to inform faculty members of

a student's disability and the appropriate accommodations required by the student. In addition, centre staff are responsible for providing training programmes to enhance faculty members' knowledge of disabilities and reasonable accommodations.

Organisation of the Study

The current study is presented in five chapters:

- Introduction: Chapter 1 includes the purpose, significance, theoretical framework, limitations, and research questions. The first chapter also includes an outline of the definitions of terms used throughout the study.
- Background of education in Saudi Arabia: Chapter 2 focuses on the background of the Kingdom of Saudi Arabia's educational system.
- Literature review: Chapter 3 presents a global overview of classifications and international disability legislation. The situation in post-secondary institutions relating to SWD/SLDs is outlined, followed by a discussion of reasonable accommodations, including (a) factors that affect the provision of reasonable accommodations such as faculty knowledge, experience, and characteristics, and (b) SWD/SLDs' perspectives on the effectiveness of reasonable accommodations. Finally, a summary concludes the chapter.
- Study methodology: Chapter 4 focuses on explaining the key research issue, the purpose of the study, the research questions, the target population, the research design, the preparation of the research instrument, the survey instrument, the validity and reliability of the survey, the data collection, the data analysis, the trustworthiness of the interviews and open-ended items, the ethical considerations and, finally, the summary.
- Results: Chapter 5 presents the findings from the data analysis.

- Discussion: Chapter 6 presents an in-depth summary of the findings as they relate to the research questions and offers some concluding comments.
- Conclusion. Chapter 7 provides an account of the study's limitations, the implications of the findings, and recommendations for future research.

Summary

An overview of the study was provided including a description of its purpose, significance, theoretical framework, limitations, questions, tools, and organisation. Definitions of terms used in the study were also presented.

CHAPTER TWO

BACKGROUND OF THE KINGDOM OF SAUDI ARABIA

Introduction

This chapter will present an in-depth discussion of the background of the Kingdom of Saudi Arabia, including:

- History of general education in the Kingdom of Saudi Arabia
- Special education in Saudi Arabia
- Background of higher education in the Kingdom of Saudi Arabia,
- Saudi women in higher education

Background of the Kingdom of Saudi Arabia

It is vital to have a comprehensive picture and full understanding of the region and people being studied when conducting any research that aims to be nation-specific. Hence, the purpose of this introductory section is to provide the reader with an overview of the recent history and geography of the Kingdom of Saudi Arabia (KSA) and its people.

The KSA was founded in 1932 with Riyadh as its capital city (CIA, 2001). It is located in the far southwest of the continent of Asia, occupying four-fifths of the Arabian Peninsula (OPEC, 2018). A third of its 2,250,000 km² area is sandy desert, of which the largest desert area is the Empty Quarter comprising almost 600,000 square kilometres (Holm, 1960). Saudi Arabia is the second largest Arabian country (after Algeria), and the fourteenth largest country in the world (OPEC, 2018). It borders eight countries: Jordan, Iraq, Kuwait, Qatar, Bahrain, the United Arab Emirates, Oman, and Yemen and lies between the continents of Asia, Europe and Africa, (The Saudi Network, 2018). A map of Saudi Arabia is provided in Appendix A.

According to the Saudi Central Department of Statistics and Information (CDSI), the Saudi population increased significantly from 7 million people in 1974 to nearly 17 million in

1992, with the most recent figures showing over 30 million in 2014. Saudi nationals account for approximately two-thirds of the population, concentrated in cities such as Riyadh and Makkah (CDSI, 2014).

Saudi Arabia came into existence as one of the world's poorest countries. Its population lived very simply in mud houses and used animals for transportation. Unlike more developed countries, Saudi was limited in the extent to which it used early-twentieth-century technology (El-Ghonemy, 1998). However, in 1938, oil was discovered in the Kingdom (Markus, 2014) and since then the Kingdom has grown into a strong oil-based economy (Ministry of Finance, 2015). Saudi Arabia is a member of the Organization of the Petroleum Exporting Countries (OPEC) and has the world's most extensive reserves of oil, supplying 17 percent of demand (CIA, 2013). The discovery of oil resulted in a sudden change for the better in terms of the economy, education, transportation, and health care and led to dramatic industrial and commercial growth (Alamri, 2011). Saudi's strong economy allowed the government to spend \$59.7 billion (16% of the total government expenditure) on education and training in 2015 (Ministry of Finance, 2015).

Islam is the official religion of the Kingdom of Saudi Arabia and also provides the basis of its legal system and its system of government (Vogel, 2000). All Saudi citizens are Muslim. This is related to the fact that the Arabian Peninsula is the birthplace of Islam and, therefore, a region of the utmost importance to Muslims. For Muslims, the two holiest places in the entire world—Makkah the Blessed (Mecca) and Madinah the Radiant—are located here. Makkah was the starting point of Islam and the hometown of the Prophet Mohammad, peace be upon him, who was born in AD 570 (Rogerson, 2010). Madinah the Radiant is the second-holiest city in Islam and is home to the Mosque of the Prophet Muhammad (al-Masjid an-Nabawi). Each year, more than two million Muslims from around the globe undertake the Hajj in Makkah, making it

one of the world's largest annual pilgrimages. Islam is at the heart of education, law, and all other aspects of life in Saudi Arabia (Al Rasheed, 2010; Arnold, 2013).

In summary, Saudi Arabia is an Arab Islamic country with Arabic as its national language. Its religion is Islam, and its constitution is the book of Allah, the Qur'an, and the Sunnah, of His Messenger, the Prophet Mohammad, peace be upon him (Prophet's narration or action). The country's system of government is conducted through a royal hereditary monarchy.

History of General Education in the Kingdom of Saudi Arabia

Before Saudi Arabia came into being as a unified state in 1932, education was extremely limited. In fact, it was a privilege only for children of the wealthy elite who lived in the central cities. Many of the schools were in the Hejaz region and most other areas suffered badly from a lack of education (Royal Embassy of Saudi Arabia, 2018). Levels of education have improved dramatically since that time, despite the fact that it was delivered informally for many years, primarily in mosques in a traditional oral style known as *Kuttab* (Hamdan, 2005). Despite the importance of Islam, some of the country's customs and traditions differed from the principles of the religion. In terms of education, mostly boys participated in this form of informal education in order to learn how to read and write. In this context, they would study the key written Islamic texts such as the Qur'an and the Prophet Muhammad's narrations, Hadith.

Kuttab schooling was the typical traditional education system across the Arabian Peninsula. In 1950, most Saudi citizens were still illiterate and based on this fact the government prioritised the country's education system and initiated significant reform. The goal of providing a foundational education to Saudi students throughout the country took on national goal as a result of government action. In 1953, formal education was inaugurated under the Ministry of Education (Al-Salloom, 1991) and, from 1975, under the Ministry of Higher Education (Princess

Nourah bint Abdul Rahman University, 2018). Today, public education is available to all Saudi citizens from the elementary to the post-secondary level and extends throughout most urban and suburban areas (Royal Embassy of Saudi Arabia, 2018).

During the reign of King Saud Bin Abdul-Aziz Al Saud, the country's second king who ruled from 1953 to 1964, the Ministry of Education was established by the government to develop and control all informal educational institutions and preside over general education. This was to include the following levels: elementary (six years from ages 6 to 12), intermediate (three years from ages 12 to 15), and secondary (three years from ages 15 to 18). However, only boys were catered for under this system (Al Abdulkareem, 2016; Al Rawaf & Simmons, 1991). The King appointed Prince Fahd (later King Fahd bin Abdul-Aziz) as the first Minister of Education in 1953. To encourage participation country-wide, the government decided to make education free. Both general and higher education remain open free today, and education is continuing to expand very rapidly (Al-Salloom, 1991).

The level of women's literacy was very low when Saudi Arabia was founded (Khutani, 2013). The daughters of wealthy families could be formally educated at home, and other girls could attend Kuttub for informal education (Al Rawaf & Simmons, 1991). Hamdan commented that it was Queen Effat Al-Thunayan, King Faisal's wife, who was one of the first to fully understand the importance of education. She promoted the idea that girls should be educated at school to learn science, mathematics, and languages, rather than just religion. King Faisal and Queen Effat together established the first girls' academy in Jeddah in 1955, which was named Dar Al Hanan, The House of the Affection (Hamdan, 2005). New elementary girls' schools sprang up rapidly over the next decade, growing from just 15 in the 1960s to more than 3,000 schools in the 1980s (Al Mohsen, 2000; Al Rawaf & Simmons, 1991).

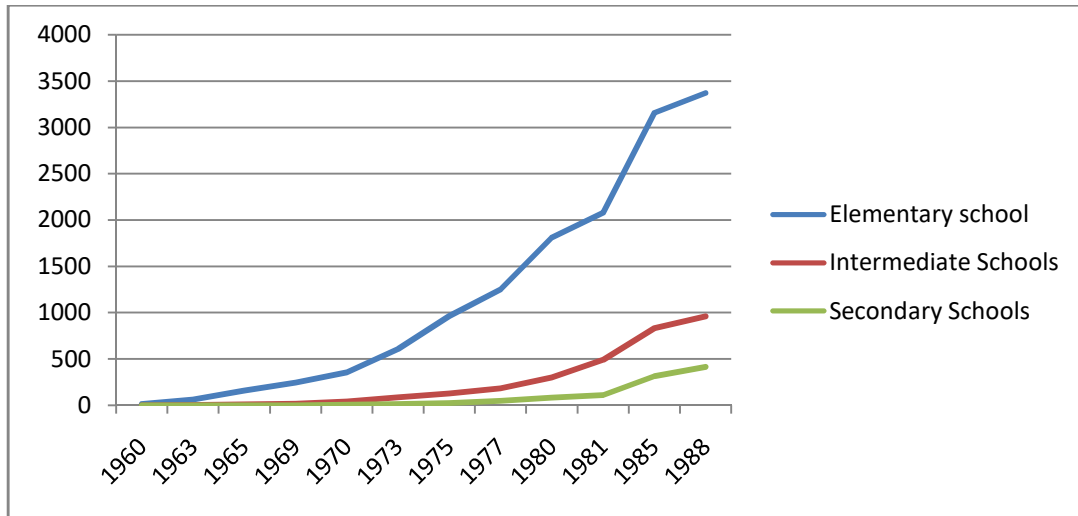


Figure 2: Increase in Girls' Elementary Schools from the 1960s to the 1980s (Al Rawaf & Simmons, 1991).

Further developments included the Jurisdiction of the General Presidency for Girls' Education (GPGE) in 1960, which for 42 years was responsible for the education of girls from kindergarten to college level (Al-Salloom, 1991). The GPGE offered curricula to girls that was similar to that provided to boys, although whereas the boys took physical education, the girls took home economics instead. The rationale was that every girl should learn how to cook, sew, take care of her family. The attitude of Saudi society toward girls plays a fundamental role in their education. It was long held that educating girls was a Western-inspired innovation and that the natural place for girls and women was in the home. Therefore, the GPGE adjusted the male curriculum to uphold traditional values in order to encourage families to educate their daughters (Al Rawaf & Simmons, 1991). The ethos is described as follows:

Women's schooling at all levels—elementary, secondary, high school and university—remained under the Department of Religious Guidance until 2002, while the education of boys was overseen by the Ministry of Education. This was to ensure that women's education did not deviate from the original purpose of female education, which was to

make women good wives and mothers and to prepare them for 'acceptable' jobs such as teaching and nursing. ((Hamdan, 2005, p. 44)

Special education in Saudi Arabia

Taking care of all different categories of disabled children is a moral humanly imposed duty according to religious, ethical, and human values. Islam takes care of each member of the Islamic community whose rights are protected under the name of Islam. Muslims have a responsibility to contribute to social welfare to the best of their ability, and this includes protecting those who have a disability or illness. Islam accepts disability as a fact of life and a part of the human condition. It encourages people to respect and support everyone in society, regardless of ability or disability (Almusa & Ferrell, 2004).

Islam asks all Muslims to maintain a positive attitude toward people with disabilities and respectfully treat them. For instance, the religion forbids frowning on a blind man. The Qur'an tells us a story about a blind man, a companion of Prophet Mohammad; peace be upon him, called Ibn Umm Maktoom, who asked the Prophet to teach him about Islam. At that time, the Prophet was preoccupied with the chieftains in Makkah and did not want to divert his attention from what he was doing and so frowned in the face of the blind man. Therefore, Allah admonished his Prophet Mohammad, peace be upon him, for this action in Surah Abaasa:

عَبَسَ وَتَوَلَّى (1) أَنْ جَاءَهُ الْأَعْمَى (2) وَمَا يُدْرِيكَ لَعَلَّهُ يَزَكَّى (3) أَوْ يَذَّكَّرُ فَتَنْفَعَهُ الذِّكْرَى (سورة عبس:1:80)

[Translation] He (the Prophet) frowned and turned away (1) when the blind man approached him (2) but how do you know? Perhaps he was seeking to purify himself (3) or be reminded, and the message would benefit him (4). (80:1)

The field of special education is at a stage of relatively early development in Saudi Arabia. However, throughout the past two decades, the Saudi government's attention to this area has increased significantly. In 1952, special education began at an individual level, focused on those with visual impairments, and in 1960 the first government institution for blind students opened in Riyadh. In 1962, the Ministry of Education founded a subdivision, the Directorate General of Special Education (DGSE), in order to develop educational plans and curricula appropriate for students with special needs. Its duties included identifying children with special needs and planning and providing suitable customised programmes on an individual basis. The DGSE focused on students with special needs, both boys and girls of school age. Moreover, it pays a monthly allowance to students with a disability (SWD) according to their circumstances and provides transportation and educational tools for such students and those with other kinds of special needs free of charge. In addition, the government provides an incentive allowance that can increase salaries by between 20 to 30% in order to encourage teaching professionals and those interested in entering the profession to gain expertise in special education and to teach special needs students (Hussain, 2010).

In 1964, the ministry created three institutes for students with visual impairments in Makkah, Aneaza, and Alhofouf (Al-Mousa, 1999). In 1972, the DGSE established three specialist departments, one focused on the needs of the deaf, one on the needs of the blind, and one on the needs of those with mental retardation (Afeafe, 2000).

From 1996 onwards, there has been a gradual growth in the development of special education programmes and curricula. Such programmes now include learning disabilities, autism, emotional and behavioural disorders, and physical disabilities, among others (Hussain, 2010). An early initiative to improve the service led to three pieces of legislation guaranteeing

rights for those with disabilities: the Legislation of Disability, the Disability Code, and the Regulations of Special Education Programs (RSEPI). Also, Saudi Arabia was among the countries that signed the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and the Regulation of Students with Disabilities' Rights in Higher Education Institutions in the Gulf Cooperation Council (RSDRHEI) (more in-depth details about the legislation will be presented in chapter three) (Alquraini, 2010; King Salman Centre for Disabilities Research, 2000).

Background of Higher Education in the Kingdom of Saudi Arabia

Due to the large number of students who graduate from general education and the urgent need for human resources to improve the economic position of the country, it became necessary to establish a Ministry of Higher Education in 1975. At this time, there were seven universities under the control of the Ministry of Education: King Saud University, Islamic University (as a small college), King Fahd University of Petroleum and Minerals, King Abdul-Aziz University, Um Al-Qura University, Imam Muhammad Bin Saud Islamic University, and King Faisal University (Alamri, 2011). The purpose of the new ministry was to increase the number of universities throughout the Kingdom. Thus the Ministry of Higher Education took on the responsibility of overseeing, planning, and coordinating the needs of post-secondary education in Saudi Arabia. It also played an important role in developing plans for higher education. These plans included providing specialized tuition in scientific fields in order to develop the human resources necessary to serve the nation's development goals and to nurture the academic environment essential to all kinds of post-secondary study. In recent years, Saudi Arabia has worked hard to create new universities distributed geographically across the country to serve more of the population, enabling them to progress to higher education. The number of

universities has now reached ten private and 26 public, as shown in Appendix B (Princess Nourah bint Abdul Raman University, 2018).

Table 1 shows the proportion of students in public and private Saudi universities between 2010 and 2014 (Ministry of Education, 2015). The actual number of students for 2010 and 2014 is shown in Table 2, highlighting significant increases in enrolment at both public and private universities.

Table 1: Proportion of Students in Public and Private Universities

	2010	2011	2012	2013	2014
Public	96.1%	95.6%	95.1%	94.5%	95.0%
Private	3.9%	4.4%	4.9%	5.5%	5.0%

(Ministry of Education, 2015)

Table 2: Total Number of Students in Private and Public Universities in 2010 and 2014

	2010	2014
Public	868,623	1,422,099
Private	34,944	74,569
Total	903,567	1,496,668

(Ministry of Education, 2015)

Saudi Women in Higher Education

It is no longer possible to ignore or deny the important role of women in building any civilisation. Women play a critical role in all realms of life, including religion, morality, education, and the economy. Therefore, there is an ongoing need to educate women well in order to build a solid base for society because women are equal participants in society. For that reason, Saudi Arabia has created universities around the Kingdom and provided a monthly allowance equal to that received by men to encourage women to exercise their educational rights. Likewise,

higher education is equally important for women. The rapid improvement in women’s post-secondary education over a short period of time was due to the generous financial support of the higher education sector of the country’s government so that Saudi women now have the opportunity to access higher education, just as men do, without political or social restrictions (Al Mohsen, 2000). The Ministry of Higher Education provides the same financial rewards, awarding scholarships equally to male and female students (Ministry of Higher Education, 2018). Therefore, there is a marked increase in the number of female students who have enrolled in undergraduate programmes. In 2013, the number of female students attending public universities reached 551,192, an increase of nearly 40,000 on the previous year’s enrolment figure of 511,593 (Ministry of Higher Education, 2014). Figure 3 illustrates the increase in female undergraduate numbers in public universities between 2012 and 2013.

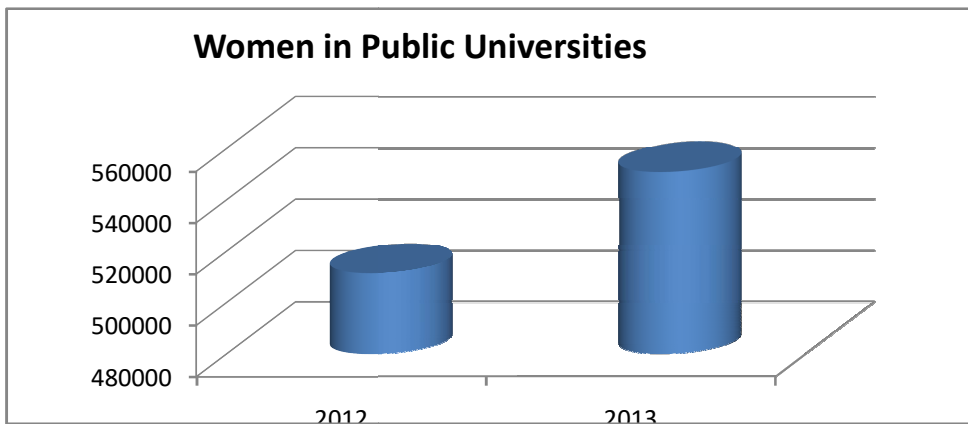


Figure 3: Number of Female Undergraduates Attending Public Universities (Ministry of Higher Education, 2014).

Private universities also assisted in the provision of education for Saudi women. In 2012, the number of enrolled female students reached 26,589. This number increased to 33,686 in 2013, as shown in Figure 4 (Ministry of Higher Education, 2014).

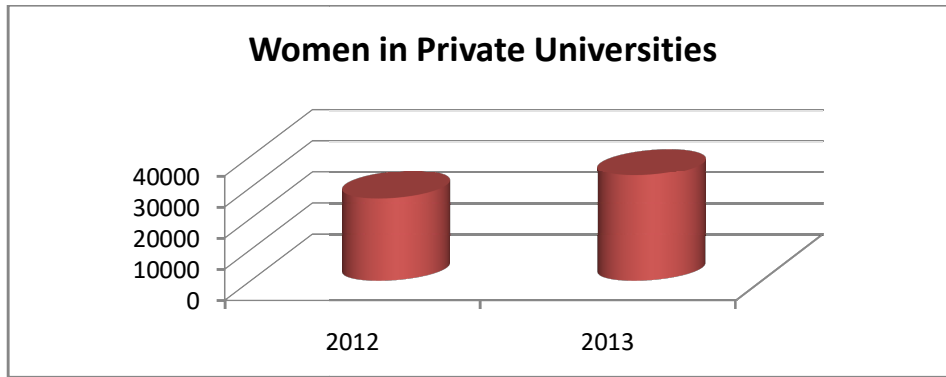


Figure 4: Undergraduate Female Students between 2012 and 2013 Attending Private Universities (Ministry of Higher Education, 2014).

The number of female undergraduates compared to male undergraduates attending public and private universities in the academic year 2013 is shown in Table 3 (Ministry of Higher Education, 2014).

Table 3: Proportion of Male to Female Undergraduates in 2013

University	Men	Women	Total	Proportion of men	Proportion of women
Public	551,192	513,686	1,064,880	48.2%	51.8%
Private	35,114	33,689	68,800	51.0%	49.0%

(Ministry of Higher Education, 2014).

Table 5 shows a higher number of women enrolled in higher education compared to men. In 2013, women constituted 51.8% of the undergraduate student body at public universities.

With the boom of social and economic life in Saudi Arabia, the culture of schooling and university attendance has become the norm for the majority of Saudi citizens. Due to the significant efforts and generous budget of the Saudi government, there has been a vast improvement in all aspects of Saudi education.

Princess Nourah bint Abdul-Rahman University (PNU)

Education in Saudi Arabia remains segregated by gender: female students are separated from male students at all levels—even at post-secondary institutions, all universities have different buildings designated for males and females with classes taking place separately. With the exception of the King Fahd University of Petroleum and Minerals (KFUPM) and the Islamic University (IU), which are only for men, and Princess Nourah bint Abdul-Raman University (PNU), which is only for women (Ministry of Education, 2015), Saudi Arabia has sought to create an appropriate educational environment for both sexes in accordance with the Islamic principles for Saudi women. This has been undertaken to promote their positive role and participation in the development of Saudi society by establishing the largest women's university in the world. Its area covers 8 million square metres, accommodating approximately 40,000 students. It was opened during the reign of King Abdullah bin Abdul-Aziz in October 2008 as Riyadh University for Girls, and later renamed Princess Nourah bint Abdul Rahman University after the sister of Saudi Arabia's founder (Ministry of Higher Education, 2014).

Summary

This chapter provided a detailed account of the background of the Kingdom of Saudi Arabia. The history of general education and special education, the background of higher education, and the status of Saudi women in higher education were explained. In the next chapter, a literature review will be presented.

CHAPTER THREE LITERATURE REVIEW

Introduction

An in-depth literature review covering nine main topics under the following titles is presented in this chapter:

- 1) Global models and disability classifications
- 2) Overview of international disability legislation and associations
- 3) SWDs in post-secondary education
- 4) Students with an SLD in post-secondary education
- 5) Centres for Disability Support Services (CDSS's) in post-secondary institutions
- 6) Reasonable accommodation
- 7) Faculty willingness to provide reasonable accommodation for students with an SLD
- 8) Evaluation of factors affecting the provision of reasonable accommodations
 - a) Faculty knowledge of disability legislation
 - b) Faculty experience with the CDSS
 - c) Faculty characteristics influencing the provision of reasonable accommodations
- 9) Perspectives of SWDs on the effectiveness of reasonable accommodations

Global Models and Disability Classifications

Developed countries and developing countries have various interpretations of disabilities and their societal implications. This international variation is based on differing perceptions of what constitutes a disability and the role of society in creating and perpetuating disadvantages based on it (Barnes & Mercer, 2005).

Classification is important in any field given the need to organise information pertaining to different groups based on common characteristics. As in all disciplines, classification plays a

pivotal role in the history of special education (Norwich, 2013). In this field, people who need additional or special educational services are grouped into numerous classifications. This approach is effective in identifying similar groups to determine the type of education and other services required and to ensure that all members of society can access these services. On this basis, education professionals can determine whether or not students are eligible to participate in special education programs. Further, people with disabilities can gain visibility, including by gaining the attention of government officials (Florian, Hollenweger, Simeonsson, Wedell, Riddell, Terzi, & Holland, 2006).

However, labelling can negatively impact students categorised as having a disability, as this information is given to successive teachers, potentially shaping low expectations. Labelling indicates that students with learning disabilities need additional support, but it can also direct teachers to treat students differently in ways that are not always positive. Further, according to the Individuals with Disabilities Education Act (IDEA), students are not eligible for special education services until a diagnosis has been made, which may entail a significant wait before the special education needed is received. Finally, this stigma can be harmful to parents if they believe that their child will not be able to lead an independent life (Henley, Ramsey, Algozzine, & Hall, 2010).

Several models are used to classify disabilities, including the medical model, the social model, and the International Classification of Functioning (ICF). Further, labels and their definitions may vary significantly between countries.

Medical Model of Disability

Over time, the number of people with disabilities has increased dramatically due to ageing populations: Older people are more vulnerable to disabilities as a side effect of many diseases.

Also, environmental factors, such as natural disasters, traffic accidents, war, and drug use, may be partially responsible for this increase. In addition, the number of people classified as having a disability has grown thanks to improved knowledge of conditions not considered a disability at an earlier point in time. Therefore, discourses concerning disability have changed.

In its first iteration, the medical model focused on the presence of an illness or disease responsible for a disability (Barnes & Mercer, 2005). This model defines a disability as a health deficiency and a direct result of a disease, injury, or any health condition that requires professional health care (World Health Organization, 2001). Focusing on the individual's health status, physical, sensorial, or intellectual, the model accounts for the consequences of the person's life situation or social experiences (Good, 2003).

The first medical model, which appeared in 1900, met with universal acceptance. It focused on the cause of death and eventually became the International Classification of Diseases (ICD). The World Health Organization (WHO) was established in 1948 to develop the classifications. Today, WHO continues to both develop disease categories and create disability classifications (Hollenweger, 2008).

Since the 1960s, through political activity on the part of people with disabilities and advocacy organisations, progress has been made in promoting social inclusion and enabling people in this group to live more independently (Charlton, 1998). Further, many efforts have been made to develop a schema to explain and define disease, disability, and impairment. In 1980, WHO published the International Classification of Imperilments, Disabilities and Handicaps (ICIDH)—a new schema focusing on the results of diseases, but neglecting their etiology or phenomenology. However, this schema was rejected by disability organisations due to the assumptions underpinning it (Oliver, 1996). For example, Moore, Beazley, and Maelzer

(1998) rejected the model for both failing to combat social exclusion and reinforcing negative ideas about people with a disability around terms such as 'unnatural,' 'incompetent,' or 'unable.' Nor does the model explain the differences between those diagnosed with the same disability. Early classifications adopted the medical model in conceptualising the term 'disability.'

Further, discrepancies in the use of terminology found in disability categories is a fundamental problem in this model: Terms such as 'learning disorder' and 'learning disability,' as well as 'visual impairment,' 'visual disability,' and 'visual handicap' usually describe the same condition. This inconsistency in labelling highlights a significant weakness in the standard concept and common language of disability (WHO, 2008). Even today, these issues have yet to be resolved.

Social Model of Disability

The social model of disability emerged for two main reasons. First, the end of the twentieth century witnessed significant developments in health care, and due to a more developed understanding of etiology treating diseases became much easier than before. Consequently, longer life expectancy triggered an increase in disabling diseases, and societies became more aware of disability issues. Second, in terms of classification, a new approach came to the fore with a focus on the factors hindering those with a disability from participating fully in society (Hollenweger, 2008).

Unlike the medical model, the social model considers disability from the community perspective, focusing on the lack of understanding and accommodation for those with disabilities. According to Shakespeare and Watson (2001), in this model, people with disabilities are considered to be a group that has experienced exclusion, negative attitudes, and oppression in

a social sense. Focusing on society to define disabilities rather than on those with disabilities (Whyte, 2006), the social model casts disabilities as a purely social matter.

International Classification of Functioning (ICF) Definition of Disabilities

In 2001, WHO published the International Classification of Functioning (ICF)—the newest and most inclusive model of functioning and disability. Based on the bio-psychosocial model, which combines medical and social models (Hollenweger, 2008; Imrie, 2004; Stucki, Cieza, & Melvin, 2007), this model defines disability as resulting from interactions between the person’s health condition and his/her environment. For this reason, the ICF is also the most widely accepted model.

This model conceptualises disabilities as an umbrella term for impairments, activity limitations, and participation restrictions. Disabilities constitute interactions between individuals with a health condition such as cerebral palsy or Down syndrome and personal and environmental factors such as limited social support and inaccessible transportation/public buildings, respectively (World Health Organization, 2015) (Figure 5).

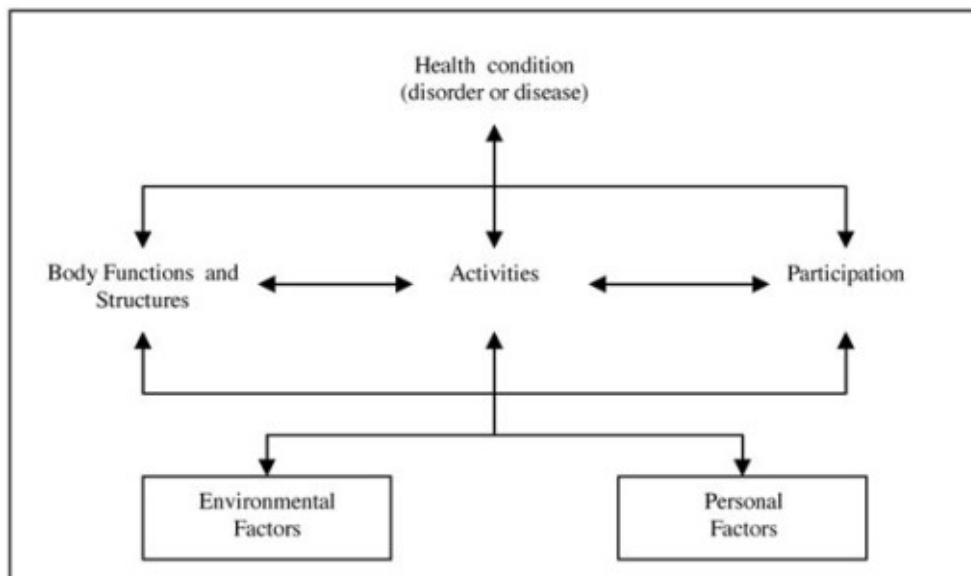


Figure 5: Interactions between components in the ICF (World Health Organization, 2015).

Figure 5 shows disability as a single prescription, rather than defining people with disabilities as a group of individuals with disabilities. In defining types of impairments, the diagram also highlights the relationship between health conditions and other factors. For example, environmental and personal factors could influence interactions between various activities, and a disability may limit participation in many activities in society (World Health Organization, 2002).

Despite the importance of disability classifications, there are arguments against them. For example, it is held that they may cause problems for children, such as peer rejection, stigmatisation, and low expectations, which could cause low self-evaluation and self-esteem (Ainscow, 1991).

Bronfenbrenner's Ecological Systems Theory

With association to human development (1979), the Ecological Systems Theory (EST) was established by Urie Bronfenbrenner. Therefore, he claimed that it could be assumed that each individual is embedded in multiple nested systems and complex interactions among humans and different systemic elements or constituents that have their effect on them lead to development. Figure 1 briefs the various systems that were offered by Bronfenbrenner. The complexity of interactive procedures among different systemic or contextual elements forms the basis of human development according to the conceptualization of Bronfenbrenner.

Bronfenbrenner's theory was chosen as the most appropriate theoretical lens for the programme of research. This was appropriate for the work, as the theory is parsimonious and readily suitable to the area under investigation. It easily aligns to the World Health Organisation's International Classification of Functioning (ICF), which is based on the bio-

psychosocial model, which combines medical and social models and represents the interaction between the person and his / her environment.

Overview of Studies Adopted Bronfenbrenner's (EST) as a Theoretical Framework

Hence, as the EST makes different factors a focal point both within and outside of the SWD which might affect inclusion and interact, it can be a valuable tool when adopted as a theoretical framework for research. Further, it makes the researchers to not to distract from the context of the phenomenon being studied. Several other studies like Foster and DeCaro (1991) implement the EST in inclusion studies. They carried out an ethnographic study of social interactions between deaf and hearing students in the hall of residence within the university, implying participant observation and comprehensive interviews. An EST model was adopted to organize rich data. The number and nature of peer interactions are influenced by the factors contained by the individuals like understanding of each other and approach towards each other communication skills, communication skills along with environmental factors, like the physical setting and the organization of campus. Keeping in mind the physical setting, for example, interactions based on lip-reading can be hindered by bad lighting conditions as observed.

To explore the social inclusion and involvement of young people with dual sensory impairment in majority of schools, Kamenopoulou carried out another research in 2012 to find out the extent to which the inclusion of young people is present in a typical environment and to recognize the limitations in their contribution. As a theoretical framework, he used EST (Bronfenbrenner, 1979) and therefore assumed the majority schools as a system where constituents interact and have an effect on social inclusion, continuously.

A study was carried out in 2016 again by Kamenopoulou in which few advantages and limitations of implementing EST in research on Inclusion and Special Educational Needs/Disabilities (SEN/D) were discussed. Moreover, this article focused on the claim that in research on inclusion in education of learners with SEN/D, the conceptual framework of the EST can play a vital role as it aids the researcher to concentrate on the critical interplay between the context and the human where the human is embedded. Difficulties of opting for this framework by researchers are highlighted too.

To discover the factors that are linked by the students with invisible disabilities with their voluntary withdrawal from a mid-western state land grant university (LGU), Thompson-Ebanks (2012) implemented Bronfenbrenner EST in a research. More explanations of stories of the participants were developed using the EST framework. A lens that gives the insight of the transactional context of the disability experience for students with invisible disabilities is given by the ecological perspective. The coding of data was done and under an ecological perspective, contrastive thematic analysis was carried out.

To study the Ecological aspects affecting the application of inclusive education in majority of the early schools in the Eastern Cape, South Africa, the EST was implied by Geldenhuy and Wevers (2013). The ecological phases that affect the application of IE in majority of primary schools are presented in this article merged within Bronfenbrenner's EST. Poor management of the learners facing hindrance to learning can also be identified through these aspects which are endorsed in all five systems of Bronfenbrenner's framework.

Bronfenbrenner's EST model was selected by Bell (2013) to imitate the experience of the environments (systems) by a student having a hearing impairment. Understanding of the university experiences of students with hearing impairment was essential in her study.

Bronfenbrenner's systems theory immensely sourced her attempts to give logic of and move further into the huge collection of data gained for this case study research.

Overview of International Disability Legislation

In 1990, the United Nations (UN) published global statistics for the disability rate in many countries. Austria came in first with the highest percentage of the population with a disability, whereas Egypt had the lowest at 3.5%. The disability rates in the US, Canada, and Australia ranged from 15 to 20%. However, these disparities arose from differences in definitions of disability (Mayhew, 2001).

Disability legislation differs between countries, as do the measurement and comparison tools used for diagnosis. On this basis, those with certain diagnoses can access many services, including financial support, health care, unemployment benefits, rehabilitation services, training, accommodation, and education (Mayhew, 2001).

Put another way, in the UK and Spain, any student who needs additional educational services is considered to have 'special educational needs,' whether or not he/she has received an official diagnosis of a disability (WHO,2008). In the US, the Individuals with Disabilities Education Act (IDEA) requires labelling under the umbrella of special education and only children formally diagnosed with a disability can receive special education services. To be eligible for such services, a child must be identified as having a disability such as deafness or blindness (Florian et al., 2006). However, children without such a diagnosis but who need additional support are offered relevant support, but not special education services.

Norwich (2013) and Douglas, Travers, McLinden, Robertson, Smith, Macnab, & O'Donnell (2012) showed that countries worldwide include a number of subsets in categorising those with special educational needs: (a) people who have a clear biological cause for their

disability, such as a visual, hearing, or other physical impairment; (b) students who are disadvantaged in some way—an example is that in some countries students who do not speak the country's first language are eligible for special education services, and (c) people with learning or behavioural problems. Yet, many countries use just one of these subsets, and others have an additional subset not included here. For example, Saudi Arabia defines talented students as requiring special educational programs (Al-Zoubi, Bani, & Sultan, 2015). Further, some countries use a non-categorical system to identify special education service requirements (Table 4).

Table 4: Disability Categories by Country

Country	Disability Category	Disability Category + Disadvantaged student	Disability Category + Disadvantaged student + Gifted student	Disability Category + Gifted student	Non-category system
Saudi Arabia				√	
Ireland	√				
US	√				
France	√				
Germany	√				
Greece		√			
New Zealand		√			
Spain			√		
Turkey			√		
Canada					√
UK					√
Denmark					√

(Norwich, 2013)

The table shows that certain countries that consider disadvantaged students as having special educational needs also consider gifted students under the same umbrella of special education.

Saudi Arabia is the only country that includes gifted students in one of the categories of special education. Further, in Saudi Arabia, disadvantaged students can access additional services, but not special education services.

Key International Disability Legislation in the United States, the Republic of Ireland, and Saudi Arabia

Disability Legislation in the United States:

1) Individuals with Disabilities Education Act (IDEA)

The Education for All Handicapped Children Act (EAHCA) became law in 1975. Renamed the Individuals with Disabilities Education Act (IDEA) in 1990, this law affirms that all SWDs have a right to education, specifically to appropriate public schooling K–12. Also, it provides appropriate intervention to support students' education through the creation of an Individual Education Program (IEP) for each SWD (Javier, 2005).

IDEA categorises disabilities into 13 types for students aged 3–21 years who are eligible for its services (Florian et al., 2006) ranging from autism to intellectual disabilities to visual impairments (including blindness). IDEA is based on six core principles : (1) Zero reject: Free, appropriate education cannot be denied to students with a disability (Al-Hoshan, 2009); (2) Non-discriminatory classification: Students thought to have a disability should be evaluated by specialists in a fair way and without discrimination; (3) Individualised and appropriate education: Students are entitled to appropriate education, which means they are to be provided with special education services that fit their needs and prepare them for the next educational level or their future career; (4) Least restrictive environment: Students with disabilities are taught in the least restricted environment possible and integrated with other students through modified classrooms, diverse teaching methods, and assistance; (5) Procedural due process: Parents have the right to reject any school action related to their child; and (6) Parent and student participation: Parents

have the right to participate in all meetings regarding the assessment of their child and to make decisions about any special education program (Turnbull & Rutherford, 1998).

2) Section 504 of the Rehabilitation Act of 1973

Section 504 of the Rehabilitation Act of 1973 is federal legislation designed to protect qualified people with a disability from discrimination based on that disability:

No otherwise qualified individual with handicaps in the United States shall, solely on the basis of her or his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. (Congress, 1973)

Section 504 does not provide special education programmes but focuses on providing necessary support and reasonable accommodation to qualified people with disabilities in many contexts, including pre-school to post-secondary education and welfare. IDEA, however, supports people with disabilities only from the age of 3 until the age of 18 or 21 if they struggle with their studies (Alkhashrami, 2015). Section 504 prohibits discrimination under any public or private program or activity receiving federal financial assistance, such as post-secondary education institutions, employment programmes, hospitals, nursing homes, mental health centres and human service programmes (U.S. Department of Health and Human Services, 2016). Section 504 is intended to make the programs of government-funded post-secondary institutions accessible to all qualified people with a disability so that they will have equal educational opportunities with flexibility in terms of the length of time taken to complete degree requirements and suitable modifications in terms of teaching and assessment instructions (Rao & Gartin, 2003).

3) Association on Higher Education and Disability (AHED)

The Association of Handicapped Student Service Programs for Postsecondary Education was established in 1978 to provide services for SWDs after they transitioned from secondary to post-secondary education. Later known as the Association on Higher Education and Disability (AHED), the association helps disability services professionals in post-secondary institutions to develop expertise through courses and conferences. It also works to support post-secondary institutions in promoting the success of SWDs. Additionally, the AHED provides support in the diagnosis of people with a learning disability and helps determine appropriate strategies for addressing each category of disability (Alkhashrami, 2015).

Disability Legislation in the Republic of Ireland

Of the countries that have developed legislation to ensure educational rights for people with disabilities, the Republic of Ireland was relatively late in creating comprehensive legislation in this regard (Griffin & Shevlin, 2011).

Education Act

Ireland's first step in the legislative direction of providing accommodations to SWDs, the Education Act of 1998 required all schools to accept students with special education needs and to identify and evaluate students with such needs (Griffin & Shevlin, 2011).

Education (Welfare) Act 2000

Within two years, the Education (Welfare) Act 2000 was passed to ensure that all children with a disability would be educated at a recognised educational institution and to determine why such students were studying at institutions not afforded this recognition (Citizen Information, 2015; Griffin & Shevlin, 2011).

Education for Persons with Special Educational Needs (EPSEN) Act

In 2004, the Education for Persons with Special Educational Needs (EPSEN) Act was passed. A significant development in Ireland's special education regulations, EPSEN is important to the country's commitment to educate children with special educational needs under 18 years of age in an inclusive environment in ordinary schools. It also outlines the statutory functions of the health service in relation to educating students with special educational needs and states that parents have the right to participate in each stage of their child's assessment and decision-making in creating an individualised education plan (IEP) (Citizen Information, 2015; Winter & O'Raw, 2010)

Disability Act 2005

The Disability Act of 2005 focuses on promoting the integration of people with disabilities into everyday life in order to have a positive long-term impact on communities. This legislation is based on six main principles: (1) ensuring independent assessment of people with disabilities who are over 18 years old, including their health and educational needs; (2) ensuring access to public buildings, services, and information and requiring old buildings to be re-fitted to suit the needs of people with a disabilities; (3) requiring six key departments to publish plans to ensure that the rights of people with disabilities are considered in planning services and provisions; (4) providing genetic testing to ensure that people who have genetic disorders are not subjected to unreasonable conditions in such matters as employment, mortgages, and insurance; (5) requiring public bodies such as governmental departments, educational institutes, and health boards (although not Defence Forces, Garda Síochána, or prison officers) to employ people with disabilities; and (6) establishing the Centre for Excellence in Universal Design in the National

Disability Authority, which aims to make the environment easier to use for everyone (Irish Statute Book, 2005).

Disability Legislation in Saudi Arabia

Saudi Arabia's Ministry of Education recognizes special education as integral to the educational system. Approximately 15–20% of school students may need special education services (Mayhew, 2001). In collaboration with the ministry, the Saudi government established the Legislation of Disability, the Disability Code, and the Regulations of Special Education Programs and Institutes (RSEPI) to provide appropriate education to people with disabilities.

Legislation of Disability

In 1987, Saudi Arabia passed the Legislation of Disability, its first law regarding people with disabilities. Designed to ensure equal rights for people with disabilities, this legislation defines different kinds of disabilities, intervention programs, prevention, and diagnosis. It also states that government facilities should provide support and training services for people with disabilities (Alquraini, 2010).

Disability Code

In 2000, the King Salman Center for Disabilities Research passed the Disability Code, a law designed to ensure the rights of those with all kinds of disabilities: visual, hearing, cognitive, motor, learning, speech and language, behavioural, pervasive developmental delay, multiple disabilities, and other disabilities requiring special care. The law comprises 16 articles, of which those most relevant to education are discussed here. The first article begins with a definition of people with disabilities:

A person with a disability is one who is totally or partially disabled with respect to his/her bodily, material, mental, communicative, academic or psychological capabilities, to the

extent that it compromises the ability of that person to meet his/her normal needs as compared to his/her non-disabled counterparts.

In regard to educational services, Article 2 stipulates that the government is responsible for providing services to individuals with disabilities in health, education, training, rehabilitation, work, the awarding of loans, and the provision of technical aids. These services must be provided to people with disabilities at all educational stages: pre-school, general education, and post-secondary education. Services should be appropriate for SWDs, and it is necessary to facilitate their enrolment and a continuous assessment of the curriculum and the services provided must take place (King Salman Center for Disabilities Research, 2000).

Regulations of Special Education Programs and Institutes (RSEPI)

The Ministry of Education, in cooperation with researchers at King Saud University who hold specialist postgraduate degrees from American universities, reviewed American special education policies such as IDEA in order to create new legislation outlining the rights of and regulations pertaining to children with disabilities and special education programmes (Alquraini, 2010). Subsequently, in 2001, the Ministry of Education introduced the RSEPI in 11 chapters (Ministry of Education, 2001), wherein each chapter contains articles outlining special education policies and ensuring the rights of people with disabilities categorised as hearing impairments, visual impairments, mental retardation, learning disabilities, gifted and talented, autism, emotional and behavioural disorders, multiple disabilities, physical and health impairments, and communication disorders.

The RSEPI supports access to free and appropriate education for individuals with disabilities and has a goal of increasing the number of SWDs in post-secondary education. RSEPI's first chapter defines all the terms that relate to people with disabilities and explains the

different types of disabilities, various special education programmes, and formal and informal evaluation methods.

The fifth chapter focuses on transition and rehabilitation programs. In particular, Article 14 talks about the goal of such programmes, which are designed to prepare people with disabilities to progress from one stage to the next or to move from one environment to another.

Article 16 describes three kinds of transition and rehabilitation programmes: (1) Rehabilitation programs, which apply before and during the three stages of general education and can enable SWDs to learn valuable communication skills, participate in extracurricular activities, and form friendships; (2) Transitional programs, which support students after high school who are able to complete post-secondary degrees, helping them develop social, communication, and decision-making skills so that they choose the right degree programs; (3) Rehabilitation programs, which help SWDs by identifying their strengths and appropriate employment and equipping them with the skills needed to be successful in that context.

United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)

Saudi Arabia was a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (King Saud University, 2013), which came into force in 2008. This convention stipulates that all people with any type of disability must enjoy full human rights and equality and obliges the signatories to ensure that this is the case in their respective countries.

The UNCRPD of States Parties comprises 50 articles covering all aspects of life such as health, education, culture, recreation, leisure, sport, and political and public life. For example, Article 5 focuses on promoting equality and non-discrimination to guarantee equal legal protection, whereas Article 6 focuses on ensuring that women with disabilities are treated

equitably. Article 24 addresses the right to education without discrimination in respect to personality, talent, creativity, and mental and physical abilities (United Nations, 2008).

Regulation of Students with Disabilities' Rights in Higher Education Institutions (RSDRHEI) in the Gulf Cooperation Council

The United Nations Convention of the Rights of People with Disabilities (UNCRPD) has been ratified by most countries, including the Gulf Cooperation Council (GCC) members. Higher education institutions in the Gulf region, therefore, apply UNCRPD standards to ensure the rights of students and employees with all types of disabilities in post-secondary institutions by issuing the Regulation of Students with Disabilities' Rights in Higher Education Institutions (RSDRHEI) in the Gulf Cooperation Council (Alkhashrami, 2015).

The RSDRHEI comprises 14 articles, the first of which, 'Educate Students with Disability in Post-Secondary Institutions,' requires all universities to promote educational opportunities for SWDs without discrimination. It also highlights the importance of training faculty members to work effectively with SWDs.

Article 9 covers the support services provided by post-secondary institutions to help ensure that SWDs' rights to higher education are met in line with the UNCRPD. According to this article, each post-secondary institute must have a Centre for Disability Support Services (CDSS) to provide training on a continual basis for all faculty and staff about the rights of SWDs. The CDSS is also responsible for identifying the accommodation(s) each SWD needs.

Overall, the Saudi government has developed comprehensive legislation to ensure the rights of people with disabilities. In recent years, Saudi Arabia has made significant progress in establishing health care centres; rehabilitation centres for psychological, social, and academic issues; and training and research centres to develop services for people with disabilities.

However, to date, the efficacy of this legislation has been limited for several reasons, including a lack of specialists in personal diagnostic assessments and a lack of effective assessment tools (Aldabas, 2015). It has been argued that all Saudi legislation faces limitations in supporting SWDs:

Even though these laws were passed almost a decade ago, they are not practiced in the real world with students with disabilities. In fact, the lack of effective implementation has created a gap between the framework of these laws and the provision of services, resulting in a lack of special education services for some students with disabilities. (Alquraini, 2010)

Despite a significant budget allocated to special education, many facilities, public and private, do not provide the necessary services and continue to use inadequate building designs and inappropriate employment systems. In addition, special education services should be available in all villages and towns, not just in major cities. Also, based on a search for information and on the pilot study of the current study, it is evident that there are deficiencies in the implementation of most of the terms of the RSDRHEI in Saudi post-secondary institutions. In particular, awareness of SWDs' rights is limited among faculty and staff, not all post-secondary institutions have a CDSS, and the services provided are often insufficient.

Comparison of International Disability Concepts

Despite evident differences between the US, Ireland, and Saudi Arabia in terms of history, values, and culture pertinent to disability legislation, each has a goal of fostering the ability of people with disabilities to be socially independent and participate in public life (Al-Mousa, 1999).

To clarify the similarity between Irish and Saudi special education policies and US principles, several key themes come into play. The US IDEA principle of zero reject is similar to Ireland's Education Welfare Act 2000 in that both specify education for students to a certain minimum level (Griffin & Shevlin, 2011). Saudi Arabia established the Directorate General of Special Education (DGSE) in 1990–1992, which states that no student with a disability should be dismissed from school due to poor performance (Alzahrani, 2005). The DGSE encompasses assessing students' skills and abilities and planning special education programmes to maximise their chances of educational success accordingly (Al-Mousa, 1999).

The US, Ireland, and Saudi Arabia have made significant progress in 'inclusion,' defined as integrating SWDs with non-disabled students and providing a less restrictive environment (Al-Hoshan, 2009). Since 1994, the placement of SWDs in non-disabled schools has become more frequent in Saudi Arabia (Alzahrani, 2005). Ireland minimises the number of students with special educational needs who leave school early without qualifications and has enacted legislation to ensure that people with disabilities can participate in education and society. For example, EPSEN is responsible for the integration of children with disabilities into mainstream schools, whereas the Disability Act of 2005 promotes the inclusion of people with disabilities over the age of 18 in Irish society.

In terms of placing children with disabilities in appropriate educational settings, all three countries have provisions for ensuring that children are assessed by a number of educational and social services or health professionals and for ensuring that the child's parents are fully involved in this process. The child is assessed according to specific criteria in order to foster his/her progress, a detailed plan is created, and the child is placed and monitored accordingly.

Another important aspect in comparing the three systems is the naming of the different categories of disabilities, as shown in Table 5.

Table 5: Names of Special Education Categories in the US, Ireland, and Saudi Arabia

Individuals with Disabilities Education Act (IDEA)	Irish System	Regulation of Special Education Programs (RSEPI)
Autism	Autism/autistic spectrum disorders	Autism
Deaf-blindness	–	–
Deafness	–	–
Emotional disturbance	Emotional and behavioural disturbance	Emotional and behavioural disorder
Hearing impairment, Intellectual disability	Hearing impairment Mild general learning disability Moderate general learning disability Severe/profound general learning disability	Hearing impairment Mental retardation
Multiple disabilities	Multiple disabilities	Multiple disabilities
Orthopaedic impairment	–	–
Health impairment	Physical disability	Physical and health impairment
Specific learning disability	Specific learning disability	Learning disability
Speech or language impairment	Specific speech and language disorder	Communication disorder
Traumatic brain injury	–	–
Visual impairment (including blindness)	Visual impairment	Visual impairment
–	–	Gifted and talented

Overall, the concepts and principles used across nations are very similar, though with differences in IEP processes and the disability nomenclature.

Students with Disabilities (SWDs) in Post-Secondary Education

The ability to cope with a given environment is important to be psychologically comfortable and successful. Therefore, if they are to graduate within the same timeframe as the rest of their cohort, SWDs must be acclimatised to the university environment and universities must be prepared to receive them. This will not happen without cooperation between academic

departments represented by faculty members and the Centre for Disability Support Services (CDSS) (Swail, 2004).

Internationally, compared with their peers, first-year SWDs at the post-secondary level may take longer to adjust to their new environment. The transition requires enhanced social, emotional, and academic skills on the student's part (Skinner & Lindstrom, 2003). Therefore, post-secondary institutions are required to provide reasonable accommodations to help SWDs integrate quickly into post-secondary life (Ostrowski, 2016). However, research has shown that the proportion of graduate students with disabilities is 20% lower than that of other students in post-secondary institutions (Newman, Wagner, Knokey, Marder, Nagle, Shaver, & Wei, 2011).

SWDs in the United States

Historically, in the US, SWDs did not have equal opportunities, nor were they guaranteed admission to post-secondary education even if they had met the requisite standards (Alliston, 2010). In one of the first studies in this area, Condon (1957) focused on supports for SWDs in a number of diverse post-secondary institutions throughout the US, discovering that 105 of 181 colleges and universities had no formalized programme for SWDs but did provide some services for them. Forty-five of them did not have special education programmes or services. Thirty-one offered organised programmes to support students with disabilities, constituting only 17% of the sample (Condon, 1957).

The first beneficiaries of the Education of All Handicapped Children Act (P.L. 94-142) (U.S. federal legislation requiring schools to provide equal educational access to children with physical and mental disabilities) graduated in 1983. However, the results of subsequent research showed that (1) unemployment among people with disabilities was on the rise and that even when they did secure a position, their wages tended to be lower compared with those without a

disability, (2) acceptance rates at the university level were low, and (3) independent living was difficult (Wagner & Blackorby, 1996).

In response, legislation designed to promote the integration of people with disabilities into post-secondary education has continued to evolve. In 2007–2012, SWDs accounted for approximately 11% of the post-secondary student population in the US, of which 56% were female and 44% were male (National Center for Education Statistics, 2013).

Republic of Ireland

Turning to the Republic of Ireland, Irish legislation has played an important role in the increase in the number of SWDs accessing post-secondary education. Recent statistics indicate a large increase in SWDs enrolled in post-secondary education, which is now approaching 5% (AHEAD, 2015). From 1994 to 1999, the proportion of post-secondary SWDs increased slightly from 0.7 to 0.9% of the student population. However, these rates are low compared to those of other countries such as the UK, which reported an increase from 3.9 to 4.5% for the same period (Shevlin, Kenny, & McNeela, 2004).

Today, most Irish universities and colleges provide several types of support for SWDs through disability support services or access offices, which, although they vary across institutions, typically focus on helping SWDs succeed in post-secondary education. Examples include providing a note-taker, lecture note copies, additional tuition, assistive technology, and extra time during exams (Dyslexia Association of Ireland, 2018).

Saudi Arabia

In regard to Saudi Arabia's post-secondary institutions, all provide electronic registration for SWDs and all other students to use, and some university registration forms ask students to specify the type of disability they have. The Ministry of Education requires an acceptance test for

all students, including SWDs, and public universities cannot exclude SWDs who have passed it. The ministry recommends that all universities provide a CDSS to ensure adequate support is available to SWDs (Alkhashrami, 2015).

However, universities still fail to meet the needs of SWDs thanks to an insufficient understanding of disabilities and correspondingly inadequate services. It is difficult to monitor the academic progress of SWDs at the post-secondary level, especially in regard to those with no official diagnosis who have already been accepted to the post-secondary level, such as students with a learning disability (Almasoud, 2011). There are no clear statistics for post-secondary SWDs at all Saudi universities, but according to published figures, of the total number of students who received services from the CDSS at King Saud University (KSU) in the academic year 2008–2009, 80% were male (Al-Khashrami, 2008). Another statistic provides the number of female students in various academic departments during the same year (Figure 6).

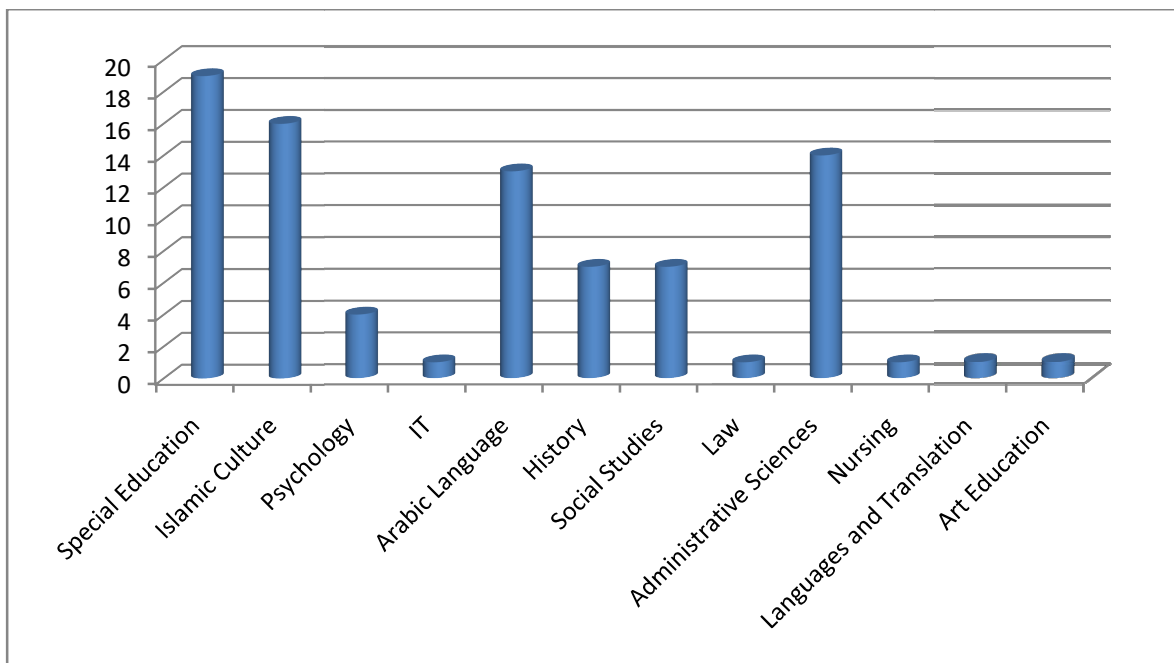


Figure 6: Number of female SWDs by the academic department at KSU (King Saud University, 2015).

Women with Disabilities at the Post-Secondary Level

Internationally, individuals with disabilities are underrepresented in post-secondary education (Tuomi, Lehtomäki, & Matonya, 2015). However, research focused on determining the issues that hinder the inclusion of women with disabilities in post-secondary education is limited. Even in countries where education is segregated, such as Saudi Arabia, few studies focus on female SWDs. Researchers are more interested in comparing male and female SWDs in terms of specific issues relating to disabilities.

Using qualitative research methods, Erten (2011) examined the perspectives of six female SWDs studying at Canadian universities. The participants indicated that the attitudes of faculty members and peers and the type of disability involved affected participation in academic and social life at university. They also valued the role of the CDSS at their universities. However, although this study is well-designed in terms of the research instrument used and the analysis, the sample is too small to be generalizable.

In many African countries, education for females has remained at a much lower level than that of males (Egaga & Aderibigbe, 2015). For example, a study in Tanzania determined the factors that enable women with disabilities to be fully included in post-secondary education. According to the participants, family support, encouragement from teachers, and sufficient financial support are all vital to the success of female students. They also indicated that faculty training and structural modification are the key elements in facility access.

Opini(2012) focused on determining the experiences of Kenyan female SWDs in post-secondary education. The results show that positive experiences with the curriculum, accessibility, and interpersonal relationships are key factors in positive learning outcomes for

this group at the university, whereas negative experiences are associated with limited participation in university activities in general.

Taken together, these studies clearly show the educational deficit first of female students in general in Africa and then the further disadvantages of female students with disabilities. However, Opini's study suggests a way forward, especially given that the results align with those of multiple other studies in regard to both male and female students, which although they differ in terms of study setting may mean that trying out similar solutions may be worthwhile.

Sayman (2015) focused on understanding the experiences of a young woman with an Autism Spectrum Disorder in post-secondary education. Based on annual interviews for three years, he found that students who faced negative attitudes from faculty and staff did not fully participate in post-secondary education. Although the conclusion presented was only to be expected, Sayman's remains one of the few studies in this area, such that the field could benefit from similar studies—especially those with a longitudinal design.

To summarise, as the number of SWDs in post-secondary education increases, it is imperative to provide support services in that context. Reasonable accommodations can help SWDs obtain an academic degree by removing some of the barriers to success (Hadley, 2007).

Students with Learning Disabilities (SLDs)

Definitions

The term 'learning disability' was introduced in the 1960s to describe children who experienced academic difficulties but who did not belong to any of the obvious disability categories as described at that time. In 1962, Kirk and Bateman documented the first definition of a learning disability:

A learning disability refers to retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subject resulting from a psychological handicap caused by a possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural and instructional factors. (p. 263)

Previously, such children were often referred to as having a mild intellectual disability (Whisenhunt, 2001).

The term learning disability was used to describe children who were of average intelligence but appeared to have learning disorders in the academic domains of reading, written language, and mathematics (Winzer, 2007). Communication, oral expression and listening comprehension are concepts which may be challenging for students with learning difficulties. Moreover, 80% of people with an SLD have a reading disorder (Speece, 2008).

In 1990, in the US, IDEA defined an SLD as:

A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or environmental, cultural, or economic disadvantage. (Special Education Guide, 2016)

Types of Learning Disabilities (LDs)

There are many types of academic SLDs, which differ in nature and intensity and tend to be present in post-secondary education (Table 6) (Hansen, 2013; Randolph, 2012).

Table 6: Key Types of SLDs

LD Type	Examples
Reading (dyslexia)	Decoding, phonetic knowledge, word recognition, comprehension, mixing up letters within words or words within sentences
Written language (dysgraphia)	Spelling, written expression, and difficulty forming letters, poor or illegible handwriting
Mathematics (dyscalculia)	Computation, problem-solving, and difficulty in understanding the symbols associated with math or applying mathematical concepts

Prevalence of Learning Disabilities (LDs)

Statistics in terms of the number of students with an SLD differ by time and location, due, at least in part, to variations in the criteria used for diagnosis (Alkhateeb, 2014). For example, in 2011, the percentage of students with an SLD in the US had increased significantly to 5.2% of total public school enrolment, or 2.4 million students (National Center for Education Statistics, 2016). There was also considerable variation in 2011 from state to state, ranging from 2.3% (Kentucky) to 13.8% (Puerto Rico) (National Center for Education Statistics, 2016).

Further, there are clear differences in the prevalence of SLDs between Arabic countries. For example, in Kuwait, in research to determine the prevalence of SLDs among primary school students studying the Arabic language and/or mathematics, 21.4% of students studying the former had an SLD compared with 13.7% of those studying the latter (Future Makers, 2013). Also, in the UAE, according to Al Zarrad (1991) in a sample of 500 primary school students, 13.4% had an SLD diagnosis. An Omani study by Tawfiq (1993) found that the prevalence of

SLDs was 12 and 9%, respectively, for males and females. In Jordan, the incidence of learning disabilities ranged from 15 to 20% of all students in public schools (Salem, Al Shahaat, & Hasan, 2003). Similarly, in Egypt, the prevalence of SLDs among primary school students was 14% based on a sample of 417 (Ashoor, 2002).

These differences can be attributed to differing cultures and differing awareness of disabilities. However, according to Hussain (2010), such differences also arise from a lack of financial support for research, deficient assessment tools, and a lack of diagnostic measurements, which have led to weaknesses in research outputs.

In regard to Saudi Arabia, in 2010, approximately five million students were enrolled in the country's schools (King Salman Centre for Disability Research, 2018), of whom 5–10% (based on global studies) had an SLD (Hussain, 2010). It is estimated that between a quarter of a million to half a million students in Saudi schools have an SLD, but the available statistics show that very few of these have been identified and provided with the necessary support in school. Of 28,000 schools in Saudi Arabia, less than 5% offer programmes and services for students with learning disabilities. It has been found that the schools have only 1,600 specialist teachers addressing learning disabilities; yet, it is estimated that approximately 20,000 teachers are needed to serve all the students with an SLD (King Salman Centre for Disability Research, 2018).

It is essential in any field to have accurate comprehensive information and statistics as a solid basis for studies on which programmes designed to serve a given population are based. However, there is an obvious lack of quality research, information, and statistics pertaining to SLDs, which is a matter that should be addressed. Alkhateeb captures the situation well when he states that:

Saudi Arabia does not have a reliable estimate of the ratio of male and female students with LDs. The average age in which LDs are identified is not known. Large gaps exist in the available information regarding students with LDs in Saudi Arabia. (2014, p. 47)

Students with Learning Disabilities (SLDs) at the Post-Secondary Level

Until recently, adults with an SLD have been neglected in practice, although many researchers have focused on problems related to this group. In the past, it was commonly held that children with an SLD would overcome it by the time they reached adolescence. At present, it is evident that many adults are in great need of support in order to effectively manage and address the problems they face—support needed to equip them to function as independent people able to participate fully in their communities (Cawthon & Cole, 2010).

Developed countries have embraced the phenomenon of SLDs among post-secondary students and have revised their educational systems accordingly, given that students with an SLD are the most prevalent disability group at the post-secondary level (Betz et al., 2012). They seek to enrol in post-secondary education for the same reasons as their peers: to gain an education, to open up employment opportunities, and to improve their quality of life (Mellard, 2005). However, despite the increase in educational and career opportunities for those with a learning disability who hold a post-secondary certificate, many obstacles remain.

According to Vogel and Adelman (1992), there is no doubt that an SLD in the years before university adversely affects students at the post-secondary level. Also, Alkhashrami (2015) has argued that there are significant differences between general education and post-secondary environments. A secondary school student receives information and services from sources without providing documents to prove a disability, whereas a post-secondary student must provide such proof to a CDSS in order to receive reasonable accommodations. Students in

this category are in need of several programmes to overcome the difficulties that arise in learning and training at the post-secondary level and in their future careers. Therefore, an assessment is needed to determine these difficulties, their causes, and ways to overcome them such that all faculty and staff at a post-secondary institute should be educated to work with SWDs, including those with an SLD.

Students with an SLD face numerous challenges transitioning to post-secondary education, particularly relating to securing appropriate accommodation and support services. Also, the effectiveness of transitions in preparing students with an SLD from the secondary to the post-secondary level has been examined from the viewpoints of special education specialists at both the secondary and post-secondary education levels (Janiga & Costenbader, 2002). In this context, the US has focused on the positive role played by educational programmes in facilitating services for post-secondary students with an SLD and appropriate rehabilitation is provided to help students get the most out of their university education. In 1983, the ratio of first-year students with an SLD at American universities and colleges was 0.05%, increasing to 3.3% in 2008, and then reaching 9% in 2012 (Cawthon & Cole, 2010; Cortiella & Horowitz, 2014) (Figure 7).

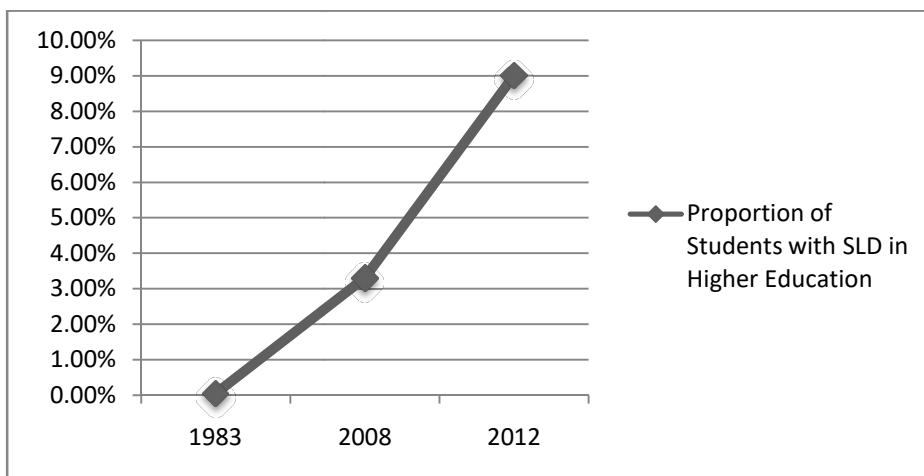


Figure 7: Rise in the proportion of SLD in the US post-secondary education.

There are two main reasons for the increase in the proportion of students with an SLD who transition to the post-secondary level in the US. First, IDEA requires all universities to accept a certain percentage of SWDs as evidence of a commitment to equality, which encourages those directing special education at the secondary level to examine post-secondary education objectively and realistically and prepare educational plans on this basis. A greater number of students with an SLD who are studying at the secondary level have been well served by educational plans that were more focused and challenging than in previous years. On this basis, more students with an SLD have become more competitive in terms of securing a university place. Second, there has been a noteworthy increase in awareness of the importance of post-secondary education to securing employment (Madaus & Shaw, 2010).

In the US, in 2010, 47.3% of all students with an SLD attended post-secondary institutions, 35% of whom studied at a two-year community college; 22% at a vocational, business, or technical school; and 16% at a four-year institution (Madaus & Shaw, 2010). Yet, only 17% of students with an SLD received appropriate accommodation and support at the post-secondary level, compared to 94% in high school. Moreover, 41% of students with an SLD completed post-secondary education, with just 4% dropping out because of a lack of essential services (Cortiella & Horowitz, 2014).

In the academic year, 2013–2014, students with an SLD in Ireland constituted the largest percentage of SWDs at the post-secondary level. In that year, of the entire student population at Ireland's 27 post-secondary institutions, 7.4% were diagnosed with a disability, of whom almost 51% were diagnosed with an SLD (AHEAD, 2015).

Saudi universities have limited experience in creating programs for people with disabilities. There are only two main support centres for female students serving most categories

of disabilities, including female students with SLDs. Some universities have smaller units serving fewer categories, such as visual or physical impairments catering only to male SWDs.

Centres for Disability Support Services (CDSS) at Post-Secondary Institutions

The needs of post-secondary SWDs including those with an SLD in regard to reasonable accommodations vary depending on the nature of the disability. In order to cater to these needs, post-secondary institutions provide centres designed to foster SWDs' academic success (O'Shea & Meyer, 2016; Los Santos, 2018). For a CDSS to fulfill its goal of supporting SWDs, the latter must report their disabilities to the centre's staff so that the latter can determine the nature of the services and reasonable accommodations needed, which are specific to each individual. Then, a reasonable accommodation plan is designed, after which the CDSS informs faculty members of the accommodations required and provides training to coordinate the support called for (Alkhashrami, 2015; Garland, 2015; Lombardi et al., 2013).

Despite these centres' contributions to facilitating the involvement of SWDS in university life, many students do not report to the centres and, therefore, do not receive assistance. There are multiple reasons for this failure to self-identify (Alkhashrami, 2015; Sayman, 2015). Students may wish to avoid the stigma of the disability and/or may wish to be self-reliant. They may wish to avoid social reactions, such as compassion and empathy, which they may see as undermining their ability to participate socially in an equal way. They may lack knowledge regarding how to present themselves to others and how to explain the nature of their disability, and/or they may not be fully aware of what the centre offers. Lack of confidence in the quality of the services and/or in the facilities available may also be a contributing factor. Finally, some students may have had negative experiences with faculty members, despite presenting a

letter from the CDSS outlining the reasonable accommodations they need. These factors can add up to a loss of confidence in the CDSS (Alkhashrami, 2015).

Examples of CDSS's at Saudi Universities

Some of the main Saudi universities, including King Saud University (KSU) and Princess Norah University (PNU), have a CDSS, which provides services for students with all types of disabilities. Other universities have disability service units that offer limited services. The units at some universities, among which are King Khalid University (KKU) and Jazan University, are reserved only for male students.

CDSS at KSU

In the Arab world, the CDSS at KSU was a pioneer in the field of integrating students with physical and/or visual disabilities with the rest of the student body. In 1985, KSU created a specialized centre to serve its male students with special education needs. The centre, named the Ibn Umm Kulthum Club, was founded to provide services for students with visual disabilities only. Six years later, the centre expanded to serve those with various kinds of disabilities. In 1993, its name was changed to the Centre for Disability Support Services (King Saud University, 2015). In 1996 a similar centre was established for female students, and in 2008, 181 SWDs, comprising 145 male and 36 female students, received CDSS services (Al-Khashrami, 2008).

In an assessment of the accommodation services for SWDs at King Saud University (Al-Khashrami, 2008), a good relationship was reported between the SWDs and faculty members, administrators, and other students. However, the study highlighted deficiencies in four main areas: inadequate services provided by the CDSS, inadequate infrastructure, weak educational tools, and a lack of cooperation among faculty members. First, students with invisible disabilities continued to experience difficulties throughout their studies due to a lack of support services and

of tailored teaching/special examination accommodations. Second, despite the presence of modern buildings, many SWDs reported dissatisfaction with the space available in corridors, classrooms, and/or bathrooms. Inadequate infrastructure for SWDs can limit their mobility and their ability to participate in activities and can even mean that they cannot get to lectures on time. Third, the study pointed to the weak educational tools provided to SWDs, for example, a lack of assistive technology in classrooms, libraries, and/or computer labs. Finally, several students complained about uncooperative faculty members who used inappropriate teaching strategies and refused to allow extra time to complete tests. In summary, the barriers described are attributable to structural and academic impediments that should be addressed.

CDSS at PNU

In 2016, 98 SWDs and faculty and administrative members with disabilities benefited from the CDSS and the universal access program at PNU. Offering services covering academic, administrative, psychological, social, and technical concerns (Sabq, 2016), this centre aligns its work with research and international standards to foster the success of its constituents and to help integrate them with the rest the university community (PNU, 2017).

The centre focuses on three main goals: creating a functional environment by (1) providing all the facilities needed for easy wheelchair movement and access; (2) providing electronic services at the university, such as an online system for registration, access to the contents of digital resources, and the ability to search websites and working with SWDs to help them develop and maintain the skills needed to use technology effectively, including acquiring the International Computer Driving License (ICDL); and (3) promoting professional management designed to educate faculty and staff to fulfill their role in providing the support needed by each student (Alhayat, 2016).

The centre promotes awareness of the educational rights of people with disabilities by hosting international days on this subject. Additionally, a committee under the name of the volunteer Hands at the University of Princess Norah focuses on attracting people with special needs and helping them to develop academic and administrative skills by encouraging them to engage in volunteer work (Alhayat, 2016).

Reasonable Accommodations

Definitions

It is important to fully understand what is meant by reasonable accommodations and their role in the educational progress of SWDs. Presently, most post-secondary institutions provide several types of support services to SWDs described as a reasonable accommodation. A pamphlet from the Trinity College Disability Service, *Everything You Wanted to Know about Reasonable Accommodations and Supporting Students with Disabilities, but Nobody Bothered to Tell You* defines the term thus:

It involves providing special treatment or facilities or making adjustments in order to enable access to a service. A reasonable accommodation is a required facility outside the mainstream provision, to allow the student with a disability to participate fully, and without an educational disadvantage in comparison with his/her peers. (Mullan &

Treanor, 2013, p. 8)

Another accepted definition is ‘a service or support that is provided to help a student fully access the subject matter and instruction as well as to demonstrate what he or she knows’ (Nolet & McLaughlin, 2005, p. 71).

The concept of reasonable accommodation is not limited to education, as SWDs often need support in their homes, communities, and many aspects of their lives. Hence,

accommodation should extend into their adult lives in general (Thompson, 2018a). However, it is important in this context. In fact, many post-secondary institutions worldwide offer supplementary services or support to help SWDs succeed in their studies and ensure they can participate in all aspects of student life. These kinds of reasonable accommodations are offered in an effort to ensure equitable instruction, assessment, and access to education for SWDs, but attempt to avoid modifying academic standards (Alhossein, 2014). The issue of retaining academic standards is at the heart of the academic enterprise given that degrees are awarded on the basis of achieving a certain level of competency. However, Alhossein does not consider whether standards are, in fact, relaxed at all for certain students on the basis of disability or for any other reason. Further studies designed to provide empirical evidence one way or the other, therefore, are very much needed.

In general, given the more challenging nature of the post-secondary curriculum as compared to the high school level, such students require different types of educational support to obtain a post-secondary degree (Montoya, 2009). Further, irrespective of whether standards are lowered in some situations, it is still the case that reasonable accommodation should be flexible enough to be tailored to each individual (Kurth & Mellard, 2006). For instance, the time required to complete a test may vary from one person to another. Students with dyslexia compared with those without a disability tend to require an additional 10–15 minutes per hour as a rule (Association of Higher Education & Disability, 2018).

Reasonable accommodation categories

In teaching and assessment, four kinds of reasonable accommodations can be offered to meet students' needs: presentation, setting (environmental), response, and timing (scheduling) (Alhossein, 2014; Elliott et al., 2011; Morin, 2014; Thompson, 2018b).

Presentation accommodations allow SWDs to access information in a variety of ways in addition to traditional pathways (Alhossein, 2014). For example, students with print disabilities (defined as an inability to visually decode standard print because of a physical, sensory, or cognitive disability) may require alternative visual, tactile, or auditory formats (Thompson, 2018b). A helpful form of accommodation for students with attention deficit disorder (ADD) is listening to audio recordings instead of reading a text, working with fewer items per page in larger print size, and/or a written list of instructions (Morin, 2014).

Sitting (environmental) accommodations refer to changes in the educational setting or the structure of the environment made to help students fully participate. For example, some students with ADD and/or Attention Deficit Hyperactivity Disorder (ADHD) need to be tested in a quiet room without any visual or auditory distractions to help them focus on the test (Alhossein, 2014).

Response accommodations allow students alternative ways to complete, solve, organise, or express their knowledge and skills, often by allowing students to use suitable materials or devices (Thompson, 2018b). For example, students with dysgraphia can use a spelling dictionary or electronic spell-checker. Likewise, using a calculator or table of math facts can be useful for students with dyscalculia (Morin, 2014).

Fourth, timing (scheduling) accommodations refer to providing extended or adjusted timing to complete assignments, tests, and projects or to process oral information. This kind of accommodation can also entail reorganising how tests or classroom activities are delivered in terms of timed sections (Morin, 2014; Thompson, 2018b). For instance, a student could be tested in several timed sessions to reduce stress and maximize his/her ability to focus (Alhossein, 2014).

Universities provide many kinds of accommodations under the umbrella of support such as extra time, tutors, note takers, and adaptive technology. Janiga and Costenbader (2002) conducted a survey of reasonable accommodations offered to SWDs at 74 colleges and universities in New York State, each of which provided at least one support service and found that the extent to which reasonable accommodation was offered differed between the institutions. Further some accommodations were more popular than others; for example, almost 95% of the colleges allowed extended time and 83% provided tutors (Figure 8). This is an important study, given that it is specific to various kinds of accommodations and maps the higher education geography of the state for students with disabilities. However, the study is now seventeen years old and the focal period is further away than that. The field could benefit from similar studies replicated in all states and internationally, preferably as an ongoing government-sponsored initiative.

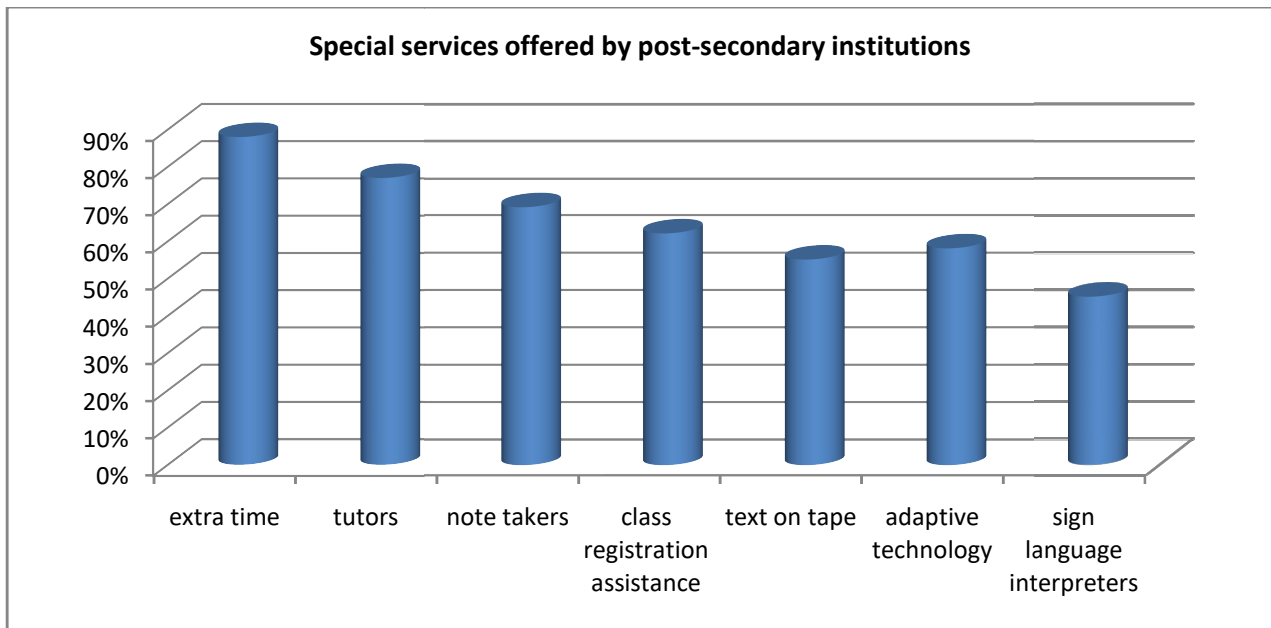


Figure 8: Availability of reasonable accommodations at 74 post-secondary institutions in New York State in 2002.

Providing Reasonable Accommodations in Post-Secondary Institutions

For students with special education needs, not only must the CDSS provide effective services, but faculty members must be ready to provide assistance and reasonable accommodations as needed (Hill, 1996). However, historically and internationally, SWDs, including those with an SLD, have faced many barriers in the context of post-secondary education—a situation that may be due to a great extent to unwillingness on the part of faculty to provide reasonable accommodations and support services. Yet, this unwillingness can be understood as produced at least in part by the institutional context.

On exactly this issue, Moriña (2017), in a study focused on providing inclusive education in the context of higher education, points to the fact that change of this nature must be holistic and system-wide. In Moriña's view, the university must do much more than ensuring access to higher education for SWDs. Instead, a reexamination of all its policies and practices is necessary and revisions based on this is necessary to ensure that the education provided is itself inclusive. According to Moriña, it is necessary for institutions of higher education to look at all systems, policies, and practices in order to ensure that ways to include SWDs are incorporated at every level. Nothing less than an all-encompassing approach will render the transformation needed.

In fact, as might be expected, Moriña is far from the only researcher to expound this view. In 'Attitudes towards Inclusion in Higher Education in a Portuguese University,' Martins, Borges, and Gonçalves (2018) make essentially the same case for inclusion, but become more specific, citing the importance of the students' ability to enrol and to complete their courses successfully. Further, Martins et al. call for an 'action plan' as a basis for providing adequate support to SWDs in every aspect of university life. Their analysis also reaches into the legislative

environment, which they see as fundamental to directing institutions in the provision of adequate institutional services and resources, infrastructure and accessibility, pedagogical support, and academic and social inclusion. It should be noted here that whereas Moriña focuses on institutional responsibility and broad accountability, Martins et al. tie this responsibility directly back to the legislative environment as the foundation of efforts to include SWDs. Martins et al. look for a detailed kind of legislation that not only ensures access but dictates specific ways in which institutes of higher education are to achieve it.

Willingness of Faculty Members to Provide Reasonable Accommodations

The extent to which and the ways in which faculty members provide reasonable accommodations is of great importance not only because of its implications for the academic and career success of SWD\SLDs but also because faculty members are in the front line for ensuring or failing to ensure their university's compliance with the law.

Students with hidden disabilities, including those with an LD, often find that their eligibility to receive a reasonable accommodation is questioned such that faculty members do not always cooperate in providing the requested reasonable accommodation (Barazandeh, 2005). However, some studies show that most faculty members report a willingness to make reasonable accommodations for SWDs including those with an SLD and want more information about their responsibilities in this regard (Basilice, 2015; Cawthon & Cole, 2010; Leyser, Vogel, Wyland, & Brulle, 1998).

Faculty members have demonstrated greater willingness to accommodate students with an SLD than students with other kinds of disabilities such as emotional problems. In a study designed to assess faculty accommodations at two universities (one in the US and the other in Mexico), Wolman, McCrink, Rodríguez, and Harris-Looby (2004) surveyed 447 faculty members

from different schools to determine their willingness to accommodate students on the basis of an SLD, deafness or blindness, emotional problems, and physical disabilities. Faculty members in both countries showed almost the same level of willingness to accommodate SWDs. However, they were more willing to provide accommodations in respect to an SLD and deafness or blindness than in respect to emotional problems or physical disabilities. Another study, with 497 faculty members as the sample, focused on their attitudes toward accommodating students with ADHD and found that most were open to doing so (Alhossein, 2014).

Faculty members sometimes prefer providing teaching accommodations to providing examination accommodations. Examining the attitudes and practices of 420 college faculty members toward providing teaching and examination accommodations, Vogel, Leyser, Wyland, and Brulle (1999) found that most were unwilling to provide examination accommodations that required altering the format of tests or assignments. Instead, they preferred to provide teaching accommodation as long as this did not lengthen the class session.

Some investigations have proven that faculty members have a preference as to which forms of accommodation are practiced in the classroom. Skinner (2007) measured faculty willingness to provide both instructional and examination accommodations to post-secondary students with an SLD in a liberal arts institution located in the southeast of the US. In total, 253 faculty members were surveyed. In terms of willingness to provide instructional accommodation, they appeared very willing to allow students with an SLD to use laptops in the classroom and were also willing to permit the use of tape recorders or provide note takers. However, most faculty members were unwilling to give extra credit. Many reported being willing to provide examination accommodations by extending the test time, providing alternative environments for tests, and allowing students to use calculators and laptops during tests (Skinner, 2007). Another

study shows that the most popular form of accommodation among faculty members is that of providing additional time or tests and permitting tape-recording in lectures. Providing copies of lecture notes was the least preferred option (Alhossein, 2014).

In summary, the majority of faculty members reported a high level of willingness to allow students to tape-record lectures, dictate answers to a scribe, and assign extra time to complete tests or assignments (Cook, Rumrill, & Tankersley, 2009; Rao & Gartin, 2003; Skinner, 2007; Vogel et al., 1999). However, they were unwilling to give SWDs extra credit for assignments as an accommodation (Skinner, 2007). Undoubtedly, a positive attitude on the part of faculty members toward providing accommodations has a beneficial impact on the academic success of students with an SLD (Ginsberg & Schulte, 2008).

Factors that Affect Faculty Members' Willingness to Provide Reasonable Accommodations

Faculty members' knowledge and training in the provision of reasonable accommodations are likely to influence how willing they are to provide such accommodations and the extent to which the latter are effective in fostering the success of SWDs. According to Zhang et al. (2010) in a wide-ranging study of the relationship between faculty knowledge and beliefs pertaining to accommodations and their associated practices:

Making a faculty aware of the potential of students with disabilities can be a way to increase their willingness to support these students. Improving the personal beliefs of a faculty regarding the education of students with disabilities is one of the most important ways to enhance the provision of accommodations and supports for students with disabilities. This can be done by increasing these individuals' knowledge of legal responsibilities and their perceptions of institutional support. (p. 276)

That there is a need for such work is undoubtedly the case across higher education. However, as noted earlier, it would be wise to focus on informed conversation rather than on assertion and foregone conclusions as the phrase ‘improving the personal beliefs’ suggests. However, whatever the rationale for persuading faculty members to adopt a certain perspective may be, Zhang et al. offer little in the way of actual strategies for doing so.

The CDSS should be key to such an endeavor. Yet, in a study on faculty knowledge of disability legislation and experiences with the CDSS, faculty members reported that they did not have sufficient knowledge or understanding of relevant legislation or enough collaboration with the CDSS. Therefore, it was hard to create appropriate reasonable accommodations in their classes (Murray et al., 2008).

With a sample of 123 faculty members at a mid-sized, public liberal arts university in upstate New York, Sniatecki et al. (2015) focused on measuring faculty knowledge of post-secondary participation for SWDs and their experiences of the services provided by the CDSS. Most of the participants reported that they lacked knowledge in terms of disability legislation and expressed a strong need to access professional development opportunities related to working with SWDs and resources such as workshops on accommodations, the use of technology in class, and best working practices. However, the faculty members reported that despite their insufficient knowledge of the relevant policies and laws, they did know where to find support on campus when working with SWDs, which points to the importance of the CDSS to the progress of SWDs and accountability on the part of the faculty.

It is, therefore, important for all post-secondary institutions to provide sufficient training to faculty members so that they can gain knowledge of disability legislation and work effectively with the CDSS. On this basis, they will become more aware of the need to provide reasonable

accommodations to SWDs and thus be more able to play a role in improving the educational outcomes of the latter (Cameron & Nunkoosing, 2012; Sniatecki, et al., 2015; Wadlington & Wadlington, 2005).

Faculty Knowledge of Disability Legislation

Governments in many countries have introduced legislation to ensure the educational rights of SWDs such that it is important for educators to understand the regulatory environment and their role in fulfilling its terms. According to Sniatecki et al. (2015), ‘Without appropriate knowledge, faculties are ill-prepared to make decisions about how to effectively implement accommodations in their classrooms’(p. 260).

In a study on the legal requirements for accommodating SWDs in the context of teacher training, specifically, teacher preparation field placements, Dieterich, Chan, and Price (2017) boil all these arguments down into a simple statement: ‘faculty must have a clear understanding of federal legislation and recent case law related to students with disabilities in professional programs in higher education’ (p. 1). However, Dieterich et al. do not consider whose responsibility this is or how it should be achieved. It is, instead, a bare statement of what we can reasonably understand to be a fact when there is a legal requirement to accommodate SWDs, let alone an ethical one.

According to Leyser et al. (1998), faculty members with more knowledge of disability legislation tend to be more willing to provide appropriate accommodations than are faculty with less knowledge in this regard. That faculty members should be well informed in regard to disability legislation is of great importance because there is a direct relationship between accommodating students with a disability and faculty knowledge of legislation, which is likely to influence a faculty member’s willingness to provide reasonable accommodations to SWDs

(Zhang et al.,2010). A lack of knowledge on the part of the faculty in regard to this legislation could have a serious negative effect on post-secondary life for SWDS: It is likely to lead to a lack of reasonable accommodations, putting such students at a disadvantage, which could result in low grades or even failure (Izzo, Hertzfeld, Simmons-Reed, & Aaron, 2001; Shaw, Scott, & McGuire, 2001). Many studies have shown that most faculty members have concerns in regard to teaching SWDs. Faculty members express the opinion that they have either very limited or no knowledge of specific disability legislation, thus lowering the chances that they will provide reasonable accommodations (Baggett, 1994; Basilice, 2015; Izzo, Murray, & Novak, 2008; Leyser et al., 1998).

Students with disabilities of many kinds are better accommodated when faculty members become better informed (Sniatecki et al., 2015). In fact, in two similar studies, researchers found that faculty members who reported being familiar with Section 504 of the Rehabilitation Act are more willing to accommodate SWDs than those who reported having no such familiarity (Izzo et al., 2008; Rao, 2002).

To promote such knowledge, educational institutions are required to provide information on disability legislation. However, based on an assessment of the knowledge of 162 faculty members at a four-year university in the southeast of the US, there is a great need for faculty members to become more versed in the legislation (Hoffman, 2013). The study reported that faculty members should receive additional information about disability legislation in order to provide more suitable and reasonable accommodations. Similarly, Leyser et al. (1998), Lombardi, Vukovic, and Sala-Bars (2015), and Shaw, Scott, and McGuire (2001) discuss the idea that some faculty members do not have enough knowledge about policies on SWDs or how to work with them, and hence do not provide appropriate accommodations. However, the extent

to which this is the case in some countries more than others is a point on which the literature is largely silent. It would be beneficial, therefore, to conduct a comparative study across countries to test faculty knowledge of legislation, how this plays out in the classroom, and what factors affect the extent to which faculty are or are not well-informed about the pertinent legal environment.

In a study by Ginsberg and Schulte (2008), 12 faculty members from a number of colleges submitted accounts of their experiences teaching SWDs. The researchers categorised the faculty members into two groups based on their perspectives on and willingness to accommodate SWDs: those with a conventional view and those with a social constructivist perspective. Those in the conventional view group saw SWDs as unrelated to other students in their classrooms. Faculty in this group reported that they did not have enough knowledge to teach SWDs appropriately such that doing so was challenging. These faculty members expressed a willingness to provide accommodations to students with obvious disabilities because the need to do so was easier to understand than in the case of SWDs whose disabilities are not obvious. Most did not view providing accommodations as a faculty responsibility, yet stated that when required to do so that the accommodation they were most willing to provide was that of allowing additional time for a student to take a test. The faculty in the social constructivist perspective group viewed SWDs and other students as one unit and focused on improving interactions between them. The faculty members in this group reported sitting with SWDs to discuss their needs. Not only were they willing to accommodate SWDs, these faculty members reported providing assistance needed by students without disabilities. The idea of treating SWDs and their peers in an integrated way appears to have a lot of merit: According to Mutanga, (2018) in a study on including students with disabilities in higher education in South Africa, support from

other students is critical if SWDs are to stay on track with their studies and modelling this behaviour of inclusion on the part of the faculty may be critical likewise in generating the relationships needed in this regard.

Stevens, Schneider, and Bederman-Miller (2018) wrote in detail about this subject in their article, 'Identifying Faculty Perceptions of Awareness and Preparedness Relating to ADA (Americans with Disabilities Act) Compliance at a Small, Private College in NE PA.' According to their research, which admittedly was carried out in only one locale and in a private college setting, faculty do not have a clear understanding of ADA laws and consequently do not understand the role of the institution in complying with those laws or their own role in ensuring this compliance. However, Stevens et al. also point to the result that 11.6% of the faculty in their study indicated agreement with the idea that accommodations even to students with documented disabilities could be 'unfair' to those without a disability. For Stevens et al., this result indicates that faculty members need more education around this subject. This last point is itself of great importance. There is clearly a need for more information and training.

However, is this a fact or a point of view? That is, some careful thought should be given to whether or not some accommodations may have the effect of providing what is or could be reasonably understood to be an unfair advantage to the accommodated group in terms of testing academic knowledge. Certainly, there would be questions around what is meant by 'unfair.' The corrective to this view is expressed clearly enough by Mutanga (2018) in 'Inclusion of Students with Disabilities in South African Higher Education' in an account that emphasizes what is fair to SWDs rather than to their peers. According to Mutanga, 'A failure to provide needed resources at the right time is an injustice as this puts students with disabilities at a disadvantage, as their work is disrupted resulting in failing exams' (p. 237).

Knowledge also affects attitudes toward providing reasonable accommodations: Some faculty members reported a positive attitude toward some kinds of accommodations but a negative attitude toward others. One cause is the belief that certain kinds of accommodations compromise academic integrity by giving SWDs an unfair advantage as compared to their peers. These beliefs must change if SWDs are to receive the support they need to succeed in the academy. Although most faculty members expressed a positive attitude toward SWDs, 4.9% expressed a negative attitude toward reasonable accommodation provision based on the belief that it creates an unfair advantage for SWDs who thus benefit at the expense of other students (Sniatecki et al., 2015). One solution may be to provide or even to mandate training. In several studies, researchers argue that quality training significantly enhances the knowledge of faculty members (Cameron & Nunkoosing, 2012; Sniatecki et al., 2015; Wadlington & Wadlington, 2005). However, a more nuanced account of faculty resistance to providing accommodations is needed and a clearer understanding of what might be regarded as fair or unfair treatment is necessary if we are to move the needle in this respect.

Faculty Members' Experiences with the CDSS

Faculty members' experiences in dealing with disability supportive services (CDSS) in terms of receiving training, cooperating with the centre, and learning about its services for SWDs certainly play an important role in whether and how accommodations are provided at the post-secondary level. Faculty members with more training are more knowledgeable about disabilities and more willing to provide reasonable accommodations than are faculty members with less training (Basilice, 2015; Bigaj, Shaw, & McGuire, 1999; Leyser, 1989).

According to some studies, faculty members do not reject the idea of providing accommodations to SWDs, but a lack of training makes them apprehensive in regard to doing so

(Basilice, 2015; Kurth & Mellard, 2006). Four out of five faculty members expressed a wish to accommodate SWDs but stated that they needed sufficient support and training from their institution to do so (Zhang et al., 2010).

CDSS staff could play a key role in enabling faculty members to increase their knowledge and are often able to propose solutions to a student's needs. The staff are familiar with the accommodations that can be made in multiple educational situations although they are not knowledgeable about the content and requirements of each curriculum. Therefore, it is necessary for the CDSS to provide mandatory training to faculty members including information about disabilities, disability legislation, and reasonable accommodation provision. Further, the CDSS is required to work with faculty members including by providing suggestions regarding how best to accommodate SWDs (Alkhashrami, 2015). Through mandated training provided to faculty members, rather than addressing the needs of each SWD on a case-by-case basis, it is possible to change the attitudes of faculty members such that they are likely to become more positive toward accommodation provision (Lombardi et al., 2013).

Researchers have made some specific suggestions for achieving this. For example, Kilpatrick, Johns, Barnes, Fischer, McLennan, and Magnussen (2017) have proposed the development of a training and awareness communication strategy pertaining to SWDs for all faculty and staff who have contact with these students. It is worth noting, too, that the researchers include staff as a critical constituent in the approach suggested. Overall, faculty members' collaboration with the CDSS supports their personal and academic relationships with SWDs. Therefore, it is important for the CDSS to provide information about its services to both of these groups. Hoffman (2013) found that compared with others, faculty members who collaborate with the CDSS have greater knowledge and are better equipped both to support

SWDs and to accommodate them adequately. However, other faculty members were found to have insufficient experience of the CDSS and the support services offered to SWDs. Further, faculty members lacked familiarity with the types of CDSS support offered to aid them in addressing the needs of the SWDs in their classes.

In a number of studies about the relationship between providing accommodations and faculty members' experiences with a CDSS, the results emphasise the importance of training the faculty members to provide assistance when SWDs need it. Leyser et al. (1998) examined the experiences and knowledge of 420 faculty members around accommodations for SWDs at a large mid-Western doctoral-granting university. According to their results, 54.6% reported being unfamiliar with the services on campus for SWDs and 82% reported having a training deficit in terms of addressing disabilities. Further, 42.6% wished to receive more training in classroom accommodations, whereas 31.7% needed more training in reasonable accommodations for testing. Additionally, the participants reported that they wanted orientation meetings for new faculty and written information about disabilities and services to help them provide accommodations.

Faculty members play a key role in supporting SWDs at the post-secondary level. Yet, for a number of reasons, as discussed, many do not adjust their teaching style to meet the needs of these students. Some faculty members complain that their institutions do not do enough to train them in this regard. Similarly, they report that even when they seek advice regarding modifying their teaching that the CDSS does not collaborate with them, thereby creating barriers to the success of SWDs (Gilson & Dymond, 2012; Leyser et al., 1998; Steele & Wolanin, 2004).

Further, Mutanga (2018) proposed a more encompassing view of what institutes should focus on in supporting the success of SWDs that we can extrapolate as being within the purview

of the CDSS. For Mutanga, action must go beyond addressing clearly discriminatory practices to include finding ways of identifying and undermining examples of intolerance that are less overt but that can be very powerful. In this regard, Mutanga points to some examples such the University of Venda's failure to provide social facilities for students with disabilities and the University of the Free State's practice of restricting students who use wheelchairs to senior residences.

Faculty Characteristics Influencing the Provision of Reasonable Accommodations

In general, the research shows that the more trained the faculty, the more willing they are to provide reasonable accommodations to SWDs. In a Greek study assessing faculty members' knowledge of dyslexia, Stampoltzis, Tsitsou, Plesti, and Kalouri (2015) found that 73.6% were familiar with dyslexia and, therefore, more willing to accommodate students with this SLD. Further, faculty members who were unwilling to provide accommodations reported needing training and comprehensive information about dyslexia. However, as could be expected, the research also suggests that characteristics such as a faculty member's age, field, academic rank, and nationality affect accommodation provision (Lombardi et al., 2015; Murray et al., 2008; Skinner, 2007).

Age

A faculty member's age can influence whether he/she provides accommodations to SWDs. In a study by Vogel et al. (1999), younger faculty staff members are more willing to provide instructional accommodation than are their older colleagues. Contrary to this finding, Malangko (2008) found that faculty over the age of 46 years old were slightly more willing to accommodate students with learning disabilities than were faculty in their twenties or thirties. Buchanan, Charles, Rigler, and Hart (2010) found that compared with middle-aged and younger

faculty, older faculty members were more willing to provide instructional accommodation to ADHD students. However, Worthy (2014) did not find any significant statistical differences in regard to willingness to accommodate SWDs associated with faculty age.

Disciplinary Field

Rao and Gartin (2003) examined faculty members' attitudes toward providing instructional and examination accommodations in class. Two hundred and forty-five faculty members in seven colleges—engineering, education, professional health, law, arts and sciences, business, architecture, and agriculture, food, and life sciences—participated. Based on a scale used to consider 18 instructional and examination accommodations, the researchers found that faculty members in the College of Education and College of Professional Health were significantly more willing than those in the other colleges to provide reasonable accommodations.

Similarly, Lewis (1998) reported that faculty in law, engineering, and computer engineering were the most unwilling to accommodate students, particularly in regard to test accommodations. However, Skinner (2007) found that faculty members in the School of Business were the least willing to provide accommodations. Conclusions presented in other studies agree that faculty in education, arts, and professional health departments are more willing than others to provide accommodations (Lewis, 1998; Rao, 2002; Rao & Gartin, 2003; Vogel et al., 1999). Conversely, in a few studies, researchers claim report results showing no statistically significant relationship between disciplinary field and whether faculty members provide accommodations to SWDs or which accommodations they provide (Alghazo, 2008), including to students with an SLD or ADHD (Alhossein, 2014).

Academic Rank

In several studies, researchers have reported that academic rank has no significant effect on faculty members' openness to accommodating SWDs (Alghazo, 2008; Rao, 2002; Skinner, 2007; Worthy, 2014) including those with ADHD (Alhossein, 2014). Alternatively, according to other studies, assistant professors and faculty members who do not have doctoral degrees are more willing to accommodate SWDs than are associate and full professors (Murray et al., 2008; Vogel et al., 1999).

Faculty Nationality

According to Alghazo (2008), there is no difference between American and Jordanian faculty members in terms of their willingness to accommodate students with disabilities. However, Lombardi et al. (2015) found that of the faculty in the US, Spain, and Canada, the Canadian faculty showed the strongest belief in the importance of accommodation provision. Wolman, et al. (2004) assessed American and Mexican faculty perspectives on accommodation and showed that due to the longer history of disability studies and training in the US, American faculty members appeared more willing to accommodate some types of disability, such as deafness or blindness, than were the Mexican faculty. Yet, the faculty groups demonstrated almost the same high level of willingness to accommodate other disabilities such as an SLD, emotional problems, or physical disabilities.

Previous Surveys Instruments to Measure Faculty Members' Willingness to Provide Reasonable Accommodation

An assessment of the provided information proves that the researchers employed a variety of survey instruments to inspect the willingness of the faculty members to arrange for reasonable accommodations for SWD/SLDs. Furthermore, every instrument was different from the other in respect that each had a different number of items in it. These items were categorized as factors.

Researchers provided the respondents with a variety of response options. Some chose to employ the dichotomous response or more strategy for their survey, while others asked their participants to respond on a Likert scale.

As a response, a survey instrument was created by Whisenhunt (2001) which aimed at contrasting the community college faculty members' knowledge levels, attitude and accommodation conformity levels of the university with respect to LD students. Before the actual survey was conducted, Whisenhunt (2001) conducted a pilot survey using two instruments. The first pilot survey did not give any reliability estimate. The second survey held a moderate reliability estimate of .72. A final instrument was devised and was distributed among 1,679 faculty members the return rate of which was 51%. Using the Cronbach's alpha, the reliability coefficient of the survey was estimated at an excellent level of .90.

Another instrument to analyze the attitude and willingness of faculty members regarding the provision of reasonable accommodations in Mexico and the United States is devised by Wolman, McCrink, Rodriguez, and Harris-Looby (2004) which proved to have a high reliability. According to the literature review, choice of language initially was English. To gauge its clarity and fluidity the newly created instrument was piloted in two separate American colleges on ten faculty members. These instruments were then translated into Spanish by a qualified interpreter once the pilot instruments were returned and assessed. The ultimate instrument was composed of seven reliable categories or factors (45 items). These factors were "willingness to accommodate students with LD" (eight items), "willingness to accommodate deaf or blind students" (eight items), "willingness to accommodate students with emotional problems" (six items), "willingness to accommodate students with physical disabilities" (five items), "assumptions about students with disabilities" (four items), "professional development" (six items) and "friendship with

persons with disabilities" (seven items) (p.288). Every factor was assessed for its Cronbach alpha coefficient which was found to be .78, .87, .79, .73, .61, .92, and .90, respectively.

Skinner (2007) also contributed to the research by creating a complimentary instrument which assessed in collecting data regarding the attitudes and willingness of the faculty members to provide substitute subject options for students with LD to acquire math and foreign language requirements. The extent of agreement of participants for providing such options was rated by them as 1=strongly disagree to 5=strongly agree. Furthermore, the instrument was composed of another portion which aimed at assessing accommodation willingness. This portion comprised two categories each subdivides into eight items i.e. teaching accommodations and examination accommodations. A Likert scale ranging from one (very unwilling) to five (very willing) was provided to the faculty members to respond to. The instrument was not checked for reliability. However, its reliability and validity were authenticated on the basis of the feedback received from Special Education department faculty members as well as the director of a disability centre.

The work of Alghazo (2008) in this regard is noteworthy. She employed the "General Attitudes toward College Educational Accommodation Scale" to study faculty members of universities in the United States and Jordan. This instrument is divided into two parts, the first to assess attitudes towards providing accommodation and the second aimed at assessing the impartiality of provision of custom accommodations for students with disabilities. The first part of the instrument consisted of seven items with regards to attitude and participants responded on a Likert scale which ranged from 1-strongly disagree to 4 – strongly agree. On the other hand, the second part has only one item with ten sub-items which were also based on a 4-point Likert scale (1-unfair, 4-fair). Several faculty members analyzed the original instrument and measured its Cronbach alpha coefficient. The first part of the instrument had a .94 Cronbach alpha

coefficient and the second part had .84 coefficients. The average coefficient was .88. A group of Arabic and English departments in Mu'tah University translated into Arabic to be used in Jordan. The Arabic version was piloted on ten faculty members of different departments by Alghazo (2008) which provided an insight into the clarity and the appropriateness of the items. The suggestions and comments about the translated version were then updated. According to Alghazo, the Arabian version had a Cronbach alpha coefficient of .88 whereas the English version had .85 coefficient.

Alhussain (2013) also has valuable input into this research. He used an instrument to assess the "perspectives of King Saud university faculty members toward accommodations for students with attention deficit-hyperactivity disorder (ADHD)." With the help of this instrument, he was able to understand the viewpoints of the faculty members of the King Saud University (KSU) when deciding to provide accommodation for ADHD college students. This survey also aimed to understand whether the participating faculty can be differentiated into gender, work experience with ADHD students, nationality, qualification and discipline. Furthermore, Alhussain assessed the viewpoints of the participants when it came to accommodation provision, professional development at KSU and their opinion about students with ADHD and how it affected their decision to provide accommodation. The instrument was divided into two parts. Demographic data of the participants such as, gender, age, marital status. was asked in the first part whereas the second part was comprised of three categories like Faculty members' perspectives toward accommodations for college students with ADHD, professional development and assumptions about students with ADHD. The average coefficient alpha of the survey on the whole was of acceptable reliability .693, whereas the first category's coefficient alpha was .683 which is also acceptable internal consistency. Lastly, the second category had a

weak overall coefficient alpha of .462. The internal consistency, however, was the best for the last category .901.

Perspectives of SWDs and Students with an SLD on the Effectiveness of Reasonable Accommodations

The perspectives of SWD/SLDs on the provision of reasonable accommodations are important because these are the people who should expect to benefit and their opinions should be used to identify weaknesses and drive improvements. Research has proven that SWD/SLDs require more accommodation in some areas than in others. Key studies have discussed the problem of focusing on disability type rather than the contextual and functional needs of students and have also taken account of their perspectives in regard to faculty members' impact on whether, how, and the extent to which accommodations are provided (Cawthon & Cole, 2010; Kurth & Mellard, 2006; Shevlin et al., 2004).

Shevlin et al. (2004) conducted a qualitative research study to determine the post-secondary engagement experiences of SWDs at two Irish post-secondary institutes. The sample comprised nine female and seven male participants, of whom the majority had dyslexia, and the rest had a hearing or visual impairment, a physical disability, or multiple disabilities. Based on participant feedback, it appears that the provision of accommodation is a complex issue. The most significant challenge was suspicion on the part of faculty members, as suggested by the difficulties SWD/SLDs reported pertaining to their efforts to obtain lecture notes. The other significant challenge was around accessing assistive technology—even when technology of this kind was available very few staff were trained to operate it and such staff were not always available.

In a qualitative study, Hadley (2007) focused on the experiences and perceptions of ten students with an SLD studying arts, science, business, education, and engineering in a private, selective, co-educational four-year college campus in the US mid-west. Most of the students said that they were not very satisfied with the quality of accommodations available in the college environment and that this had affected their ability to reach their academic goals. The students were especially dissatisfied with the university writing centre, commenting on a lack of professionals with the knowledge and expertise required to help them improve their writing. Also, there was a consensus among the students with an LD that lecturers moved through class material quickly, making it hard to take notes or even to follow. Therefore, it is important to give students with an SLD access to class notes or to allow them to use a tape recorder. More positively, the students reported that receiving extra time was critical to their ability to finish assignments and tests and to reducing the stress they experience. The students also preferred to take exams privately, given that this means the extra time accommodation is not evident to their peers.

Some universities are focusing more on disability types than on students' contextual and functional needs, which, however, may lead to a mismatch between the latter and the accommodation provided. In a survey of 108 students in 15 communities and technical colleges in California, Minnesota, and Kansas, Kurth and Mellard(2006)measured the extent to which SWDs considered multiple kinds of accommodations to be effective. In their sample, 65% of participants reported having one primary disability, whereas 35% reported having two or more. Students with an SLD were the largest category of SWDs (39%), followed by students with an orthopaedic impairment (23%), a hearing impairment including deafness (13%), a visual impairment including blindness (9%), a chronic illness (6%), a traumatic brain injury (4%), an

emotional disturbance (2%), a psychiatric issue (2%), and a speech or language impairment (2%). Students' perceptions of the effectiveness of accommodation types are summarised in Table 7.

Table 7: Students' Reports of Accommodation Effectiveness in the Kurth and Mellard Study

Accommodation	Students reporting use	%	Reported effectiveness
Notetaker	24	87.5%	
Extended time on tests	35	85.7%	
Adaptive technology	11	81.8%	
Tape recorder	4	75.0%	
Alternate testing location	11	72.7%	
Taped texts/notes	9	66.7%	
Copy of notes ahead of class	1	0.0%	

In this study, some students reported that they experienced discomfort during examinations conducted in a setting separate from that of their peers and reported that accommodation processes affected their sense of belonging to their post-secondary education institutes. In particular, they reported a compromised sense of belonging on returning to the classroom setting after taking a test because of questions from their peers about their whereabouts.

Based on the perspectives of 110 students with an LD on access to accommodation, Cawthon and Cole (2010) examined the extent to which 16 types of accommodations were provided at a four-year post-secondary institution. The participants reported that they had received more accommodations at the post-secondary than at the high school level, including separate settings for tests, extended time for tests, and tutoring. However, 21% of the participants stated that they had faced obstacles in obtaining accommodations, although they did not identify an overarching institutional obstacle. Instead, they viewed obstacles individually, depending on

the type of disability. However, these obstacles did not affect their satisfaction with the services they did receive.

From the students' viewpoint, faculty knowledge of the needs of SWDs is necessary if reasonable accommodations are to be provided. One of the significant barriers to the success of SWDs in post-secondary education is a lack of knowledge and understanding of the cognitive, psychological, and emotional needs of SWDs on the part of the faculty (Basilice, 2015).

According to Kurth and Mellard(2006), despite reports from faculty members describing positive interactions with students with an LD, the students seldom felt the same way. They felt that faculty members did not have enough information about how to properly accommodate them, and on some occasions did not feel welcome to enrol in a faculty member's classes—which they perceived as discrimination.

Hill (1996) focused on measuring the willingness of faculty members at 21 Canadian universities to provide reasonable accommodations from the perspective of SWDs. In that study, 264 students with various disabilities were interviewed to gather their perceptions of the willingness of faculty to make accommodations in the classroom. Approximately 66% of the participants reported that faculty members were very willing to make accommodations for their needs. However, 12% reported that faculty members were uncooperative in providing accommodations and 9% had taken action by complaining to the authorities responsible at their university. However, the rest reported a lack of reasonable accommodation provision. Also, they believed that this lack of accommodation was due to a lack of knowledge on the part of faculty members in regard to the reasonable accommodation.

Al-Amri and Ashahrani (2012) considered the needs of SWDs at King Abdul-Aziz University based on a sample of 58 (71.6%) male and 23 (28.4%) female students, of whom 66%

were in the Arts and Humanities College. The study included questions designed to determine the extent of SWDs' satisfaction with the services provided by the CDSS: 12.3% strongly agreed and 27.2% merely agreed that these were satisfactory; 35.8% (the greatest proportion) had no knowledge of the centre; 18.5% disagreed; and 6.2% strongly disagreed. The study also found that the majority of SWDs are satisfied with the cooperation of faculty members: 41.8% responded that it was good, and 22.2% responded that it was excellent. SWDs believed that faculty members are aware of their special needs and said that they offer assistance and reasonable accommodations.

Summary

Currently, post-secondary education for SWDs is developing in a positive direction. Some governments have responded and continue to respond to pressing demands from people with disabilities by creating legislation that guarantees their rights in all aspects of their lives, particularly in terms of fostering this group's success in obtaining a degree. Thus, it has become necessary for many post-secondary educational institutions to change their policies in order to afford equal opportunities to SWDs.

Increases in the number of SWDs at the post-secondary level have caused researchers to study the experiences of these students in this context, including by determining factors that may hinder graduation in a reasonable timeframe and factors that may support it. Multiple studies have demonstrated both a relationship between faculty members' knowledge and experience with SWDs and their willingness to provide reasonable accommodations to SWDs, including those with an SLD, at the post-secondary level and the importance of providing these and other kinds of support to the academic success of this group.

Studies show that although faculty members indicate a high level of willingness to support SWDs and provide reasonable accommodations, they are not sufficiently versed in disability legislation and lack experience and training from the CDSS. The opinions of SWDs at the post-secondary level on the accommodations received are mixed, although the majority are not very satisfied with the accommodations provided.

In summary, the literature reviewed here highlights the need for further research related to reasonable accommodations offered at post-secondary institutions, especially for female SWDs. There is a lack of quantitative and qualitative studies about women with disabilities, especially at the post-secondary level and even in Saudi Arabia despite its gender-segregated education system.

CHAPTER FOUR

RESEARCH METHODOLOGY

Introduction

To the knowledge of the researcher, no previous study has measured the perspectives of female faculty members in regard to their willingness to provide reasonable accommodations to female students with disabilities (SWDs) and students with learning disabilities (SLDs) in Saudi post-secondary institutions. There is also no assessment of the extent to which students are satisfied with the support provided to them. Therefore, this study is the first of its kind in the Saudi Arabian context.

For this study, the researcher collected data pertaining to the perspectives of university faculty, CDSS management, and SWD/SLDs. The purpose of this chapter is to outline the procedures used in this study, discuss the methodologies, describe the study population, the development of the research instruments, the data collection, and the methods of data analysis to answer the research questions.

The Key Research Issue

The number of SWD/SLDs enrolled in institutes of post-secondary education in Saudi is increasing dramatically. However, very few universities have even small units to provide services to female students who have visual, physical, and health disabilities. The two universities, King Saud University (KSU) and Princess Nourah University (PNU), considered herein, though, each have a Centre of Disability Support Services (CDSS), which provides services to students with a range of disabilities, including learning disabilities which are the last category added to the CDSS at each institution. These two post-secondary institutions were selected for this study because both are located in the capital city Riyadh and both have a student

body that includes SWDs representing a number of disability categories. Given this feature of the student body, it was possible to collect data pertinent to a comprehensive examination of the factors that affect the willingness of faculty members to provide reasonable accommodations to female students with all types of disabilities.

Purpose of the Study

The key questions investigated in this research study are as follows: Are faculty members at Saudi institutes of post-secondary education who teach SWD/SLDs aware of the need to provide reasonable accommodations to meet the specific needs of these students? What level of knowledge do faculty members have in regard to disability legislation? Do they know about the CDSS within their institution? At what level are they willing to provide reasonable accommodations in their classes? What concerns do they have about having SWD/SLDs in their classes? What recommendations do they have in regard to serving these students? Are SWD/SLDs satisfied with the reasonable accommodations provided to them?

The purpose of this study is to understand the factors that could affect the willingness of female faculty members to provide reasonable accommodations, such as the faculty members' level of knowledge about disability legislation, methods of teaching SWD/SLDs and, their experience and concerns about having such students in their classes. This study also discusses the experiences and opinions of female SWD/SLDs in regard to the effectiveness of the reasonable accommodations provided at their universities. Based on the results of this study, suggestions and recommendations will be included in the final chapter, which will be helpful for all involved in the effort to develop supports for SWD/SLDs in post-secondary education, such as planners, policy-makers, and academics.

Finally, guidelines for this research have been borrowed from Bronfenbrenner's (1977, 1979, 1992) ecological model. By adopting this model for certain guidelines, a productive campus for the SWD/SLDs can be created for post-secondary education. Furthermore, researchers, practitioners, and educators can have a more vivid perception of what the SWD/SLDs in Saudi experience.

Research Questions

Based on the literature review and Bronfenbrenner's framework, combined with the researcher's personal knowledge of the post-secondary educational context of Saudi Arabia, the following research questions were generated:

- 1) To what extent are faculty members at Saudi universities willing to accommodate students with disabilities (SWDs) and students with learning disabilities (SLDs?)
- 2) What factors affect faculty members' willingness to provide reasonable accommodations to SWD/SLDs?
 - Faculty age, college, academic ranking, and nationality
 - Level of faculty member knowledge of disability legislation and the extent of their experience working with SWD/SLDs
 - Level of faculty member training relating to disability legislation and the extent of their experience working with SWD/SLDs
- 3) What are the perspectives of female faculty members on having female SWD/SLDs in their classes?
- 4) What experiences do female faculty members report of having female SWD/SLDs in their classes?

- 5) What opinions do SWD/SLDs express of the reasonable accommodations they receive at their institutions?
- 6) What are the perspectives of CDSS management on the reasonable accommodations offered by their institutions?

Targeted Population

There are three target groups in this study: (1) Female faculty members with an academic rank in the range of lecturer to full professor of any nationality teaching in either the education or art school at KSU and PNU (most SWD/SLDs at the selected universities study in those schools). (2) Female students currently enrolled at KSU or PNU who have any disability such as learning disability, hearing impairment, visual impairment, physical impairment, ADHD, autism, and are registered with their university CDSS as eligible to receive instructional and testing reasonable accommodations. There were no other selection criteria. (3) Management of the CDSS, who were interviewed about the services provided for SWD/SLDs and training programmes for faculty members at their post-secondary institutions. The size of each sample is shown in Table 8.

Table 8: Total and Sample Number for Each Group of Study Participants

Post-secondary institute	Total number of faculty members	Sample number of faculty members	Total number of SWD/SLDs	Sample number of SWD/SLDs	Total number of CDSS management staff	Sample number of CDSS management staff	Total of sample
KSU	305	176	92	6	1	1	183
PNU	352	211	108	6	1	1	272
Total	657	387	200	12	2	2	455

Research Design

There are three major educational research methodologies: quantitative, qualitative, and mixed or mixed-methods research (Johnson & Christensen, 2008).

The purpose of the current study was to obtain information on the willingness of faculty members to provide reasonable accommodations and to determine how these reasonable accommodations are perceived by SWD/SLDs. Therefore, a mixed method approach was used as most appropriate to the study purpose. Johnson and Onwuegbuzie (2004) defined the mixed method approach as follows:

[It is] the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study [...]. It is an expansive and creative form of research, not a limiting form of research. It is inclusive, pluralistic, and complementary. (p. 17)

There are several types of mixed method approach. However, the sequential exploratory sequential mixed method will be used in this study. It has been observed that exploratory sequential mixed methods design is among the most popular approaches, as affirmed by Creswell, Hanson, Clark, and Morales (2007). The overall aim is to provide a general explanation reinforced by detailed findings.

A sequential exploratory sequential mixed method is a two-phase design method where qualitative data is collected after the collection of quantitative data. It aims to utilize qualitative outcomes as a road to more explanations and interpretations of the results from the quantitative collection. For instance, to gather quantitative data from a bigger crowd, a survey may be conducted. Later, members of that group may be chosen for interviews where they will get a

chance to elaborate and give insights into their responses in the survey (Ivankova, Creswell, & Stick, 2006).

Statistically significant results or statistically insignificant results are few results that may be taken for follow-up. This design is essential in the case where the researcher wishes to analyze trends and relationships with quantitative data along with being able to describe the causes behind the resultant trends.

A sequential explanatory mixed methods study is followed in this research along with two strands (phases) and follow-up explanations. To apply this design, there will be two different phases. The collection and analysis of quantitative data will be done in the first phase. As the quantitative results require more explanations, a second qualitative phase is implied by the researcher which is patterned as such to lead to the elaborations of the first quantitative outcomes. It is expected to get some outcomes which will be needing further clarifications, and only quantitative data is not enough to crack it due to the length and variety of the evaluated variables in this research.

For the quantitative aspect, a research survey design was implemented, as this is one of the most well-established research methods. Through this method, the researcher collects data from participants by asking them to fill out multiple-choice and/or essay questions in a survey instrument (Lavrakas, 2008). According to McMillan and Schumacher (2006):

Surveys are used to learn about people's attitudes, beliefs, values, demographics, behavior, opinions, habits, ideas, and other types of information. They are used frequently in business, politics, government, sociology, public health, psychology, and education because accurate information can be obtained for large numbers of people with a small sample. (p. 233).

This study draws on survey research across KSU and PNU faculty members to assess their willingness to provide reasonable accommodations to SWD/SLDs and to determine a possible relationship between the level of the faculty member's knowledge/training and her willingness to provide reasonable accommodations. Further, the researcher seeks the opinions and concerns of faculty members in regard to having SWD/SLDs in their classrooms.

The qualitative aspect is based on interviews, a common strategy for collecting qualitative data across the human and social sciences (Brinkmann, 2014; DiCicco-Bloom & Crabtree, 2006). Research interviews take several forms, such as formal structured interviews, less formal semi-structured interviews, and informal interviews known as unstructured interviews. In this study, a semi-structured interview format is used whereby the researcher moderated the conversation using a set of open-ended questions with a clear guide as to the topics to be covered. The goal was to collect detailed, in-depth data. Moreover, this type of interview is more flexible and offers great freedom to the respondents in giving their answers such that conversations can delve deeper into issues and provide a better understanding of the issues pertinent to the research questions (Brinkmann, 2014; Fylan, 2005).

In this study, the researcher used semi-structured interviews conducted with faculty members, SWD/SLDs, and the management of CDSS. Fourteen faculty members were interviewed with 23 questions in order to collect information about their attitudes toward and experience of providing reasonable accommodations to SWD/SLDs in the classroom. Six students from each university were interviewed. The interview protocol for this group consisted of 19 questions developed to learn about the participant and to assess their individual experiences as SWD/SLDs and to establish their opinions in regard to the extent to which they considered the reasonable accommodations provided by the university to be both accessible and effective.

The two managers of CDSS were also interviewed using a 17-question format to discuss the services provided for faculty members and SWD/SLDs at their respective universities. The interviews were to take 50 minutes each with some questions tailored according to the participant's interests.

The interview participants were able to share information in a setting that guaranteed anonymity. The interview questions for the faculty members can be found in Appendix F, the question for the SWD/SLDs in Appendix H, and the questions for the CDSS management in Appendix J

Survey Instrument

The survey instrument was based on a study by Whisenhunt (2001), which investigates the willingness of post-secondary education faculty to accommodate SLDs. Her survey consists of four main parts: seven demographic questions; a five point-Likert (none, little, moderate, above average, mastery), for items 1–3 gauging the participant's knowledge of disability legislation; a four-point Likert scale (strongly agree, agree, disagree, strongly disagree) for items 1–19; a three-point-Likert scale (no, unlikely, yes) for items 1–24 for SLDs without official documentation and for SLDs with official documentation. Whisenhunt's survey has no open-ended questions (Appendix C).

Validity and Reliability of Whisenhunt's Survey

Whisenhunt (2001) conducted two pilot studies to determine the ability of these items to measure the validity and reliability of the survey. She assessed 159 participants in the pilot studies. The results obtained from the first pilot study indicated that some items were not clear to the participants and further clarification was requested for other items. Reliability was not calculated for this stage. All required changes were made to the survey as suggested by the participants. In

the second pilot study, reliability was tested using Cronbach's alpha to estimate the internal consistency across items. The reliability of the instrument was determined to be .72, which is considered moderate, especially given that the sample size of the second pilot was small (35 participants). All comments and feedback from the participants in the second pilot study were used to improve the survey. The final draft of the survey was then distributed to approximately 1,500 faculty members. Using the Cronbach's alpha, the reliability coefficient of the actual survey was estimated at an excellent level of .90.

Preparing the KSA-SBAKRI Research Instrument

Cross-cultural research requires accurate translation to obtain reliable and valid measurements of the concept of interest in the target population, such as their language and culture (Sousa & Rojjanasrirat, 2011). In this study, the researcher used an English-language research instrument to assess Saudi faculty members who speak Arabic. Therefore, it was necessary to use appropriate translation procedures to determine the equivalence of the translated instruments. There are two main categories of translation for quantitative research instruments, which are subdivided into six sub-types, as shown in Figure 9.

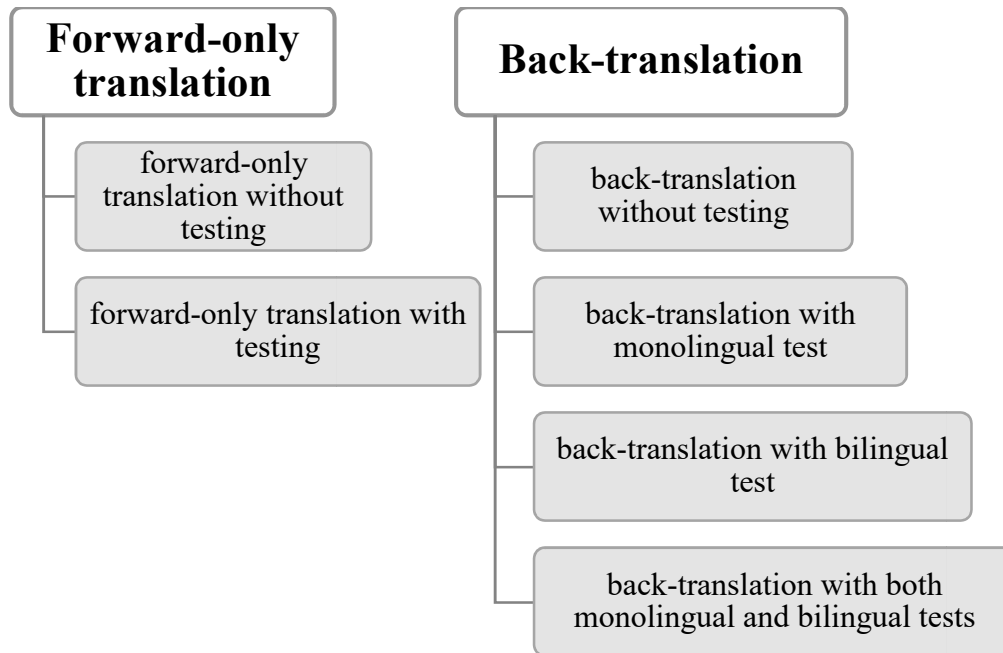


Figure 9: Categories of translation for quantitative research instruments (Alhossein, 2014; Maneesriwongul & Dixon, 2004).

Each translation category has strengths and weaknesses. For example, forward-only translation is the fastest and most economical application, as only one translator is needed to translate the instrument from its original language into the target language with or without testing. However, the equivalence between the two instruments is not verified because this kind of translation is not an efficient way to find any discrepancies that may have occurred during the translation process (Maneesriwongul & Dixon, 2004).

On the other hand, back-translation, which has four subtypes, provides a good comparison between the original source language and the version that has been translated into the source again. However, it has the drawbacks of being time-consuming and requiring two bilingual translators: the first translator translates the instrument from the original language into the target language, and the second translator back-translates the instrument from the target

language into the original one. Any discrepancies between the original language and the target language will then be detected (Brislin, 1970).

As there is no single perfect translation technique (Maneesriwongul & Dixon, 2004), the researcher followed back-translation with a monolingual test technique. Competent Arab graduate scholars from English-speaking universities studying and/or teaching English as a second language (TESL) were independently contacted to translate the original English survey into Arabic. Next, the Arabic instrument was given to another scholar of Arabic to check the grammar. After the grammatical checks, the survey was translated back into the original language by an English literature scholar and later checked against the original to evaluate the translation process, and the validity and reliability of the target language instrument. Finally, a pre-test was undertaken before the actual administration to ensure that the language of the instrument would be clear and understandable.

Research Instrument (KSA-SBAKRI)

As the primary purpose of the current study is to determine the factors that affect the willingness of female faculty members to provide reasonable accommodations to SWD/SLDs, it was necessary to change some of the terms of Whisenhunt's survey slightly based on the literature review. Moreover, it was important for the researcher to keep the scale items divided into subscales to make it easier for participants to answer the questions and for analysis purposes. The new survey, named KSA-SBAKRI, has four subscales: level of knowledge, faculty perspectives on CDSS, faculty willingness to provide reasonable accommodations to SWDs, and faculty willingness to provide reasonable accommodations to SLDs.

The survey consists of three parts with a total of 55 items and questions: (1) eight demographic questions, (2) 43 close-ended items, and (3) four open-ended questions.

The KSA-SBAKRI developed from Whisenhunt's survey and comprising five main sections was used as the questionnaire instrument. The first section consists of eight questions designed to gather demographic information about the faculty members: place of employment, college, academic rank, nationality, age, previous experience teaching SWDs, previous experience teaching SLDs, and number of training programmes offered by the CDSS. Fewer options were offered for answering some of the questions than is the case in Whisenhunt's survey. For example, whereas Whisenhunt's survey offered six options pertaining to age, in the present study only three options were offered as the recommendation of the experts determining the validity of the instrument. Also, in regard to the question on college types, the options were reduced to two—the Art College and the Education College—as the majority of the SWD/SLDs were enrolled in those schools.

The second section assessed the level of knowledge, including eight points items with a five-point Likert scale (mastery, above average, moderate, little, none). The first five points items assessed the faculty members' level of knowledge in regard to Saudi legislation around disability. Then, two points items were used to assess their knowledge about teaching SWD/SLDs, and the last point item was used to assess their knowledge of the CDSS at their institution.

In section three, the third part of Whisenhunt's survey "assessing faculty attitudes toward SLD" was removed in order to add a new section to meet the purpose of the literature review and answer the third point of the second research question. The new part has five points that relate to the faculty members' perspectives on the support and training programmes offered by the CDSS. This section has a five-point Likert scale (strongly agree, agree, neutral, disagree, and strongly disagree).

Section four of Whisenhunt's survey is divided into two minor sections. The first measures faculty willingness to provide reasonable accommodations to SLDs without documentation, and the second measures faculty willingness to provide reasonable accommodations to SLDs if requested by the disability office. Additionally, it has 23 items and a space provided under each point for comments. However, according to the goals of the present study, some modifications were made by deleting some items from this section and adding others for the KSA-SBAKRI. Again, there are two minor sections, of which the first measures faculty willingness to provide reasonable accommodations to SWDs and the second measures faculty willingness to provide reasonable accommodations to SLDs.

The number of items in section 4 was reduced from the 24 used in Whisenhunt's survey to 15. That is, some similar sentences were merged into a single sentence for the KSA-SBAKRI. For example, items 6, 11, and 15 were combined into a single item as were items 8, 14, and 18. Therefore, sentences number 14 and 5 in KSA-SBAKRI were used to represent each group of similar questions. Moreover, due to the recommendations of the validity checkers, items 6 and 15 were added to the KSA-SBAKRI in order to render it relevant to Saudi universities, which in recent years have required students to use a learning management system such as Blackboard. This was also adopted to assess the sense of the social and teaching responsibility of faculty members. Finally, the spaces under each item in Whisenhunt's survey were omitted and replaced with the fifth section, which has four open-ended questions.

In section 5, i.e. the final section, the researcher added four new open-ended questions in order to gain a better understanding of faculty members' recommendations and concerns around having SWD/SLDs in their classes (see the English and Arabic versions of the survey in Appendix E).

The KSA-SBAKRI is an electronic survey. It was designed to be administered this way, as the majority of participants have access to the Internet and this method of delivery is lower cost, faster, and more accessible than a pencil and paper survey. Also, this method of delivery allows only the target participants to complete the survey, and it can be designed in such a way that faculty members cannot skip any answers such that there is no need to exclude any responses because of missing information.

Validity of the KSA-SBAKRI Survey in the Pilot Study

Validity checks are an effective way to help determine whether the survey questions can measure what they are intended to measure. Joppe (2000) explains what validity means in quantitative research as follows:

Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit ‘the bull’s eye’ of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others. (p. 1)

Therefore, to measure the validity of the survey, the researcher followed three steps to ensure that it reflected the purpose of the study:

- To ensure that the key related subjects of the survey measured all research aspects and reflected the issue under examination, the researcher reviewed many studies in the literature review related to the willingness of faculty members to accommodate SWD/SLDs in post-secondary education.
- To ensure the validity of the survey instrument, the survey was sent to be examined and revised by seven professionals interested in the topic of inclusion in post-secondary

education at different post-secondary institutions, in different departments, and representing different academic ranks (Table 9). The researcher also added one subscale (CDSS) and five items underneath it to the survey. Moreover, the required changes suggested by the professionals were made before the instrument was distributed to address the study topics.

- After the survey had been reviewed by the professionals, a pilot study was carried out in December 2016 with 46 female faculty members at both of the post-secondary institutions included in the study, KSU and PNU. Suggestions made by the participants were taken into consideration, and some minor changes were made to the survey, such as deleting, rewording, and reordering some questions and including additional questions.

Table 9: Professionals who Examined and Revised the Survey for Validation

Professional	Frequency
Professor from the School of Education at Trinity College Dublin	1
Associate professor from the Department of Special Education at KKU, Saudi Arabia	3
Associate professor from the Department of Educational Psychology at KKU in Saudi Arabia	1
Associate professor from the Department of Curriculum and Instruction at PNU in Saudi Arabia	1
Assistant professor from the Department of Curriculum and Instruction at KKU in Saudi Arabia	1
Total	7

Reliability of the KSA-SBAKRI Survey in the Pilot Study

The reliability of a survey refers to the measure of internal consistency for the research (Gliem & Gliem, 2003). Two types of errors affect the reliability of research. First, ‘random “unpredictable” errors’ can result from sampling techniques. To overcome this problem, researchers can use a larger sample of participants. Second, ‘measurement errors’ refers to how efficiently the instrument performs in gathering information from a sample of participants. Therefore, it is important to use a reliability tool, i.e. a statistical assessment tool, to produce stable and consistent results to minimise errors, so that the data collected are an accurate representation (Fink & Litwin, 1995).

One of several kinds of reliability is internal consistency, which is a description of the extent to which all the elements in the survey instrument can measure the concept or construction of the items. Cronbach’s alpha is used to assess the strength of internal consistency reliability and to show the extent of measurement error in any scale. The range of the Cronbach’s alpha value is expressed as any number from 0 to 1 (Tavakol & Dennick, 2011).

In this study, Cronbach’s alpha was used to measure the internal consistency and reliability of the instrument as a whole and to do the same in regard to the subscales. Here, Cronbach’s alpha was based on Kirk’s (1984) classification (Table 10).

Table 10: Kirk’s Classification of Cronbach’s Alpha

Cronbach’s alpha	Internal consistency
$\alpha > 0.9$	Very high
$0.89 > \alpha > 0.70$	High
$0.69 > \alpha > 0.30$	Medium
$0.3 > \alpha$	Low

The reliability results of the survey in this study as a whole was calculated at 0.85, indicating high internal consistency. The results for the survey reliability for each section is shown in Table 11.

Table 11: Cronbach's Alpha for the Pilot Study of KSA-SBAKRI and the Subscales

Scale	Items	Reliability Coefficient
Level of knowledge	8	0.93
CDSS	5	0.86
SWD	15	0.85
SLD	15	0.82
KSA-SBAKRI	43	0.85

Data Collection

Obtaining approval to conduct research with human subjects in Saudi Arabia requires additional steps that might be necessary for other countries. This is due to the independence of Saudi universities in some aspects related to the implementation of applied research in the university setting. In the present study, the researcher followed the steps presented below:

- 1) Ethical approval was obtained from the Research Ethics Committee (REC) at Trinity College Dublin (Appendix Q) as a doctoral research requirement and as required from the Saudi Cultural Bureau in Dublin when applying for a field trip to Saudi Arabia.
- 2) All documentation, including Arabic and English versions of the research proposal, surveys, interview questions, tentative timeline, and the supervisor's letter of support were sent to my sponsor, King Khalid University, to obtain approval for field trip

expenses and ethical considerations. The committee at King Khalid University examined the research instruments to ensure their appropriateness within Saudi culture

- 3) The researcher's full name, job title, and institution, as well as the research project title were required for permission to conduct the research at KSA and PNU. After reviewing the research instruments and the purpose of the study, both universities approved the study and issued an official letter to the colleges of education and arts (Appendix O & Appendix P). This meant that the researcher had official authorisation to distribute the survey to a member of the three target groups. Administrators at the colleges of education and arts sent the surveys through their internal postal system to all the faculty members, and a list of faculty members' names and email address was provided to facilitate the follow-up. Names and phone numbers were also provided for CDSS management and students with disabilities at both universities to enable the researcher to schedule interviews.
- 4) The researcher sent an email to all faculty members that included a consent form for the anonymous survey, the university's letter of approval, a statement giving the purpose of the study, the researcher's contact information, and an online link to the survey.
- 5) Immediately upon distribution, the researcher received considerable positive feedback from faculty members, expressing the view that the study was important to their academic environment and pleasure at having the opportunity to participate. After one week, the researcher contacted the faculty members to ensure that they had received the survey. One month was allowed for the surveys to be completed and returned. Another three emails were sent as a gentle reminder every two weeks. All data were collected

from the colleges within ten weeks of distribution. A total of 657 surveys were sent to both KSU and PNU of which 387 were returned (Table 12 provides details).

- 6) Lastly, the electronic survey was sent to some WhatsApp faculty members' groups.

Table 12: Population and Sampling

Place of employment	Population	Sample	Response rate
KSU	305	176	57.7%
PNU	352	211	59.9%
Total	657	387	58.9%

- 7) An arrangement was made to conduct interviews with faculty members, CDSS management staff, and SWD/SLDs at both universities, initially by telephone and then followed by a personal face-to-face individual interview. Some were conducted in person, and some by phone due to the student's summer holidays or because she did not live in Riyadh. More details are shown in Tables 15 and 16.

Data Analysis

First quantitative part:

KSA-SBAKRI survey was organised to ensure that it would be relevant to and adequate for answering some of the study questions. The purpose of this survey was to investigate the willingness of female faculty members to provide reasonable accommodations in Saudi post-secondary institutions. The responses to the survey were analysed using the Statistical Package for the Social Sciences (SPSS).

Descriptive statistics (frequencies and percentages) were used to analyse the demographic questions (1–8) pertaining to population characteristics, including place of employment, college,

academic rank, nationality, age, and previous experience teaching SWD/SLDs. One of the eight questions had an “other” option that allowed the participant to submit a response not offered by the survey. This question query nationality.

Again, descriptive statistics such as frequency, mean, and standard deviation were used to analyse the closed-ended questions in the four subscales: (1) level of faculty knowledge pertaining to reasonable accommodations, (2) CDSS, (3) faculty willingness to provide reasonable accommodations to SWDs, and (4) faculty willingness to provide reasonable accommodations to SLDs.

An analysis of variance (ANOVA) was used to clarify the differences between the independent variables of place of employment, college, academic rank, age, and experience teaching SWDs and SLDs. The dependent variables were the four subscales (level of knowledge, CDSS, willingness to provide reasonable accommodations to SWDs, and willingness to provide reasonable accommodations to SLDs). Two of the four subscales (level of knowledge and CDSS) were five-point Likert scales. The mid-point of the five-point Likert scales is shown in Table 13.

Table 13: Mid-point of Faculty Level of Knowledge and CDSS (Hussain, 2010)

	(5)	(4)	(3)	(2)	(1)
Level of Knowledge	Mastery	Above average	Moderate	Little	None
CDSS	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Mid-point	above 4.2	3.40–4.2	2.50–3.3	1.8–2.49	less than 1.8

The other two subscales (willingness to provide reasonable accommodations to SWDs and willingness to provide reasonable accommodations to SLDs) have a three-point Likert scale, the mid-point of which is shown in Table 14.

Table 14: Mid-Point of Willingness to Provide Reasonable Accommodations to SWDs and Willingness to Provide Reasonable Accommodations to SWD/SLDs (Hussain, 2010)

	(3)	(2)	(1)
Willingness to provide reasonable accommodations to SWDs & SLDs	Yes	Unlikely	No
Mid-point	above 2.34	1.6 – 2.34	less than 1.6

Second: Qualitative part

The last part of the survey contains four open-ended questions to allow faculty members to articulate their concerns and recommendations freely and spontaneously about having SWDs and SLDs in the classroom and providing reasonable accommodations for them. This study features 28 semi-structured interviews with 14 faculty members, 12 students, and two CDSS managers, for analysis. Several techniques can be used to analyse data. However, the choice depends on the purpose and type of qualitative data (Strauss & Corbin, 2014). Given that open-ended questions and interviews do not lend themselves to mathematical abstraction, a thematic analysis method was used that relies on a constant comparative analysis process. The analysis procedure is summarised by Taylor and Bogdan (1984) as follows:

In the constant comparative method, the researcher simultaneously codes and analyses data in order to develop concepts; by continually comparing specific incidents in the data, the researcher refines these concepts, identifies their properties, explores their

relationships to one another, and integrates them into a coherent explanatory model. (p. 126)

The benefits of using thematic analysis in research include the ability to easily compare and contrast findings (e.g. from participants' responses), focusing on themes that emerge from the results. In this process, the researcher can identify, analyse, and describe emerging themes and capture the main points succinctly in relation to a large dataset or population. Therefore, for this study, thematic analysis was employed following a procedure consisting of six phases (Braun & Clarke, 2006):

- 1) Reading and re-reading the transcripts until they become intimately familiar, focussing on the identification of the important points in each transcript and making brief summary notes.
- 2) Developing observations from all interview transcripts and coding line by line, creating broad labels for important data.
- 3) The observations of the previous two stages are then made by identifying connections within the coded data and creating themes, then gathering all the data that is relevant to each theme.
- 4) Next, reviewing the themes by checking them against coded extracts and the entire data.
- 5) Naming each theme and writing a clear definition about what story that theme tells.
- 6) The final phase involves producing a report to tell the story of the data and convince the reader of the integrity of the analyses by providing evidence and choosing vivid and non-repetitive examples.

Trustworthiness of the Research Interviews and Open-ended Items

Trustworthiness is defined as the extent of confidence in the data and a belief in the research findings to ensure the study's quality (Lincoln & Guba, 1985). In order to determine the trustworthiness of the data, the researcher followed these steps:

- 1) Completed a data analysis of open-ended questions and interview transcripts.
- 2) Chose a Saudi professor with knowledge of the study's purpose and experience in the field of special education and qualitative research methods.
- 3) Asked the identified professor to collaborate by reviewing all transcripts of the interviews and coding them.
- 4) Determined trustworthiness after collecting the coding on the basis of an 'inter-observer agreement' defined as 'a comparison of recordings of behaviours of two or more observers' (Martella, Nelson, Morgan, & Marchand-Martella, 2013). The agreement was obtained using the following formula:

$$\text{Percentage of Agreement} = \frac{\text{Agreements}}{\text{Agreements} + \text{Disagreement}} \times 100$$

Answers 90% and above are desirable, 89–70% are adequate, and less than 70% are questionable (Richards, Taylor, & Ramasamy, 2013).

- 5) Determined agreement between the Saudi professor in special education and the researcher to be (82%) based on the previous formula.

Description of the Interview Participants

It is important for the reader to contextualise the responses of the individual participants. This section provides basic biographical information regarding each faculty member who was

interviewed (Table 15) and each student who was interviewed likewise (Table 16). (All the faculty are referred to by numbers and all the students by aliases to ensure anonymity).

Table 15: Biographical Information of Faculty Interview Participants

FM	Biographical Information
FM1	<p>She is an assistant professor in the Department of Media, College of Arts. She has taught three SWD/SLDs: a blind student, a student with a visual impairment, and a student with a mobility impairment. She said that she has sound knowledge in the field of special education and good experience in the different types of disabilities, because one of her family members has a disability. She also said that she understands the meaning of reasonable accommodation.</p>
FM2	<p>She is a lecturer in the Department of Special Education – Learning Disabilities. She has taught a number of blind students as well as a group of deaf students. She said that she has sound knowledge of the field of special education, as it was her major in her master’s degree. She also indicated familiarity with reasonable accommodation.</p>
FM3	<p>She is an assistant professor in the Department of Psychology and has taught a number of blind students and deaf students and a group of students with learning disabilities. She has knowledge in the special education field because she has attended training courses on this topic offered by the Centre of Disability Support Services (CDSS). Also, she said that she has good</p>

FM Biographical Information

background knowledge of the types of reasonable accommodation deemed most suitable for different disability cases.

FM4 She is a lecturer in the Department of Social Studies with ten years' experience in teaching. She has taught five students with visual impairments and 13 students with learning disabilities, one of whom had ADHD. She mentioned that she has good knowledge in the field of special education due to the fact that she has taught lessons on various kinds of disabilities. Additionally, she has read some books on how to deal with students with disabilities. She also stated that she understands the most fitting kinds of reasonable accommodation for different disability cases.

FM5 She is a lecturer and holds a master's degree in social services with a focus on youth. She has taught blind students and students with learning disabilities. She stated that she has excellent knowledge in the field of special education, that she has learned from the students themselves, and that she has a good background in reasonable accommodation.

FM6 She is a lecturer in the Department of Educational Planning and Management. She has taught a student with ADHD in the past . She mentioned that she has good knowledge of special education because she has a child with ADHD. She did not have any specific knowledge of reasonable

FM Biographical Information

accommodation.

FM7 She is a lecturer in the Department of Social Studies and has taught a blind student with mobility disorders and ADHD. She has knowledge about the different kinds of disabilities because she has experience working in a centre dedicated to the care of students with disabilities, outside of Saudi Arabia for a period of three months.

FM8 She is a lecturer and has a master's in education in measurement and evaluation. She has taught a group of deaf students and a group of blind students. She believes that she has sound knowledge in regard to how to work with students with disabilities, reporting that she found teaching them to be difficult at first, but the CDSS provided her with effective assistance.

FM9 She is an assistant professor in the Department of Social Studies, having taught students with learning disabilities, students with ADHD, blind students, and students with mobility impairments. She has sound knowledge of disabilities because she has taught the subject of special needs care to undergraduate students.

FM10 She is a lecturer in the Department of Social Studies. During her career, she has taught a group of deaf students, blind students, students with learning disabilities, and students with hearing impairments. She mentioned that she

FM Biographical Information

is knowledgeable in special education and disability types, proven by the fact that she is teaching an introductory course on disabilities care to undergraduate students.

FM11 She is an assistant professor in the Department of Kindergarten Education and has taught one student with severe visual impairment. She admitted that her knowledge of special education is very limited and that she is unfamiliar with the meaning and implications of reasonable accommodation.

FM12 She is an assistant professor of the fundamentals of kindergarten education. Her experience of teaching SWDs centres on teaching blind students, although she has also taught a mobility-impaired student. She believes that she has sound knowledge regarding working with students with disabilities because she has taught a course on special needs care. However, she is unfamiliar with the meaning and implications of reasonable accommodation.

FM13 She is an associate professor in educational management and planning and has taught a student with a mobility impairment, in addition to two deaf students. She claimed to have good knowledge of the different kinds of disabilities and can work with them effectively because she worked with the Universal Access Program (Centre for People with Disabilities), which is pertinent to all SWDs.

FM Biographical Information

FM14 She is a lecturer in the Department of Social Studies, with just one semester of teaching experience at the time of the interview. During the semester in which she was interviewed for the study, she was teaching a blind student. Although she does not have in-depth knowledge of teaching students with disabilities, she does have general knowledge because of a curriculum in her department that focuses on disabilities. She has little knowledge of reasonable accommodation.

Table 16: Biographical Information of SWD/SLD Interview Participants

Student Biographical Information

Fatimah Fatimah is a student in the Department of Kindergarten who had graduated two weeks before the interview. She has multiple sclerosis, which causes damage to the nerves, and as a result, she cannot walk properly. Also, she has Attention Deficit Hyperactivity Disorder (ADHD). Initially, she had no desire to study at the post-secondary level, but her parents pushed her to complete her education. She failed to pass certain subjects because some of the faculty members refused to provide assistance and refused to make reasonable accommodations for SWDs. However, as she knew about the CDSS and its services, she passed her other courses.

Amani Amani was not accepted by the Department of Languages and Translation because of her disability. However, she is now at the sixth level in the Department of Special Education and Learning Disabilities. She has been totally blind since birth because of retinal detachment. After graduation, she hopes to establish a centre for people with disabilities to help them to adapt within the community. She is ambitious and has a goal of completing a master's degree and a Ph.D. in special education. She is a member of some voluntary associations and a students' consulting centre. She also has several talents including public speaking and writing poetry and stories.

Maryam Maryam is studying in the Department of Special Education and Learning Disabilities. She has been completely blind since birth due to retinal detachment. She had just graduated two weeks prior to the interview. Her hometown is located 1200 km from the university at which she studied. She chose that university because it provides all the required services for students with disabilities. Also, she wanted to obtain an undergraduate certificate to make her family proud. As a blind student, she took into consideration the fact that she would face some challenges, but she did her best to overcome them.

Ebtisam Ebtisam is 23 years old. She is studying at the final level in the Department of Special Education and Learning Disabilities. She has had a

genetic visual impairment since birth. In her childhood, one of her teachers told her that she would not even be able to finish primary education. This situation made her determined to complete her education in order to prove to herself and to all those who doubted her abilities that she is able to accomplish it and have a good career. She wanted to prove that the disability would not prevent her from achieving her goals. She knew that by exercising her rights in the Department of Special Education and Learning Disabilities, she was not asking either for compassion or charity.

Soha Soha is studying in the Media Department and is currently at the fifth level. She has a physical impairment arising from spina bifida, as well as a visual impairment. Initially, she wanted to study in the Department of Psychology, but physical and sensory health was a condition for acceptance. Her pre-university education was very difficult, as she faced many problems and moral violence. By contrasting, she found her university education to be quite different as the university pays great attention to students with disabilities, provides them with all the necessary provisions, and facilitates the teaching and learning process.

Sahar Sahar is an undergraduate student in the Department of Quranic studies (level eight). She has been completely blind since birth due to retinal detachment and glaucoma. Blindness is a genetic disease that runs in her

family. Her hometown is far away from Riyadh. By living in Riyadh, she has achieved one of her goals of living away from her family, which has taught her to be independent.

Abeer Abeer is studying at the third level in the Department of Applied Linguistics. She has had a mobility impairment since childhood. Also, she has Attention Deficit Disorder (ADD), which means that she often requires explanations to be repeated in order to understand the lecture topic. She has a strong determination to complete her university education because she has high self-esteem and knows that she is able to do it.

Amal Amal is a student in the Department of Law Department and is studying at the third level. She is studying law because she thinks that society needs women who are able to serve in legal matters. Amal has had a physical impairment (hemiplegia) due to a car accident for four years, and she is now in a wheelchair. She wants to become an effective person who can serve society. Her mother and friends encouraged her to complete her education.

Arwa Arwa is studying at the third level in the Department of History. She has been diagnosed as having a 'mathematics learning disability.' Also, she has problems with memorizing information, especially when faced with a long text. She thinks that studying at the university is more difficult

because faculty members do not perceive her as a student with a disability and do not cooperate with her. This is contrary to her experience in secondary education where she found the teachers to be collaborative.

Noha Noha is studying at the sixth level in the Department of the English Language. She has dwarfism. Noha wants to prove that her disability will not prevent her from completing her post-secondary education or from achieving her future goals. At the beginning of her study at the university, she was very anxious because she thought she would find the courses too difficult. However, she found the courses to be easier than expected. Now, she is enjoying her studies.

Rehab Rehab is studying graphic design and digital media at the final level. She has been visually impaired for the past four years because of a coma brought on by diabetes. She stayed in hospital for a long time. She lost her sight entirely at first; however, after six months, she regained some sight in one eye. Then, she decided to study graphic design. Although this field of study may not be useful to her in terms of a future career, she chose to pursue it as reflective of her abilities and interests.

Abrar Abrar is 23 years old. She is a student in the Department of Graphic Design and Digital Media (level 5). She has had a visual impairment since birth. According to Abrar, there were no major difficulties or

constraints during her study at the university although the only reasonable accommodation she needed was test paper enlargement.

Ethical Considerations

- 1) IRB approval was obtained from Trinity College Dublin (TCD) before the data were collected and the study conducted.
- 2) Permission to conduct the research was obtained from KSU and PNU.
- 3) A cover letter was sent to all faculty members in the focal colleges at both universities (with the permission of the university authorities) with the survey attached, setting out the study rationale and requesting participation in the survey and the interview (Appendix D).
- 4) The CDSS at each university was contacted and asked to distribute a request for students requesting them to participate in the study, with each student signing a consent letter. This request included the study rationale and guaranteed confidentiality and anonymity for all participants (Appendix G).
- 5) CDSS management staff were contacted with a consent letter and asked to participate in the study through a series of individual semi-structured interviews. The letter emphasised that participation was voluntary and that confidentiality and anonymity would be guaranteed (Appendix I).
- 6) Participation was voluntary and no incentives were offered to potential participants with the exception that the researcher expressed her appreciation.
- 7) In the study, the names of the interviewed students were changed to preserve their privacy.

- 8) Any information obtained in connection with this study remains confidential. It will not be possible for individual respondents to be identified from the results.
- 9) All data are and will continue to be maintained by the researcher at a safe location and electronic software (SPSS) used for analysis. The researcher will keep the surveys for a period of two years after which time they will be destroyed.

Summary

The mixed-methods approach used in this study were described in this chapter. The problem and the purpose of the study were discussed, the list of research questions provided, the target population detailed, and a description of the research instrument development procedures, including validity and reliability, and the pilot study was provided. Finally, the data collection, data analysis, and ethical considerations were explained.

CHAPTER FIVE

ANALYSIS AND FINDINGS

Introduction

This study was designed to explore the views of female faculty members at two universities in Saudi Arabia in regard to providing reasonable accommodations to SWD/SLDs in their classes. More specifically, the study focused on these six questions:

- 1) To what extent are faculty members at Saudi universities willing to accommodate SWD/SLDs?
- 2) What factors affect faculty members' willingness to provide reasonable accommodations to SWD/SLDs?
 - Faculty age, college, academic ranking, and nationality
 - Level of faculty member knowledge of disability legislation and the extent of their experience working with SWD/SLDs
 - Level of faculty member training relating to disability legislation and the extent of their experience working with SWD/SLDs
- 3) What are the perspectives of female faculty members on having female SWD/SLDs in their classes?
- 4) What experiences do female faculty members report of having female SWD/SLDs in their classes?
- 5) What opinions do SWD/SLDs express of the reasonable accommodations they receive at their institutions?
- 6) What are the perspectives of CDSS management on the reasonable accommodations offered by their institutions?

This was a mixed-methods study that included a questionnaire completed by female faculty members at two Saudi universities. In addition, based on the results from the survey, semi-structured interviews were conducted with the faculty members, SWD/SLDs, and management staff at the CDSS at both universities included in the study. Findings from this study are presented in this chapter, drawing on a combination of quantitative and qualitative data.

Data entry reliability

As there was a requirement to enter data manually in SPSS, the researcher ensured that adequate quality checks were carried out to reduce the likelihood of human error. In addition to individual entry re-checking, data accuracy was examined using SPSS by sense-checking the quantity of each variable by category, as well as the mean values, ranges, and average values for the samples. A check was carried out to ensure that all data points were within the expected limits. Any outliers were considered errors, such that they were amended. For example, college was defined as 1 for Education and 2 for Arts; therefore, any number other than 1 and 2 would have been considered an error.

Sample characteristics

Female faculty members at PNU and KSU regardless of age, academic status, nationality, and level of experience were the population of interest in this study. All 657 female faculty members targeted belonged to either the College of Arts or the College of Education. Surveys were distributed electronically, with built-in quality checks to ensure that all were completed fully without errors or omissions. Surveys were sent to all female faculty members at KSU (n=305) and PNU (n= 352) in the two focal colleges. A total of 387 surveys were completed (n= 176, 45.5% from KSU and n= 211, 45.5% from PNU). A breakdown of the population in terms of demographics is provided in Table 27.

The vast majority (n=370, 95.6%) of the faculty who answered the survey were of Saudi nationality; this may be because the study was conducted in the summer, when most of the international faculty return to their families in their home countries. Faculty in the sample were somewhat more likely to come from the College of Education (n=217, 56%) than from the College of Arts (n=170, 44%). The majority (n=305, 78.8%) of those who answered the survey reported that they had received no training from their institutions in regard to working with SWD/SLDs, as shown in Table 17.

Table 17: Descriptive Statistics for Demographic Information

	Variables	Sample	%
University	KSU	176	45.5
	PNU	211	54.5
College	Education	217	56
	Arts	170	44
Nationality	Saudi	370	95.6
	Non-Saudi	17*	4.4
Academic Rank	Lecturer	163	42
	Assistant professor	154	39.8
	Associate professor	59	15.2
	Professor	11	2.8
Age	Younger than 35	115	29.7
	35–45	157	40.6
	Older than 45	115	29.7
Experience teaching SWDs	No experience	180	46.5
	Fewer than 5 students	132	34
	5–10 students	32	8.3
	More than 10 students	43	11

		Variables	Sample	%
Experience teaching SLDs		No experience	276	71.3
		Fewer than 5 students	88	22.7
		5–10 students	10	2.6
		More than 10 students	13	3.4
Training programmes (TP) on supporting SWD/SLDs		None	305	78.8
		Fewer than 5 TPs	64	16.5
		5–10 TPs	16	4.1
		More than 10 TPs	2	.5

Measures

In addition to demographic questions, the survey included eight items that assessed faculty members' familiarity with the regulations that govern the rights of SWD/SLDs, ways of teaching those students, and the assistance provided by the Centre for Disability Support Services (CDSS). These items were combined into a single measure called the Knowledge Scale.

The survey also included five items that assessed the extent to which faculty agreed that their university's CDSS provided them with useful assistance and training for working with SWD/SLDs; these items were combined into a single measure called the CDSS Scale.

Finally, the survey included 15 items that assessed faculty members' willingness to provide a variety of accommodations to SWD/SLDs. All items were scored on a 3-point Likert-type scale, where 1 = 'I would not offer this accommodation'; 2 = 'I probably would not offer this accommodation', and 3 = 'I would offer this accommodation'. Each faculty member's scores for the 15 individual SWD items were added together to compute an SWD Scale score; similarly, scores on the 15 individual SLD items were added together to compute an SLD Scale score.

Table 18 presents the mean, standard deviation and reliability for each of these measures.

Table 18: Mean, standard deviation and reliability of principal measures

Measure	Mean	Standard Deviation	Cronbach's Alpha
Knowledge Scale	16.43	8.92	.942
CDSS Scale	14.76	4.91	.899
SWD Scale	39.81	4.59	.827
SLD Scale	39.54	4.61	.820

I. Faculty Members' Willingness to Provide Reasonable Accommodations

Tables 19 and 20 present the mean for each of the individual items that assess faculty willingness to provide reasonable accommodations. As the tables indicate, a substantial majority of the faculty at both universities indicated that they would be willing to provide SWD/SLDs with virtually every accommodation on the list. The single exception to this pattern concerned the item, 'Allow students to do extra credit assignments when this option is not available for other students'; only one in four participants agreed that they would allow students to do this.

Table 19: Frequencies and Percentages of Willingness to Provide Reasonable Accommodations for SWDs

Items	Group (1): SWDs					
	No		Unlikely		Yes	
	N	%	N	%	N	%
1) Photocopy my notes after the lecture	18	4.7	81	20.9	288	74.4
2) Allow the student to tape-record the lecture	40	10.3	70	18.1	277	71.6
3) Allow the use of a note taker	8	2.1	53	13.7	326	84.2
4) Extend deadline to complete coursework	21	5.4	74	19.1	292	75.5

Items	Group (1): SWDs					
	No		Unlikely		Yes	
	N	%	N	%	N	%
5) Accept alternative assignment formats (example: oral presentations in place of written assignments)	9	2.3	61	15.8	317	81.9
6) Exempt the student from using learning management systems and allow her to use another technology that other students use; for example, exempt the student from the use of a blackboard and allow her to use smartphone applications	9	2.3	59	15.2	319	82.4
7) Allow the use of a proofreader to assist with grammar correction and punctuation	16	4.1	84	21.7	287	74.2
8) Allow misspellings, incorrect punctuation, and poor grammar without penalizing the student	23	5.9	110	28.4	253	65.4
9) Allow the student to do extra credit assignments when this option is not available for other students	154	39.8	138	35.7	95	24.5
10) Provide extra time on tests	28	7.2	98	25.3	261	67.4
11) Allow the student to take proctored tests in a supervised place	33	8.5	96	24.8	258	66.7
12) Allow the use of a third-party test reader	19	4.9	80	20.7	288	74.4
13) Provide adequate lined paper to aid a student with poor handwriting skills during tests	9	2.3	59	15.2	319	82.4
14) Allow the student to take an alternative form of exam (example: some have problems with computer-generated answer sheets and prefer answering in the answer sheet, others might do better with multiple choice instead of essay tests)	15	3.9	88	22.7	284	73.4
15) Meet the student to discuss the study problems that she faces and the accommodations that fit her condition	7	1.8	43	11.1	337	87.1

Table 20: Frequencies and Percentages of Willingness to Provide Reasonable Accommodations for SLDs

Items	Group (2): SLDs					
	No		Unlikely		Yes	
	N	%	N	%	N	%
1) Photocopy my notes after the lecture	24	6.2	84	21.7	279	72.1
2) Allow the student to tape-record the lecture	43	11.1	75	19.4	269	69.5
3) Allow the use of a note taker	14	3.6	56	14.5	317	81.9
4) Extend deadline to complete coursework	21	5.4	66	17.1	300	77.5
5) Accept alternative assignment formats (example: oral presentations in place of written assignments)	12	3.1	72	18.6	303	78.3
6) Exempt the student from using learning management systems and allow her to use another technology that other students use; for example, exempt the student from the use of a blackboard and allow her to use smartphone applications	17	4.4	66	17.1	304	78.6
7) Allow the use of a proofreader to assist with grammar correction and punctuation	14	3.6	77	19.9	296	76.5
8) Allow misspellings, incorrect punctuation, and poor grammar without penalizing the student	20	5.2	112	28.9	255	65.9
9) Allow the student to do extra credit assignments when this option is not available for other students	155	40.1	138	35.7	94	24.3
9) Provide extra time on tests	22	5.7	102	26.4	263	68
11) Allow the student to take proctored tests in a supervised place	39	10.1	100	25.8	249	64.1
12) Allow the use of a third-party test reader	31	8	91	23.5	265	68.5
13) Provide adequate lined paper to aid a student with poor handwriting skills during tests	7	1.8	51	13.2	329	85

Items	Group (2): SLDs					
	No		Unlikely		Yes	
14) Allow the student to take an alternative form of your exam (example: some have problems with computer-generated answer sheets and prefer answering in the answer sheet, others might do better with multiple-choice instead of essay tests)	15	3.9	91	23.5	281	72.6
15) Meet the student to discuss the study problems that she faces and the accommodations that fit her condition	9	2.3	46	11.9	332	85.8

II. Factors That Affect Faculty Willingness to Provide Reasonable Accommodations

Faculty age. Faculty were divided into three age groups (younger than 35, 35–45, older than 45). A one-way analysis of variance found that these age groups did not differ significantly on the SWD scale ($F = 2.10$, $df = 2$, $p > .05$), or on the SLD scale ($F = 1.34$, $df = 2$, $p > .05$).

Faculty college. The results of a t-test showed no statistically significant differences between faculty at the two college for on either the SLD Scale ($t = .156$, $df = 385$, $p > .05$) or the SWD Scale ($t = .628$, $df = 385$, $p > .05$).

Faculty academic rank. Faculty were grouped into four academic ranks: Lecturer, Assistant Professor, Associate Professor, and Full Professor. The results of a one-way ANOVA show no statistically significant differences among academic ranks on either the SLD Scale ($F = 1.31$, $df = 3$, $p > .05$), or the SWD Scale ($F = .72$, $df = 3$, $p > .05$),

Faculty nationality. Faculty were divided into two groups: Saudis and non-Saudis. As noted above, the vast majority of faculty (95.6%) were Saudi. The results of a t-test showed no statistically significant differences by faculty nationality for either the SLD Scale ($t = 1.07$, $df = 385$, $p > .05$) or the SWD Scale ($t = 1.308$, $df = 385$, $p > .05$).

Faculty experience with SWD's and SLD's. Faculty were scored in terms of four levels of experience teaching SWD's and SLD's, from "no experience" through "more than 10 students."

There was a very high correlation between faculty willingness to provide accommodations to SWD's and SLD's ($r=.936, p< .001$); however, there were no significant correlations between faculty experience with these students and their willingness to provide accommodations.

Table 21: Correlations between Faculty Members Experience in Teaching SWD/SLDs and Willingness to Provide Reasonable Accommodations (N=387)

	Taught SWD	Taught SLD	SLD scale	SWD scale
Taught SWD	—			
Taught SLD	.168	—		
SLD scale	-.049	-.027	—	
SWD scale	-.048	.003	.936	—

Faculty training. Faculty members were scored in terms of four levels of training, from “None” to “more than ten” training programs. There was no significant correlation between faculty training and either the SLD scale ($r = -.07, p> .05$) or the SWD scale ($r = -.03, p> .05$).

Faculty knowledge of regulations and faculty assessment of CDSS. Finally, faculty were scored in terms of their knowledge of regulations governing accommodations to students with disabilities (Knowledge), and a scale that measures their assessment of the training provided by their CDSS. As Table 22 indicates, faculty who scored higher on the CDSS scale also scored higher on the measure of Knowledge CDSS scales ($r = .375, p< .01$). This correlation indicates that the participants who felt that they had been well-trained by their CDSS were more likely to report that they were familiar with the regulations governing accommodations to SWDs compared with faculty who felt that they had not been well-trained by their CDSS.

However, no statistically significant correlations were found between faculty scores on Knowledge of regulations or scores on the CDSS scale and their scores on either of the two

scales that measured faculty willingness to provide accommodations. In fact, those correlations were close to zero. This result indicates that the CDSS training received by a faculty member and her knowledge of regulations have virtually no effect on willingness to provide accommodations.

Table 22: Faculty Knowledge of Regulations, Faculty Assessment of CDSS, and Willingness to Provide Accommodations

	SLD15	SWD15	Knowledge	CDSS
SLD15 Scale	---			
SWD15 Scale	.936**	----		
Faculty Knowledge Regulations Scale	.019	.015	---	
Faculty Assessment CDSS Scale	.012	.026	.375**	---

* $p < .05$

** $p < .01$

In short, none of the factors investigated in this study – faculty age, college, academic rank, nationality, experience, training, or knowledge of regulations – had any statistically significant relationship with their willingness to provide accommodations to SWD’s or SLD’s. The utter absence of statistically significant findings is, of course, surprising and disappointing. In retrospect, two explanations seem plausible. One is that there was insufficient variance in the measures of willingness to provide accommodations. All of the items were measured on 3-point Likert scales; the vast majority of participants scored nearly every item "three," meaning that they were willing to provide that accommodation. Had the items been scored differently, perhaps on 5-point scales, faculty would have been able to express more nuanced opinions. This might have resulted in more variance and therefore more chance of detecting significant results. The second possibility, of course, is that willingness to provide accommodations is simply not

affected by the variables that were investigated. For example, it is reasonable to imagine that faculty who teach very different subjects may differ in their willingness to provide accommodations; however, this is only likely if those subjects are sharply distinct (say, Engineering and Social Work). There is no compelling reason to believe that teachers of Arts and Education, who made up the two groups in this study, should differ significantly. The larger aim of the study was to show that faculty willingness to provide accommodations is influenced by their academic sub-culture; to test this hypothesis, it might have been more effective to compare faculty whose sub-cultures are more sharply distinct.

III. Faculty members' perspectives on Having SWDs and SLDs in their Classes

Two open-ended questions were added to the end of the KSA-SBAKRI to establish faculty members' perspectives on having SWDs and SLDs in their classes. These questions were designed to elicit faculty members broad views of their concerns and recommendations for working with SWD/SLDs and how interactions between the students and other students as well as the faculty affected the class and to determine the faculty's views in regard to whether and how to develop and improve the provision of reasonable accommodation for students with disabilities. Open-ended transcripts are provided in Appendix K. Many scientific methods have been developed for qualitative data analysis, and the most appropriate method depends on the objectives of the research (Strauss & Corbin, 2014). Given the objectives of the present study, the researcher selected thematic analysis, which is dependent on the constant comparison method (Braun & Clarke, 2006).

Faculty members' concerns about having SWDs and SLDs in their classes

After a careful review and analysis of sample answers, the first open-ended question was written to state 'List your concerns about having SWDs and SLDs in your class. The faculty members' answers in regard to what concerns them about teaching SWDs and SLDs can be classified into three main groups arranged by the frequency of answers of the faculty members. (Figure 10). Knowing that (L, AP, AsP, and P) mean (Lecturer, Assistant Professor, Associate Professor and Professor).

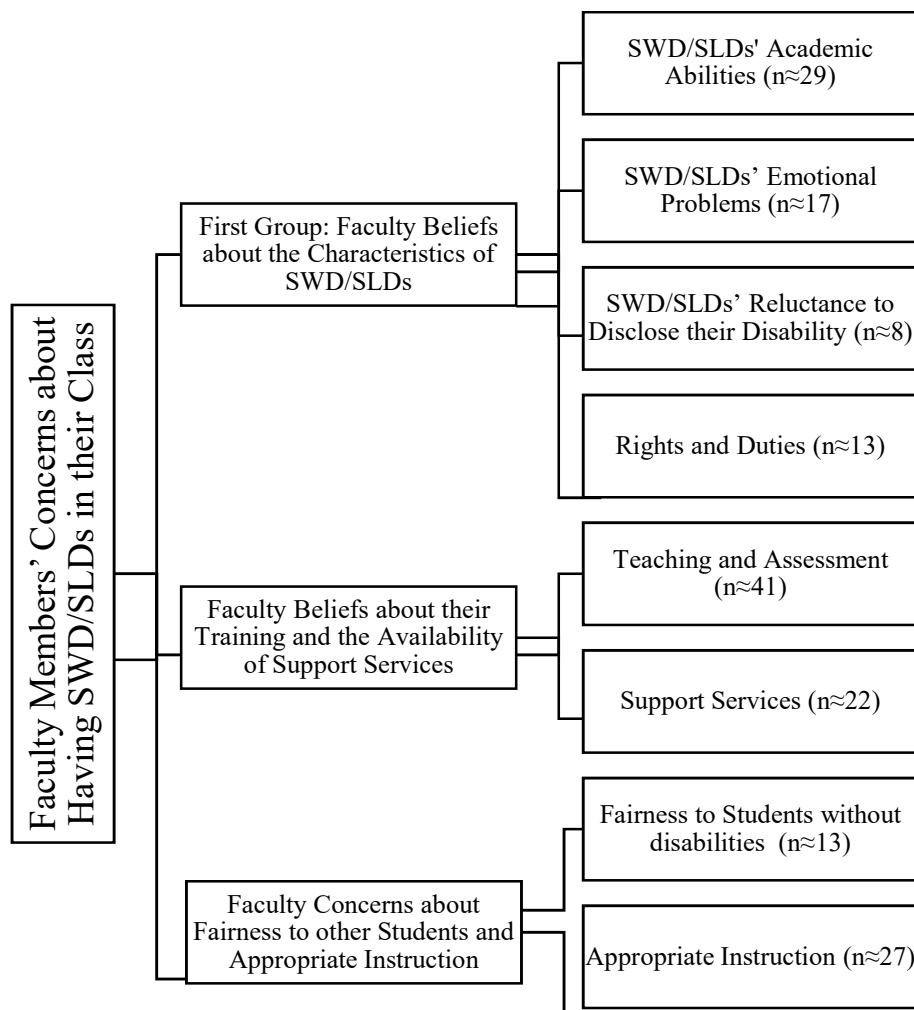


Figure 10: Main groups presented in descending order according to the frequency of answers of faculty members' concerns in teaching SWD/SLDs.

Faculty beliefs about the characteristics of SWD/SLD

SWD/SLDs' academic abilities. Faculty members believe that students with disabilities are significantly less academically able than are their classmates without disabilities. For example, according to AsP8, 'a student with a disability has no ability to comprehend the subject'. This view was repeated by many faculty members in more-or-less similar words. AP39, for example, referred to SWD/SLDs' 'inability to understand the curriculum'. Another commented on SWD/SLDs' 'inability to understand information delivered in a lecture'. According to AP31, 'students with disabilities have low educational skills', and L28 stated that the 'outcomes of students with disabilities differ from the ordinary student'.

SWD/SLDs' emotional problems. Several of the faculty noted that SWD/SLDs often have emotional problems. For example, according to L9, 'students with disabilities often suffer from irritability or sadness'. In AP27's view, 'These students often have difficulty with interaction and participation because of their shyness'. Finally, L38 noted that 'They are often frustrated and anxious about the future'.

SWD/SLDs reluctance to disclose their disabilities. Several faculty members noted that students often do not disclose their disabilities because they feel embarrassed, because they fear that they will not be taken seriously, or because they themselves do not recognize that they have a disability. For example, AP15 commented that 'The student sometimes doesn't talk with me about her needs or her problems because she is ashamed of telling me about them; despite the fact that I mentioned in class that students with disabilities should provide me with information about their problems and needs'. Similarly, AP41 commented that 'They usually feel uncomfortable because they don't like the looks of pity'. L41 suggested that students may refrain from disclosing their disabilities because they fear that the faculty member will not take them

seriously, adding that this fear 'is not unfounded'. Finally, L33 noted that students may refrain from mentioning their disabilities because 'The students themselves don't recognize that they have a disability and refuse assistance'.

Rights and duties. A number of faculty members mentioned that SWD/SLDs do not seem to be aware that they are entitled, by law, to special assistance. For example, L36 stated, 'Students with disabilities lack awareness of their rights'. AP25 suggested that a student's family could be a part of this problem: 'The student's family refuses to recognize that their daughter suffers from a problem that requires special treatment. This makes it difficult for the university to take any action that preserves the student's right for special treatment'. Some of the faculty members felt that the problem was not entirely the fault of the students or their family: the law itself might be ambiguous. In AP25's view, 'there is no clear law that preserves the rights of the student with special needs'. On the other hand, a few of the faculty members suggested that students with disabilities sometimes take advantage of the rules: According to AsP9, 'Some of them exploit their disability excuse in a way doesn't fit their real needs. They do so to gain more prerogatives.

Faculty beliefs about their training and the availability of support services

The faculty members were asked how they felt about their ability to provide reasonable accommodations that fit the special needs of SWD/SLDs, the training received, and the availability of support services. Their answers suggest a keen awareness of their own deficiencies and those of their institutions.

Teaching and assessment. Many of the faculty members said that they had never been trained how to provide accommodations for SWD/SLDs, and that as a result, they felt guilty about not providing students with the accommodations needed. For example, L31 mentioned her

'lack of experience in dealing with students with disabilities' whereas AP7 stated 'I lack acquaintance with the most appropriate teaching methods and techniques to deliver information to them'. Some of the faculty commented that, because they are unsure as to how to respond to these students, they are afraid of being unfair to them. For example, L12 said that she 'feels guilty when there are difficulties in delivering information' and further that she is 'afraid of being neglectful'. Similarly, AP36 commented that 'I don't have enough experience and I'm afraid of failing to assist them as required', and AP54 commented that 'I haven't enough experience and I'm afraid of being unfair to the student and failing to assist her'. AP61 expressed the problem succinctly: 'I am afraid I'm not qualified for this'.

Faculty who raised these concerns often pointed out that they had received very little or even no training. For example,

There are no training programs on teaching methods. I should have a long period of training in order to identify and learn about the most appropriate and effective teaching methods and how to use these methods while teaching students with disabilities and delivering information to them. (P2, 2017).

Support services. Many of the faculty members mentioned that they had received very little support from their university in regard to working with students with special needs. One common complaint was that the faculty are not informed early enough about which students have special needs the accommodations they require. For example, AP15 noted that reports of SWD/SLDs are not delivered to professors in the required time. This made it impossible for her 'to recognize the students with disabilities from the beginning of the semester [which] I realized that after the mid-term test'. Further, she added, 'Most reports don't give the diagnosis'.

Another complained that the CDSS did not provide faculty members with specific recommendations about how to meet students' needs: 'I don't know the required procedures for each case of disability'. Another voiced the opinion that students with visual impairments at least should be afforded extensive assistance:

Students with visual impairments should be provided with a highly qualified escort who can effectively help them with mobility between classrooms and other buildings on campus, as well as taking notes during lectures from what is written on board or presented on a screen. (P2, 2017).

L20 mentioned that the problem of dealing with SWD/SLDs was compounded by the high number of students in the classes. L20 felt that this should be taken into consideration so that she could do her best for SWD/SLDs who need support.

Faculty concerns about fairness to students without disabilities and appropriate instruction

Although nearly all the faculty members interviewed expressed concern for SWD/SLDs, many also suggested that they were concerned about the effect that catering to these students' needs might have on their classmates and on the curriculum.

Fairness to students without disabilities. A number of faculty members expressed the concern that having SWD/SLDs in their classrooms might have a negative effect on the other students without disabilities. A common theme was that SWD/SLDs require special attention, which may slow down instruction for everyone else. For example, according to AP55, 'repeating explanations or explaining slowly [for an SWD/SLD] may inconvenience her colleagues', according to AP59, as an SWD/SLD may need a longer time to understand, this may have a negative impact on how class time is used. AP40 worried that 'increased compassion for

[SWD/SLDs] may be an ‘injustice’ to other students. Further, some faculty members were concerned that SWD/SLDs may have difficulty interacting with students without disabilities. AP10 expressed the concern that SWD/SLD ‘[would] not accept opportunities to work with peers, and AP42 worried that, affording more ‘privileges’ to SWD/SLDs than to other students would lead to ‘anger’ on the part of the latter.

Appropriate instruction. Several faculty members noted that the curriculum they teach is not designed for SWD/SLDs. According to AP20, ‘The curriculum lacks relevance to their needs’. As a result, AP22 worried about SWD/SLDs ‘not being able to finish the curriculum on time’, such that they slow down the syllabus. A few faculty members stated that although they are sympathetic toward SWD/SLDs, they believed these students should be directed to areas of study that are more appropriate for them. For example, AsP10 said that it would be helpful for SWD/SLDs to

Choose departments and specializations that are appropriate for their abilities, because some scientific specializations may not be appropriate for their disabilities. They should have their own classrooms, or they could study for a trial period, for example, a month. This process would help to identify the extent to which university study is appropriate for them, and the student who can’t get a good grade, she will, then, be excluded from university study. (AsP10, personal interview, 2017)

The faculty members who stated that they worried about whether SWD/SLDs could meet university standards said they felt uneasy about being overly compassionate and helpful toward these students this might come at the expense of lowering their standards. For example, L45 said

that she was uncomfortable, ‘showing compassion’ to SWD/SLDs, and similarly, AsP5 stated that she is ‘afraid to treat such students ‘mercifully’.

Faculty recommendations about accommodations

In an open-ended question on the questionnaire, the faculty members were invited to ‘list any recommendations about reasonable accommodation that you may have for working with SWDs and SLDs to meet their needs in your class’.The answers can be organized into four main groups: (1) Developing the skills of faculty members; (2) Developing better supportive services; (3) Preparing students without disabilities (those without disabilities); and (4) Curriculum modification.

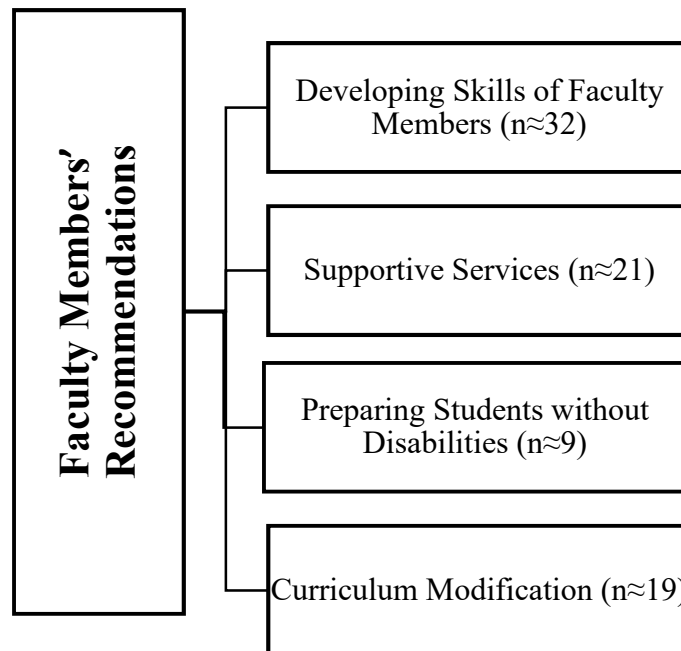


Figure 11: Main groups arranged according to the frequency of faculty members' recommendations.

Developing the skills of faculty members. This was the most often proposed recommendation. Many faculty members agreed that they urgently need training in order to carry out their instructional role. They recommended that training courses and workshops on effective methods of teaching and assessing SWD/SLDs be offered. For example, Aps5 said, ‘There should be training courses and workshops for all faculty members on how to deal with students with disabilities and learning disorders cases.’ AP34 recommended, “training courses to acquaint faculty with policies and procedures concerning students with disabilities.” Similarly, L9 expressed the opinion that professors should take at least a one-semester course and visit the CDSS with the goal of ‘qualifying professors with the required skills before teaching students with disabilities.’”

Developing better supportive services. The faculty members were keenly aware that they need help working with SWD/SLDs and proposed a variety of ideas. L25 suggested ‘a permanent and dedicated department in the CDSS in order to provide help for faculty members. AP24 recommended providing faculty with more effective means of providing assistance than writers and escorts, because some of them don’t work so well’. Further, AP4 pointed out that faculty members often do not know that there is an SWD/SLD in their classroom because they do not receive any formal notification that this is the case. Therefore, AP4 recommended that the student’s name be linked electronically with files relating to the best method of working with her’.

Preparing students without disabilities. Faculty members realize that students without disabilities play an important role in helping those with disabilities become more integrated into the classroom and extracurricular activities. Accordingly, the faculty members recommended offering programs through students without disabilities students can learn and then apply

relevant knowledge, skills, and dispositions in terms of working with SWD/SLDs. P2 suggested preparing students without disabilities about their role' in regard to SWD/SLDs. Also, L41 suggested inviting students to attend seminars, conferences and encouraging them to participate in these effective academic programs.”

Curriculum modification. Because the curriculum plays a primary role in the educational process, several faculty members proposed that it be modified to fit the individual needs of SWD/SLDs. L25 said, “Curriculum modification should be a role of academic guidance for students.” L48 noted the importance of “raising awareness of faculty members toward ways of modifying curriculum to fit capabilities and capacities of students with disabilities.”

IV. Faculty members' experience of having SWDs and SLDs in their classes

Faculty members may find teaching SWD/SLDs to be challenging for a number of reasons. In order to explore their experience, semi-structured interviews were conducted with 14 faculty members, from both universities. The faculty spoke about many aspects of their experience. However, only those portions of their accounts directly relevant to teaching SWD/SLDs are presented. After a careful review of the interview transcripts (Appendix L), their responses were classified into five groups: (1) reasonable accommodation, (2) CDSS, (3) attitudes toward and reservations about teaching SWD/SLDs, (4) SWD/SLDs' academic ability, and (5) SWD/SLDs' personal and emotional problems (Figure 12).

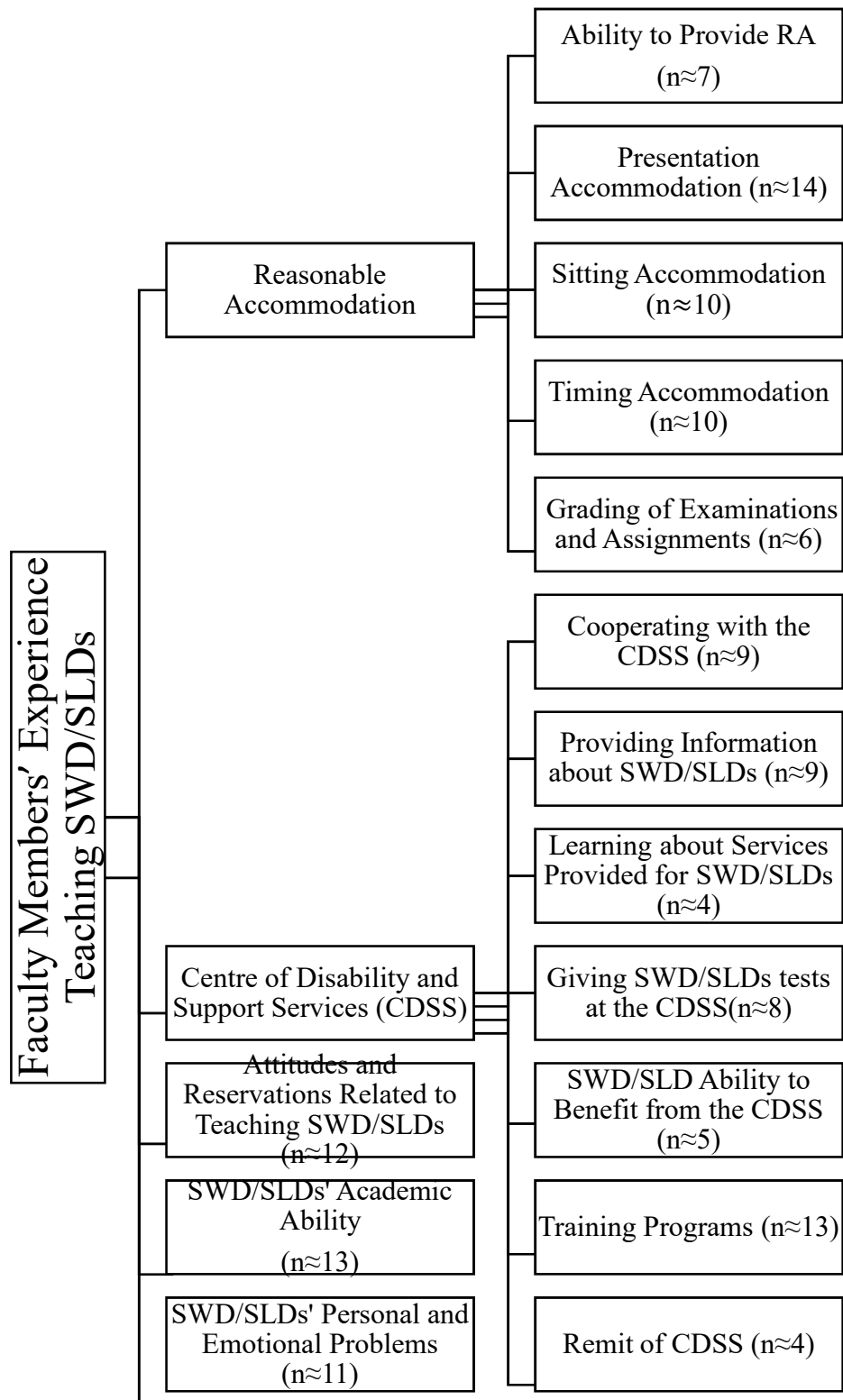


Figure 12: Main groups arranged according to the frequency of answers of faculty members' experience

Reasonable accommodations

Faculty members were asked about their ability to provide reasonable accommodations that fit the special needs of SWD/SLDs and the types of reasonable accommodations provided. Their answers suggest a keen awareness of reasonable accommodations. To facilitate the analysis of the findings, the feedback is categorised into five subgroups: ability to provide reasonable accommodations, presentation accommodations, sitting (environmental) accommodations, timing accommodations, and assessment and grades.

Ability to provide reasonable accommodations. All the faculty members reported being very willing to provide both examination accommodations and instructional accommodations and did not see any disadvantages to doing so. For example, FM11 said, “Yes, sure, I have the ability to do so, and I do not think reasonable accommodation has disadvantages.” Similarly, FM1 said, ‘ I don’t think there are disadvantages of providing reasonable accommodation because I’m a human being and I have to take care of them’. Also, FM2 supported this view by saying, ‘I believe that it is unfair to equate an ordinary student with a disabled student. Therefore, it is necessary to consider the individual differences among students’.

They expressed a positive attitude toward reasonable accommodations, which included the belief that SWD/SLDs have a right to this assistance. As FM9 commented, ‘At the beginning of the semester, I tell all students that their colleague has a disability and that she needs special treatment. You shouldn’t compare yourself with her’. FM4 stated that ‘It is unfair not to provide reasonable accommodation for them’.

Despite a high level of willingness to provide reasonable accommodations, the faculty members also expressed some reservations, which are discussed later in the analysis of this question.

Presentation accommodations. Each faculty member shared her experience of adapting the design or delivery of instruction and examinations, depending on the student's case.

Instructional Accommodation: It is evident that the faculty are trying to deliver instruction in different ways to accommodate SWD/SLDs. For example, FM8 explained, 'I'm trying to deal with the student according to her abilities without her being overly conscious of it because I do not want her to feel something different'. Also, FM2 added, 'It's known that deaf students are less proficient in language than students without disabilities. Therefore, I needed to use simple terms in explanations, presentations, and exams'. FM14 explained her approach in more detail and the response it elicited from the student:

I use a lot of visual aspects such as images and video, and since the student is blind, it will be difficult for her to engage with us [...]. I began to explain every picture I presented in general without talking to her, so as she would not feel singled out. Indeed, the student began to respond and engage in the lecture explanation with me. (FM14, personal interview, 2017)

Some faculty members allow students to bring someone to help them in the classroom. As FM2 explained, 'They are permitted to go to the lecture hall, accompanied by their attendants to help them to write'.

Providing materials was another topic discussed. For example, FM12 noted that 'I provide her with my papers and summaries of each lecture'. Similarly, FM2 commented that blind students need lectures in Word format; therefore, I arrange information in the PowerPoint slides, and then I convert them to Word format to be more comprehensive'. However, providing alternative material could cause some disadvantages, as one of the faculty members pointed out:

‘One of the students with disabilities came to me in a deplorable condition to tell me that all records of lectures had been damaged [...]. Unfortunately, this student didn’t pass the exam’.

Communication with SWD/SLDs is one of the accommodations that the faculty members mentioned in regard to addressing issues in the classroom. FM9 noted that ‘I give priority to students with disabilities during office hours to explain the subject to them and to discuss any problems or difficulties they may be encountering in my lecture’. On the other hand, FM5 used an array of communication methods ‘such as Twitter in social communication, through e-mail and in person during office hours’.

Finally, some faculty members spoke about ways in which their colleagues misinterpret what is involved in providing reasonable accommodations. FM2 described some examples of this kind of misinterpretation as follows:

There are some faculty members who are very lenient and interpret reasonable accommodation incorrectly; as they summarize the curriculum into five or six pages only. Also, there are some faculty members who are radical and strict, as they refuse to provide any reasonable accommodation for the students with disabilities. (FM2, personal interview, 2017)

FM13 also encountered similar behavior, stating that ‘Some faculty members may simply omit part of the scientific material, but I see that it is not permissible for the university student to graduate with inferior outputs to her colleagues’.

Examination Accommodations: In regard to examination accommodations, over half the faculty mentioned modifying test questions. For example, FM5 highlighted the importance of ‘developing and formulating questions in a way that is fitting, considering the abilities of the

students with learning disabilities. Moreover, blind students should have their exam in Braille language'. Again, FM10 added that she 'changed the exam method and strategies' to accommodate the specific needs of her student. Also, FM9 spoke of examination accommodations that she made for her student, explaining that 'She cannot write, so I tested her verbally'.

One of the faculty members, FM2, commented that she even 'allowed one of her [the student's] family members to take photographs instead so that I can assess her'. In addition, FM2 discussed providing a reasonable accommodation by having the SWD/SLDs take a practice examination: 'I prepared a demo exam before they had their final exam to determine the type of questions fitting their capabilities'.

Sitting (environmental) accommodations: The faculty members mentioned providing two kinds of sitting accommodations: instructional accommodations and examination accommodations.

Instructional Accommodations: The faculty members gave two examples of sitting accommodations. FM2 said, 'If I want to capture the attention of one of them, I have to turn the classroom lights off and on again'. Also, FM1 noted that her student 'shouldn't sit next to the door, so as not to be troubled by the external sounds. Her parents also recommended that I read in front of their daughter because she can lip-read'.

Examination accommodations: A number of the faculty members talked about sitting accommodations, including FM9, who shared her personal experience in depth on this topic:

I put the student with learning disabilities in front of the board during the monthly exams because she has attention deficit disorder. She had high grades [...], but when the university took the decision that all students with all kinds of disabilities should have their

exams in the centre of disability support services, her proficiency became lower and she obtained lower grades than before. (FM9, personal interview, 2017)

Further, FM9 was not happy with the requirement whereby SWD/SLDs must be tested at the CDSS:

The students with disabilities have their exam in the CDSS, and this is very difficult for the faculty member; because if the student needs to ask a question, the professor has to go to the centre, even she if is located far away on the campus. Alternatively, if we talked with students via phone, there would be a misunderstanding. (FM9, personal interview, 2017)

Timing accommodations

There are two kinds of timing accommodations: instructional accommodations and examination accommodations.

Instructional accommodations: Only two of the faculty members who talked about spending additional time on explanations for SWDs spoke of doing so in a negative way. For instance, FM4 said, ‘I think there are disadvantages and downsides of reasonable accommodation because it is a big burden on the faculty member to explain the curriculum in a way that fits each disability case’, emphasizing that especially if we are tight on time’. Similarly, FM8 noted, ‘I was explaining slowly and re-explaining information many times. Therefore, the students without disabilities felt that it was excessive.’ For this reason, FM8 expressed the opinion that as numerous deaf students are enrolled at her university that they should be taught separately from the other students.

Examination accommodations: Almost all the faculty members commented that the university gives SWD/SLDs extra time to finish tests. For example, FM2 spoke of ‘allowing a

student extended time to read exams or assignments’, and FM13 stressed that ‘students with learning disabilities need a long time to answer the questions in the exam’.

Grading examinations and assignments

Only one faculty member (FM1) reported giving higher grades to SWD/SLDs than to the other students, admitting that she ‘often helps’ SWDs with grades ‘because they cannot be compared to the rest of the students’. She went on to justify this practice on the basis that, ‘They actually need our help, and this help should be provided without their knowledge so as not to cause them feelings of sadness or make them feel pitied’.

Some faculty members frowned on their colleagues for giving higher grades to SWD/SLDs than to the other students. According to FM3, ‘They give them additional grades, and this is meaningless. It is considered a great insult to their capabilities’. Giving higher grades to SWD/SLDs as compensation causes two main problems from the point of view of faculty members. First, some SWD/SLDs start asking for higher grades. FM14 stated, ‘I hear from my colleagues so often that some students use their disability as an excuse in begging for adjusted grades, postponing the test, reducing subjects and changing the strategies of questions in the exam’. Concurring with FM14, FM4 stated that the student is asking to get grades without performing anything or making any additional effort; only on the basis that she has a mobility-related disability’.

To summarize, five subgroups were discussed in depth under the category of reasonable accommodations. First, in regard to their ability and willingness to provide reasonable accommodations, the faculty members reported being very willing to provide examination and instructional accommodations on the whole. However, some expressed reservations pertaining to certain aspects of providing reasonable accommodations. The second subgroup was presentation

accommodations, whereby all the faculty members shared their experience pertaining to adapting the design or delivery of instruction and examinations. The third subgroup was sitting (environmental) accommodations, which the faculty members also discussed. Fourth, the faculty members talked about timing accommodations, principally the practice of extending the time dedicated to explaining a test and providing additional time for an SWD/SLD to take a test. Finally, grading examinations and assignments was another topic that faculty members addressed.

Centre of Disability Support Services (CDSS)

Significant interview time was taken up in discussing the faculty members' experiences with the CDSS. The discussions encompassed cooperating with the centre, providing information about SWD/SLDs, learning about services provided for SWD/SLDs, ways in which SWD/SLDs could benefit from the CDSS, receiving training from the CDSS, and the remit of the CDSS in general.

Cooperating with the CDSS

There were differing opinions on the issue of cooperation with the centre, whereby some of the faculty members expressed a positive view whereas others offered a negative opinion. In terms of a positive opinion of the CDSS, FM10 commented that the CDSS 'always communicates with us via email to provide us with information about the students with disabilities and how to deal with them'. FM12 reported a similar experience: 'I have been communicating with the Centre since the beginning of its establishment. In fact, I was very happy because the students were unable to find anyone to help them otherwise'.

On the negative side, some of the faculty pointed to a lack of contact between the centre and the faculty and the centre and the students, such that the latter often do not benefit from the

services that the centre is charged with providing. A number of faculty members voiced this opinion, including FM2, who gave the following account:

I have dealt with them. Frankly, the Centre's employees aren't collaborators as hoped [...].

I do not remember any cooperation between myself and them regarding the methods of teaching. They have never sent us proposals on how to deal with students with disabilities.

(FM2, personal interview, 2017)

FM1 claimed, 'I've never had to deal with them', while FM8 has never visited the centre but does communicate with the staff via e-mail. Finally, FM4 commented that she had dealt with the CDSS in the past but that 'it didn't help me much'.

Providing information about SWD/SLDs

Many of the faculty members agreed that the CDSS provides information about SWD/SLDs at the beginning of the semester. FM14 commented that 'They sent me the means and strategies of how to deal with the student and the appropriate ways to provide her with the reasonable accommodation'. According to FM1, 'They notify us if there is a student with a disability and provide us with all required information about this student at the beginning of the semester'.

However, some complaints included that the faculty are not informed early enough regarding which students have special needs. FM1 claimed that the 'CDSS doesn't provide me with effective methods and ideas about how to provide reasonable accommodation to the students with disabilities'. Also, according to FM4, 'The CDSS did not provide me with her [the student's] name at the beginning of the semester. Therefore, how can I provide her with

reasonable accommodation if I don't have any information about her disability, or even her name?'

Learning about services provided for SWD/SLDs

Most of the faculty members interviewed have limited information about what the CDSS provides for SWD/SLDs. However, one faculty member, FM12, at least, appeared to be very familiar with the centre's services, stating, 'They provide excellent support such as transportation, academic supervisors, a psychiatrist and social workers. It also provides a better venue where the students with disabilities are tested'.

Inequality in providing services for students with different types of disabilities was mentioned by FM3: 'I note that most of the support goes towards the blind and deaf students. I do not think the students with learning disabilities receive the same attention'.

Giving SWD/SLDs tests at the CDSS

The faculty members also spoke about giving SWD/SLDs mid-term and final examinations at the CDSS from many points of view. First, a number of the faculty members commented that they do not like sending test papers to the CDSS. According to FM4, 'I don't like to send the exam to the CDSS because I'm afraid that exam questions could be leaked or e-mails would be hacked and leaked'. FM1 expressed exactly the same concern.

Further, FM9 offered an in-depth description of the disadvantages of testing SWD/SLDs at CDSS. One of the disadvantages is that testing in this context means that communication between the faculty member and the SWD/SLD becomes very difficult. Further, she explained that talking by phone is not a solution, as misunderstandings easily arise by doing so. She also commented that test-taking at the CDSS may not be conducive to students performing at their

best, explaining that her student's grades dropped after it became mandatory for SWD/SLDs to take exams at the CDSS.

Also, she found out that one of the CDSS supervisors had helped her student answer the test questions:

One of the CDSS supervisors helped one of my students in answering the test questions. Therefore, she got a very good score. However, when the supervisor was changed, the same student didn't pass the other subject [...]. I expect that the Centre causes problems for the students; however, they believe that they take care of the students' interests. (FM9, personal interview, 2017)

This same faculty member also noted that SWD/SLDs are required to take exams at the CDSS such that the students have no choice in the matter:

The students with learning disabilities sometimes do not want their colleagues to know of their problems. However, the Centre calls them to do the exams in the CDSS, and this causes embarrassment to the student [...]. She doesn't want anyone to know that she has learning disabilities but the Centre makes it evident to everyone. (FM9, personal interview, 2017)

SWD/SLDs ability to benefit from the CDSS

There are several reasons why SWD/SLDs may be reluctant to use services from the CDSS.

FM13 offered this explanation:

Some students may be reluctant to present themselves to the centre, which may be for several reasons [...]. The student does not know about the centre's services [...], may have a sensitive situation [...], the faculty members don't encourage or motivate the students with disabilities to present themselves to the centre and benefit from its services [...]. [And the student] may be afraid of showing her disability. (FM13, personal interview, 2017)

FM3 added, ' I have a student with learning disabilities, I told her about the Centre; she refused to benefit from the advantages it provides,' and continued to say that this may be because the student does not want others to know her case'.

Training programs

None of the interviewed faculty members had received sufficient training to work effectively with SWD/SLDs and many had not participated in any training designed for this purpose.

Some of the faculty members blamed the CDSS for not inviting them to attend training sessions. For example, FM11 commented that 'I did not attend because no one notified or informed me to attend such training courses'. Similarly, FM10 said, 'I did not attend and did not receive an invitation from the Centre to attend a course'. FM2 blamed herself, saying, 'To be honest, I neglect myself in the developmental side and workshops. I don't really know about the training programs held by CDSS.' She continued by reaffirming that this lack of development was her own doing and not a fault of the CDSS.

Some of the faculty said that they do not want to attend training programs held by the CDSS because they do not need to do so, or the level is so basic that it is not appropriate for the academic level of faculty members. FM1 explained, 'I don't think I need to attend these training courses, because I teach roughly 200 to 250 students in each class, and I find that there is only

one student that has some kind of disability on average'. FM8 put the matter concisely: 'The Centre develops simple training courses that aren't suitable for us as faculty members'.

Remit of the CDSS

Opinions were divided on this point into two main stances. Some of the faculty members were of the opinion that the centre's power should be increased, whereas others favored a decrease in power. FM2 suggested that the remit of the CDSS should be increased to oblige faculty members to provide reasonable accommodations, saying, 'I would like to give the centre of disability support services a greater authority over faculty members, so that there would be rules forcing the faculty members to provide reasonable accommodation for the students with disabilities'. On the other hand, FM9 argued that SWD/SLDs and faculty members should have the right to determine what suits each student and the centre should not interfere:

The faculty member should be allowed to deal with the student with disabilities freely, to determine what is most appropriate for the student. The faculty member shouldn't be committed to specific strategies or rules regarding her teaching of the students of disabilities [...]. The students with disabilities should have the ability to choose the place where she desires to have her exam. She has to have the right to choose to have her exam in the CDSS or with the rest of her colleagues. If the university wants to apply integration and accommodation, why are they isolated in the exam? (FM9, personal interview, 2017)

In summary, there are seven subgroups within the main group (CDSS). These subgroups comprise faculty cooperating with the CDSS, providing information about SWD/SLDs to faculty

members, learning about the services provided for SWD/SLDs, SWD/SLDs' ability to benefit from the CDSS, training programs, and the remit of the CDSS.

Attitudes and Reservations Related to Teaching SWD/SLDs

Most of the faculty members showed a positive attitude toward SWD/SLDs. For example, FM1 objected to referring to them as 'students with disabilities': 'I prefer to call them students with capacities or achievements'. Some of the faculty considered studying in the context of higher education to be a right for SWD/SLDs, as expressed in FM8's account:

I felt sorry when I heard some of my students with disabilities talking about their aims to study in some medical departments. Actually, I don't know why they aren't allowed to study in all departments, especially as many of them are smart and studious. (FM8, personal interview, 2017)

Moreover, FM7 emphasized that 'If the disability does not prevent the student to excel academically, then I see that she has the right to study and even to pursue graduate studies'. On the other hand, faculty members also expressed several reservations in regard to SWD/SLDs studying at the college level. In particular, some of the faculty members voiced concerns about SWD/SLDs studying in certain colleges or departments. For example, FM12 offered this opinion:

I think they shouldn't be accepted if the department requires a strong effort such as the departments of the College of Education, because the teachers need to make a lot of effort

and have to be very patient. I think that students with disabilities are more suited to professional and technical departments. (FM12, personal interview, 2017)

FM4 felt that ‘Some areas are not suitable for some types of disabilities. For example, a student who has speech and language disorders is not fit to study at the kindergarten department’.

Moreover, FM13 argued that there are issues with students studying in the College of Education that are compounded by students registering without stating that they have a disability:

In recent years, the number of female students in the Education College has decreased significantly in order to meet the requirements of the labor market and to act as a teacher. Now, the students who are studying at the Faculty of Education are those who did not reveal their disability during registration.

In this statement, FM13 is referencing a number of new regulations for admission to colleges of education at Saudi universities set by the Ministry of Education in 2016 with a view to reducing the number of students accepted by 50%. Under these new regulations, applicants are subjected to interviews and written tests that are supposed to take account of the applicant’s health (Al-Watan, 2016).

Also, one of the faculty members, FM1, expressed a reservation in regard to SWD/SLDs studying certain subjects:

I had two students with disabilities, one of them is completely blind and the other has severe visual impairment [...]. [T]his subject is not appropriate for these two students because this subject is based on photography. Also, I tried to convince the two students to drop this subject.

In addition, FM10 argued that SWD/SLDs ‘are not appropriate for our department [Social Studies] and do not have the necessary skills because it requires the student to face the public’.

SWD/SLDS academic ability from the viewpoint of the faculty members

Approximately half of the faculty members commented that SWD/SLDs are academically weaker than students without disabilities. For example, FM8 stated that ‘In general, the students without disabilities are more proficient than the students with disabilities, and they can perform much better in all exams’. Likewise, FM9 commented that all SWD/SLDs are less proficient academically compared with the other students, which may be because some departments are very difficult. However, faculty members admire the effort that SWD/SLDs put into their studies. According to FM12, ‘They make double efforts more often than the rest of the students. There are smart and studious students among them’.

Of all the SWD/SLDs, blind students are considered the most educationally proficient. According to FM2, ‘One of the blind students in my class achieved a grade point average (GPA) of 4.95/5’. And, FM2 gave this general account of her experience with blind students:

The blind students do not accept a reduction in the tasks required in the subjects, and they usually tell me that they are as efficient as their colleagues and want to accomplish all tasks [...]. I can say that the majority of blind students are proficient and studious. Some of them are more proficient than the students without disabilities [...]. I prefer to teach the blind students because they are more proficient than the rest of the students with other kinds of disabilities. (FM2, personal interview, 2017)

On the other hand, students with learning disabilities and students with hearing impairments are viewed as the least academically proficient. According to FM3, 'The deaf students are not proficient enough and they always want me to facilitate questions. They want me to give them multiple-choice questions'. FM13 said, 'We can note the academic weakness of the students with learning disabilities'. Also, FM7 noted that,

The student who has ADHD is unlikely to be proficient. She has a lower academic level. I do not think she will pursue her university studies or acquire a job after graduation because she cannot apply the theoretical aspects that she learned in the university.

Therefore, some faculty members preferred not to teach students with learning disabilities. FM5 admitted:

I do not mind teaching all kinds of students with disabilities; but I do not prefer to teach the students with learning disabilities; as I had previous experience with one of the students with learning disabilities. She needed a long time in reading the questions, and she needed me to explain everything carefully and slowly. (FM5, personal interview, 2017)

FM2 stressed that teaching students with learning disabilities requires a double effort and intensive teaching'.

SWD/SLDs' personal and emotional problems

Faculty members talked about students' self-confidence, claiming that blind students are the most confident and students with hearing impairments and learning disabilities are the least

confident. In FM10's view, 'The blind students have high self-confidence, wear the best clothes, wear make-up and laugh with their classmates'. Additionally, FM3 commented that 'It may be the problem of shyness, especially with deafness, but the blind students are bolder to talk and engage in a conversation'. Also, FM6 commented that the student with a learning disability that I had taught was introverted, had no self-confidence, as she acted without thinking, so made many errors'.

Another personal problem is that SWD/SLDs are sensitive, according to the faculty interviewed. In FM2's view, 'deaf students are very nervous and emotional'. Also, FM4 felt that 'some of them are irritable,' even in relation to 'minor problems'. Also, FM12 agreed, 'Yes, they are very irritable, agitated and sensitive'.

Some faculty members attribute SWD/SLDs' personal issues to other reasons pertaining to their families or how others look at them. In FM13's opinion, SWD/SLDs 'have a sense of inferiority' because of how others view them. For this reason, in FM13's view, SWD/SLDs 'may have social withdrawal'. FM1 stated, 'I expect that their psychological problems came from home because the university provided them with many comforts'. FM8 offered his experience of working with one SLD as follows: 'I have encountered a student who had been crying a lot because she is suffering from family problems but was otherwise normal'.

However, faculty members can also be responsible for causing problems for SWD/SLDs. FM1 expressed such concerns in her response:

Unfortunately, I see that there are some unscrupulous faculty members who do not take care of students with disabilities and do not provide them with the necessary reasonable accommodations because they say that SWDs are difficult to deal with. However, I don't

see anything preventing the faculty member from providing reasonable accommodation for any student with disabilities, because academic issues are separate from personal relations. (FM1, personal interview, 2017)

Also, students without disabilities can be implicated in causing psychological problems for SWD/SLDs:

In the group work, many students try to avoid them [SWD/SLDs] because they believe that those students with disabilities may be a burden on the group and the reason behind the slow work. According to my experience, I see that the relations and interactions between them is generally negative. (FM3, personal interview, 2017)

Also, FM10 offered a more specific account of these relationships and the negative effects they can have on SWD/SLDs, noting that although some of the students without disabilities were kind to an SWD/SLD in her class, ‘others would make fun of her’. FM10 added, ‘Most importantly, some students refused to work with her in a group’.

These problems can sometimes render the relationship between some SWD/SLDs and faculty members more personal in nature. FM1 mentioned one instance of this kind: ‘The student with mobility impairment that I have taught had many psychological problems. So much so, that one day she told me about them and when she left my office, I felt so emotional that I cried’.

Also, FM2 commented that ‘One of my blind students is very close to me. I know her psychological conditions, and she [...] tells me the problems she encounters with other faculty members’.

V. Opinions of SWD/SLDs of the reasonable accommodations they receive at their institutions

SWD/SLDs may find it more difficult than their peers without disabilities to adjust to their new environment. To explore their experience, semi-structured interviews were conducted with several of these students at both universities. The students who were interviewed spoke about many aspects of their experience. However, for the purpose of this study, only their comments directly relevant to experiences related to their disabilities are considered. After a careful review of the interview transcripts (Appendix M), the SWD/SLDs' responses were classified into four groups: SWD/SLDs' experience at university, interaction with the faculty, interaction with CDSS staff, and admission to areas of study (Figure 13).

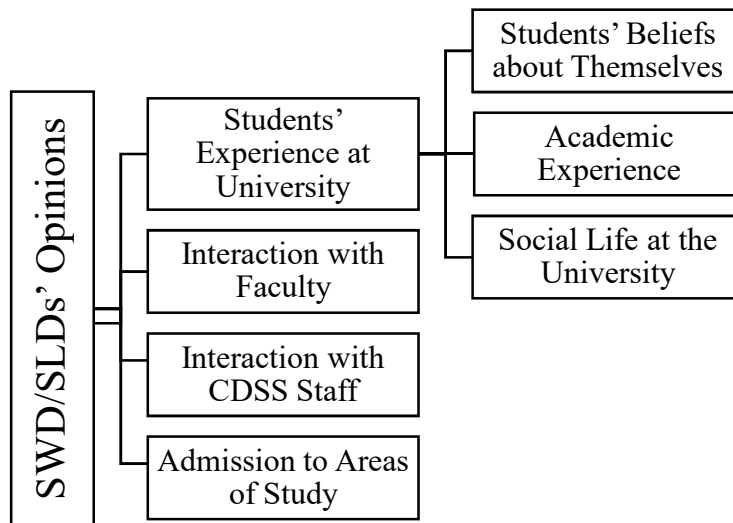


Figure 13: Main groups arranged according to the frequency of answers of SWD/SLDs' opinion.

Students' experience at university.

Under this main category, an account is provided of how SWD/SLDs' think of the breadth of their experience at the university as they perceive it in relation to their disabilities.

Students' beliefs about themselves

Most of the students seemed confident in their own ability and ready to compete on equal terms with their classmates. For example, Amani said, 'I decided to have my exam with the students without disabilities in order to feel that I'm like them'. Abeer agreed: 'I'm self-confident and I have self-esteem. I actually know that I'm able to do it'. Similarly, Ebtisam said that she wants, 'to prove to myself and to all those who doubted my abilities that I am able to complete the education and have a good career. I want to prove that my disability can't prevent my insistence on achieving my goals'.

Academic experience

The students varied considerably in their experience of how much support they had received from their university. Maryam said about her university, 'It has a great deal of experience in dealing with students with visual disabilities for 30 years. That's why we have not faced any significant difficulties'. Similarly, Sahar, a visually impaired student, said, 'The university provides us with all required services including tests, classrooms, modern technologies and modern teaching techniques'. On the other hand, Rehab said, 'The University did not officially inform me about the Centre for Disability Support Services'. Noha agreed: 'The University should pay more attention to students with mobility impairments'.

Social life at the university

Although most of the SWD/SLDs focused on the academic side of their experience, many also commented on the social life and extracurricular activities provided by their universities. Amani said, 'There are many things that I liked, such as the voluntary clubs'. Similarly, Ebtisam said, 'My university life was an important period in my life as I developed my character and social relationships'. Noha commented that 'I have good relations with other people. I didn't feel any segregation at this university'. Most of the SWD/SLDs also reported that they have positive relationships with their peers without disabilities. For example, Fatimah said, 'My colleagues helped me in my university study'. Noha agreed: 'What helped me to achieve adaptation and overcome segregation is that my colleagues interacted with me in a way made me not feel that I'm a disabled student at the university'.

Interaction with the faculty

How they interact with the faculty is critical in determining the academic progress of SWD/SLDs. The students' opinions of the faculty varied considerably: Some felt that their instructors supported them and were willing to provide reasonable accommodations. Others described the faculty as being far less able and/or far less willing to provide effective support, perhaps because they lacked sufficient training.

Some students reported positive experiences with faculty members. According to Amani, 'There was a faculty member who perceived my case and provided me with an exam that is different from the other students' exams'. Similarly, Soha said, 'She developed an assignment that fit my health status. ' I am very grateful and thankful to her'. Ebtisam said, 'This professor gave me the chance to talk during lecture and to provide answers for the questions. The professor helped me to prove that I'm a human, not just a disabled individual'.

On the other hand, the SWD/SLDs also had numerous complaints about the faculty. For example, Fatimah said, ‘they don’t provide reasonable accommodation for me so that I failed to pass their subjects. They don’t perceive our cases’. Similarly, Sahar said, ‘There are some faculty members who neglect me in the classroom’. Amani said, ‘There is always a negative side and a positive side, but the positive sides are always less’. And, Rehab said, ‘I suffered a lot because I had my exams with students without disability and there was no extra time. They didn’t take into consideration my special case as a visually impaired student’.

Without exception, the SWD/SLDs who were interviewed agreed that the faculty need better training and preparation to interact with them in terms of teaching and assessment. For example, Fatimah said, ‘The faculty members should be provided with training courses preparing them [...] to deal with the students with disabilities’. Amani commented that faculty members should attend training [...] so they can deal with the students with disabilities and blind students’. Maryam said, ‘Faculty members should be developed in terms of providing reasonable accommodation for university students with disabilities through developing courses and workshops relating to this issue’. Abrar said, ‘The university should develop training courses for the faculty members on how they can positively deal with the disabled students and provide reasonable accommodations for the students with disabilities’.

Interaction with CDSS Staff

All SWD/SLDs receive special education services from the CDSS when they are admitted to either of the two focal universities. The SWD/SLDs expressed a sense of appreciation for the centre’s services and staff. For example, Fatimah said, ‘I faced some difficulties in studying but the Centre of Disabilities Support Service helps me and provides me with a lot of services’. Similarly Maryam commented that ‘They are collaborators, especially the

academic advising staff who facilitate the registration process and organize time tables for students'. Ebtisam said, 'I think no one can deny that the employees at the Centre of Disability Support Services (CDSS) were very co-operative and helpful'. Similarly, Noha said, 'I can say that they do their best for supporting us'.

Admission to areas of study

SWD/SLDs are admitted to some departments regardless of the type of disability they have. However, in some departments, this is not the case. For example, Amani said was not accepted to the Department of Languages, stating 'they are not able to make the effort they made with my colleagues previously'. Soha agreed: 'I wanted to study in the Psychology Department but they stipulated physical health and sensory health as a condition for acceptance'. Similarly, Soha said, 'I have a lot of my colleagues with mobility impairments that have not completed their education because they have not found a university that will accept them'.

VI. CDSS Management's Perspectives on Supporting Reasonable Accommodations Offered at Their Institutions

The CDSS plays a key role in supporting reasonable accommodations, providing facilities such as electronic software, spreading awareness of SWD/SLDs' needs, and providing professional development for faculty. Semi-structured interviews were conducted with the management staff at the CDSS at each university to assess their concerns and recommendations. A thematic analysis of the interview transcripts (Appendix N) suggested that their responses could be organized into six main themes (Figure 14).

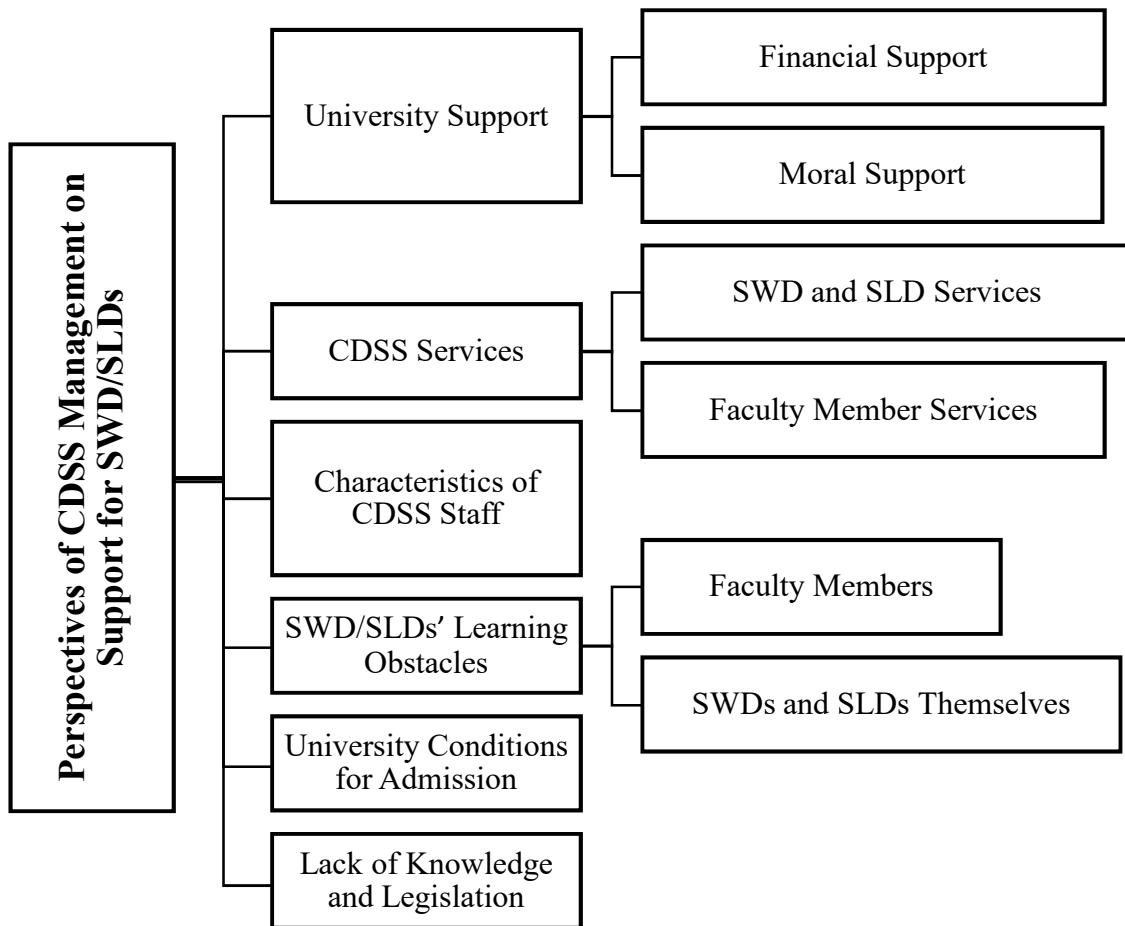


Figure 14: The main groups arranged according to the frequency of answers of CDSS management perspectives on support for SWD/SLDs.

University support

Financial support

Financial support from the university is essential in order for the CDSS to provide reasonable accommodations; among other things, it pays for Assistive Technology (AT), an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities, such as Braille to accommodate blind students in their classes and tests. Several interviewees said that the university had been very supportive; for example, one said, ‘The support is excellent. Yes, it’s enough as we are provided with the modern technologies for the

students with disabilities. The university always updates the technological devices of the centre'. However, noting that the CDSS is supported at the highest level of administration, another staff member said, that although this is the case, the CDSS 'is still in the process of development and it's incomplete'.

Moral support

The participants mentioned that moral support is just as important as financial support. Their suggestions included having 'specialists [...] arbitrate the procedures of CDSS', 'Collaboration with all university departments that serve the CDSS, such as the medical departments, psychological departments and educational departments' and 'Activating the role of students at the department of special education and providing them with chance for volunteering at the Centre

CDSS services to SWD/SLDs and faculty members

Services to students with disabilities

At both universities, the CDSS provides a range of services to students. These include academic counselling, social guidance, psychological counselling, technical support and academic support. As one interviewee explained,

At the beginning of the semester the Centre provides the students with disabilities with academic guidance, despite the fact that this service is actually provided by all colleges at the university. In addition, the Centre helps the students with disabilities change or modify their schedules in a way that fits their case.

Services provided for faculty members

In addition to services provided to SWD/SLDs, the CDSS plays an important role in preparing the faculty to work with these students by offering professional development, training,

and consultations. Among the services described by one of the CDSS managers were ‘providing any further assistance requested by the faculty member’ and ‘meeting with the faculty member in order to clarify the facilities approved by the University’ In addition, ‘The faculty members are provided with training courses that explain methods of adapting the evaluation process and activities. The courses are mandatory for faculty members who teach students with disabilities’. However, one manager said that ‘training programs developed by the CDSS aren’t compulsory’ and added that the University should motivate the faculty members to develop their willingness to effectively provide reasonable accommodations for students with disabilities’.

Characteristics of CDSS staff

Managers at both universities agreed that staff working at the CDSS are highly qualified, well-trained, and passionate about their work. As one manager said, ‘because we are specialized in the field of special education and learning disability, we are more understanding of the problems faced by students with disabilities and students with a learning disability’. The other manager spoke of her staff’s dedication to ‘dealing and interacting with the wonderful students with disabilities’.

Obstacles faced by the CDSS

Faculty members

Several obstacles may prevent SWD/SLDs from taking full advantage of the services provided by the CDSS, one of which is the faculty members themselves. For example, one of the managers said that, ‘A faculty member came and required me not to enable this student to complete her study in the department of early childhood’. Similarly, another manager said ‘Some of the faculty members have awareness enough to effectively provide reasonable accommodation, while some others don’t’.

Students themselves

CDSS management staff perceived that SWD/SLDs may not be aware of the Centre's existence, may be insufficiently aware of their rights, and/or may refuse to take advantage of the services available to them. One of the managers said, 'They don't know the services provided by the Centre'. Another said, 'Although some students have a physical and mobility impairment, they insist on not registering for the Centre's services in order to prove to themselves and everyone else that they can do everything like the rest of the students without disabilities'.

University conditions for admission

Saudi universities, like many other universities, apply certain conditions and criteria to accepting SWD/SLDs to certain departments. For example, students with physical disabilities cannot be accepted to study medicine or physical education because of their perceived inability to cope with the requirements. A manager at the CDSS explained that 'The reason behind that was that the student must have good health and fitness, because the university focuses on preparing students with skills to meet the requirements of the labour market'. Another said 'All students with disabilities are allowed to study at the university except the students with total deafness or blindness'. Another manager agreed: 'Not all departments are available for the students with disabilities. For example, the college of education doesn't accept them to the department of psychology because it requires the student to be free of any kind of disability as a condition for acceptance'. This manager added, 'All students with disabilities are allowed to study at the university except those with [an] intellectual disability'.

Lack of knowledge and legislation

Awareness of the needs and rights of SWD/SLDs is insufficient among higher education authorities. One manager said, 'In fact, special education in Saudi universities is still insufficient,

and there are no regulations developed by [the] Ministry of Education that are mandatory for all universities'. Another said, 'I can say that the Saudi universities are still at the beginning of the road (and taking baby steps)'. In addition, 'The decision-makers don't understand the requirements of the educational programs.

Summary

This chapter concluded the data analysis of the quantitative and qualitative survey data obtained via KSA-SBAKRI and presented a qualitative data analysis relating to the interviews with faculty members, SWD/SLDs, and CDSS managers. In the next chapter, the findings are discussed along with a summary of the key points, the research contribution, and recommendations for further research in this field.

CHAPTER SIX

DISCUSSION

Introduction

The study includes an assessment of the relationship between key variables relating to the faculty members (age, college, academic rank, and nationality), their level of knowledge and training in regard to SWD/SLDs, and their willingness to provide reasonable accommodations. Also included is an in-depth account of both the faculty members' perspectives on SWD/SLDs and their experiences teaching students who have received one or both of these diagnoses. Further, the study includes a discussion of how SWD/SLDs view the reasonable accommodations they receive and the perspective of CDSS management on SWD/SLD accommodations and how faculty members are implementing or failing to implement them.

Six research questions were explored:

- 1) To what extent are faculty members at Saudi universities willing to accommodate Students with Disabilities (SWDs) and Students with Learning Disabilities (SLDs)?
- 2) What factors affect faculty members' willingness to provide reasonable accommodations to SWD/SLDs?
 - Faculty age, college, academic rank, and nationality
 - Level of faculty member knowledge of disability legislation and the extent of their experience working with SWD/SLDs
 - Level of faculty member training relating to disability legislation and the extent of their experience working with SWD/SLDs
- 3) What are the perspectives of female faculty members on having female SWD/SLDs in their classes?

- 4) What experiences do female faculty members report of having female SWD/SLDs in their classes?
- 5) What opinions do SWD/SLDs express of the reasonable accommodations they receive at their institutions?
- 6) What are the perspectives of CDSS management on the reasonable accommodations offered by their institutions?

This chapter offers a consideration of the findings relating to the research questions in the context of the existing literature using Bronfenbrenner's ecological systems as a framework.

Summary of Findings

Bronfenbrenner's ecological systems theory was applied in this study in order to investigate how various factors affect the educational support received by SWD/SLDs. The concentric circles illustrative technique was used to explain interactions between the environment and culture, relevant legislation, post-secondary institution, CDSS, faculty members, peers without disabilities, and the SWD/SLDs themselves and how these factors influence their education and the provision of reasonable accommodations in higher education.

It is clear from the findings that collaboration between the CDSS staff, faculty members, and SWD/SLDs is necessary if the latter are to receive suitable accommodations and appropriate educational support to enable them to succeed in all aspects of their studies. Further, students without a disability, the university, the legislative environment, and the country's culture each has an indirect effect on whether and the extent to which reasonable accommodations are provided.

Some of the major findings reported herein align with Bronfenbrenner's ecological systems theory:

- (1) Faculty members who have direct interactions with SWD/SLDs report being very willing to provide reasonable accommodations to such students.
- (2) Despite reporting that they are very willing to provide reasonable accommodations, most faculty members who have direct interactions with SWD/SLDs reported that they do not have sufficient training to identify which reasonable accommodation to provide.
- (3) Most faculty members have insufficient knowledge of the disability legislation pertaining to the educational rights of SWD/SLDs, which, in turn, means that the latter are not receiving reasonable accommodations as often as or to the extent that the legislation allows.
- (4) The majority of faculty members reported that they lack a relationship with the CDSS. Further, the CDSS does not provide required training programs through which the faculty could improve their knowledge of the disability legislation and learn how to modify the curriculum to suit SWD/SLDs.
- (5) Most SWD/SLDs reported that the CDSS is valuable in supporting their educational journey. However, the SWD/SLDs also reported that in order for the faculty to understand their needs, it is necessary for the latter to receive more training so that effective instruction can be provided. Further, the students reported being unhappy with admission policies that prevent them from studying in some departments.

Discussion of the Research Findings

Based on Bronfenbrenner's ecological systems theory, the results clearly demonstrate that the people directly responsible for providing instruction to SWD/SLDs, i.e., the faculty members, are instrumental in supporting or hindering the academic success of students in this group.

However, it is just as clear that the relative effectiveness of faculty members in this regard accrues in the wider context of a specific university's culture and the country's educational and legislative environments more generally, which operate, in turn, within the broader cultural context of Saudi Arabia.

The findings associated with each research question are presented together with a conclusion and a projection of the findings' implications for the bigger picture of postsecondary education research and practice. This discussion is organized to focus on six key areas: SWDs and SLDs, faculty members, students without a disability, the CDSS, the university, and legislation and culture.

Students with Disabilities/Learning Disabilities (SWD/SLDs)

The 12 students with a learning disability and/or another kind of disability provided both positive and negative feedback on their experiences with faculty members, other students, the CDSS, and the university.

First, most of the SWDs seemed confident in regard to their academic ability and their readiness to compete on equal terms with their classmates. However, compared to the SWDs, most of the SLDs seemed less confident in their academic ability. However, through the open-ended questions and interviews, it became clear that many of the faculty members were of the opinion that all SWD/SLDs are at a lower academic level than that of their fellow students. The faculty members reported that in their experience of SWD/SLDs, blind students are the most academically proficient. At the opposite end of the scale, students with a learning disability and students with a hearing impairment were considered the least academically proficient. Consistent with the result of a previous study on attitudes toward post-secondary SWDs and reasonable accommodations at the post-secondary level (Barazandeh, 2005), this finding is an important

one. Barazandeh found that faculty members do not always cooperate in providing the requested reasonable accommodation especially when the student involved has a learning disability as compared to another kind of disability.

A further useful result of the present study is that all 12 of the SWD/SLDs comprising the sample expressed gratitude for the support they had received from the CDSS and all 12 reported that they would not have been as successful without assistance from that direction. On this basis, it is evident that the CDSS constitutes a worthwhile and effective endeavor in supporting SWD/SLDs' academic success at a foundational level. Given that at least one student reported that help from the CDSS had led to greater success in other courses, there is every reason to expect that support provided in one area for an SWD/SLD means that the student becomes more able to succeed generally. These results should be encouraging for legislators, university administrators, students, faculty members, and CDSS staff alike, as they suggest that in an overarching sense, at least, that the CDSS endeavor is producing results.

The perspectives of SWD/SLDs on the reasonable accommodations provided by faculty members are of great importance in determining the direction accommodations should take, their limitations, and implications. The SWD/SLDs' reported mostly negative views on their experiences of receiving accommodation. Their complaints in this regard tended to centre on the faculty members' failure to understand the students' academic and emotional needs—a result supported by Basilice (2015) in a study addressing the extent to which faculty members' knowledge of and attitudes toward SWD/SLDs affect the latter's success at post-secondary institutions. That is, in the present study, the SWD/SLDs reported that faculty members routinely failed to understand what they needed in order to succeed academically. Similarly, Basilicereported that one of the significant barriers to the success of SWD/SLDs at the post-

secondary level is a lack of knowledge and understanding on the part of the faculty in regard to the cognitive, psychological, and emotional needs of such students. Further, 63 faculty members who responded to the KSA-SBAKRI survey's open-ended questions reported being unsure as to how to respond to the needs of SWD/SLDs and do not provide accommodations for this reason. Further, the faculty members also reported feeling guilty about their failure in this regard. Yet, it should also be noted that most of the faculty members who reported this sense of guilt reported acting on this in any way, whether by seeking information from the CDSS or elsewhere or by asking the students questions to establish what they need. This point again leads back to the CDSS and the stronger role it could play in providing information on an ongoing basis.

The SWD/SLDs discussed some of the negative impacts that a lack of reasonable accommodations has had on their post-secondary educational careers. Almost all these students reported that they were not very satisfied with the level or type of accommodations available in the classroom and that the inadequacy of the accommodations afforded to them had negatively affected their progress toward their academic goals. In previous studies, researchers have discussed the importance of removing obstacles that prevent SWD/SLDs from receiving adequate reasonable accommodation measures (Basilice, 2015; Hill, 1996; Kurth&Mellard, 2006). One of the barriers identified is a limited understanding of reasonable accommodations on the part of faculty members. According to the vast majority of SWD/SLDs in the present study, faculty members' understanding of reasonable accommodations is critical to their willingness to offer reasonable accommodations and their ability to work effectively with students who need this kind of support. Further, faculty members need sufficient relevant training in order to be effective on this point.

Although faculty members may be aware of a student's disability, they are unlikely to truly understand the specific challenges she faces on a day-to-day basis because of it. Moreover, many students have disabilities that are not immediately obvious such as a learning disability (Barazandeh, 2005; Hill, 1996; Sayman, 2015; Vogel et al., 1999). Some of the SLDs noted that faculty members may not be well-equipped to address their needs and may have misconceptions about what it means to have a learning disability. Further, the SWD/SLDs commented that faculty members should acknowledge their condition and understand that it presents a real challenge for students, yet affirm that such students can still succeed academically.

Because of the nature of the challenges they face, many of the SWD/SLDs disclosed that they were unable to meet the minimum academic requirements in terms of meeting deadlines and effectively managing their workload. As Sayman (2015) suggested, their progress is hindered by faculty members' negative attitudes toward them and/or by a lack of proper training afforded to the faculty.

Finally, according to Kumar and Wideman (2014), SWDs may discover ways to adjust to given learning environments. However, in the worst case, they will quit, particularly if they feel that their efforts are futile and that they are prone to failure. (These points may hold true for SLDs likewise.) When students embrace this view of themselves, the result can be depression and anxiety, which can be manifested in a lack of motivation (Erten, 2011). From the point of view of most faculty members, SWD/SLDs have social and emotional problems. In fact, many of the faculty members talked about SWD/SLDs as shy and as lacking self-confidence, but claimed that blind students are the most confident and those with a hearing impairment the least confident. Further, most of the faculty members reported that students with hearing impairments are the most irritable, agitated, and sensitive of the SWD/SLDs. Some faculty members attribute

personal issues experienced and expressed by SWD/SLDs to a number of reasons, such as family problems, pity or curiosity from other people, efforts to avoid them by non-disabled students because of perceptions that SWD/SLDs are a burden in the context of group work, and a lack of relevant knowledge and experience on the part of faculty members.

Faculty Members

As faculty members play a key role in the academic lives of SWD/SLDs at post-secondary institutions, four of the six research questions at the centre of this study focused on this aspect. The first research question seeks self-reported feedback to determine whether and the extent to which faculty members at post-secondary institutions in Saudi Arabia are willing to provide reasonable accommodations to SWD/SLDs. According to the KSA-SBAKRI, faculty members at both the universities included in the study reported being very willing to provide reasonable accommodations. Most of the faculty members agreed that they are willing to meet with students to discuss study problems and accommodations. Yet, only about a third of faculty members reported a willingness to provide the specific accommodation of providing extra credit assignments to SWD/SLDs but not to other students. This high level of willingness is similar to the findings of several previous studies (Basilice, 2015; Cawthon & Cole, 2010; Leyser, et al., 1998). These results can be seen as promising for the future of SWD/SLDs in higher education. After all, faculty members are expressing a high level of willingness to work with students. Further, the reluctance to provide extra credit can be read not as a reluctance to accommodate such students but as stemming instead from a willingness to be fair overall. That is, in relation to legislation protecting SWD/SLDs' rights in the context of higher education, Leyser, et al., (1998) found that the majority of faculty expressed a willingness to provide requested reasonable accommodations but that also expressed a need for proper training in order to do so. Also, in a

study on SLDs' perspectives on accommodations, access, and obstacles, Cawthon and Cole (2010) reported that most of the faculty members consider themselves to have a positive attitude toward SLDs and are willing to provide reasonable accommodations to them. Similarly, focusing on faculty knowledge of and attitudes pertaining to SWDs, Basilice (2015) reported that faculty members are willing to provide reasonable accommodation when needed.

In all three of these studies, faculty members were asked questions worded similarly to the questions in the present study designed to capture the faculty's willingness to provide accommodations. In all three studies, the results both for overall willingness to provide accommodations were within high points of the results reported herein. However, according to another study, faculty members are more willing to accommodate SLDs than students with other disabilities, such as emotional problems (Wolman, et al., 2004). Wolman, et al., (2004) found this to be the case in their research into American and Mexican faculty attitudes toward students with disabilities. Specifically, they found that faculty members were more willing to accommodate blind students than students with emotional problems. Again, this finding supports the findings of the interviews with the faculty members in the present study, which showed that the faculty had a preference for teaching blind students and are more willing to accommodate students whose disabilities are readily apparent.

However, the result from the KSA-SBAKRI showing a very high correlation (.93) between "willingness to provide accommodations for SWDs" and "willingness to provide accommodations to SLDs" may be due to the nature of the three-point Likert scale. That is, given that only three choices were provided, it may be that the participants consistently answered positively, thereby portraying themselves in the best light, whereas more choices may have produced more nuanced results. Another factor that may have contributed to this high correlation

is that the participants may not have had a clear understanding of how to answer the questions because of the design of the survey. That is, the questions pertaining to the willingness to provide accommodations to SWDs and the questions pertaining to willingness to provide reasonable accommodation to SLD may have been confusing to the participants and could have been presented in a separate section.

Despite the high level of willingness to provide accommodations, two-thirds of the faculty members who participated in the interviews reported that they would prefer not to teach SLDs. This result is in accordance with a result reported by Barazandeh (2005) in a study on attitudes toward disabilities and reasonable accommodations in the university context. Also, in Barazandeh's study, most of the faculty members stated that they like teaching blind students. However, in the present study, half the faculty members expressed the view that students with all types of disabilities are less proficient academically than are students without a disability, and that students with all types of disabilities need special attention such that more time and effort is required to provide effective instruction to them.

The second research question addresses the influence of independent variables, i.e., age, college, academic ranking, and nationality, on faculty members' willingness to provide reasonable accommodations. The level of the faculty member's knowledge and training was also investigated in relation to willingness to provide reasonable accommodations. However, overall, either taken individually or collectively, the independent variables did not show a significant influence on faculty members' willingness to provide reasonable accommodations.

Influence of age. The results of the one-way ANOVA did not lead to any significant findings regarding the influence of age on faculty members' willingness to provide reasonable accommodations to SWD/SLDs. This finding supports findings in a study by Worthy (2014),

which showed no significant statistical differences based on age on the willingness of faculty to accommodate SWDs. However, the results do not agree with those presented in other studies: For example, Malangko (2008) and Buchanan, et al., (2010) found that compared with their younger peers older faculty members are more willing to provide reasonable accommodations to SWD/SLDs. On the other hand, Leyser, et al., (1999) found that younger faculty members are more willing to provide reasonable accommodations than are their older colleagues.

Influence of disciplinary field. In this study, no significant influence was found for disciplinary field on faculty members' willingness to provide reasonable accommodations to SWD/SLDs. This result supports those reported in similar studies in which no statistically significant relationship was found between disciplinary field and the provision of reasonable accommodations for students with disabilities including those with learning disabilities (Alghazo, 2008; Alhossein, 2014). Moreover, according to some studies, education and arts faculty are more willing to provide accommodations than are faculty in other colleges (Lewis, 1998; Rao, 2002; Rao &Gartin, 2003; Vogel et al., 1999).

Influence of academic rank. There is no significant relationship between academic rank and willingness to provide reasonable accommodations. According to other studies, too, academic rank has no significant effect on faculty members' willingness to provide accommodations to SWD/SLDs (Alhossein, 2014; Alghazo, 2008; Rao, 2002; Skinner, 2007; Worthy, 2014). However, in two studies (Murray et al., 2008; Vogel et al., 1999), researchers found that lecturers whose highest level of formal education is a master's degrees are more willing to provide reasonable accommodations than are faculty members who have doctorate degrees. This result is consistent with comments made by the faculty members in the interview context of the present study. The lecturers were more enthusiastic than were those holding a

higher academic rank in presenting their experiences and knowledge in relation to providing reasonable accommodations. The lecturers were also more familiar with the term “reasonable accommodation” than were their more highly ranked peers.

Influence of nationality. Again, no significant relationship was found in this study between faculty members’ nationality and their willingness to provide reasonable accommodations. This result may be because very few non-Saudi faculty members (n = 17, 4.4%) participated in the survey. However, Alghazo (2008) found no difference between faculty members on the basis of nationality in terms of their willingness to accommodate students with a disability.

Level of relevant knowledge and training. The KSA-SBAKRI included eight questions designed to assess faculty members' knowledge of the CDSS, teaching SWD/SLDs, and disability legislation relevant to the education of SWD/SLDs in Saudi Arabia. In general, the faculty had limited knowledge of these areas. Also, through the open-ended questions and interviews, most of the faculty members admitted that they need more training, and some faculty members argued that the CDSS should take responsibility for shortcomings in the faculty members' knowledge. This result is also supported in several previous studies (Cameron & Nunkoosing, 2012; Murray, Flannery, & Wren, 2008; Sniatecki, Perry, & Snell, 2015; Wadlington & Wadlington, 2005). Further, compared with faculty members who felt that they had not been well-trained by their CDSS, those who felt the opposite were more likely to report that they were familiar with the regulations governing accommodations for students with disabilities. These results are important, as they suggest that the CDSS can be highly effective in disseminating information to and training faculty members and that the latter can be receptive to and benefit from these efforts.

Students without Disabilities

The SWD/SLDs generally felt that their peers were understanding of the need for accommodations and that they did not complain that these were unfair or unreasonable. All the SWD/SLDs reported that they had good relationships with students without disabilities in the classroom. However, two SWD/SLDs stated that this good relationship was limited to the classroom, as they did not interact with their classmates without disabilities outside the classroom. Also, most of the faculty members agreed that the SWD/SLDs and the students without disabilities were just colleagues, rather than friends. Further, a few of the faculty members noted that in group work contexts, many students without disabilities try to avoid teaming up with SWD/SLDs in the belief that the latter would be a burden on the group and may even cause it to lag behind others. Moreover, many faculty members expressed the concern that students without disabilities might think themselves treated unfairly as a consequence of accommodations provided to students with disabilities. In the present study, some faculty members reported sharing the rationale and the legal basis for providing reasonable accommodations in a bid to ensure that students without disabilities would not feel that the SWD/SLDs were given an unfair advantage. The CDSS and faculty members could be implicated in the poor relationship between SWD/SLDs and their peers without disabilities. May (2012) suggested that positive attitudes of on the part of peers without disabilities in a class including SWD/SLDs could be increased by instruction from faculty members who had received sufficient training in addressing the needs of the latter. It is likely that the positive attitude, leadership, an example of the faculty member had a positive impact on the students' perceptions of and attitudes toward SWDs.

As noted, many of the faculty members admitted that they were concerned about the opinions of students without disabilities and were conscious of affecting them negatively in any way. For example, students without disabilities may not be well served if the pace of a lecture is slowed down to accommodate SWD/SLDs who need dedicated attention or additional instruction.

Centre for Disabilities Support Services (CDSS)

Each of the two universities included in the present study has a Centre for Disabilities Support Services (CDSS) charged with providing academic counseling, social guidance, psychological counseling, technical support, and academic support. It is encouraging that all the SWD/SLDs in the current study were satisfied with the services available from the CDSS. Unfortunately, most of the faculty members expressed a negative view of the CDSS. That is, although almost all the participants in this study agreed that the CDSS staff are highly qualified, well-trained, and passionate about their work, there were some serious reservations in some areas.

Half the students reported that it was only after arriving on campus that they had become aware of the CDSS and the services it provides. According to the CDSS management and some of the students, the CDSS was introduced to SWD/SLDs during orientation. Yet, two of the students reported that they had not become aware of the centre until after their foundation year.

Similar to previous research findings (Alkhashrami, 2015), it was evident that many students are not prepared to handle situations in the higher education context that require them to disclose that they have a disability and the nature and extent of it in order to obtain the instructional support they need. Some SWD/SLDs and some faculty members suggested that more information and workshops should be provided about the centres for SWD/SLDs—especially before they arrive on campus given that some provisions take considerable time to put

in place, such as providing an interpreter for those who communicate only through sign language (Montoya, 2009). Moreover, most of the faculty members interviewed mentioned that they have limited information about the ways in which the CDSS can help them better serve the SWD/SLDs in their classes.

Based on the interviews, it became evident that each of the centres focuses on providing services to students who have disabilities that are readily discernable. Moreover, if this is, indeed, the case, resources are being dedicated to these students disproportionately, which is problematic. In brief, centres charged with levelling the playing field for SWD/SLDs may be limiting their focus to one or two groups with the larger population they are charged with serving.

Some of the SWD/SLDs and some of the faculty members complained that the CDSS tends to focus on specific types of disabilities, rather than the actual functional needs of individual students, which can vary greatly even among those with disabilities of the same type. This result is supported by a study by Kurth and Mellard (2006) about SWDs' perceptions of the accommodation process in post-secondary education. Moreover, none of the faculty members who were interviewed had participated in any training program relating to teaching SWD/SLDs, indicating that among their other duties and perhaps also in their reward structure that serving the needs of such students is a low priority. Specifically, in regard to training, some of the faculty members commented that they were aware of the training programs offered but could not attend because of the large number of students in their classes and their workload more generally. The majority of faculty members reported that they had not received an invitation from the CDSS to attend a training program.

That attending a training program to better serve the needs of SWD/SLDs is a low priority for faculty members is a matter of concern given how SWD/SLDs view the faculty's limited efforts to assist them. That is, in the student interviews, it became apparent that most felt that faculty members often lacked an understanding of the challenges faced by SWD/SLDs and struggled to handle their situations in a sensitive way. Training is required in many cases to ensure that more faculty members become aware of the specific needs of SWD/SLDs, the various types of accommodations that can be offered, and the purpose of each so that the faculty can provide the most appropriate option (Alkhashrami, 2015; Garland, 2015; Lombardi, Murray, & Dallas, 2013). Training programs are offered at the CDSS at both universities. However, according to some faculty members, these are neither mandatory nor sufficiently advanced to meet their instructional needs.

In addition to commenting on their lack of participation in the training programs, some of the faculty complained that the support provided to them by the CDSS is neither sufficiently timely nor sufficiently targeted. For example, a number of the faculty members observed that they are not informed early enough as to which students have special needs or the accommodations required in each case. This is a matter of great importance, as a failure to present a reasonable accommodation request very early in a given semester may lead to a delay in providing the accommodation or even in a failure to provide it, which can, in turn, lead to dissatisfaction among faculty members thereby creating a negative instructional environment for SWD/SLDs (Fleming, Plotner, & Oertle, 2017; Terras, Leggio, & Phillips, 2015). On this point, it is evident both that the CDSS can do much more to ensure that faculty members receive needed training programs and that higher administration within the universities would do well to require faculty to take the requisite training.

Also, the faculty members were divided on the CDSS remit. Some were in favor of increasing the remit of the centre. However, others were in favor of the opposite. Based on the data gathered from the faculty members, it may be advisable for a standing committee of CDSS staff and faculty members to be formed to ensure that the CDSS is as effective as possible in serving the best interests of the students, including by working directly with faculty members.

Finally, it is certainly the case that some students feel embarrassed or at least very private about their disability or condition such that they may not even disclose it to the CDSS.

Additionally, SWD/SLDs expressed reservations on this point because they did not wish to take the initial CDSS examination at the centre, such that there is no flexibility in this regard. Further, some of the faculty members stated that they had reservations about providing the CDSS with exam questions in advance of the exam date because of the possibility that these might be leaked.

Universities

Financial support from the university is essential to meeting the needs of SWD/SLDs. In this study, CDSS management at both universities expressed a high level of satisfaction with the financial support they received. However, a member of one of the CDSS management teams stated that despite the avowed interest on the part of the university administration, the centre has yet to fulfill its potential. However, in this regard, it is reasonable to argue first that the CDSS's are still relatively new and that in any case ongoing development would be expected. Yet, the concern is a legitimate one.

Further, it should be recognized that some Saudi universities won't even admit students with certain kinds of disabilities. Such policies can be cited as clear evidence of discrimination and as indicative of the many ways in which SWD/SLDs face obstacles in multiple aspects of their lives. In this overall environment, it is hardly surprising that Saudi universities apply certain

conditions to accepting students with disabilities to study in certain departments such as departments that require graduate students to face crowds. For this reason, most of the SWD/SLDs complained about their university's admission policies, arguing that some of the departments in which they wish to study won't accept them for no other reason than that they have a disability. Most of the faculty members and CDSS management agree with these policies, especially those in departments that require graduate students to work with people face to face. However, a few faculty members expressed the view that if SWD/SLDs are capable of succeeding academically, then why shouldn't all departments accept them?

Finally, because the curriculum plays a primary role in the educational process, several faculty members proposed that they should be allowed to modify the curriculum to fit the individual needs of SWD/SLDs. It was noted by those surveyed that the curriculum is not designed with SWD/SLDs in mind, that it lacks "relevance to their needs." This presents challenges to SWD/SLDs in regard to their ability to complete courses within the allocated timeframe.

Legislation and Culture

One of the most significant results of the analysis based on the experiences of this research sample population is that the disability support services offered by Saudi universities are still insufficient. There is no legislation to make providing support services mandatory at all universities. Further, there is also the very ingrained cultural obstacle whereby services are offered in the male branch first and are introduced to the female branch only after they have reached a satisfactory level for the male students. Because of the lack of sufficient disability services for female students at most Saudi universities, this practice increases the burden on female students who want to complete their university studies such that they are often faced with

the choice of relocating to a major city or discontinuing their post-secondary education.

Evidently, there is still much to be done at Saudi universities to improve the services provided to SWD/SLDs, and decision-makers must become better informed in regard to the importance of establishing suitable academic programs for this population.

Summary

A detailed summary of the findings was provided in this chapter. Overall, the findings suggest that CDSS's require more institutional support to fulfill their mission among students and faculty members, that more faculty training is needed in an institutional environment that more strongly encourages support of SWD/SLDs than is currently the case, and that further research into attitudes toward SWD/SLDs and the ways in which they continue to be neglected is warranted.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to investigate how female SWD/SLDs are treated in post-secondary education in Saudi Arabia and to determine the extent to which female faculty members are willing to provide reasonable accommodations for them.

This study clearly indicates that there is significant room for improvement in Saudi Arabia in post-secondary education in terms of addressing the needs of SWD/SLDs. Many of these students (female students given the study sample) are finding it difficult to achieve academically because of the challenges they face and the insufficient provisions made for them by institutions of post-secondary education. Obstacles include a lack of faculty awareness, inadequate accommodations and communication, limited training opportunities, and insufficiencies in the support system itself.

Proposals to address these issues and improve the experiences of SWD/SLDs in postsecondary education include making changes at the faculty level by, for example, requiring faculty members to participate in training programs, and by allowing SWD/SLDs to study in more departments. However, there is also a focus on implementing changes in legislation to improve policy and practices.

Finally, it is important to bear in mind that very few studies to date have explored the provision of reasonable accommodations for female students or male students in Saudi Arabia or, indeed, in any other Arab country. Therefore, the information offered herein constitutes an important contribution to the field and the beginning of a benchmarking process. It is also important to note that these findings have implications for policies for SWD/SLDs and the implementation of these policies, especially given the evident gap between the former and the

latter in practice. These issues are evident in many of the study's findings, as university policies put in place in response to legislation were not widely known among faculty members.

Recommendations

This study contributes to the research on special education by focusing on gaps in the literature and by exploring specific questions to further the overall body of knowledge in this area. It is vital to continue with research and development in this field in order to continually improve the education received by SWD/SLDs at the post-secondary level. It is evident that each SWD/SLD has specific needs, and with a growing number of such students choosing to study at the post-secondary level, a number of key considerations need to be addressed: societal implications and discrimination experienced by people with disabilities, university provisions, the CDSS, support infrastructure, faculty attitudes, experiences of SWD/SLDs, and attitudes of non-disabled students.

Societal implications and discrimination experienced by people with disabilities. It is well known, as established in the literature that prevailing attitudes toward SWD/SLDs influences the services provided in support of this population. For example, it is possible to engage SWD/SLDs in multiple kinds of activities with their peers only when faculty members believe that SWD/SLDs can fully participate in classroom activities. This belief can only come from relevant experience and training through which faculty learn to work effectively with SWD/SLDs. When faculty members resist working with SWD/SLDs in the classroom, a negative attitude toward this population may not be the reason. Instead, resistance on this point may arise in part from the implementation of a poorly designed inclusive education program. In such a program, students do not benefit, the program has a negative influence on the classroom, and the faculty have neither the time, resources, nor expertise for inclusion efforts to be successful. To

address issues of this kind, the institution should assure faculty members that they will be significantly involved in decision making pertaining to inclusion and its implementation in their classrooms. The institution should also ensure that all faculty members have the support necessary to develop and implement a successful inclusive classroom. However, convincing faculty members who have had negative experiences in the context of inclusion can be expected to entail additional effort.

Moreover, there is a need to ensure that legislation is actually implemented and implemented successfully to ensure that full rights are granted at all levels for those with disabilities, whether in regard to health care, education, or civil rights in general. In all aspects of their lives, people with disabilities (PWDs) should be free of discrimination, such that they should not be treated differently based on their disability or the type of their disability or in reference to gender, ethnicity, or religion. Unfortunately, though extensive, the legislation in place in the Gulf countries still has significant gaps.

In order to establish and maintain an effective system to ensure that sufficient student support services are offered, documented policies are needed, as well as an accurate records management system. Policies should be mandatory and enforceable, and records should capture up-to-date information about the needs of SWD/SLDs based on their age, gender, and disability. Best practices should be adopted in Saudi Arabia as developed in countries that offer appropriate and sufficient services in regard to developing training records, creating a national electronic system for follow-up with each SWD/SLD, and identifying the equipment that each needs in order to progress academically. On this basis, delays in the services offered to SWD/SLDs can be identified and appropriate action taken to improve related processes.

University provisions. This study clearly demonstrates that the current environment of most Saudi universities in terms of providing support to SWD/SLDs, including special education services, is insufficient. Unfortunately, the majority of Saudi SWD/SLDs are not offered adequate services. Even when services are available, they are often focused on one type of disability, and the provisions offered are often limited in nature. Overall, Saudi universities should benefit from the experience of international universities that have preceded them in serving students with a range of disabilities. Further, all universities should establish a CDSS with no distinction made on the basis of gender. Among other measures, the CDSS should be mandated to put processes in place to ensure that faculty members and any other parties responsible for issues or delays in regard to teaching SWD/SLDs or providing appropriate accommodation are held accountable. However, these processes should also include measures to ensure that all involved in a complaint are treated fairly. Such systems would also provide evidence should a legal challenge or question pertaining to due diligence arise.

CDSS. It should be the responsibility of the CDSS to make all relevant information available to SWD/SLDs when they are accepted to the university and again when the semester starts to encourage them to disclose their disabilities. Information about the services available to such students could be communicated prior to their arrival, by, for example, distributing leaflets or posters to schools, relaying information to high school counselors, and then again in offer letters and welcome packets.

According to some faculty members, the training programs offered at their respective universities are neither mandatory nor sufficiently advanced to meet their instructional needs. On this point, then, both a stronger institutional effort may be needed to render the CDSS as effective as possible by considering such endeavors as mandating programs for faculty,

publicizing the achievements of faculty and staff in this arena, funding relevant research, and rewarding students, faculty, and staff for achievements in advancing services and providing exemplary education for SWD/SLDs, assuming concerns pertaining to privacy are addressed.

Support infrastructure. Most Saudi universities have limited electronic resources for tracking students' needs and progress. To overcome this deficiency, universities should create a database for each student, and at the end of each semester faculty members should provide information about their experience of providing accommodations to each SWD/SLD. A process of this kind would be helpful to the CDSS to guide faculty members who teach the students next to build on the experiences of those who have already worked with the students.

Weir (2004) noted the importance of recognizing the specific learning and academic supports required, which vary from student to student. Saudi universities should, therefore, place students in the least restrictive environment possible with the specific additional support needed. Further, faculty members should be ready to adjust their instructional methods accordingly.

Faculty attitudes. It is now widely accepted that the attitude toward SWD/SLDs of faculty members is key to how willing they are to teach this population and provide appropriate accommodations and how successful they are in doing so. Faculty members with a negative attitude toward SWD/SLDs tend to treat them poorly, and those with a positive attitude tend to spend more time with such students and make a greater effort to accommodate them, thereby ensuring that they receive support in a timely way. Fear and ignorance can constitute significant barriers to student success, and faculty members are instrumental in either creating a welcoming environment in which all students are included and also feel a sense of being included—or in strengthening existing barriers. Therefore, it is recommended that universities launch a drive to raise awareness among faculty members through education and training initiatives to advance the

academic success of SWD/SLDs. Given that the level of knowledge and understanding varies between faculty members, such initiatives would offer a common starting point for further development. Universities should develop channels for better communication between faculty members, the CDSS, and SWD/SLDs in order to establish the best reasonable accommodation for each SWD/SLD, instead of considering only the opinion of the CDSS or only the opinion of the faculty member.

A faculty member must become aware of the needs of SWD/SLDs. Therefore, regular meetings between faculty members and CDSS staff are important in ensuring that the needs of SWD/SLDs are fully met through appropriate means. These meetings should be mandatory and should occur at least once a term for all faculty members with such students in their classes. Faculty members who do not have SWD/SLDs in their classes should attend these meetings as well in order to learn more about how to work effectively with this population.

Also, communication between faculty members and SWD/SLDs should be established as early as possible, preferably just as the academic year begins. By becoming familiar with the specific needs and concerns of SWD/SLDs at this point, faculty members would be better prepared to provide the necessary accommodations from the outset such that these will be of maximum benefit to the students who need them.

Further, well-designed training courses should be available to support faculty members in their efforts to provide reasonable accommodations. These courses could focus on the specific nature of various disabilities or possible alternative ways to teach in order to facilitate the students' learning. As an additional incentive, this type of training would contribute to faculty members' professional career development. This recommendation is consistent with results reported by Cameron and Nunkoosing (2012), Sniatecki, et al., (2015), and Wadlington and

Wadlington (2005), in studies that stress the importance of training programs for faculty members in order to increase their willingness to provide reasonable accommodations.

Another important recommendation is that of passing national legislation to require universities to take certain steps and provide certain services to support the educational success of SWD/SLDs. Providing reasonable accommodations should be a duty attached to every faculty position—not a personal choice. Universities may find it beneficial to use tenure reviews to recognize faculty for outstanding effort in this regard. Rewarding progress in this direction in performance reviews and through awards would also support efforts to improve the education received by SWD/SLDs.

Experiences of SWD/SLDs. SWD/SLDs' experience in the context of post-secondary education varies from student to student based on factors such as type of disability. SWD/SLDs should not encounter barriers to receiving accommodations with the administration. Further, collecting and acting on feedback from SWD/SLDs on their experiences is crucial to evaluating services on an ongoing basis and to directing continuous improvement efforts. It is necessary to develop quality and accreditation procedures to ensure that all students with/without disabilities are included and consulted so that their perceptions and experiences are taken into account in establishing standards for the delivery of high-quality support services for SWD/SLDs. Further, the CDSS should offer workshops designed to clarify legislation and university policies for SWD/SLDs in order to support faculty in meeting the needs of such students. Training should also be extended to SWD/SLDs to help ensure that they know what they are entitled to. In this way, such students would have a foundation for accessing CDSS services and identifying whether or not faculty members are helping them to achieve their academic goals.

Attitudes of non-disabled students. It is known that non-disabled students may have a negative attitude toward SWD/SLDs, which may have the effect of leaving SWD/SLDs isolated and lonely. To help address this issue, universities should offer activities such as sport and arts equally available to all students, regardless of whether or not they have a disability. Only when SWD/SLDs are fully integrated in the classroom, and appropriate reasonable accommodations are provided will they be on an equal footing with non-disabled students and only in such circumstances will the latter understand the need to level the playing field for SWD/SLDs.

Limitations of the Study

This study contributes important information in regard to how reasonable accommodations are provided in Saudi institutes of post-secondary education and the viewpoints of key stakeholders in that process. It also highlights some of the problem areas in this process such as misconceptions on the part of faculty members and on the part of students without disabilities in regard to the academic ability of SWD/SLDs as well as what centres charged with serving the needs of such students need to do in terms of providing faculty training and communicating with faculty and students.

As with all research, this study should be understood against a background of other research studies and in terms not only of its contributions to the field but also in reference to its limitations. First, the student sample is relatively small, and all the respondents are female students studying at the education and arts colleges of two universities located in the same city (Riyadh). Therefore, the results may not be generalizable either to universities located elsewhere, to colleges focused on other disciplines, or to universities for male students in Saudi Arabia.

Likewise, the faculty sample is small and drawn entirely from the same universities. It should also be noted that not all faculty members at the two focal universities had the same

opportunity to participate in the survey, as email correspondence was sent to their official email addresses. As the faculty members are not required to use their KSU or PNU email addresses, not all of them will have received the survey.

Further, participation was entirely voluntary. Given that this was the case, it may be that only faculty members with a particular interest in or specialist knowledge of SWD/SLDs and/or of providing reasonable accommodations decided to participate whereas those who were not particularly interested in the area chose not to engage. If this is the case, this may have introduced some bias into the results. Further, faculty members who are not at ease with the online environment may have decided not to participate given that the survey was administered entirely online.

It is also important to consider that what faculty members state in regard to their willingness to provide reasonable accommodations may not reflect the reality in the classroom. As is usual in research, however, the assumption is that the participants responded truthfully. There are two points to consider in interpreting the results on this point: First, expressing a willingness to do something is not the same as actually doing it, which is of great importance, especially given that many of the faculty members pointed to barriers to providing accommodations. Second, it may be that people tend to respond in a way that puts them in a positive light. However, if this is the case, it is a limitation in all research in which attitudes and opinions are solicited.

A relatively small number of non-Saudi faculty members participated in this study. On this basis, there is not enough data from which to draw generalizable conclusions in regard to whether or not faculty members really are willing to provide accommodations or are actually doing so or in relation to their views on SWD/SLDs. In particular, in terms of understanding the

relationship between the nationality of faculty members and their willingness to provide accommodations, the sample used is homogenous so that no conclusions on this point can be drawn. However, in terms of this variable and all the other variables included, this study establishes directions for future research and practice.

The interviews with the faculty members were conducted during the final exam period and the interviews with the students during the summer vacation. Because all the participants comprising the study sample were female, it was difficult to coordinate with some of them for face-to-face interviews due to challenges presented by social restrictions and the lack of public transportation. Therefore, some of the interviews were conducted by telephone.

Future Studies

This study provides a sound foundation for further research into the experiences and treatment of SWD/SLDs at Saudi universities and provides a useful reference source for policy-makers. As the key findings suggest that the majority of faculty members lack adequate training and that many feel uncomfortable providing accommodations to SWD/SLDs, one proposal is to adopt a baseline assessment strategy to assess faculty members' knowledge in this area and then provide an appropriate training program to ensure that they are able to support the progress of the SWD/SLDs in their classes accordingly. A comparison of the results in future work would lead to improved assistance and training in implementing instructional strategies.

The results of the present study suggest the need for additional research to establish why some faculty members have a negative attitude toward teaching students with certain types of disabilities and to establish the extent to which such an attitude may function as a self-fulfilling prophecy by directing faculty attention away from these groups and thereby undermining their academic progress. It would be worthwhile to explore accommodations provided to these groups

as compared to others in relation to academic achievement. In the short term, this result is immediately actionable: CDSS management can include a focus on these groups in terms of educating faculty members and redoubling efforts to ensure that these students receive the support to which they are entitled.

The sample of students in the present study comprised only women from two Saudi universities. Hence, in future work, researchers should expand the sample population and verify whether the patterns identified herein are more general or less general in reference to broader, less homogenous samples in regard to gender, but also in regard to variables such as discipline, country, age, and institution type. Future research should include a more diverse sample of students, for example, drawn from public and private colleges and including both male and female students. In addition to surveys administered to faculty members, surveys could be used to gather feedback from faculty and staff other than course instructors, and perhaps even from the families and friends of SWD/SLDs.

There is a dearth of research (especially in Arabic studies) on the relationships between SWD/SLDs and their peers without disabilities in post-secondary education and the impact of these on the progress of the former. Nor has the efficacy of tactics such as explaining reasonable accommodations for pacifying non-SWD/SLDs who may feel themselves to be unfairly treated been established. Further, given the growing emphasis on group work in the post-secondary context, the tendency of students without disabilities to try to exclude SWD/SLDs should be examined. The same holds true for exploring the impact of SWD/SLDs on the progress of student groups on an empirical basis.

A worthwhile research direction would be to look at the programs offered by the CDSS's at the institutions where the faculty members report a high level of satisfaction with the CDSS in

order to determine how other CDSS's can advance. A proposed research direction on this point would be to look at international institutional contexts to discover how best to communicate to faculty that providing effective teaching including accommodations to SWD/SLDs is not optional. Also, research could focus on identifying where the greatest attention is needed both to secure the legitimacy of the centres on campus and to strengthen their efforts on behalf of the students they exist to support. Also, qualitative studies are needed to establish what CDSS staff do that is most effective and specific steps they can take to improve further.

The field would be well served by initiatives to conduct interdisciplinary research across departments focused on areas such as curricula and teaching methods, psychology, and special education. Through integrated efforts of this kind, it will be possible to collect and share information about the difficulties faced by students, faculty members, and CDSS staff in order to find solutions and create programs capable of addressing or even of eliminating these difficulties.

Also, it would be a useful exercise to gather and analyze similar data for other parts of the world for comparison and benchmarking purposes. Such an analysis could be used to influence decision-makers at a governance and policy-making level.

Finally, this research has proffered useful information regarding the aspects which impact the provision of reasonable accommodation for SWD/SLDs in one way or another. The observations are made in various levels of environment by utilizing Bronfenbrenner's (1977, 1979, 1992) ecological theoretical framework. Many relevant institutes like universities, policy-making bodies, faculty members, and staff could make good use of this research in comprehending certain hindrances that appear for understanding the needs of SWD/SLDs. It can also be useful foresight for future SWD/SLDs.

Summary

This chapter presented a conclusion to the study as well as a description outlining limitations and corresponding recommendations regarding the provision of reasonable accommodations for SWD/SLDs in the university context. The recommendations of this study have important implications for faculty members, students, and CDSS's. Future research directions concerning the importance of providing reasonable accommodations in the university context have been proposed and warrant investigation.

Overall, this study should be understood in the context of the broader landscape of movements directed at creating a more inclusive educational environment, the ways in which these have been supported to date, and the ways in which these have been undermined. Further, in this study, as in many others, the focus is limited to a specific country and a small sample. However, on this basis, an overall picture of the challenges faced by students, faculty, and staff in regard to the extent to which an equitable pedagogical environment for SWD/SLDs is provided emerged. Likewise, the relationship between universities and educational institutions at other levels with the legislative environment can be described more completely. Moreover, further, the ways in which legislation is being translated into action—or action is falling short of the legislation in the environment of higher education—can be apprehended. In this context, this study offers one small part of the picture describing what is needed for SWD/SLDs to excel academically. More research is needed, of course, and It is important for researchers to find and celebrate positive steps as well as to identify where significant steps toward inclusiveness still need to be taken.

REFERENCES

- Afeafe, M. Y. (2000). Special education in Saudi Arabia. Retrieved from <http://www.khayma.com/education-technology/PrvEducation3.htm>
- AHEAD. (2015). *Numbers of students with disabilities studying in higher education in Ireland 2013/14*(Report No. 2015-02). Dublin: AHEAD Educational Press.Retrieved from <http://edepositireland.ie/handle/2262/76785>
- Ainscow, M. (1991). Effective schools for all: An alternative approach to special needs in education. *Cambridge Journal of Education*, 21(3), 293–308.
- Al Abdulkareem, S. (2016). *Education development in Saudi ArabiaHistorical Project*. Retrieved from <https://www.scribd.com/document/86318616/Education-Development-in-Saudi-Arabia-Historical-Project>
- Al-Amri, A. & Ashahrani, A. (2012). Students with disabilities in King Abdul-Aziz University in Jeddah and their needs. *Journal of Studies in Social Work and Human Sciences*,(471535), 1001–1108.
- Alamri, M. (2011). Higher education in Saudi Arabia. *Journal of Higher Education Theory and Practice*, 11(4), 88–91.
- Aldabas, R. A. (2015). Special education in Saudi Arabia: History and areas for reform. *Creative Education*, 6(11), 1158–1167.
- Alghazo, R. (2008). *Disability attitudes of postsecondary faculty members and perspectives regarding educational accommodation* (Doctoraldissertation). Retrieved from ProQuest Dissertations Publishing. (3310998)
- Alhayat. (2016). Princess Nora University develops its services for students with disabilities. Retrieved from<http://www.alhayat.com/m/story/16680650#sthash.meCG6746.dpbs>

- Al-Hoshan, H. (2009). *Postsecondary outcomes of students with visual and auditory impairments in Saudi Arabia: Implications for special education policy*(Doctoral dissertation). ProQuest Dissertations.Retrieved from<http://elib.tcd.ie/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2010-99010-315&site=eds-live&scope=site>
- Alhossein, A. (2014). *Perspectives of King Saud University faculty members toward accommodations for students with Attention Deficit-Hyperactivity Disorder (ADHD)* (Dissertation). Kent State University. Kent, OH.
- Alkhashrami, S. (2008). Assessment of support services offered to students with disabilities. *The University Journal, Parents Organization, Gulf Disabilities Organization, 1*, 76–88.
- Alkhashrami, S. (2015). *Special needs services in post secondary education* (Vol. 1). Dubai, UAE: Kuttab Publishing.
- Alkhateeb, N. (2014). *Female general education teachers' knowledge of and perceived skills related to learning disabilities in the Qassim region, Kingdom of Saudi Arabia* (Doctoral dissertation). Washington State University, Pullman, WA.
- Alliston, J. (2010). *Postsecondary education of students with disabilities: Review of faculty and of students with disabilities perceptions for training*. Hattiesburg: University of Southern Mississippi.
- Almasoud, H. (2011). *Enhancing public services for individuals with autism in Saudi Arabia. King Saud University*. Retrieved from <http://faculty.ksu.edu.sa/almasoud/>
- Al Mohsen, M. (2000). *An exploratory study of the views of modernization of educated Saudi women* (Doctoral dissertation). University of Pittsburgh, Pittsburgh, PA.

- Al-Mousa, N. (1999). Development of special education in the Ministry of Education. *In commemoration of the centennial of the Kingdom of Saudi Arabia*. Riyadh: Almomtaz Foundation for Publishing and Bookbinding.
- Almusa, A., & Ferrell, K. (2004). *Blindness in Islam*. Paper presented at the Council for Exceptional Children Conference, New Orleans, LA.
- Alquraini, T. (2010). Special education in Saudi Arabia: Challenges, perspectives, future possibilities. *International Journal of Special Education*, 25(3), 139–147.
- Al Rasheed, M. (2010). *History of Saudi Arabia* (2nd ed.). Beirut: Dar ALSaqee.
- Al Rawaf, H., & Simmons, C. (1991). The education of women in Saudi Arabia. *Comparative Education*, 27(3), 287–295.
- Alromi, N. (2000). *Vocational education in Saudi Arabia* (Doctoral dissertation). Pennsylvania State University, University Park, PA.
- Alrossan, F. (2001). *Psychology of exceptional children: Introduction to special education*. Amman: Dar Al Fiker.
- Al-Sadhan, A. (2012). *Resistance to change in Saudi society* (Vol. 2). Riyadh: Center of Women's Studies.
- Al-Salloom, H. (1991). *History of educational movement in the Kingdom of Saudi Arabia*. Washington, DC: Saudi Arabian Cultural Mission in the United States of America.
- Alzahrani, A. (2005). *An investigation of the social development of students with hearing impairment in the special schools for the deaf and public schools in Riyadh City in the Kingdom of Saudi Arabia* (Doctoral dissertation). University of Kansas (AAT 3190400).
- Al Zarrad, F. (1991). Learning disability among a sample of primary school students in the United Arab Emirates. *Journal of Arab Gulf Science*, 11(38), 121–127.

- Al-Zoubi, S., Bani, A., & Sultan, M. (2015). Talented students' satisfaction with the performance of the gifted centers. *Journal for the Education of Gifted Young Scientists*, 4(1), 1–20.
- Al-Watan. (2016). *50% Reduction in the number of admissions in colleges of education*. Retrieved from http://www.alwatan.com.sa/Local/News_Detail.aspx?ArticleID=256577&CategoryID=5
- Arnold, J. (2013). HAJJ: Journey to the heart of Islam. *Religious Studies Review*, 39(1), 30–31.
- Ashoor, A. (2002). *The effectiveness of the training program in the treatment of some developmental learning disability* (Doctoral dissertation). University of Zagazig.
- Association for Higher Education Access & Disability. (2018). *What kinds of supports are available?* Retrieved from <http://www.ahead.ie/supports>
- Baggett, D. (1994). *A study of faculty awareness of students with disabilities*. National Association for Developmental Education (No. ED 369208).
- Barazandeh, G. (2005). Attitudes toward disabilities and reasonable accommodations at the university. *The UCI Undergraduate Research Journal*, 8(1), 1–11.
- Barnes, C., & Mercer, G. (2005). Understanding impairment and disability: Towards an international perspective. *The Social Model of Disability: Europe and the Majority World* (pp. 1–16) Leeds, UK: Disability Press.
- Basilice, L. (2015). *Faculty knowledge and attitudes regarding students with disabilities in higher education* (Doctoral dissertation). Retrieved from ProQuest (3664370).
- Bell, D. (2013). *Investigating teaching and learning support for students with hearing impairment at a university in the Western Cape* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

- Betz, C., Smith, K., & Bui, K. (2012). A survey of California nursing programs: Admission and accommodation policies for students with disabilities. *Journal of Nursing Education, 51*(12), 676–684.
- Bigaj, S., Shaw, S., & McGuire, J. (1999). Community-technical college faculty willingness to use and self-reported use of accommodation strategies for students with learning disabilities. *Journal for Vocational Special Needs Education, 21*(2), 3–14.
- Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. Retrieved from <http://eprints.uwe.ac.uk/11735>
- Brinkmann, S. (2014). Interview. In T. Teo (Ed.), *Encyclopedia of critical psychology* (Vol. 1, pp. 1008–1010). New York, NY: Springer.
- Brislin, R. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*(3), 185–216.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32*(7), 513–531.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of child development* (Vol. 6, pp. 187–249). Boston, MA: JAI Press.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. London, Sage.
- Buchanan, T., Charles, M., Rigler, M., & Hart, C. (2010). Why are older faculty members more accepting of students with attention-deficit hyperactivity disorder? A life-course

- interpretation. *International Journal of Disability, Development and Education*, 57(4), 351–369.
- Cameron, H., & Nunkoosing, K. (2012). Lecturer perspectives on dyslexia and dyslexic students within one faculty at one university in England. *Teaching in Higher Education*, 17(3), 341–352.
- Cawthon, S., & Cole, E. (2010). Postsecondary students who have a learning disability: Student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and Disability*, 23(2), 112–128.
- CDSI. (2014). *Number of population*. Retrieved from <http://www.cdsi.gov.sa/english/>
- Charlton, J. (1998). *Nothing about us without us: Disability, oppression and empowerment*. Berkely, CA: University of California Press.
- CIA. (2001). *The World Factbook: Saudi Arabia* (02771527). Retrieved from <http://eds.b.ebscohost.com.elib.tcd.ie/eds/detail/detail?vid=0&sid=41aa2b5f-7dd7-4e6f-a8d7-22e749b418ed%40sessionmgr103&bdata=JnNjb3BIPXNpdGU%3d#AN=16921842&db=ukh>
- CIA. (2013). *The World Factbook: Saudi Arabia*. *CIA World Fact Book*, 51, 604–607. Retrieved from <http://elib.tcd.ie/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ukh&AN=98677661&site=eds-live>
- Citizen Information. (2015). *Special Needs Education*. Retrieved from http://www.citizensinformation.ie/en/education/the_irish_education_system/special_education.html

- Condon, M. E. (1957). A survey of special facilities for the physically handicapped in the colleges. *The Personnel and Guidance Journal*, 35(9), 579–583.
- Congress. (1973). *Rehabilitation Act (1973)*. 29 U.S.C. § 701, USA: Congress.
- Cook, L., Rumrill, P. D., & Tankersley, M. (2009). Priorities and understanding of faculty members regarding college students with disabilities. *International Journal of Teaching and Learning in Higher Education*, 21(1), 84–96.
- Cortiella, C., & Horowitz, S. (2014). *The state of learning disabilities: Facts, trends and emerging issues*. New York, NY: National Center for Learning Disabilities.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35(2), 236–264.
- DiCicco-Bloom, B., & Crabtree, B. (2006). The qualitative research interview. *Medical Education*, 40(4), 314–321.
- Dieterich, C. A., Chan, P. E., & Price, A. E. (2017). Legal implications for accommodating students with disabilities in teacher preparation field placements. *Teacher Education and Special Education*, 40(3), 194–211.
- Douglas, G., Travers, J., McLinden, M., Robertson, C., Smith, E., Macnab, N.,...O'Donnell, M. (2012). *Measuring educational engagement, progress and outcomes for children with special educational needs: A review* (Report No. 11). Trim, County Meath. Ireland: National Council for Special Education Research. Retrieved from http://ncse.ie/wp-content/uploads/2014/10/Outcomes26_11_12Acc.pdf
- Dyslexia Association of Ireland. (2016). *Learning supports available in college/FE*. Retrieved from <http://www.dyslexia.ie/information/information-for-students/learning-supports-available-in-collegefe/>

- Egaga, P., & Aderibigbe, S. (2015). Gender and environmental sustainability: Issues and problems involved for persons with special needs in Nigeria. *Journal of Education and Practice, 6*(30), 184–187.
- El-Ghonemy, M. (1998). *Affluence and poverty in the Middle East*. London: Routledge.
- Elliott, S. N., Kettler, R. J., Beddow, P. A., & Kurz, A. (2011). *Handbook of accessible achievement tests for all students: Bridging the gaps between research, practice, and policy*. New York, NY: Springer Science & Business Media.
- Erten, O. (2011). Facing challenges: Experiences of young women with disabilities attending a Canadian university. *Journal of Postsecondary Education and Disability, 24*(2), 101–114.
- Fink, A., & Litwin, M. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage.
- Fleming, A. R., Plotner, A. J., & Oertle, K. M. (2017). College students with disabilities: The relationship between student characteristics, the academic environment, and performance. *Journal of Postsecondary Education and Disability, 30*(3), 209–221.
- Florian, L., Hollenweger, J., Simeonsson, R., Wedell, K., Riddell, S., Terzi, L., & Holland, A. (2006). Cross-cultural perspectives on the classification of children with disabilities. Part I. Issues in the classification of children with disabilities. *The Journal of Special Education, 40*(1), 36–45.
- Foster, S. B. & DeCaro, P. M. (1991). An ecological model of social interaction between Deaf and Hearing students within a postsecondary educational setting. *Disability, Handicap and Society, 6*(3), 181 – 201.

- Future Makers. (2013). *Students with Learning disabilities are deprived of attention*. Retrieved from <http://www.paaet.edu.kw/FutureMakers/FutureMakers29/FM3-29-2013/9.html>
- Fylan, F. (2005). Semi-structured interviewing. In J. Miles & P. Gilbert (Eds.), *A handbook of research methods for clinical and health psychology* (pp. 65–78). New York, NY: Oxford University Press.
- Garland, J. (2015). Commuter students with disabilities. *New Directions for Student Services, 150*, 57–67. doi:10.1002/ss.20127
- Geldenhuys, J. L., & Wevers, N. E. J. (2013). Ecological aspects influencing the implementation of inclusive education in mainstream primary schools in the Eastern Cape, South Africa. *South African Journal of Education, 33*(3).
- Gliem, J. A., & Gliem, R. A. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Proceedings of the 2003 Midwest Research to Conference in Adult, Continuing and Community Education* (pp. 82–88). Columbus, OH: Ohio State University.
- Gilson, C. L., & Dymond, S. K. (2012). Barriers impacting students with disabilities at a Hong Kong university. *Journal of Postsecondary Education and Disability, 25*(2), 103–118.
- Ginsberg, S., & Schulte, K. (2008). Instructional accommodations: Impact of conventional vs. social constructivist view of disability. *Journal of the Scholarship of Teaching and Learning, 8*(2), 84–91.
- Good, A. (2003). *Competing paradigms in studying disability: The ICF as a way forward?* Paper presented at the Conference of the Sociological Association, Ireland.
- Griffin, S., & Shevlin, M. (2011). Responding to special educational needs: An Irish perspective. *British Journal of Special Education, 35*, 251–252.

- Hadlaq, H. (2014). *Female Education in Saudi Arabia: Amiraculous achievement*. Al- Ma'arefah. Retrieved from http://www.almarefh.net/show_content_sub.php?CUV=423&SubModel=138&ID=2174
- Hadley, W. (2007). The necessity of academic accommodations for first-year college students with learning disabilities. *Journal of College Admission*, 195(spring), 9–13.
- Hamdan, A. (2005). Women and education in Saudi Arabia: Challenges and achievements. *International Education Journal*, 6(1), 42–64.
- Hansen, K. (2013). *College Instructors' Preparedness to Teach Students with Learning Disabilities*. University of Western Ontario. Retrieved from <http://ir.lib.uwo.ca/etd/1244>
- Henley, M., Ramsey, R., Algozzine, R., & Hall, P. (2010). *Labeling and disadvantages of labeling*. Retrieved from <http://people.uncw.edu/robertsonj/SEC210/Labeling.pdf>
- Hill, J. (1996). Speaking out: Perceptions of students with disabilities regarding adequacy of services and willingness of faculty to make accommodations. *Association on Higher Education and Disability*, 12(1), 22–43.
- Hoffman, J. (2013). *Disability: Faculty knowledge, awareness, and perceptions* (Doctoral dissertation). California State University, Long Beach, CA.
- Hollenweger, J. (2008). Cross-national comparisons of special education classification systems. In M. McLaughlin (Ed.), *Disability classification in education: Issues and perspectives* (pp. 11–27). Thousand Oaks, CA: Corwin Press.
- Holm, D. (1960). Desert geomorphology in the Arabian peninsula. *Science*, 132(3437), 1369–1379.
- Hussain, O. (2010). *Evaluation of preparation program for teachers specializing in learning disabilities in Saudi Arabia* (Doctoral dissertation). University of New Mexico.

- Imrie, R. (2004). Demystifying disability: A review of the international classification of functioning, disability and health. *Sociology of Health & Illness*, 26(3), 287–305.
- Irish Statute Book. (2005). *Disability Act 2005*. Retrieved from <http://www.irishstatutebook.ie/eli/2005/act/14/enacted/en/index.html>
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, 18(1), 3-20.
- Izzo, M., Murray, A., & Novak, J. (2008). The faculty perspective on universal design for learning. *Journal of Postsecondary Education and Disability*, 21(2), 60–72.
- Izzo, M., Hertzfeld, J., Simmons-Reed, E., & Aaron, J. (2001). Promising practices: Improving the quality of higher education for students with disabilities. *Disability Services Quarterly*, 21, 1–13.
- Janiga, S., & Costenbader, V. (2002). The transition from high school to postsecondary education for students with learning disabilities: A survey of college service coordinators. *Journal of Learning Disabilities*, 35(5), 463–470.
- Javier, I. (2005). *The Individuals with Disabilities Education Act (IDEA)*. New York, NY: Nova Publishers.
- Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. Thousand Oaks, CA: Sage.
- Johnson, R., & Onwuegbuzie, A. (2004). *Mixed methods research: A research paradigm whose time has come* (Vol. 33). Thousand Oaks, CA: Sage.
- Joppe, M. (2000). *The research process*. Retrieved from <http://www.ryerson.ca/~mjoppe/rp.htm>

- Kamenopoulou, L. (2012). 'A study on the inclusion of deafblind young people in mainstream schools: key findings and implications for research and practice', *British Journal of Special Education*, 39(3), 137 – 145.
- Kamenopoulou, L. (2016). Ecological systems theory: A valuable framework for research on inclusion and special educational needs/disabilities. *Παδαγωγικά*, 88(4), 515-527.
- Khutani, M. (2013). *Educational rights for women in Islamic and international human rights law: A study of theory and its application in Saudi Arabia*. Wollongong: University of Wollongong. Retrieved from <https://ro.uow.edu.au/theses/3886/>
- Kilpatrick, S., Johns, S., Barnes, R., Fischer, S., McLennan, D., & Magnussen, K. (2017). Exploring the retention and success of students with disability in Australian higher education. *International Journal of Inclusive Education*, 21(7), 747–762.
- King Salman Center for Disabilities Research. (2000). *Disability code*. Retrieved from <http://www.kscdr.org.sa/en/Pages/DisabilityCode.aspx>
- King Salman Center for Disability Research. (2016). *National learning disabilities program*. Retrieved from <http://www.kscdr.org.sa/ar/research/Pages/learning-disabilities-program.aspx>
- King Saud University. (2013). *Students with disability services policies and procedures at King Saud University*. Riyadh: Center of Special Education Services.
- King Saud University. (2015). *Center of Special Education Services*. Riyadh: Center of Special Education Services.
- Kirk, R. (1984). *Elementary statistics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Kirk, S., & Bateman, B. (1962). Diagnosis and remediation of learning disabilities. *Exceptional Children*, 29(2), 73–78.

- Kumar, K., & Wideman, M. (2014). Accessible by design: Applying UDL principles in a first year undergraduate course. *The Canadian Journal of Higher Education, 44*(1), 125–147.
- Kurth, N., & Mellard, D. (2006). Student perceptions of the accommodation process in postsecondary education. *Journal of Postsecondary Education and Disability, 19*(1), 71–84.
- Lavrakas, P. (2008). *Encyclopedia of survey research methods: AM* (Vol. 1): Thousand Oaks, CA: Sage.
- Lewis, M. (1998). *Faculty attitudes toward persons with disabilities and faculty attitudes toward accommodate students with learning disabilities in the classroom*. (Doctoral dissertation). Auburn University.
- Leyser, Y. (1989). A survey of faculty attitudes and accommodations for students with disabilities. *Journal of Postsecondary Education and Disability, 7*(3), 97–108.
- Leyser, Y., Vogel, S., Wyland, S., & Brulle, A. (1998). Faculty attitudes and practices regarding students with disabilities: Two decades after implementation of Section 504. *Journal of Postsecondary Education and Disability, 13*(3), 5–19.
- Lincoln, S., & Guba, E. (1985). *Naturalistic inquiry* (vol. 75). Thousand Oaks, CA: Sage.
- Lombardi, A., Murray, C., & Dallas, B. (2013). University faculty attitudes toward disability and inclusive instruction: Comparing two institutions. *Journal of Postsecondary Education and Disability, 26*(3), 221–232.
- Lombardi, A., Vukovic, B., & Sala-Bars, I. (2015). International comparisons of inclusive instruction among college faculty in Spain, Canada, and the United States. *Journal of Postsecondary Education and Disability, 28*(4), 447–460.

- Madaus, J., & Shaw, S. (2010). *College as a realistic option for students with learning disabilities*. Center on Postsecondary Education and Disability, Neag School of Education, University of Connecticut. Retrieved from <http://www.council-for-learning-disabilities.org/college-as-a-realistic-option-for-students-with-learning-disabilities>
- Maneesriwongul, W., & Dixon, J. (2004). Instrument translation process: A methods review. *Journal of Advanced Nursing*, 48(2), 175–186.
- Malangko, M. (2008). *Attitudes and willingness of California Community College Public Safety (Police, Fire and Emergency Medical Services) faculty to provide accommodations for students with learning disabilities*. Santa Barbara, CA: University of California.
- Markus, U. (2014). *Oil and gas: The business and politics of energy*. India: Palgrave Macmillan Education.
- Martella, R., Nelson, J., Morgan, R., & Marchand-Martella, N. (2013). *Understanding and interpreting educational research*. New York, NY: Guilford Press.
- Martins, H. M., Borges, M. L., & Gonçalves, T. (2018). Attitudes towards inclusion in higher education in a Portuguese university. *International Journal of Inclusive Education*, 22(5), 527–542.
- May, C. (2012). An investigation of attitude change in inclusive college classes including young adults with an intellectual disability. *Journal of Policy and Practice in Intellectual Disabilities*, 9(4), 240–246.
- Mayhew, L. (2001). *Disability: Global trends and international perspectives*. Retrieved from <http://www.actuaries.org/IAAHS/OnlineJournal/2004-2/Mayhew%202001.pdf>

- McGuckin, C., & Minton, S. J. (2014). From theory to practice: Two ecosystemic approaches and their applications to understanding school bullying. *Journal of Psychologists and Counsellors in Schools, 24*(1), 36–48.
- McMillan, J., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). UK: Pearson.
- Mellard, D. (2005). Strategies for transition to postsecondary educational settings. *Focus on Exceptional Children, 37*(9), 1–19.
- Ministry of Education. (2001). *Regulations of Special Education Programs (RSEPI)*. Riyadh: Media Center of Ministry of Education.
- Ministry of Education. (2015). *Higher education in the Kingdom of Saudi Arabia: Indicators and international comparisons*. Riyadh: Ministry of Education: Observatory on Education.
- Ministry of Finance. (2015). *Ministry of Finance statement about the national budget for 2015*. Retrieved from <http://www.mof.gov.sa/english/DownloadsCenter/Pages/Budget.aspx>
- Ministry of Higher Education. (2018). *The current status of higher education in the Kingdom of Saudi Arabia*. Riyadh: General Department for Planning & Statistics. Retrieved from <https://www.moe.gov.sa/ar/MediaCenter/pages/default.aspx>
- Ministry of Higher Education. (2014). *Saudi women in higher education*. Riyadh: Ministry of Higher Education.
- Montoya, A. (2009). *A comparison of the educational supports needed and provided for undergraduate and graduate students with learning disabilities in higher education* (Doctoral dissertation). University of Florida. Retrieved from ProQuest Dissertations.
- Moore, M., Beazley, S., & Maelzer, J. (1998). *Researching disability issues*. UK: McGraw-Hill Education.

- Morin, A. (2014). *Common modifications and accommodations*. Retrieved from <https://www.understood.org/en/learning-attention-issues/treatments-approaches/educational-strategies/common-modifications-and-accommodations>
- Moriña, A. (2017). Inclusive education in higher education: Challenges and opportunities. *European Journal of Special Needs Education*, 32(1), 3–17.
- Mullan, M., & Treanor, D. (2013). *Everything you wanted to know about reasonable accommodations and supporting students with disabilities but nobody bothered to tell you*. Dublin: Trinity College Disability Service.
- Murray, C., Flannery, B., & Wren, C. (2008). University staff members' attitudes and knowledge about learning disabilities and disability support services. *Journal of Postsecondary Education and Disability*, 21(2), 73–90.
- Mutanga, O. (2018). Inclusion of students with disabilities in South African higher education. *International Journal of Disability, Development and Education*, 65(2), 229–242.
- National Center for Education Statistics. (2013). *Postsecondary education*. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=60>
- National Center for Education Statistics. (2016). *Students with disabilities*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=64>
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2)*. National Center for Special Education Research.
- Nolet, V., & McLaughlin, M. (2005). *Accessing the general curriculum: Including students with disabilities in standards-based reform*. Thousand Oaks, CA: Corwin Press.

- Norwich, B. (2013). Categories of special educational needs. In L. Florian (Ed.), *The SAGE handbook of special education* (vol. 1, pp. 55–66). London: Sage.
- Oliver, M. (1996). Defining impairment and disability: Issues at stake. In C. Barns & G. Mercer (Eds.), *Exploring the divide: Illness and disability* (39–54). Leeds, UK: Disability Press.
- OPEC. (2018). *Saudi Arabia facts and figures*. Retrieved from http://www.opec.org/opec_web/en/about_us/169.htm
- Opini, B. (2012). Examining the motivations of women students with disabilities' participation in university education in Kenya. *Scandinavian Journal of Disability Research*, 14(1), 74–91.
- O'Shea, A., & Meyer, R. (2016). A qualitative investigation of the motivation of college students with nonvisible disabilities to utilize disability services. *Journal of Postsecondary Education & Disability*, 29(1), 5–23.
- Ostrowski, C. P. (2016). Improving access to accommodations: Reducing political and institutional barriers for Canadian postsecondary students with visual impairments. *Journal of Visual Impairment & Blindness*, 110(1), 15–25.
- PNU. (2017). *Supportive services for people with disabilities in Princess Nourah University*. Retrieved from <http://www.pnu.edu.sa/arr/NewsActivities/Announcements/Pages/Announcement514.aspx>
- Princess Nourah bint Abdul Raman University. (2018). *Higher education*. Retrieved from <http://www.moe.gov.sa/ar/HighEducation/Government-Universities/Pages/default.aspx#>

- Randolph, T. (2012). *Students with disabilities experience and description of integrating into an academic community in higher education: A phenomenological study* (Doctoral dissertation). Capella University. Retrieved from ProQuest.
- Rao, M. (2002). *Students with disabilities in higher education: Faculty attitudes and willingness to provide accommodations* (Doctoral dissertation). University of Arkansas. Retrieved from ProQuest.
- Rao, S., & Gartin, B. (2003). Attitudes of university faculty toward accommodations to students with disabilities. *Journal for Vocational Special Needs Education, 25*, 47–54.
- Renn, K. A., & Arnold, K. D. (2003). Reconceptualizing research on college student peer culture. *The Journal of Higher Education, 74*(3), 261–291.
- Richards, S., Taylor, R., & Ramasamy, R. (2013). *Single subject research: Applications in educational and clinical settings* (2nd ed.). Australia: Cengage Learning.
- Rogerson, B. (2010). *The Prophet Muhammad: A biography*. UK: Hachette Digital.
- Royal Embassy of Saudi Arabia. (2018). *About Saudi Arabia*. Retrieved from <https://www.saudiembassy.net/about/>
- Sabq. (2016). 98 Women are benefiting from the Centre of Disability Support Services at Princess Norah University. Retrieved from <https://sabq.org/>-مستفيدة من مركز خدمات ذوات الاحتياجات الخاصة بجامعة نورة
- Salem, A., Al Shahaat, M., & Hasan, A. (2003). *Learning disability: Diagnosis and treatment*. Amman, Jordan: Daar Al Fiker.
- Sayman, D. (2015). I still need my security teddy bear: Experiences of an individual with autism spectrum disorder in higher education. *Learning Assistance Review (TLAR), 20*(1), 77–98.

- Shakespeare, T., & Watson, N. (2001). The social model of disability: An outdated ideology? *Exploring theories and expanding methodologies: Where we are and where we need to go*, 2, 9–28.
- Shaw, S., Scott, S., & McGuire, J. (2001). *Teaching college students with learning disabilities*. Retrieved from ERIC(ED459548).
- Shevlin, M., Kenny, M., & McNeela, E. (2004). Participation in higher education for students with disabilities: An Irish perspective. *Disability & Society*, 19(1), 15–30.
- Skinner, M. (2007). Faculty willingness to provide accommodations and course alternatives to postsecondary students with learning disabilities. *International Journal of Special Education*, 22(2), 32–45.
- Skinner, M., & Lindstrom, B. (2003). Bridging the gap between high school and college: Strategies for the successful transition of students with learning disabilities. *Preventing School Failure: Alternative Education for Children and Youth*, 47(3), 132–137.
- Sniatecki, J. L., Perry, H. B., & Snell, L. H. (2015). Faculty attitudes and knowledge regarding college students with disabilities. *Journal of Postsecondary Education and Disability*, 28(3), 259–275.
- Sousa, V., & Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: A clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, 17(2), 268–274.
- Special Education Guide. (2018). Specific Learning Disabilities. Retrieved from <https://www.specialeducationguide.com/disability-profiles/specific-learning-disabilities/>

- Speece, D. (2008). Learning disabilities in the United States: Operationalizing a construct. In L. Florian & M.J. McLaughlin (Eds.), *Disability classification in education: Issues and perspectives* (227–239). Thousand Oaks, CA: Corwin Press.
- Stampoltzis, A., Tsitsou, E., Plesti, H., & Kalouri, R. (2015). Lecturer perspectives on dyslexia within one Greek university: A pilot study. *Electronic Journal of Research in Educational Psychology*, 13(37), 587–606.
- Steele, P. E., & Wolanin, T. R. (2004). *Higher education opportunities for students with disabilities: A primer for policymakers*. Washington, DC: Institute for Higher Education Policy. ERIC (ED485430).
- Stevens, C. M., Schneider, E., & Bederman-Miller, P. (2018). Identifying faculty perceptions of awareness and preparedness relating to ADA compliance at a small, private college in NE PA. *American Journal of Business Education*, 11(2), 27–40.
- Strauss, A., & Corbin, J. (2014). *Basics of qualitative research* (4th ed.). Newbury Park, CA: Sage.
- Stucki, G., Cieza, A., & Melvin, J. (2007). The international classification of functioning, disability and health: A unifying model for the conceptual description of the rehabilitation strategy. *Journal of Rehabilitation Medicine*, 39(4), 279–285.
- Swail, W. (2004, June). *The art of student Retention: A handbook for practitioners and Administrators*. Paper presented at the Texas Higher Education Coordinating Board 20th Annual Recruitment and Retention Conference, Austin, TX.
- Swart, E., & Pettipher, R. (2011). Perspectives on inclusive education. In E. Landsberg, D. Krüger, & E. Swart (Eds.), *Addressing barriers to learning: A South African perspective* (2nd ed., 3–23). Pretoria, South Africa: Van Schaik: 3–23.

- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's Alpha. *International Journal of Medical Education, 2*, 53–55.
- Tawfiq, Z. (1993). Learning disability among a sample of primary school students in Oman. *Journal of the College of Education in Zagazig, 20*, 235–266.
- Taylor, S., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings* (2nd ed.). New York, NY: John Wiley & Sons.
- Terras, K., Leggio, J., & Phillips, A. (2015). Disability accommodations in online courses: The graduate student experience. *Journal of Postsecondary Education and Disability, 28*, 329–340.
- The Saudi Network. (2018). *Saudi Arabia main cities*. Retrieved from <http://www.the-saudi.net/index.html>
- Thompson-Ebanks, V. (2012). *Experiences of students with disabilities: Factors that influence their withdrawal as baccalaureate degree seeking students* (Doctoral dissertation, Colorado State University).
- Thompson-Ebanks, V., & Jarman, M. (2018). Undergraduate students with nonapparent disabilities identify factors that contribute to disclosure decisions. *International Journal of Disability, Development and Education, 65*(3), 286–303.
- Thompson, S. (2018a). *Assessment accommodations*. National Center on Educational Outcomes, University of Minnesota. Retrieved from http://www.specialconnections.ku.edu/?q=assessment/assessment_accommodations
- Thompson, S. (2018b). *Instructional accommodations*. National Center on Educational Outcomes, University of Minnesota. Retrieved from

http://www.specialconnections.ku.edu/~kucrl/cgi-bin/drupal/?q=instruction/instructional_accommodations

- Timmerman, L. C., & Mulvihill, T. M. (2015). Accommodations in the college setting: The perspectives of students living with disabilities. *The Qualitative Report*, 20(10), 1609–1626.
- Tuomi, M., Lehtomäki, E., & Matonya, M. (2015). As capable as other students: Tanzanian women with disabilities in higher education. *International Journal of Disability, Development and Education*, 62(2), 202–214.
- Turnbull, H., & Rutherford. (1998). *Free Appropriate public education: The law and children with disabilities* (4th ed.). Denver, CO: Love Publishing Company.
- United Nations (2008). *The convention on the rights of persons with disabilities (CRPD)*. New York, NY: United Nations.
- U.S. Department of Health and Human Services. (2016). *Your rights under Section 504 of the Rehabilitation Act*. Retrieved from <https://web.archive.org/web/20150317090828/http://www.hhs.gov/ocr/civilrights/resources/factsheets/504.pdf>
- Vogel, F. (2000). *Islamic law and the legal system of Saudi: Studies of Saudi Arabia* (vol. 8). Leiden: Brill.
- Vogel, S., & Adelman, P. (1992). The success of college students with learning disabilities: Factors related to educational attainment. *Journal of Learning Disabilities*, 25(7), 430–441.

- Vogel, S., Leyser, Y., Wyland, S., & Brulle, A. (1999). Students with learning disabilities in higher education: Faculty attitude and practices. *Learning Disabilities Research & Practice, 14*(3), 173–186.
- Wadlington, E., & Wadlington, P. (2005). What educators really believe about dyslexia. *Reading Improvement, 42*(1), 16–33.
- Wagner, M., & Blackorby, J. (1996). Transition from high school to work or college: How special education students fare. *The Future of Children, 6*(1), 103–120.
- Weir, C. (2004). Person-centered and collaborative supports for college success. *Education and Training in Developmental Disabilities, 39*(1), 67–73.
- Whisenhunt, J. (2001). *Higher education faculty and students with learning disabilities: A study of attitude, knowledge and accommodation compliance*. Retrieved from Dissertation Abstracts International, 62 (06), 2053. (UMI No. 3017490).
- Whyte, J. (2006). *Consulting with children with disabilities as service users: Practical and methodological considerations*. Dublin: Social Services Inspectorate and Children’s Research Centre, Trinity College. Retrieved from http://www.thehealthwell.info/node/15646?content=resource&member=572160∓catalogue=none&collection=none&tokens_complete=true
- Winter, E., & O’Raw, P. (2010). *Literature review of the Principles and Practices relating to Inclusive Education for Children with Special Educational Needs*. Trim, Republic of Ireland: National Council for Special Education.
- Winzer, M. (2007). *Children with exceptionalities in Canadian classrooms* (8th ed.). Toronto, Canada: Pearson.

- Wolman, C., McCrink, C. S., Rodríguez, S. F., & Harris-Looby, J. (2004). The Accommodation of University Students with Disabilities Inventory (AUSDI): Assessing American and Mexican faculty attitudes toward students with disabilities. *Journal of Hispanic Higher Education, 3*(3), 284–295.
- WHO. (2008). *International classification of functioning disability and health for children and youth version*. Geneva, Switzerland: World Health Organization.
- World Health Organization. (2001). *International Classification of Functioning, Disability and Health: ICF*. Geneva: World Health Organization.
- World Health Organization. (2002). *Towards a common language for functioning, disability and health: ICF*. Geneva: World Health Organisation. Retrieved from <http://www.who.int/classifications/icf/training/icfbeginnersguide.pdf>
- World Health Organization. (2011). *World report on disability*. Geneva: Switzerland. Retrieved from http://www.who.int/disabilities/world_report/2011/report.pdf
- World Health Organization. (2014). *Disability and rehabilitation*. Retrieved from <http://www.who.int/disabilities/ar/>
- World Health Organization. (2015). *Disability and health*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs352/en/>
- Worthy, K. (2014). *Faculty attitudes toward students with disabilities at a Southern HBCU* (doctoral dissertation). Tennessee State University. Retrieved from ProQuest.
- Zhang, D., Landmark, L., Reber, A., Hsu, H., Kwok, O. M., & Benz, M. (2010). University faculty knowledge, beliefs, and practices in providing reasonable accommodations to students with disabilities. *Remedial and Special Education, 31*(4), 276–286.

APPENDICES

Appendix A: Map of Saudi Arabia



AppendixB: Private &Public Universities in Saudi Arabia

	Private University	Location	Founded
I	Prince Sultan University PSU	Riyadh	1999
II	Effat University	Jeddah	1999
III	Arab Open University	Riyadh, Jeddah, Dammam, Hail, Al Ahsa& Madinah	2002
IV	Al-Yamamah Private University(YU)	Riyadh	2004
V	University of Business and Technology (UBT)	Jeddah	2008
VI	Fahd bin Sultan University (FBSU)	Tabuk	2003
VII	Prince Mohammad bin Fahd University (PMU)	Al Khobar	2008
VIII	Alfaisal University	Riyadh & Jeddah	2002
IX	Dar Al Uloom University (DAU)	Riyadh	2009
X	Dar Al Hekma University	Jeddah	1999

	Public Universities	Location	Founded
I	King Saud University (KSU)	Riyadh	1957
II	King Fahd University of Petroleum and Minerals (KFUPM)	Al Dhahran	1963
III	King Abdul-Aziz University (KAU)	Jeddah	1967
IV	Um Al-Qura University (UQU)	Makkah the Blessed (Mecca)	1967
V	Imam Muhammad Bin Saud Islamic University	Riyadh	1974
VI	King Faisal University (KFU)	Al Ahsa	1975
VII	Islamic University (IU)	Madinah the Radiant	1981
VIII	King Khalid University (KKU)	Abha	1998
IX	Qassim University (QU)	Qassim	2003
X	Taibh University	Madinah the Radiant	2003
XI	Taif University (TU)	Taif	2003

XII	University of Hail (UOH)	Hail	2005
XIII	Jazan University	Jazan	2005
XIV	Al Jouf University (JU)	Al Jouf	2005
XV	Al Baha University (BU)	Al Baha	2005
XVI	Univesity of Tabuk (UT)	Tabuk	2006
XVII	Najran University (NU)	Najran	2006
XVIII	Northern Border University (NBU)	Arar&Rafha	2007
XIX	Princess Nourah bint Abdul-Raman University (PNU)	Riyadh	2008
XX	King Saud Bin Abdul-Aziz University for Health Sciences (SAUDI ARABIA)	Riyadh, Jeddah & Al Ahsa	2008
XXI	University of Dammam (UOD)	Dammam	2009
XXII	Sattam bin Abdul-Azia University (PSAU)	Al Aflaj	2009
XXIII	Shaqra University	Hurimelaa, Quiah, Duwadmi, Afif, Thadeq & Al Mahmal	2009
XXIV	Majmaah University (MU)	Al Zulfi, HodatSudeer, Al Gat & Remah	2009
XXV	Saudi Electronic University (SEU)	Riyadh	2011
XXVI	University of Jeddah (UJ)	Jeddah	2013

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Instructions: Please use a dark-colored pen or pencil, completely color in the circle next to the response that best applies to you. If you change answers, be sure that you completely erase your previous answer or put an "X" through the unwanted answer.

How much personal contact have you had with someone that has a documented Learning Disability (LD)? (Completely color in the circle under the statement that applies to you)

no contact	very limited contact	co-worker/ friend	family member / own child	I, myself have a learning disability
1	2	3	4	5

Have you taught students with documented learning disabilities? If yes, approximately how many in the past 3 years? (Completely color in the circle under the statement that applies to you)

No students taught	less than 10	more than 10, less than 30	more than 30
1	2	3	4

Indicate your knowledge level with the statements listed below. Using the 5 point graduating scale with 1= no knowledge, and 5 = Mastery level (Mastery level = you could teach the material)

1	2	3	4	5
None	Little	Moderate	Above average	Mastery
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1 2 3 4 5 For example : I am familiar with what learning disabilities are.

o O O O O This response indicates "little knowledge"

1 2 3 4 5

- | | | | | | |
|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 1. Rehabilitation Act of 1973. |
| 1 | 2 | 3 | 4 | 5 | 2. Americans with Disabilities Act of 1990. |
| 1 | 2 | 3 | 4 | 5 | 3. The different types of Learning Disabilities. |

Indicate the training experience that you have had with regard to LD. Color in the circle under the total amount of training you have had.

- | | | | |
|------|----------------------------|---------------------------|--------------------|
| None | 2 or less training courses | 3-5 training over courses | 6 training courses |
| 1 | 2 | 3 | 4 |

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Instructions: Please use a dark-colored pen or pencil, completely color in the circle next to the response that best applies to you. If you change answers, be sure that you completely erase your previous answer or put an “X” through the unwanted answer.

Indicate the extent to which you agree or disagree with the following statements. Color in the circle under the letter/s that corresponds to your response with SD - being strongly disagree to A - being strongly agree.

SD= Strongly Disagree	D= Disagree	A=Agree	SA= Strongly Agree
------------------------------	--------------------	----------------	---------------------------

SD	D	A	SA
-----------	----------	----------	-----------

- | | | | | |
|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 1. Students with LD belong in a 4 yr. University or College. |
| 1 | 2 | 3 | 4 | 2. Students with LD belong in Community College. |
| 1 | 2 | 3 | 4 | 3. Students with LD belong in vocational training programs. |
| 1 | 2 | 3 | 4 | 4. Students with LD do not belong in any type of college. |
| 1 | 2 | 3 | 4 | 5. Students with LD are “mildly mentally retarded”. |
| 1 | 2 | 3 | 4 | 6. Students with LD take up too much time of the teacher. |
| 1 | 2 | 3 | 4 | 7. Learning Disabilities are not “real”. |
| 1 | 2 | 3 | 4 | 8. Students with LD will have a difficult time getting or keeping a job. |
| 1 | 2 | 3 | 4 | 9. A teacher should accommodate all students with a documented LD. |

- | | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 10. Accommodations for students with LD are not fair to the other students. |
| 1 | 2 | 3 | 4 | 11. I will ONLY give accommodations if I believe it will not compromise the integrity of my course. |
| 1 | 2 | 3 | 4 | 12. I consider my attitude toward students with LD as supportive and accommodating. |
| 1 | 2 | 3 | 4 | 13. I consider my attitude toward students with LD as guarded and skeptical. |
| 1 | 2 | 3 | 4 | 14. I consider my attitude toward students with LD as "middle of the road". |
| 1 | 2 | 3 | 4 | 15. I would like to have more training about various learning disabilities. |
| 1 | 2 | 3 | 4 | 16. I have all the training I need to accommodate students with LD. |
| 1 | 2 | 3 | 4 | 17. I would like more training about accommodations for LD. |
| 1 | 2 | 3 | 4 | 18. In general, I understand the needs of students with LD sufficiently. |
| 1 | 2 | 3 | 4 | 19. In general, I do not understand the needs of students with LD sufficiently. |

SD	D	A	SA
----	---	---	----

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Instructions: Please use a dark-colored pen or pencil, completely color in the circle next to the response that best applies to you. If you change answers, be sure that you completely erase your previous answer or put an "X" through the unwanted answer.

Would you provide the accommodation listed below for a student with a Learning Disability in your class? On left side of the accommodation, answer it as if the student does not have documentation. Then on the right side of the same accommodation, answer it as if the student does have documentation and it is being requested by the Disabilities Office. Color in a circle under No, Unlikely, or Yes on both sides of the accommodation. (2 answers for each accommodation)

Without Documentation**If requested by
Disability Office**

No	Unlikely	Yes	Use space provided for any comments	No	Unlikely	Yes
1	2	3	1. Photocopy my notes after lecture <hr/>	1	2	3
1	2	3	2. Provide extra time on a test (1 -5x to 2x) <hr/>	1	2	3
1	2	3	3. Allow student to tape record lecture <hr/>	1	2	3
1	2	3	4. Allow the use of a scribe / note-taker <hr/>	1	2	3
1	2	3	5. Tape record an oral presentation for a grade <hr/>	1	2	3
1	2	3	6. Administer a test orally <hr/>	1	2	3
1	2	3	7. Extend deadlines to complete projects <hr/>	1	2	3

1	2	3		1	2	3
---	---	---	--	---	---	---

8.Accept alternative assignments

1	2	3		1	2	3
---	---	---	--	---	---	---

9.Allow the student to do extra credit assignments when this option is not available to other students

1	2	3		1	2	3
---	---	---	--	---	---	---

10.Allow the use of a reader for a test

Without Documentation

If requested by Disability Office

No	Unlikely	Yes	Use space provided for any comments	No	Unlikely	Yes
-----------	-----------------	------------	-------------------------------------	-----------	-----------------	------------

1	2	3		1	2	3
---	---	---	--	---	---	---

11.Oral, taped, or typed responses to exams instead of hand written

1	2	3		1	2	3
---	---	---	--	---	---	---

12.Providing adequate lined paper to aid a student with poor handwriting skills

1 2 3 13. Provide the student with a detailed syllabus to give them ample time to complete reading and writing assignments 1 2 3

1 2 3 14. Allow the student to give oral presentation or tape-recorded assignments rather than complete written projects 1 2 3

1 2 3 15. Allow student to take an alternative form of your exam (example: some have problems with computer generated answer sheets, others might do better with multiple choice instead of essay tests) 1 2 3

1 2 3 16. Allow a proctor to rephrase test questions that are not clear to the student (example: clarify a double negative) 1 2 3

1 2 3 17. Allow student to dictate answers to a proctor 1 2 3

1 2 3 18. Allow student to respond orally to essay questions 1 2 3

1	2	3	19. Analyze the process as well as the final solution (give partial credit if math computation is correct although final answer was not	1	2	3
---	---	---	---	---	---	---

1	2	3	20. Allow use of basic calculators during tests	1	2	3
---	---	---	---	---	---	---

Without Documentation

**If requested by
Disability Office**

No	Unlikely	Yes		No	Unlikely	Yes
-----------	-----------------	------------	--	-----------	-----------------	------------

1	2	3	21. Allow misspellings, incorrect punctuation, and poor grammar without penalizing the student	1	2	3
---	---	---	--	---	---	---

1	2	3	22. Allow use of proofreaders to assist in the correction of grammar and punctuation	1	2	3
---	---	---	--	---	---	---

1	2	3	23. Allow use of proofreader to assist in reconstruction of the student's first draft of a written assignment	1	2	3
---	---	---	---	---	---	---

1	2	3	24. Allow use of proofreader to assist the student in the substitution of higher level vocabulary for the original wording	1	2	3
---	---	---	--	---	---	---

Thank you for your cooperation! The School of Education at University of N.C. at Greensboro

Please return it sealed in the self-addressed envelope provided to the Disabilities Director at your school- see list below for name. The Disability director will collect these and then the researcher will collect them on the due date.

**You may also mail the survey directly to the researcher if you wish
To researcher: Jannette Whisenhunt 102 Azalea Dr. Winston-Salem, N.C. 27105**

**Please Mail the survey back through Campus Mail to the Disability Director at your school by
March 15.2001**

Appalachian State Univ.	Suzanne Wehner	Asheville-B T.C.C.	Annie Clingenpeel
East Carolina Univ.	Dr. Janet Filer	Central Piedmont	Patricia Adams
UNC Charlotte	C.C. Rowe	Fayetteville T.C.C.	Bessie Locus
UNC Greensboro	Dr. Patricia Bailey	Pitt C.C.	Michael Bridgers
UNC Wilmington	Dr. Peggy Turner	Wake T.C.C.	Janet Killian
Western Carolina	Carol Mellen	Caldwell C.C.&T.I.	Garrett Hinshaw
N.C. A & T	Peggy Oliphant	Gaston College	Jerry Simpson
Fayetteville State	Fred Sapp	Surry C.C.	Larry Rooks
Cape Fear C.C.	Bill Parker	Forsyth T.C.C.	Paula Compton

Appendix D: English and Arabic Consent Letter for Faculty Members

Trinity College Dublin

Informed Consent Cover Letter for Anonymous Surveys

**“Reasonable Accommodation for Students with Learning Disabilities/ Disabilities: Perspectives
from University Staff and Students”**

Sreen Talal Bakri from the School of Education, Trinity College Dublin, is conducting a research study. The purpose of the study is to determine the factors that could affect the willingness of female faculty members to provide reasonable accommodations in Saudi universities, as well as to evaluate the experience of female disabled students. Moreover, it aims to gain insight into the perspectives of the management of the Centre of Disability Support Services (CDSS) about the reasonable accommodations offered. You are being asked to participate in this study because you are a faculty member at Prince Norah University (PNU) or King Saud University (KSU).

The survey should take approximately 10-15 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. There shall be no names or identifying information associated with this survey. All data will be retained for two years in a locked file in Sreen Bakri's office and then will be destroyed.

The findings from this project will provide information on the effectiveness of reasonable accommodations offered at KSU and PNU. In general, the purpose is to improve special education services at higher education level. If published, results will be presented in summary form only.

*If you would like to volunteer for an interview to share further information regarding this study please call or email the researcher.

Thank you for your consideration.

Arabic Consent Letter for Faculty Members

خطاب موافقة للمشاركة في استبانة الموامة الأكاديمية المقدمة للطالبات من ذوات صعوبات التعلم والإعاقات الأخرى: اتجاهات عضوات هيئة التدريس والطالبات بالجامعات

الباحثة طالبة دكتوراه في كلية التربية بجامعة ترينيتي Trinity College Dublin تقوم بإجراء دراسة بحثية بغرض تحديد العوامل المؤثرة على استعداد عضوات هيئة التدريس في تقديم الموامة الأكاديمية المعقولة في الجامعات السعودية، وتقييم تجربة الطالبات من ذوات صعوبات التعلم / والإعاقات المختلفة في المرحلة الجامعية، أيضا تهدف هذه الدراسة إلى معرفة وجهات نظر رئيسات مراكز الوصول الشامل حول الموامة الأكاديمية المعقولة المقدمة.

طلب منك المشاركة في هذه الدراسة لأنك عضوة هيئة تدريس في جامعة الأميرة نوره أو جامعة الملك سعود.

مشاركتك في هذه الدراسة طوعية ولك كامل الحرية في عدم المشاركة، مع العلم أنه لن يكون هناك أسماء أو معلومات تعريفية مرتبطة بهذه الاستبانة وسيتم الاحتفاظ بجميع البيانات لمدة سنتين في ملف مقفل في مكتب الباحثة الخاص ومن ثم سيتم إتلافها.

ستقدم نتائج هذه الدراسة معلومات عن فعالية الموامة الأكاديمية المقدمة في جامعتي الملك سعود والأميرة نورة لتحسين خدمات ذوي الإعاقة في التعليم العالي السعودي وسيتم عرض النتائج بشكل موجز عند نشر هذه الدراسة.

هذه الاستبانة تحتاج إلى ما يقارب من 10 إلى 15 دقيقة لاستكمالها.

*إذا كان لديك الرغبة بأجراء مقابلة لإثراء المعلومات في موضوع هذه الدراسة أرجو عدم التردد في التواصل مع الباحثة، شاكرة لك حسن تعاونك ومشاركتك في هذه الاستبانة.

أشكركم على اهتمامكم.

Appendix E: English and Arabic and KSA-SBAKRI Survey

The Willingness of Female Faculty Members to Provide Reasonable Accommodation in Saudi Postsecondary Institutions

Thank you for agreeing to take part in this research.

In Saudi Arabia, there is a need to understand more about the experiences of female students with disabilities (SWD) and students with specific learning disabilities (SLD) in post-secondary education, by assessing female faculty members' knowledge levels, training and willingness to provide instructional and examination accommodation that commensurate with the educational needs of the students according to their abilities. This could include recording lectures or allowing additional time for exams and coursework.

The target group in this survey includes: female faculty members in both King Saud University (KSU) and Princess Norah University (PNU), from College of Education and College of Art, academic rankings and nationalities.

These are the definitions of *Group (1) SWD* and *Group (2) SLD* in this survey:

Group (1) SWD: Female Students who are studying in KSU and PNU who experience any kind of disability (hearing impairment, visual impairment, physical impairment, ADHD, Autism... etc.) except learning disability.

Group (2) SLD: Female Students who are studying in KSU and PNU who have reading disability (dyslexia), writing disability (dysgraphia) or math disability (dyscalculia).

Your cooperation is greatly appreciated.

i. Participant's Details:

<u>Please choose the most appropriate answer:</u>	
1)	<u>Place of employment:</u> <input type="radio"/> KSU <input type="radio"/> PNU
2)	<u>College:</u> <input type="radio"/> College of Education <input type="radio"/> College of Art
3)	<u>Academic Rank</u> <input type="radio"/> Lecturer (Master) <input type="radio"/> Assistant Professor <input type="radio"/> Associate Professor <input type="radio"/> Full Professor
4)	<u>Faculty Nationality</u> <input type="radio"/> Saudi <input type="radio"/> Other (_____)
5)	<u>Age:</u> <input type="radio"/> Younger than 35 <input type="radio"/> Between 35 and 45 <input type="radio"/> Older than 45
6)	<u>Approximately how many SWD that you have taught in the last five years?</u> <input type="radio"/> No experience <input type="radio"/> Fewer than 5 <input type="radio"/> Between 5-10 <input type="radio"/> More than 10
7)	<u>Approximately how many SLD that you have taught in the last five years?</u> <input type="radio"/> No experience <input type="radio"/> Fewer than 5 <input type="radio"/> Between 5-10 <input type="radio"/> More than 10
8)	<u>How many CDSS training programs have you attended in supporting SWD and SLD in your class?</u> <input type="radio"/> No training <input type="radio"/> Fewer than 5 <input type="radio"/> Between 5-10 <input type="radio"/> More than 10

ii. Level of Knowledge

Please indicate your level of knowledge regarding the statements listed below:	Mastery	Above Average	Moderate	Little	None
1) Legislation of Disability 1987					
2) Disability Code					
3) The Regulations of Special Education Programs (RSEPI)					
4) The Regulation of Students with Disabilities' Rights in Higher Education Institutions in the Gulf Cooperation Council GCC					
5) United Nations Convention on the Rights of Persons with Disabilities(UNCRPD)					
6) Teaching students with different types of disability					
7) Teaching students with specific learning disability					
8) Center of Disability Support Services (CDSS)in your university <u>If you choose the answer "None" here please proceed straight to part iii</u>					

iii. Perspectives on CDSS

Please indicate the extent to which you agree or disagree with the following statements:	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1) CDSS provides required assistance for faculty members in providing reasonable accommodation					
2) CDSS provides training for faculty members in different types of disability					
3) CDSS provides training for faculty members about disability legislations					
4) CDSS provides training for faculty members in establishing reasonable accommodation in your class.					
5) Overall, I believe that CDSS provides very affective support for faculty member in relation to SWD and SLD.					

iv. Willingness to Provide Reasonable Accommodation

Group (1) SWD			Would you provide the reasonable accommodations listed below for students with disabilities and students with specific learning disabilities? (Indicate your answer for <u>BOTH</u> SWD on the left side and SLD on the right side)	Group (2) SLD		
No	Unlikely	Yes		No	Unlikely	Yes
			1) Photocopy my notes after the lecture			
			2) Allow the students to tape record the lecture			
			3) Allow the use of a note taker			
			4) Extend deadline to complete coursework			
			5) Accept alternative assignment formats (example: oral presentations in place of written assignments)			
			6) Exempt the student from using learning management systems and allow her to use another technology that other students use, for example, exempt the student from the use of a blackboard and allow her to use smart phone applications.			
			7) Allow the use of a proofreader to assist with grammar correction and punctuation			
			8) Allow misspellings, incorrect punctuation, and poor grammar without penalizing the student.			
			9) Allow the student to do extra credit assignments when this option is not available for other students			
			10) Provide extra time on tests			
			11) Allow student to take proctored tests in a supervised place			
			12) Allow the use of a third party test reader			
			13) Provide adequate lined paper to aid a student with poor handwriting skills during tests			
			14) Allow the student to take an alternative form of exam (example: some have problems with computer generated answer sheets and prefer answering in the answer sheet, others might do better with multiple choice instead of essay tests)			
			15) Meet the student to discuss the study problems that she faces and the accommodations that fit her condition			

v. Concerns and Recommendations

List your concerns about having SWD and SLD in your class	
Group (1): SWD	Group (2): SLD

List any recommendations about reasonable accommodation that you may have for working with SWD and SLD to meet their needs in your class	
Group (1): SWD	Group (2): SLD

***If you would like to volunteer for an interview to share further information regarding this study please call or email the researcher.**

Thank you very much for participating in this study!

مدى استعداد عضوات هيئة التدريس ومن في حكمهن لتقديم الموازنة الأكاديمية في الجامعات السعودية

الشكر الجزيل لك مقدما على موافقتك للمشاركة معي في هذه الاستبانة.

تهدف هذه الدراسة لمعرفة ومقارنة تجربة الطالبات السعوديات من ذوات الإعاقة عموما وذوات صعوبات التعلم خصوصا خلال دراستهن في المرحلة الجامعية من خلال تقييم مستوى المعرفة، التدريب وقابلية عضوات هيئة التدريس ومن في حكمهن لتقديم الموازنة الأكاديمية (Reasonable Accommodation) في طرق التدريس والتقييم بما يتناسب مع حاجات الطالبات التربوية وقدراتهن كالمسجلين المحاضرة صوتيا أو اعطاء وقت اضافي لإنجاز المشاريع وإنهاء الاختبارات.

الفئة المستهدفة في هذه الاستبانة هن عضوات هيئة التدريس من محاضرات وأساتذة بجامعة الملك سعود والأميرة نورة بنت عبد الرحمن من جميع التخصصات في كليتي الآداب والتربية.

المقصود بمجموعة (1): هن الطالبات اللاتي يدرسن في جامعتي الملك سعود والأميرة نورة بنت عبد الرحمن ممن لديهن نوع أو أكثر من الإعاقة (إعاقة بصرية، سمعية، جسدية، توحد ... الخ) ولا تشمل هذه المجموعة الطالبات اللاتي لديهن صعوبات تعلم.

المقصود بمجموعة (2): هن الطالبات اللاتي يدرسن في جامعتي الملك سعود والأميرة نورة بنت عبد الرحمن ممن لديهن صعوبات القراءة (دسليكسيا)، صعوبات الكتابة (دسغرافيا) أو صعوبات الحساب (دسكالوليا).

مشاركتهن واقتراحتهن محل التقدير والاحترام.

أ. بيانات المشاركات:

الرجاء اختيار الاجابة المناسبة:	
1	مكان العمل <input type="radio"/> جامعة الملك سعود <input type="radio"/> جامعة الأميرة نورة
2	الكلية التي تعملين بها: <input type="radio"/> كلية التربية <input type="radio"/> كلية الآداب
3	الرتبة العلمية: <input type="radio"/> محاضر <input type="radio"/> أستاذ مساعدة <input type="radio"/> أستاذ مشارك <input type="radio"/> أستاذ
4	الجنسية: <input type="radio"/> سعودية <input type="radio"/> أخرى (_____)
5	العمر <input type="radio"/> أقل من 35 <input type="radio"/> بين 35 و45 <input type="radio"/> أكثر من 45
6	أرجو تحديد عدد الطالبات من ذوات الإعاقة المجموعة (1) اللاتي سبق لك تدريسهن في الخمس السنوات الأخيرة؟ <input type="radio"/> لا يوجد <input type="radio"/> أقل من 5 طالبات <input type="radio"/> بين 5 إلى 10 طالبات <input type="radio"/> أكثر من 10 طالبات
7	أرجو تحديد عدد الطالبات من ذوات صعوبات التعلم المجموعة (2) اللاتي سبق لك تدريسهن في الخمس السنوات الأخيرة؟ <input type="radio"/> لا يوجد <input type="radio"/> أقل من 5 طالبات <input type="radio"/> بين 5 إلى 10 طالبات <input type="radio"/> أكثر من 10 طالبات
8	أرجو تحديد عدد الدورات التدريبية التي تلقيتها من مركز خدمة الطالبات من ذوات الإعاقة فيما يختص بدعم الطالبات من ذوات الإعاقة عموما أو صعوبات التعلم تحديدا في البيئة الجامعية؟ <input type="radio"/> لا يوجد <input type="radio"/> أقل من 5 دورات <input type="radio"/> من 5 إلى 10 دورات <input type="radio"/> أكثر من 10 دورات

ب. مستوى المعرفة:

ليس لدي أدنى معرفة	معرفتي قليلة	معرفتي متوسطة	معرفتي أعلى من المتوسطة	معرفتي ممتازة	أرجو تحديد مستوى معرفتك في العبارات المدرجة أدناه:
					(1) قانون الإعاقة السعودي 1987
					(2) نظام رعاية المعوقين في المملكة العربية السعودية
					(3) القواعد التنظيمية لمعاهد وبرامج التربية الخاصة في المملكة العربية السعودية
					(4) البنود التنفيذية لحقوق الطلبة ذوي الإعاقة في مؤسسات التعليم العالي بدول مجلس التعاون الخليجي
					(5) اتفاقية الأمم المتحدة لحقوق الأشخاص ذوي الإعاقة
					(6) تدريس الطالبات من ذوات الإعاقات المختلفة
					(7) تدريس الطالبات من ذوات صعوبات التعلم
					(8) خدمات مركز الطالبات من ذوات الإعاقة بجامعتك *إذا تم اختيار الإجابة (ليس لدي أدنى معرفة) على هذه الفقرة فقط أرجو عدم الإجابة على البعد (ج)

ج. المركز الجامعي لخدمة الطالبات من ذوات الإعاقة:

لا أوافق بشدة	لا أوافق	محايد	أوافق	أوافق بشدة	أرجو تحديد مدى موافقتك على العبارات الآتية:
					(1) تتعاون موظفات المركز مع عضوات هيئة التدريس عند طلبهن للمساعدة والنصح في تقديم المواعمة الأكاديمية المناسبة
					(2) يوفر المركز الدورات التدريبية لعضوات هيئة التدريس فيما يتعلق بأنواع الإعاقات المختلفة
					(3) يوفر المركز الدورات التدريبية لعضوات هيئة التدريس فيما يتعلق بقوانين حقوق الإعاقة وبرامج التربية الخاصة
					(4) يوفر المركز الدورات التدريبية لعضوات هيئة التدريس فيما يتعلق بتقديم المواعمة الأكاديمية المناسبة لحالات الإعاقة المختلفة
					(5) عموماً، أنا أعتقد بأن المركز يقدم دعم كبير لعضوات التدريس في كل ما يتعلق بتدريس الطالبات من ذوات الإعاقة وصعوبات التعلم

د. مدى قابلية عضوة هيئة التدريس لتوفير المواعمة الأكاديمية:

المجموعة 2 (ذوات صعوبات التعلم)			أرجو تحديد مدى استعدادك لتوفير المواعمة الأكاديمية في حال وجود طالبة من احدى المجموعتين في محاضراتك من خلال العبارات الآتية. ارجو الإجابة في كلا الجهتين مع العلم ان الجهة اليمنى تخص المجموعة 1 (الطالبات ذوات الإعاقة)، والجهة اليسرى تخص المجموعة 2 (الطالبات ذوات صعوبات التعلم)	المجموعة 1 (ذوات الإعاقة)		
ح	ب	ج		ح	ب	ج
			(1) إعطاء الطالبة نسخة من مذكراتي المتعلقة بالمحاضرة			
			(2) السماح للطالبة باستخدام مسجل صوتي لتسجيل المحاضرة			
			(3) السماح بحضور شخص لكتابة المعلومات المقدمة في المحاضرة للطالبة			
			(4) تمديد الوقت المحدد لإنهاء الواجبات والمشاريع			
			(5) قبول طرق بديلة لتقديم المشاريع المطلوبة مثل (تقديم عرض شفهي أو صوت مسجل للطالبة بدلا من تقديمه كتابة)			
			(6) إعفاء الطالبة من استخدام نظم إدارة التعلم والسماح لها باستخدام تقنيات مختلفة عن بقية الطالبات مثلا (إعفاء الطالبة من استخدام البلاكورد والسماح باستخدام تطبيقات الهواتف الذكية المخصصة لذوي الإعاقة)			
			(7) السماح للطالبة بالاستعانة بشخص للمراجعة اللغوية لتعديل الأخطاء النحوية والإملائية وعلامات الترقيم			
			(8) التسامح مع وجود الأخطاء الإملائية واللغوية التي ترتكبها الطالبة في الواجبات والاختبارات			
			(9) إعطاء الطالبة واجب بدرجات إضافية في حين ان بقية الطالبات لا يحصلن على هذه الميزة			
			(10) إعطاء الطالبة وقت إضافي لإنهاء الاختبار			
			(11) السماح للطالبة بأخذ الاختبار في قاعة منفصلة عن بقية الطالبات مع وجود مشرفة			
			(12) السماح بوجود شخص لقراءة أسئلة الاختبار للطالبة			
			(13) توفير صفحات مسطرة في الاختبار لمساعدة الطالبات اللاتي قد تكون لديهن مشكلات في مهارات الكتابة			
			(14) المرونة في اختبار الطالبة بصيغة بديلة عن بقية الطالبات، على سبيل المثال: (بعض الطالبات لديهن مشكلات بسبب الإعاقة مع أوراق التصحيح الالكتروني ويفضلن الحل في ورقة الاختبار. وأخريات لديهن مشكلة في الاختبارات المقالية ويجبن عن الأسئلة بشكل أفضل في الاختبارات الموضوعية)			
			(15) الاجتماع بالطالبة لمناقشة المشكلات الدراسية التي تواجهها والمواعمة الأكاديمية التي تناسبها			

هـ. مخاوف وتوصيات

ماهي الأمور التي قد تثير قلقك من تدريس الطالبات من ذوات الإعاقة او صعوبات التعلم؟

المجموعة (1): الطالبات ذوات الإعاقة	المجموعة (2): الطالبات ذوات صعوبات التعلم

هل لديك توصيات تتعلق بتقديم المواءمة الأكاديمية لتتوافق مع حاجات الطالبات من ذوات الإعاقة أو ذوات صعوبات التعلم؟

المجموعة (1): الطالبات ذوات الإعاقة	المجموعة (2): الطالبات ذوات صعوبات التعلم

إذا كان لديك الرغبة بإجراء مقابلة لإثراء المعلومات في موضوع هذه الدراسة أرجو عدم التردد في التواصل مع الباحثة،
شاكراً لك حسن تعاونك ومشاركتك في هذه الاستبانة.

Appendix F: English and Arabic Faculty Members Semi-Structured Interview

Faculty Members Semi-Structured Interview

1	Can you tell me a little about yourself, academic degree and specialization?
2	What kind of disabilities of the students have you taught?
3	How do you evaluate your experience and knowledge in types of disabilities?
4	How have you gained this knowledge?
5	Do you have knowledge in reasonable accommodation fitting for different disabilities cases?
6	From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?
7	Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?
8	Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?
9	Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?
10	What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Center of disability support services (CDSS)?
11	Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?
12	What kinds of disabilities are you prefer to teach, and why?
13	What do you think about teaching students with learning disabilities?
14	Describe your experience with the center of disability support services (CDSS) at your university. Are they collaborators?
15	What kind of support does the CDSS provide to the students with disabilities, students learning disabilities and faculty members?
16	Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?
17	If we ask students with disabilities about their experience with faculty members, what their answer would be?
18	There are some departments don't accept students with disabilities, what do you think?
19	From your experience, how do you evaluate the students with disability academically and educationally?
20	Do you think students with disabilities have some psychological or personal problems?
21	How do you see the relation between ordinary students and students with disabilities?
22	What are your recommendations to support students with disabilities at the university level?
23	Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

Note: The interviews are a semi-structured method. Some questions will be distributed according to the participant's interests. Therefore, some questions can be focused on, and others ignored. Estimated interview time 50 minutes may increase or decrease depending on participant response.

Arabic Faculty Members Semi-Structured Interview

المقابلة الشخصية للطلاب من ذوات صعوبات التعلم وذوات الإعاقات الأخرى

1	عرفيني على نفسك قليلا: رتبك العلمية، تخصصك
2	ما نوع إعاقة الطالبات اللاتي قمتي بتدريسهن؟
3	كيف تقيمين معرفتك بأنواع الإعاقة؟
4	من أين حصلت على هذه المعرفة؟
5	هل لديك معرفة بالمواعمة (التسهيلات) الأكاديمية المناسبة لحالات الإعاقة المختلفة؟
6	من خلال تجربتك ماهي المواعمة الأكاديمية التي قدمتها للطالبات المعاقات في محاضرتك؟
7	هل لديك القابلية لتقديم المواعمة، وماهي إيجابيات وسلبيات تقديمها؟
8	البعض يقول ان إعطاء المواعمة الأكاديمية للطالبات من ذوات الاعاقة يعطيهم فرصة غير عادلة مع بقية الطالبات، ما رأيك؟
9	هل تعتقد بأن هناك أنواع من المواعمة الأكاديمية غير مناسبة للطالبة الجامعية؟
10	ماهي الخطوات التي تتبناها إذا اعتقدت ان إحدى طالباتك لديها نوع من أنواع الإعاقة؟ ولم يتم اعلامك عنها من قبل مركز خدمة ذوات الإعاقة؟
11	هل تقومين بمناقشة الطالبة المعاقة عن احتياجاتها والتحديات التي تواجهها في محاضرتك؟
12	ماهي فئات الإعاقة التي تفضلين تدريسها ولماذا، والفئات التي لا تفضلين تدريسها مع ذكر السبب؟
13	ما رأيك في تدريس فئة صعوبات التعلم؟
14	هل تعاملتي من قبل مع مركز الوصول الشامل (مركز خدمة ذوات الإعاقة)، رجاء اوصفي تجربتك معهم إذا كانت الإجابة نعم.
15	ما نوع الدعم الذي يقدمه المركز للطالبات من ذوات الإعاقة وصعوبات التعلم؟ ولعضوات هيئة التدريس؟
16	هل حضرتي الدورات التدريبية التي يقيمها المركز التي تخص تعليم الطالبات من ذوات الإعاقة، لماذا حضرتهن؟ او لماذا لم تحضرتهن؟ وما مدى استعدادك لحضور هذه الدورات مستقبلا؟
17	لو سألنا الطالبات ذوات الإعاقة عن تجربتهن مع عضوات هيئة التدريس ماذا سيكون جوابهن باعتقادك؟
18	هناك بعض الأقسام لا تقبل الطالبات من ذوات الإعاقة فيه ما رأيك؟
19	من خلال خبرتك التدريسية كيف تقيمين قدرات الطالبة المعاقة تعليميا وأكاديميا؟
20	هل ترين أن هناك مشاكل نفسية أو شخصية تتعلق بالطالبات من ذوات الاعاقة؟
21	كيف ترين معاملة الطالبات الأخريات للطالبات من ذوات الإعاقة؟
22	ماهي توصياتك لدعم الطالبات من ذوات الإعاقة في المرحلة الجامعية؟
23	هل هناك أي نقاط أخرى بالنسبة لتقديم المواعمة الأكاديمية ترغبين في التحدث عنها؟

ملاحظة: المقابلة تخضع لمنهجية Semi-Structured interview لذلك سيتم توزيع الاسئلة حسب اهتمامات المشارك، حيث يمكن

التركيز على بعض الأسئلة و تجاهل البعض الآخر. الوقت المقدر للمقابلة 50 دقيقة قد تزيد أو تنقص حسب استجابة المشارك

Appendix G: English and Arabic Consent Letter for SWD and SLD

Trinity College Dublin

Informed Consent Letter for the Interviews of Students with Learning Disability/ Disability

**“Reasonable Accommodation for Students with Learning Disabilities/ Disabilities: Perspectives
from University Staff and Students”**

Sreen Talal Bakri from the School of Education, Trinity College Dublin, is conducting a research study. The purpose of the study is to determine the factors that could affect the willingness of female faculty members to provide reasonable accommodations in Saudi universities, as well as to evaluate the experience of female disabled students. Moreover, it aims to gain insight into the perspectives of the management of the Centre of Disability Support Services (CDSS) about the reasonable accommodations offered. You are being asked to participate in this study because you are a student with a disability at Prince Norah University (PNU) or King Saud University (KSU).

The interview will be recorded and should take approximately 40-50 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. There shall be no names or identifying information associated with this interview. You can refuse to answer any of the questions at any time. There are no known risks in this study, but some individuals may experience discomfort when answering questions. All recordings, recording-transcripts or copy of notes taken will be retained for two years in a locked file in Sreen Bakri’s office and then will be destroyed.

The findings from this project will provide information on the effectiveness of reasonable accommodations offered at KSU and PNU. In general, the purpose is to improve special education services at higher education level. If published, results will be presented in summary form only.

If you have any questions about this research project, please feel free to call me at: +353874401588 or email me at: bakris@tcd.ie.

Thank you for your consideration.

Sincerely,

-
- **I agree to participate in this recorded interview.**
 - **I agree that any information obtained from this research may be used in any way thought best for this study.**

Signature of Interviewee _____ Date _____

**خطاب موافقة لعمل مقابلة مع الطالبات من ذوات صعوبات التعلم أو الإعاقات الأخرى
المواعدة الأكاديمية المقدمة للطالبات من ذوات صعوبات التعلم والإعاقات الأخرى: اتجاهات عضوات هيئة
التدريس والطالبات بالجامعات**

الباحثة طالبة دكتوراه في كلية التربية بجامعة ترينيتي Trinity College Dublin تقوم بإجراء دراسة بحثية بغرض تحديد العوامل المؤثرة على استعداد عضوات هيئة التدريس في تقديم المواعدة الأكاديمية المعقولة في الجامعات السعودية، وتقييم تجربة الطالبات من ذوات صعوبات التعلم / والإعاقات المختلفة في المرحلة الجامعية، أيضا تهدف هذه الدراسة إلى معرفة وجهات نظر رئيسات مراكز الوصول الشامل حول المواعدة الأكاديمية المعقولة المقدمة. طلب منك المشاركة في هذه الدراسة لأنك طالبة من ذوات صعوبات التعلم أو الإعاقات الأخرى في جامعة الأميرة نورة أو جامعة الملك سعود.

المقابلة سيتم تسجيلها وتحتاج إلى ما يقارب من 40 إلى 50 دقيقة لاستكمالها، مشاركتك في هذه الدراسة طوعية ولكم كامل الحرية في عدم المشاركة، مع العلم أنه لن يكون هناك أسماء أو معلومات تعريفية مرتبطة بهذه المقابلات ولكن بعض الأفراد قد يشعرون بعدم الراحة عند الإجابة على بعض الأسئلة. سيتم الاحتفاظ بجميع التسجيلات، نصوص التسجيلات أو الملاحظات المأخوذة في المقابلات لمدة سنتين في ملف مقفل في مكتب الباحثة الخاص ومن ثم سيتم إتلافها.

ستقدم نتائج هذه الدراسة معلومات عن فعالية المواعدة الأكاديمية المقدمة في جامعتي الملك سعود والأميرة نورة وذلك لتحسين خدمات ذوي الإعاقة في التعليم العالي السعودي، وسيتم عرض النتائج بشكل موجز عند نشر هذه الدراسة.

إذا كان لديك أي أسئلة حول هذا المشروع البحثي، فلا تتردد في التواصل مع الباحثة.

أشكركم على اهتمامكم.

- أوافق على المشاركة في هذه المقابلة المسجلة.
- أوافق على أن المعلومات التي سيتم الحصول عليها من هذه المقابلة يمكن استخدامها لخدمة هذه الدراسة.

توقيع طالبة _____ التاريخ _____

Appendix H: English and Arabic SWD and SLD Semi-Structured Interview

	Questions	Estimated Time
1	Could you tell me a little bit about your background?	Five Minutes
2	What kind of disability do you have? and since when?	
3	What is your area of study?	
4	What year are you in?	Five Minutes
5	What did you take into account when deciding to continue your education after high school?	
6	Why did you choose to study in this university?	
7	Why did you decide to study in this department?	Fifteen Minutes
8	How did you settle into the college? What helped you? What didn't?	
9	What did you enjoy?	
10	What kinds of difficulty have you faced in the college?	Ten Minutes
11	What experience have you used to handle these problems?	
12	Did you explain the difficulty you have to anyone in the college? What kind of help did you get?	
13	When did you find out about CDSS? How?	Ten Minutes
14	Describe your experience with CDSS staff if you qualified for accommodation.	
15	Describe your experience with faculty members in the classroom. How well have they cooperated in providing accommodation?	
16	Tell me about your experience of classroom accommodations that you received. Do you find it helpful?	Ten Minutes
17	What about the assessment accommodation? Do you find it helpful?	
18	When you think back over your years of study in the college, what comes to mind?	Five Minutes
19	Finally, what are your recommendations to improve the accommodation in your education institute?	

Note: The interviews are a semi-structured method. Some questions will be distributed according to the participant's interests. Therefore, some questions can be focused on, and others ignored. Estimated interview time 50 minutes may increase or decrease depending on participant response.

المقابلة الشخصية للطالبات من ذوات صعوبات التعلم وذوات الإعاقات الأخرى

التسلسل	السؤال	الوقت المقدر
1	هل يمكن أن تعرفيني قليلا عن نفسك؟	خمس دقائق
2	ما نوع أعاقتك؟ متى أصبتي بها؟	
3	ما هو مجالك الدراسي؟	
4	ما السنة الدراسية التي أنت فيها حاليا؟	
5	مالذي أخذته بعين الاعتبار عندما قررت مواصلة تعليمك بعد المرحلة الثانوية؟	خمس دقائق
6	لماذا اخترت الدراسة في هذه الجامعة؟	
7	لماذا قررت الدراسة في هذا القسم؟	
8	كيف اندمجتي هنا؟ ما الذي ساعدك؟ وما الذي لم يساعدك؟	خمسة عشرة دقيقة
9	مالذي أعجبك في دراستك الجامعية؟	
10	ما هي أنواع الصعوبة التي واجهتها في الجامعة؟	
11	ما هي الخبرات التي استخدمتها لمعالجة هذه المشاكل؟	
12	هل شرحت الصعوبات التي لديك لأي شخص في الجامعة؟ ما نوع المساعدة التي حصلت عليها؟	عشر دقائق
13	متى تعرفت على مركز خدمة ذوات الاعاقة في جامعتك؟ وكيف؟	
14	أوصفي تجربتك مع موظفات مركز خدمة ذوات الاعاقة في جامعتك. هل هن متعاونات؟	
15	أوصفي تجربتك مع عضوات هيئة التدريس في القاعات الدراسية. وما مدى تعاونهن في تقديم المواعمة؟	عشر دقائق
16	أخبريني عن تجربتك عن المواعمة التي تلقيتها خلال المحاضرات الدراسية. هل وجدتتها مفيدة؟	
17	ماذا عن المواعمة في الإمتحانات؟ هل وجدتتها مفيدة؟	
18	عندما تفكري مرة أخرى في السنوات الدراسية التي قضيتها في الجامعة، ما الذي يتبادر إلى ذهنك؟	خمس دقائق
19	وأخيرا، ما هي توصياتك لتحسين المواعمة الأكاديمية في جامعتك؟	

ملاحظة: المقابلة تخضع لمنهجية Semi-Structured interview لذلك سيتم توزيع الاسئلة حسب اهتمامات المشارك، حيث يمكن التركيز على بعض الأسئلة و تجاهل البعض الآخر. الوقت المقدر للمقابلة 50 دقيقة قد تزيد أو تنقص حسب استجابة المشارك

Appendix I: English and Arabic Consent Letter for CDSS Managements

Trinity College Dublin

**Informed Consent Letter for the Interviews of Members of the Centres of Disability
Support Service (CDSS) Management**

**“Reasonable Accommodation for Students with Learning Disabilities/ Disabilities: Perspectives
from University Staff and Students”**

Sreen Talal Bakri from the School of Education, Trinity College Dublin, is conducting a research study. The purpose of the study is to determine the factors that could affect the willingness of female faculty members to provide reasonable accommodations in Saudi universities, as well as to evaluate the experience of female disabled students. Moreover, it aims to gain insight into the perspectives of the management of the Centre of Disability Support Services (CDSS) about the reasonable accommodations offered. You are being asked to participate in this study because you are a member of CDSS management at Prince Norah University (PNU) or King Saud University (KSU).

The interview will be recorded and should take approximately 40-50 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. There shall be no names or identifying information associated with this interview. You can refuse to answer any of the questions at any time. There are no known risks in this study, but some individuals may experience discomfort when answering questions. All recordings, recording-transcripts or copy of notes taken will be retained for two years in a locked file in Sreen Bakri’s office and then will be destroyed.

The findings from this project will provide information on the effectiveness of reasonable accommodations offered at KSU and PNU. In general, the purpose is to improve special education services at higher education level. If published, results will be presented in summary form only.

If you have any questions about this research project, please feel free to call me at: +353874401588 or email me at: bakris@tcd.ie.

Thank you for your consideration.

Sincerely,

-
- **I agree to participate in this recorded interview.**
 - **I agree that any information obtained from this research may be used in any way thought best for this study.**

Signature of Interviewee _____ Date _____

Arabic Consent Letter for CDSS Managements

خطاب موافقة لعمل مقابلة رئيسة مركز الوصول للشامل لخدمة ذوي الاعاقة

الموامة الأكاديمية المقدمة للطالبات من ذوات صعوبات التعلم والإعاقات الأخرى: اتجاهات عضوات هيئة التدريس والطالبات بالجامعات

الباحثة طالبة دكتوراه في كلية التربية بجامعة ترينيتي Trinity College Dublin تقوم بإجراء دراسة بحثية بغرض تحديد العوامل المؤثرة على استعداد عضوات هيئة التدريس في تقديم الموامة الأكاديمية المعقولة في الجامعات السعودية، وتقييم تجربة الطالبات من ذوات صعوبات التعلم / والإعاقات المختلفة في المرحلة الجامعية، أيضا تهدف هذه الدراسة إلى معرفة وجهات نظر رئيسات مراكز الوصول الشامل حول الموامة الأكاديمية المعقولة المقدمة.

طلب منك المشاركة في هذه الدراسة لأنك رئيسة مركز الوصول الشامل لخدمة ذوات الاعاقة في جامعة الأميرة نورة أو جامعة الملك سعود.

المقابلة سيتم تسجيلها وتحتاج إلى ما يقارب من 40 إلى 50 دقيقة لاستكمالها، مشاركتك في هذه الدراسة طوعية ولك كامل الحرية في عدم المشاركة، مع العلم أنه لن يكون هناك أسماء أو معلومات تعريفية مرتبطة بهذه المقابلات ولكن بعض الأفراد قد يشعرون بعدم الراحة عند الإجابة على بعض الأسئلة. سيتم الاحتفاظ بجميع التسجيلات، نصوص التسجيلات أو الملاحظات المأخوذة في المقابلات لمدة سنتين في ملف مقفل في مكتب الباحثة الخاص ومن ثم سيتم أتلافها.

ستقدم نتائج هذه الدراسة معلومات عن فعالية الموامة الأكاديمية المقدمة في جامعتي الملك سعود والأميرة نورة وذلك لتحسين خدمات ذوي الاعاقة في التعليم العالي السعودي، وسيتم عرض النتائج بشكل موجز عند نشر هذه الدراسة.

إذا كان لديك أي أسئلة حول هذا المشروع البحثي، فلا تتردد في التواصل مع الباحثة.

أشركم على اهتمامكم.

- أوافق على المشاركة في هذه المقابلة المسجلة.
- أوافق على أن المعلومات التي سيتم الحصول عليها من هذه المقابلة يمكن استخدامها لخدمة هذه الدراسة.

توقيع طالبة _____ التاريخ _____

Appendix J: English and Arabic CDSS Managements Semi-Structured Interview
CDSS Management Semi-Structured Interview

	Questions	Estimated Time
1	Could you tell me a little bit about your background?	Five Minutes
2	What is your field of special education?	
3	Why did you decide to work in CDSS?	Ten Minutes
4	What do you enjoy about working in this position?	
5	How well does the university support this center?	
6	What kind of assistance does CDSS provide to help SWD and SLD when they need help?	Five Minutes
7	How are students registered at CDSS?	Ten Minutes
8	Why do you think SWD and SLD hesitate to introduce themselves to CDSS?	
9	If we asked SWD and SLD about CDSS services what do you think they would say?	
10	How does CDSS inform faculty about the SWD and SLD they have in their class and the accommodation they need?	Fifteen Minutes
11	What kind of assistance does CDSS provide to help faculty members when they have SWD or SLD?	
12	What kind of training programs do you provide for faculty members to improve the level of accommodation provision?	
13	How many faculty members attended these training programs this year? Are they mandatory or optional?	
14	How do you see the level of faculty members communicating with the center when they have questions about providing reasonable accommodation?	
15	Would you say that faculty members are knowledgeable about reasonable accommodations or they do rely on CDSS?	
16	How do you think the service of CDSS could be improved?	Five Minutes
17	Finally, what do regard on your achievement as a CDSS management?	

Note: The interviews are a semi-structured method. Some questions will be distributed according to the participant's interests. Therefore, some questions can be focused on, and others ignored. Estimated interview time 50 minutes may increase or decrease depending on participant response.

Arabic CDSS Managements Semi-Structured Interview

المقابلة الشخصية لرئيسات مراكز خدمة ذوات الإعاقة

الوقت المقدر	السؤال	التسلسل
خمس دقائق	هل يمكن أن تعرفيني قليلا عن نفسك؟	1
	ما هو تخصصك الدقيق؟	2
	لماذا قررت العمل في مركز خدمة ذوات الإعاقة؟	3
عشر دقائق	ما الشيء المميز بالعمل في هذا المنصب؟	4
	ما مدى دعم الجامعة لهذا المركز؟ هل ترين أنه كافي؟	5
خمس دقائق	ما نوع الخدمات التي يقدمها المركز للطالبات من ذوات صعوبات التعلم خصوصا وذوات الإعاقة عموما؟	6
	كيف يتم تسجيل الطالبات في المركز؟	7
	لماذا تعتقدين أن الطالبات من ذوات صعوبات التعلم خصوصا وذوات الإعاقة عموما يترددن في تقديم أنفسهن وعرض مشكلاتهن على المركز؟	8
عشر دقائق	لو سألنا الطالبات عن آراءهم في الخدمات المقدمة لهن في المركز ماذا تعتقدين ستكون إجابتهن؟	9
	كيف يقوم المركز بإبلاغ أعضاء الهيئة التدريسية عن المواعمة الأكاديمية التي تحتاج إليها الطالبات؟	10
خمس دقائق	ما هو نوع المساعدة التي يقدمها المركز لمساعدة أعضاء هيئة التدريس عندما يكون لديهن طالبات من ذوات صعوبات التعلم وذوات الإعاقة؟	11
عشر دقائق	ما أنواع البرامج التدريبية التي يقدمها المركز لعضوات هيئة التدريس لتحسين مستوى تقديم المواعمة الأكاديمية؟	12
	كيف كان إقبال عضوات هيئة التدريس لحضور هذه البرامج التدريبية هذا العام؟ وهل هي الزامية أو إختيارية؟	13
	كيف ترين مستوى تواصل عضوات هيئة التدريس معكم عندما يكون لديهم أسئلة حول ترتيبات المواعمة الأكاديمية؟	14
	هل يمكن أن تقولي أن أعضاء هيئة التدريس على دراية كافية بالمواعمة الأكاديمية أو أنها يعتمدون على المركز؟	15
خمس دقائق	باعتقادك كيف يمكن تطوير خدمات المركز؟	16
	وأخيرا، ما هي توصياتكم لتحسين المواعمة الأكاديمية في جامعتكم؟	17

ملاحظة: المقابلة تخضع لمنهجية Semi-Structured interview لذلك سيتم توزيع الاسئلة حسب اهتمامات المشارك, حيث يمكن التركيز على بعض الأسئلة و تجاهل البعض الآخر. الوقت المقدر للمقابلة 50 دقيقة قد تزيد أو تنقص حسب استجابة المشارك

Appendix K: Answers of Open-Ended Questions

L: Lecturer

AP: Assistant Professor

AsP: Associate Professor

P: Professor

N	Question	Answer
L1	1&2	- Her inability to perform the role of a teacher
	3	- Guiding students to careers fit their special needs and it mayn't be consistent with the teaching profession.
	4	- Providing professional guidance for them in accordance with their abilities.
L2	1	- For the students, some of them totally depend on these accommodations and don't make any effort to learn. For me, I can't deliver information for the students as required and thus they fail.
	2	- The inability to deliver the information required for the students as well.
	3	- Separating the departments of students with disabilities from the ordinary students if their number is more than 15 students.
L3	1	- I consider them as a chance for me to acquire and experience new ways of teaching and more information about reasonable accommodation.
	2	- The previous answer, now we are free from worry about their colleagues because all students become having a high awareness and they are collaborating with each other more than before.
	3	- Increasing the students' awareness about their role toward their colleagues with disabilities. We are working on this step in King Saud University, and it's actually in progress.
	4	- Developing association gathering them together so as not to feel lonely.
L4	1	- Lack of knowledge about the correct and appropriate handling methods for their disability type, which may increase their frustration of the learning process.
	2	- I didn't teach students with disabilities, so I don't have a preview of what may raise my apprehension toward teaching them.
	3	- There should be awareness courses for professors before they teach students with disabilities. The professors should be developed in

		<p>how they can deal with the students with disabilities and in how they can provide reasonable accommodation for students with disabilities. The role of (CDSS) should be more effective in terms of increasing the awareness of students and professors toward the students with disabilities. To me, I has studied deaf and blind students and also relied on self-learning in order to be able to teaching students with disabilities. it was actually very frustrating, but I realized that I have to learn more effective methods of accommodation in order to be able to handle students with disabilities and provide the reasonable accommodation for them. Therefore, I highly recommend that there should be translators for translating the curriculum, so that the translators have to be provided with courses by the professors of curriculum they will work with them.</p>
	4	- I've never had to deal with them before.
L5	1&2	- I don't know the ways of dealing with them and I'm afraid to be unjust with them.
	3	- I didn't try to get courses in this regard or to develop myself in it because it isn't suitable for a children teacher.
	4	- An essential condition for the kindergarten teacher to be completely healthy to be able to take care of children as well.
L6	1&2	- Students with disabilities aren't able to understand the required subject
	3&4	- All faculty members pay more attention to delivering the scientific knowledge for the students with disabilities as their colleagues of the ordinary students because they occupy a work depends on what they learned at the university, thus we ensure that what is taught by these graduate students in schools and centers is compatible with functional responsibility.
L8	1&2	- Students with disabilities don't know their rights
	3&4	- Intensive training courses on teaching methods and alternative assessment
L9	1&2	- Students with disabilities often suffer from irritability or sadness
	3&4	- Qualifying professors with the required skills before teaching students with disabilities.
L10	1&2	- Some authorities intervene to request additional degree for the students in order to pass the subject without being interested in students learning. From my viewpoint, this disrupts the students learning and reduces their self-confidence, and gives negative impression about the students with disabilities.
	3&4	- All universities to abolish the condition of healthy senses in order to accept any student in the department. The acceptance criterion should be clear requirements determined by the department such as

		the ability to draw or the ability to use certain devices. Also, there should be interest in the diagnosis of learning difficulties cases because many of the cases reach the university education.
L11	1	- There is no vocational guidance for the students with disabilities.
	2	- Ignoring some of the difficulties and disorders the students have in order to pass the curriculum without focusing on the skills that should be accurately developed and enhanced.
	3	- There must be an experience- based classification for the faculty members in order to provide assistance and advice to all faculty members
	4	- There must be intensive courses on the diagnosis of these cases in order to reach them and provide them with help and assistance.
L12	1&2	-Feels guilty when there are difficulties in delivering information. I'm afraid of being neglectful. -Inadequate time for explaining lecture.
L13	1	- I may not deal with the student well or I may be emotionally influenced while evaluating her.
	2	- I do not know how she was diagnosed, what the evidence and how to deal with her, especially she may exploit the professor at the request of more features and facilities than her colleagues.
L14	1&2	- I don't know the most optimal and effective ways in order to provide knowledge to them.
L15	1&2	- I don't know the most optimal and effective ways for teaching and evaluating this group of students.
L16	1	- They are reclusive students; also, they don't explain their problems and difficulties they face in the college. I studied deaf and dumb and I was cooperative with them in terms of questions as they don't desire the essay questions. Actually, I didn't face difficulties in dealing with them.
	3	- Each student should have special portfolio explains her case, situation and the difficulties that student face. This portfolio should contain the opinions of who taught her in past years.
L17	1&2	- I don't know the most optimal and effective ways of teaching and evaluating this group of students.
L18	1	- The lack of any courses that can provide the faculty members with professional skills in the optimal and effective teaching ways and techniques.
	3&4	- The lecturer should be notified that there are students with disabilities in the classroom. The lecturers should be provided with the necessary guidance and advising.
L19	1&2	- I don't know the appropriate teaching way according to their individual abilities.
	3&4	- There should be training courses for raising awareness toward the rights of the students with disabilities. These training courses

		should also provide the faculty members with information and knowledge about the optimal and effective ways of teaching and evaluating the students with disabilities.
L20	1	- The high density of students in classrooms. Each classroom contains large numbers of students.
	3&4	- Adaptation of curriculum for students with disabilities should provide academic guidance for students. There should be coordination with (CDSS) in the works and activities of the students with disabilities.
L21	1	- Facing difficulties in studying.
	2	- Inability to understand the curriculum.
L22	1&2	- The differences of the learning speed and system; thus, taking into account all the students without exception. - The inability to properly deal with them and equip them with the required skills.
L23	3&4	- I hope that the lecturers are provided with a report providing information about the healthy status of the student and whether she suffers from any additional disabilities. It should also include the student's social and psychological status, and the extent of her abilities to understand the curriculum. That's because I noticed that the deaf students can't communicate with the lecturer. The report should contain whether the student face difficulties inside classroom or in understanding the curriculum because there are some students with disabilities who are weak in writing and they can't write well in the final exam. It also should contain information about the questions they are unable to answer and whether there is possibility to distinguish them from their colleagues with special tests after reviewing the student's report and status, which is attached with each subject.
L24	1	- Firstly: Academic description designs don't adopt the concept of inclusive education for all abilities, and most teaching and evaluating processes depend on traditional ways which are research and exams. From my point of view and field experience, there should be more classroom activities during the semester (5 summer activities) which based on cooperative learning, and the assessment of the students based on their participation in the activities (for instance, 25 degrees for classroom activities) the traditional exam should be limited to only (10 degrees); because the performing skills of the students with disabilities are considered as their strength point; so, we have to improve, develop and enhance their strengths. - Secondly: the nominal reasonable accommodation is now the norm; as they make the group of students with disabilities working together during the activities. They have to impose and force the

		<p>reasonable accommodation in classroom. The ordinary students should provide the disabled students with help and perform their requirements especially deaf students; because it's the philosophy of our specialization. There is no reason prevents the ordinary and disabled students from studying together under a new scheme developed by the university.</p> <ul style="list-style-type: none"> - Thirdly: the students with disabilities, especially the deaf students, suffer from many difficulties and problems in reading comprehension; so there must be additional lessons provided by (CDSS) for raising the reading comprehension of disabled students. For my part, I use the reading comprehension ways in all of my lectures in order to ensure that all students know what they read.
	2	<ul style="list-style-type: none"> - Unfortunately, most of them do not have the diagnosis. I can identify them through my experience in teaching. Their determination is the dilemma, especially if the student is unaware toward her problem.
	3&4	<ul style="list-style-type: none"> - Adoption of the universal design concept in program planning and descriptions writing. - Developing intensive courses in order to provide faculty members with comprehensive learning ways and techniques. - Developing detailed accommodations for each description handled by specialized committee. - Not to rely on traditional methods of explanation and assessment. - Adoption of sign language in PowerPoint and audio presentations in order to be suit with the abilities of deaf students and visually disabled students, and it's placed in a blackboard with a Professor voice who explains the lecture to provide the disabled students with opportunity for the self-learning.
L25	1&2	-Curriculum modification should be a role of academic guidance for students. Identifying assessment methods appropriate for the capacities of each case.
	3&4	-There should be a permanent and dedicated department inside the centre of disability support services in order to provide help for faculty members of the curriculum in harmonizing the curriculum and determining the methods of appropriate assessment.
L26	1	- Ways to communicate with the deaf students.
	2	- The faculty member may not recognize the students with disabilities from the beginning of the semester
	3	- A team to determine what is required from the Professor.
	4	- Increasing flexibility in university regulations regarding providing grades and test times.
L27	1	- Not prepared for teaching the deaf

L28	1	- Outcomes of student with disabilities differ from the ordinary student.
	2	- Low educational level for them
	3&4	- She must make sure that the educational outcomes of ordinary student and student with disabilities be the same.
L29	1	- They are unable to understand information presented in the lecture.
	2	- It may be due to the lack of understanding the requirements.
	3&4	- Issuance of laws imposing the provision of equal opportunities for ordinary individuals and individuals with disabilities for admission to be accepted at universities and to prevent exclusion of individuals with disabilities from being accepted in various departments.
L31	1	-lack of experience in dealing with students with disabilities
L32	1	- There should be a good escort with the disabled student.
	2	- I taught only one student and I actually didn't face difficulty.
	3	- I think that the role of the faculty members should be activated and there should also be meetings with the employees of (CDSS).
	4	- The psychological guidance and support must be effectively provided for the student with disabilities.
L33	2	The students themselves don't recognize that they have a disability and refuse assistance.
L34	1&2	- I don't give her the full rights during lecture.
	3&4	- Putting them in separated groups, and developing courses in order to provide the professor with the skills of how to give them their full rights.
L35	1&2	- Not knowing the effective and optimal ways to deal with them; because their things should be familiar with the professor so that the students are not inadvertently detained.
	3&4	- Developing courses in order to provide the professor with the skills of how to teach students with disabilities. The (CDSS) should raise its services provided for the students with disabilities and should develop courses for raising student's awareness toward their colleagues of students with disabilities.
L36	1	- I don't know how to deal with them and I have a fear not to give them their right. -Students with disabilities lack awareness of their rights.
	2	- I have no concern as they are natural but they have difficulty in something.

	3&4	- It supposed to provide training courses for all faculty members on how to deal with this group of students as well as learning difficulties.
L37	1	- The inability to deliver information well to the student; because the students are ashamed of telling the professor that they can't understand the information or part of information.
	3	- Setting aside time for discussing the needs of students with disabilities and also for discussing what has been presented in the lecture and providing answers for the asked questions.
L38	1	-They are often frustrated and anxious about the future
L39	1&2	- Lack of understanding the students' requirements and needs or the difficulty of performing their assignment.
	3&4	- Providing escorts belonging to the same specialization. - Providing training courses for faculty members in order to raise their awareness toward needs and requirements of the students with disabilities.
L40	1&2	- Lack of understanding the lecture as required due to the lack of consideration of the book as well as the delivery of assignments.
L41	3&4	-Invite students to attend seminars, conferences and encouraging them to participate in these effective academic programs
L42	1&2	- Generally, there is no reason for concern about the two groups, but I only have a regard to the compatibility between the student with disabilities and the other ordinary students and achieving sufficient interaction between them. - Some students with disabilities may not disclose their disability because they are being worried that faculty member doesn't perceive this, and this is not unfounded
	3&4	- The faculty members must involve the students with disabilities with other ordinary students and they also must provide the reasonable accommodation for the students with disabilities in order to achieve the psychological and social compatibility. - Focusing on oral participation for them during lecture and taking into account the type of questions and answers commensurate with the type of disability - Faculty members must initiate by asking the student about the extent of assignments appropriateness for its capabilities.
L43	1&2	- Not to accept enrichment programs
	3	- developing parallel programs to them
	4	- Developing effective and creative ways for determining students with learning disorders.
L44	1&2	- There is no reason for worry but what may make me worry is that whether the student has understood the subject. The lack of clarity

		of some students regarding expressing their problem.
	3&4	- I recommend that the faculty member meets with the student in (CDSS) allowing the student to clarify her problems and difficulties. The student should also tell the faculty member about the difficulties the she faces, and how the faculty member can provide her with the assistance fits her case. Then the faculty member will be able to give them alternative assignments.
L45	1&2	- Due to my inability to deal with the students with disabilities, I fear ofshowing compassion and mercy to them and act something that hurts or demoralize them.
L46	1&2	- Their inability to correctly understand and the difficulty of participation with members of the group to solve cases and educational situations.
	3&4	- Conducting a scientific study and performing a periodical assessment of the views of the faculty members and students, and also there should be training for the ordinary students on how they creatively and collaboratively deal with the students with disabilities in ways depending on the type of each disability.
L47	1	- I can't correctly deliver information to them, or I may ask them to perform assignments that are beyond their abilities and capacities.
	2	- I don't know that there are students with disabilities in my classroom. So, receive the same treatment like other ordinary students. - Inability to correctly deliver information to students with disabilities.
	3	- There should be specialist in special educational needs who acts as assistant to the faculty member in order to assist her to scientifically and creatively communicate with the students with disabilities in classroom.
	4	- Developing the training courses for the faculty members in order to provide them with the skills of how to deal with the students with disabilities.
L48	1&2	- The inability to correctly deliver information to the student with disabilities.
	3&4	- Raising awareness of faculty members toward ways of modifying curriculum to fit capabilities and capacities of students with disabilities
L49	2	- Need time and concentration
	3	- Developing training courses in order to raise the awareness of the students toward their colleagues of the students with disabilities and how to collaboratively deal with them.
	4	- There should be virtual classes in order to provide them with more time to help them, and the volunteer hours of the professors are calculated.

L50	3&4	- Spreading awareness among the university community members including the faculty members and students.
L51	1&2	- Inadequate lecture time to accommodate their needs.
	3&4	- (CDSS) should provide an assistant to help the lecturer at accommodating the needs of the students with disabilities.
L52	1	- Nothing, we should know how to deal with them and read about their needs and requirements, and I actually think that's our duty toward them.
	2	- We always need extra office hours in order to support them.
	3	- Each disability needs specific accommodation.
	4	- Facilitating the ways of delivering information to them and developing new effective teaching methods and techniques.
L53	1	- The inability to assist the student as required.
	2	- The student's inability to follow up the instruction.
L54	1	- I don't know their cognitive and psychological needs.
	2	- My inability to deliver information to them as required.
L55	1	- the student's psychological disorder because of her sense of weakness; for example, the difficulty of treatment and suffering about that
L56	2	- I have to undergo a training program on the most optimal teaching methods and techniques to be used in teaching the students with learning disorder.
	3	- Developing training courses for the faculty members on how to deal with the students. - The university has to establish a centre for supporting the students with disabilities and students with special educational needs.
	4	- Conducting joint researches between the department of Curricula and Teaching Methods, Department of Psychology, and Department of Special Education in order to survey the important difficulties faced by both the student and the professor, and to find out solutions and programs to eliminate these difficulties. - Developing training courses for the faculty members in order to know how to deal with the students with disabilities on the academic, psychological and social levels.
AP1	1&2	- It's not preferred for the student with disabilities to enter the Department of Early Childhood Education as it is not suitable because the child at this stage requires special care and attention.
AP2	1&2	- Embarrassing her in classroom when I ask her about lecture topic.

AP3	1&2	- Failing to give the students her rights; or to be more lenient making her more reliable as a result of the empathy with accommodating her needs.
	3&4	- It's important to support the student with disabilities, bearing in mind that this support is to assist the student to achieve her self-confidence and realize her role as an active member in the community. Providing facilities doesn't mean creating reliability.
AP4	1	- Not using creative and effective learning strategies fit their cases.
	2	- My inability to provide a scientific subject suitable for the difficulties they face.
	3	- The student's name can be linked electronically with files relating to the best method of dealing with her, so that when the student registers in a course, the professor becomes able to access the student's file to know the most appropriate strategies for the student, and also know the name of responsible in the Universal Access Program (UAP) in order to communicate with her and she would be considered as a permanent reference for the professor, leading to reducing the burden on the centre.
	4	- The same recommendation above, with continued support during the semester; for example, developing a separate virtual class for all professors who teach students with learning disabilities or special needs to form a loop support ongoing throughout the semester and where to share documents, videos, and others in order to develop the skills of professors.
AP5	1&2	- To deal with her in less than her mental abilities, thus she feels bored.
AP6	1&2	- Not to teach them with the right and appropriate method.
AP7	1&2	- I lack acquaintance with the most appropriate teaching methods and techniques to deliver information to them.
AP8	1	- I'm afraid that students become frustrated as a result of my inability to teach them with the teaching methods fit their cases and their needs.
	2	- I'm afraid that I can't provide them with reasonable accommodation, and this will actually occur because I can't diagnose their cases or determine them in classroom.
	3&4	- The faculty member must be provided with detailed information about the students with disabilities in her classroom in order to search for the most appropriate teaching methods that fit their cases and needs.
AP9	1&2	- I don't know the whole ways of dealing with the students with disabilities.
	3&4	- Developing training course for preparing the faculty members on how to deal with the students with disabilities.

AP10	1&2	- SLD may not accept to work with her colleagues.
AP11	1&2	- I don't know the right procedures of how to deal with a student with disabilities in order to teach her as required.
AP12	1&2	- To be unfair with them or not to achieve the required goals because I don't know right ways of how to deal with them.
AP13	3&4	- The faculty member must be provided with detailed information about the student and the optimal way of how to deal with her at the beginning of the semester because some students are ashamed of identifying their case, and the department provides the professor with the required information about the students with disabilities at the end of the semester just for writing a separate question paper for them.
AP14	1	- I may face a disability that I don't have complete knowledge about its characteristics
	2	- I don't have fears because I'm professionally specialized in learning disorders.
	3&4	- There is no adequate support from the Universal Access Program (UAP). As a faculty member, I don't know the services provided by this centre; so, I hope that there will be a clear vision.
AP15	1	- The student sometimes doesn't talk with me about her needs or her problems because she is ashamed of telling me about them; despite the fact that I mentioned in class that students with disabilities should provide me with information about their problems and needs.
	2	- I don't recognize the students with disabilities from the beginning of semester, I realized that after the mid-term test. due to the large number of students which exceeds 50 students. Most reports don't give the diagnosis.
AP16	1	- The lack of support and facilities that enhance the student's abilities.
	3&4	- Paying more attention to the overall design of the educational process at the beginning of any program planning; so that students can complete their studies to suit different learning styles; thus, it will ensure the achievement of good outcomes.
AP17	1&2	- My inability to deliver information and achieve goals as required.
	3&4	- Developing training courses for the faculty member in this field.
AP18	1&2	- My inability to provide the student with the academic support or the reasonable accommodation.
	3&4	- Privatizing questions and curriculum for them.
AP19	1&2	- My inability to deal with her with the way fits her case and needs.
	3&4	- Developing training courses for the faculty member.

AP20	1	- The curriculum lacks relevance to their needs
	2	- It's difficult to know or determine the students with disabilities inside classroom.
AP21	1	- She needs to new effective teaching methods and creative teaching aids.
	2	- She needs you to repeat explanation, repeat instructions, and provide extra time for assignments and projects delivery.
	3	- Developing training courses for the faculty member. - Opening specific departments for them.
	4	- Diversity in teaching tools. - Enhancing their abilities. - Facilitating the scientific subject through the simplified explanation and relative examples for enhancing understanding.
AP22	1	- Inability to understand the curriculum
	2	- Not being able to finish the curriculum on time,and delay in the syllabus.
	3	- Developing training courses for the faculty members in order to provide them with the skills of how to deal with the students with disabilities and to raise their awareness toward their needs and requirements. The faculty members should be skilled in how to effectively provide the reasonable accommodation.
	4	- Developing a special curriculum for the students with disabilities only.
AP23	1	- I'm afraid of being neglectful with them as I can't focus on them due to the limited time of the lecture. Using different teaching methods and techniques makes me distracted.
	2	- The same previous answer with increasing responsibility as they need to be followed up and supervised but the problem of the limited time and large number of students inside classroom doesn't help to effectively provide the reasonable accommodation for the students
	3	- We need training courses as well as reducing the number of students in the departments including students with disabilities so that we can effectively focus on them.
	4	- The same previous answer.
AP24	1	- They are unable to access the required references
	2	- I have not experienced students with disabilities so that I can determine my fears.
	3	- Providing faculty with more effective means of providing assistance than writers and escorts, because some of them don't work so well

	4	- Providing training courses in order to apply what is known about the students.
AP25	1	- There is no clear law that preserves the right of the student with special needs especially those who suffer from symptoms of attention deficit hyperactivity disorder (ADHD). Also, the student family refuse to recognize that their daughter suffers from a problem that requires special treatment, this makes it difficult for the university to take any action that preserves the student's right for special treatment.
	2	- There is not enough time to give the students their right and also there's no enough time to give their colleagues, who do not suffer any difficulties in learning, their right.
	4	- The faculty members don't often report that there is a student with disabilities facing a learning problem faced by; which could lead to a delay in case study and assessment. Faculty member may have the powers that enable her to treat students with disabilities in a way fitting her case. but there is nothing to protect faculty member in the case of a student family
AP26	3&4	- Training courses for the faculty members.
AP27	1&2	- These students often have difficulty with interaction and participation because of their shyness.
AP28	1&2	- The student doesn't understand the lecture topic and she can't ask the professor.
AP29	1	- I don't know the diagnosis of the student's case and then deal with them
AP30	2	- Training courses on how to deal with the different various disabilities.
	3	- Training courses on how to deal with the different various disabilities.
	4	- Focusing on educating faculty members to note and gather the indicators of the learning disorders and difficulties among students
AP31	1&2	- Students with disabilities have low educational skills
AP32	1&2	- The faculty members don't know the optimal way of how to deal with the students with disabilities. - The student with disabilities attends the lectures among large number of ordinary students, so the faculty member can't provide the reasonable accommodation as required.
	3&4	- Opening new departments fit their abilities and provide specialist supervisor to support the faculty members regarding the assistance of the students with disabilities and providing provide the necessary support for them technically and spatially.
AP33	1&2	- The inability to deal with them by the method that fits with their cases, as well as the difficulty of their integration with other students.

AP34	1	- Her psychological status and my inability to understand it. I actually experienced this.
	2	- Evaluating her ability to learn.
	3&4	- Training courses to acquaint faculty with policies and procedures concerning students with disabilities
AP35	1	- How to deal with them inside classroom as students - How to effectively deliver information to them
	2	- How to creatively deliver information to them in a way fits their abilities.
AP36	1&2	- I don't have enough experience and I'm afraid of failing to assist them as required.
	3&4	- Developing the necessary training courses for providing reasonable accommodation.
AP37	3	- What is taught for the student at the university should be applied or it should be similar to what on the ground so as not to be in a collision and conflict of information, particularly including students with disabilities.
	4	- Modifying some of the requirements to fit their specific needs.
AP38	1&2	- My inability to teach them as required.
	3&4	- Listening to them and providing them with their requirements.
AP39	1&2	- Their inability to understand the curriculum.
	3&4	- The universities don't develop training courses that can raise the awareness toward the needs and rights of the students with disabilities and how to deal with each case.
AP40	1&2	- The inability to provide them with clear information fits her case. - Forgetting about the presence of the student in the classroom and then the lack of focus. - I don't ask her a scientific question or ask her to participate in classroom for fear that embarrassing the student. - Increased compassion for the student so that we reach the injustice stage between the students.
AP41	1	- They usually feel uncomfortable because they don't like the looks of pity.
	2	- The faculty members can't diagnose the cases of the students with disabilities and then they can't identify the way of how to deal with them.
	3	- Yes, trying to integrate them and not to embarrass them among their students through trying to easily provide their needs and dealing with them like other ordinary students.
	4	- Their cases should be diagnosed and raising the awareness that those students suffer from diseases not stupidity or lack of diligence

		of the student himself.
AP42	1&2	- Giving her opportunities and more privileges [may] raise the anger of the ordinary students
AP43	1	- The lack of a good diagnosis of the disability type, so it's difficult to determine the so good treatment and the best strategy
	2	- The lack of adequate knowledge of appropriate teaching strategies.
AP44	3&4	- Providing training courses for the faculty members in order to improve their learning process.
AP45	3&4	- The existence of the facilities they need and facilitates their use. - Understand the cases, take care of them and creatively deal with them. - The faculty members should be well prepared.
AP46	1&2	- Fear of inadequate experience of how to creatively deal with them leading not to be given the full time to teach.
AP48	3&4	- Developing the training courses for the faculty members. - Providing student with escort.
AP49	1	- The student with disability can't understand the information she receives inside the classroom.
AP50	1	- I may embarrass her if I ask her to do something that she can't perform; for example, I asked a student to read but I didn't know that she was blind. So, I apologized to her in classroom.
	2	- I may not be able to provide information for them in a way fits her level.
	3&4	- Paying more attention to them. - Determining the departments and specializations fit their cases and levels; for instance, how to be specialist when she graduates from the Department of Social Studies.
AP51	1	- Failure to reach appropriate solutions.
	2	- Inability to understand the nature of their needs.
	3	- Holding a meeting with them in order to know their point of view and suggestion regarding the ways should be used for facilitating their learning process.
	4	- There must be a specialized consultant centre act as supervisor evaluates the training courses developed for assisting the faculty member in providing the reasonable accommodation.
AP52	1&2	- I don't know the appropriate methods that can enable me to appropriately deliver information to them.
AP53	1	- Her unsuitability for application of what she learned.
	2	- She may transfer her weakness to the others.
	3	- To deal with her like the ordinary student.

	4	- Developing courses for them in order to enhance their ability.
AP54	1	- There is no adequate time to clearly explain the lecture topic in way fits her disability and needs; especially under the large number of students in the classroom.
	2	- I haven't enough experience and I'm afraid of being unfair to the student and failing to assist her
AP55	1&2	- Taking into my consideration her case in terms of repeating explanations or explaining slowly may inconvenience her colleagues
	3&4	- They should have their own classrooms, or they study a trial period; for example, a month. This process helps to identify the extent to which the university study is appropriateness for them, and the student who can't get a good grade, she will, then, be excluded from the university study.
AP56	1&2	- The way of delivering information.
	3&4	- Providing professional specialist for help.
AP57	1	- The inability to accommodate their needs in a way fits their case.
	2	- The lateness of realizing their cases and assimilating their problems in the suitable time; so that I have the chance to teach them and deal with them in a way fits their cases and needs.
	3&4	- There should be training courses for the faculty members enabling them to have adequate knowledge about the optimal ways of how to deal with the students with disabilities.
AP58	1&2	- Information isn't delivered appropriately and their psychological status.
AP59	1&2	- She needs a longer time to understand which negatively effects on course time.
AP60	1&2	- They hit the labor market.
	3	- Preparing the faculty member by the specialists.
AP61	1&2	- I am afraid I'm not qualified for this.
AsP1	1&2	- They are not provided with the required services and facilities.
AsP2	1&2	- I don't know how to deal with because of lack of experience.
AsP3	1&2	- Not to have the skills of how to deal with them.
AsP4	1	- I do not know how to deal with them.
	2	- Determining if they really need help or they just get the advantage of their disability.

AsP5	1&2	- I'm afraid to deal with her piteously and mercifully.
	3&4	- There should be training courses and workshops for all faculty members on how to deal with students with disabilities and learning disorders cases
AsP6	1&2	- Not to deliver information properly because the professor will take into account the majority regarding the level of her voice, writing and explanation.
	3&4	- To have their own classrooms separated from the ordinary student's classrooms.
AsP7	2	- The nature of their hidden disability that is difficult to clarify for the ordinary students.
AsP8	1	- a student with a disability has no ability to comprehend the subject.
	2	- Their need to a longer time during lecture may negatively influence on the rest students.
	3	- Providing teaching aids in the class.
	4	- Giving them the chance during the exams by the ways that fit their abilities.
AsP9	1&2	- Not to help them enough. - The content of specialization doesn't fit their abilities. - Some of them exploit their disability excuse in a way doesn't fit their real needs. They do so to gain more prerogatives.
AsP10	3	- Choose departments and specializations that are appropriate for their abilities, because some scientific specializations may not be appropriate for their disabilities. They should have their own classrooms, or they could study for a trial period, for example, a month. This process would help to identify the extent to which university study is appropriateness for them, and the student who can't get a good grade, she will, then, be excluded from university study
	4	- To use effective ways helping them to overcome their problems and thus become closer to ordinary.
AsP11	1&2	- The inability to deal with the students with disabilities. - To be unfair with them.
	3&4	- Taking into consideration the individual differences and giving them opportunities regarding methods of assessment.
P1	1	- I don't know the required procedures for each case of disability. CDSS doesn't provide us with that.
	2	- My conviction that the student who suffers from learning disability know that some specific academic specializations don't fit her abilities. There is no accurate diagnosis for these cases.
	4	- The approved diagnosis and the training on how to deal with these cases.

P2	1&2	<ul style="list-style-type: none"> - Not to achieve the learning objectives. - There are no training programs on teaching methods. I should have a long period of training in order to identify and learn about the most appropriate and effective teaching methods and how to use these methods while teaching students with disabilities and delivering information to them
	3&4	<ul style="list-style-type: none"> - Preparing ordinary students about their role toward their colleagues from students with disabilities.
P3	1&2	<ul style="list-style-type: none"> - To ask her perform something exceeds her abilities.
	3&4	<ul style="list-style-type: none"> - Developing the faculty members' skills of how to properly determine the needs of students with disabilities and students with learning disorders. They should also be able to determine the nature of activities and assignments the students will perform.
P4	3	<ul style="list-style-type: none"> - Informing the faculty members how to deal with the students with disabilities. - Enabling the student to know how to communicate with the academic guide for facilitating the process of learning with the rest of the faculty members.
	4	<ul style="list-style-type: none"> - (CDSS) has to cooperate with faculty members and provide them with the appropriate ways for dealing with the students with disabilities.

Appendix L: Transcripts of the Faculty Members Interviews

(1)

FM1
<p>Can you tell me a little about yourself, academic degree and specialization? I am an Assistant Professor in the Department of Media</p>
<p>What kind of disabilities of the students have you taught? I've taught three students: student with total blindness, student with visual impairment and student with mobility impairment.</p>
<p>How do you evaluate your experience and knowledge in types of disabilities? I have good knowledge in this field</p>
<p>How have you gained this knowledge? I have an experience in the different types of disabilities because one of my family members has a disability.</p>
<p>Do you have knowledge in reasonable accommodation fitting for different disabilities cases? Yes of course, I have knowledge and experience</p>
<p>From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures? From my experience, in the photojournalism subject, is an optional and not mandatory, I had two students with disabilities, one of them is completely blind and the other has severe visual impairment. I had to call the head of department that this subject is not appropriate for these two students because this subject is based on photography. Also, I tried to convince the two students to delete this subject. The Blind student was convinced to delete it; but the student with visual impairment has refused to delete the subject, hence I have deleted some practical activities for her, as well as I allowed one of her family members to take photographs instead, so that I can assess her.</p>
<p>Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it? Yes, I have the ability to provide reasonable accommodation. I don't think there are cons of providing reasonable accommodation because I'm a human being and I have to take care of them. But unfortunately, I see that there are some unscrupulous faculty members who do not take care for students with disabilities and do not provide them with the necessary reasonable accommodation because they say that SWD are harsh in dealing. However, I don't see anything prevents the faculty member to provide reasonable accommodation for any student with disabilities because academic issues differ from personal relations. One of the cons is that the Centre of disability support services (CDSS) requests the question paper before the test date by a day or two, and I'm afraid exams questions would be leaked or e-mails would be hacked. Thus, I have to put questions on a flash memory and send it to the Centre or an employee comes to pick it up.</p>

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I often help students with disabilities in grades because they cannot be compared to the rest of the students. they actually need our help, and this help should be provided without their knowledge so as not to feel sadness or pity. Further, I also often give more grades to the student with disabilities who I see studious more than the student with disabilities who I see careless.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

It's impossible to happen because CDSS provides us with information about any student with some kind of disability. therefore, I don't think there is a student with disabilities haven't been recorded in the CDSS's files.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Of course, this is discussed in my Office to ensure privacy if I felt that student suffers from a problem or difficulties in my lecture.

What kinds of disabilities are you prefer to teach, and why?

I prefer to teach students with mobility impairment because this disability is more appropriate to subjects of the department.

What do you think about teaching students with learning disabilities?

I have no experience in teaching students with learning disabilities.

Describe your experience with the centre of disability support services (CDSS) at your university. Are they collaborators?

In the fact I've never had to deal with them, but they notify us if there is a student with disabilities and provide us with all required information about these students at the beginning of the semester. Also, they contact with us before the final exam to deliver them a copy of the test to add the necessary modifications and adjustments such as enlarging font size for students with visual impairment. Also, students with disabilities have their exam in the Centre.

Unfortunately, CDSS doesn't provide me with effective methods and ideas about how to provide the reasonable accommodation to the students with disabilities. This is may be because I don't attend their training courses. Additionally, I think it would be better to speak directly with the student to understand their needs.

What kind of support does the CDSS provide to the students with disabilities, students learning disabilities and faculty members?

In fact, I don't know; however, the University facilities, such as the Central Library, have many devices that help students with disabilities; for example, the Braille for blind students.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I don't think I need to attend this training courses, because, I teach about 200 to 250 students in each class and I find that there is only one student has some kind of disability among the students, too, as I told you I have sufficient experience to deal with students with disabilities because one of my family members has a disability.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

In General, I think they'll say that most of us are collaborators with them by 95%.

There are some departments don't accept students with disabilities, what do you think?

I wanted to discuss this issue in our department because some subjects need photography and using Photoshop applications, and this basically requires the visual sense. I know that all individuals with disabilities have the right to learn; however, to accept them in some departments or subjects is considered a fatal mistake. Therefore, I call that there should be conditions for registration in some subjects such as the subject of media photography which basically depends on visual sense. what I mean is that all students with disabilities have the right to study in any department; however, there are some subjects not appropriate for them, so they should be replaced by other subjects fitting their abilities.

From your experience, how do you evaluate the students with disability academically and educationally?

Some of them are studious, while others are careless.

Do you think students with disabilities suffer from psychological or personal problems?

Quite frankly, the student with mobility impairment I have taught had many psychological problems so much so that one day she told me her many problems and when she left my office, I was influenced emotionally so much so that I cried a lot. Also, the students with visual impairment are very nervous and irritable. Most importantly, I expect that their psychological problems came from the House because the University had provided them with all means of comfort.

How do you see the relation between ordinary students and students with disabilities?

It is excellent.

What are your recommendations to support students with disabilities at the university level?

Firstly, students with disabilities must be supported with all means of comfort. Also, the shouldn't be called students with disabilities or special needs; as I prefer to call them students with capacities or achievements.

The faculty members should be also provided with training courses to raise their awareness towards students with disabilities. Also, recording lectures is an important step.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

There are a large number of students with disabilities and the University provides them with all means of comfort. When I was a student, I did not see them a lot, but now there is a significant increase in the number of students with disabilities inside the campus.

(2)

FM2

Can you tell me a little about yourself, academic degree, specialization and age?

I'm a lecturer in the department of special education, my major is learning disabilities.

What kind of disabilities of the students have you taught?

I have taught a number of blind students as well as a group of deaf students.

How do you evaluate your experience and knowledge in the types of disabilities?

I've an excellent knowledge in this field because my major is special education.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

I begin with deaf students. I have taught them a difficult curriculum in terms of quality and quantity of information. It's known that deaf students are less proficient in language than ordinary students. Therefore, I was in need to use simple terms in explanation, presentation and exam.

Also, I prepared a demo exam before they had their final exam to determine the type of question fitting their capabilities. I found that the objective question is easier for them, not only they encounter difficulties in the essay question, but also, I have encountered difficulties in reading their writings because they don't use linking words which are employed to link or connect sentences; thus, their writings were unlikely to be understandable or comprehensible. Thus, I put only subjective questions in the exam to ensure that questions fit their capabilities. This is the issue on which the institutes where the deaf students have been taught are blamed. They have made students get accustomed to summaries and subjective questions. Therefore, writings of the students are difficult to be developed or improved to answer questions containing more information. further, some students with disabilities come to me to explain some topics of the curriculum during the Office hours. The Centre informed us that if I want to draw the attention of one of them, I have to turn off and turn on the light of the classroom. in general, special examination arrangements are for disabled and dyslexic students

Regarding students who are blind or visually impaired, such access may require readers for classroom assignments and exams, or assistance obtaining materials in alternate format such as on tape, in Braille, or on computer disk. Other accommodations may include allowing a student extended time to read exams or assignments. Also, blind students need lectures in Word format; therefore, I arrange information in the PowerPoint slides, and then I convert them to Word format to be more comprehensive. Also, during exams, I take into consideration that blind student takes more time to answer question than the rest of her colleagues. Therefore, I modify and adjust the questions in a way fits her capabilities. In addition, and before presenting any video or educational tool, I make sure to explain exactly what is for the student before viewing it. Also, the ordinary students prepare models and other educational means for the blind students so that they fumble to get a clear perception of the whole topic.

Moreover, all students with disabilities are given half an hour as an additional time.

Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?

There are some faculty members who are very lenient understand reasonable accommodation incorrectly; as they summarize the curriculum into five or six pages only. Also, there are some faculty members who are radical and strict as they refuse to provide reasonable accommodation for the students with disability. This happened with one of my blind students who is very close to me, and i know her psychological conditions, and always come to my office to tell me the problems she encounters with faculty members. This student regularly have panic attacks during exam. However, some faculty members believe that she exaggerates and plays. I always enter into a debate with my colleagues because of this student; as they want her to have her test in CDSS so as not to confuse the rest of the students because of the sound of the device or panic attacks. Also, they give her a test full of essay questions which requires more effort and time. Last week, one of the faculty members pulled her test paper without giving her additional time which imposed by CDSS and this negatively affects her psychological condition.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I actually hear that from my colleagues. For me, I believe that it is unfair to equate ordinary student with disabled student. The ordinary students need only a few seconds to move between the paragraphs of the exam; while blind students, for example, need 3-5 minutes to read only one paragraph. Therefore, it is very necessary to take into account the individual differences among students.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

Yes, I have dealt with them. Frankly, the Centre's employees aren't collaborators as wished. Only before the exam, they send us e-mail to notify us that we have to send them the exam. Further, I do not remember any cooperation between me and them in the method of teaching, they haven't send us proposals in how to deal with students with disabilities.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

Yes, I have attended a training course on how to deal with students with disabilities. To be honest I neglect myself in the developmental side and workshops. I don't really know about the training programs that held by CDSS I negligent myself not the Centre.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Of course, this is discussed in my Office to ensure privacy if I felt that student suffers from a problem or difficulties in my lecture.

What kinds of disabilities are you prefer to teach, and why?

I am happy to teach all kinds of disabilities as I learn from these experiences, and this develops my skills and motivates me exert a greater effort.

What do you think about teaching students with learning disabilities?

Teaching students with learning disabilities requires a double effort and intensive teaching.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

I do not think the level of student's satisfaction is high with the faculty members.

There are some departments don't accept students with disabilities, what do you think?

I believe that if the department depends on the Applied Science, so it is possible to say that this department does not fit students with disabilities, but if the department depends on theoretical science, I believe that I do not mind to accept students with disabilities because theoretical science doesn't require physical effort. Although I believe that there are enormous capabilities within every person; thus, all individuals, even with disabilities can study in all departments.

From your experience, how do you evaluate the students with disability academically and educationally?

Some of them are studious, while others are careless. One of the blind students in my class achieved a grade point average (GPA) 4.95/5. Also, the majority of them are good. However, I have blind student at the first level are unlikely to be proficient in progressing presentations. On the other hand, at the least level, I have two blind students are excellent in developing presentation. Therefore, I will contact the CDSS and ask them to cooperate with the two students to develop a training course for their colleagues at the first level.

Do you think students with disabilities suffer from psychological or personal problems?

In fact, I see that deaf students are very nervous and emotional. I remember, for example, that I have spoken about how cochlear implants was very useful for a lot of people. In fact, I faced a violent reaction of them; as they said that cochlear implants are a big lie. I think this reaction because they reached the age when they do not benefit from this operation and that they have no linguistic basis since childhood. Also, one of my blind students who is very close to me, and i know her psychological conditions, and always come to my office to tell me the problems she encounters with faculty members. This student regularly has panic attacks during exam. Therefore, I consulted a colleague who is a psychiatrist as I made the student communicate with him until her case improves.

How do you see the relation between ordinary students and students with disabilities?
From my experiences, I see that ordinary students don't refuse their colleagues with disabilities. But in return, there are students with disabilities are very keen to work with ordinary students into groups. For example, I had two blind sisters in my class, and they asked me that every one of them want to be in a different group, and they were welcomed by the rest of their colleagues in their groups. I believe that the ordinary students in the groups works in a slow way taking into consideration the cases of their colleagues with disabilities.

Last week, there was presentation by a group of students, and one of them is a blind student. In fact, I liked how the students cooperated with their colleague; for example, they did not make the escort led her to the place of presentation, but one of the students did so and the other brought papers. They were very collaborators.

There may be some of the sensitivities of students with disabilities that the rest of the students do not want to work with them.

What are your recommendations to support students with disabilities at the university level?
I hope that every faculty member teach students with disabilities provides the CDSS with the types of reasonable accommodation. This enables the faculty members to benefit from the experiences of the other members in how to use the most effective type of reasonable of accommodation. Thus, the Centre of disability support services becomes having a Bank of information helps in serving students with disabilities.

Also, I wish to give the Centre of disability support services a greater authority over faculty members that there should be rules force the faculty members to provide reasonable accommodation for the students with disabilities. that's because I find some faculty members believe that it is unfair to provide reasonable accommodation.

(3)

FM3

Can you tell me a little about yourself, academic degree, specialization and age?

I'm Assistant Professor, Psychology

What kind of disabilities of the students have you taught?

I have taught a number of blind students, deaf students and a group of students with learning disabilities.

How do you evaluate your experience and knowledge in the types of disabilities?

I've good knowledge in this field because I have attended training courses on this topic in the Centre of disability support services (CDSS).

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?

Yes, I have a good background about the reasonable accommodation fitting for different disabilities cases.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

Deaf students are unlikely to be able to answer essay questions because they are used to this in public education. Thus, if I gave them my essay question, the answer is no more than two lines. Therefore, I change question in a way fits their disabilities.

However, compared to ordinary students, the blind students don not accept to reduce the tasks required in the subjects, and they usually tell me that they are efficient as their colleagues and want to accomplish all tasks.

Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?

There are sometimes downsides of some faculty members; as they give them additional grades, and this is meaningless, it is considered a great insult to their capabilities, that's make some deaf students are always asking to reduce and facilitate questions. I think they are taking advantage of their disability or that their output instruction from the general education was originally low.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I think because some faculty members give them additional grades.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

I have a student with learning disabilities, and I told her about the Centre; but she refused to benefit the advantages it provides for the students with disabilities.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Yes, especially before the exam I explain to them how the questions will be.

What kinds of disabilities are you prefer to teach, and why?

I prefer to teach the blind students because they are more proficient than the rest of the students with other kinds of disabilities.

What do you think about teaching students with learning disabilities?

My experience in teaching a student with learning disabilities was good, and I don't mind teaching another.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

In fact, I went to them one time to ask for a test of one of my students who had the exam in the centre and her papers were late. Therefore, I went to the Centre and asked them about the reasons why they don't send me the answers papers of this student. In fact, they were collaborators.

What kind of support does the CDSS provide to the students with disabilities, students learning disabilities and faculty members?

I note that most of the support goes for the blind and deaf students. I do not think the students with learning disabilities received the same attention. This may possibly be because the student herself does not want others to know her case.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

Yes, I have attended one training course on the categories of disabilities and how to deal with them in general, and this course is developed at the beginning of each semester. If any courses will be developed on other topics related to this field, I will certainly attend.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

This varies depending on the student or the member.

There are some departments don't accept students with disabilities, what do you think?

There's a blind student came to me after I spoke in the induction day, and she said that her dream is to study at the Department of Psychology. I told her the psychologist needs vision sense to see and evaluate the situation in front of her. She told me that there is blind Assistant Professor in the Department of psychology. I told her that this is a former system, and I have no the ability to serve you in this issue because this is the Department policy. In fact, if have any authority regarding this issue, I would accept you in the Department of Psychology.

From your experience, how do you evaluate the students with disability academically and educationally?

In fact, I can say that the majority of blind students are proficient and studious, even some of some are more proficient that the ordinary students. However, the deaf students are not proficient enough and they always want me to facilitate questions. They want me to give them objective questions. I think this is because Alamal institute where they studied at the public education levels depended on this method regarding the exam questions. Therefore, the education outputs they have are weak; thus, we are forced to keep up with this issue.

Do you think students with disabilities suffer from psychological or personal problems?

I do not think it reaches the psychological problems. It may be the problem of shyness, especially deaf, but the blind students are bolder to talk and engage in a conversation.

How do you see the relation between ordinary students and students with disabilities?

There are a few students who are trying to communicate and deal with them, for example, in the group work, many students try to avoid them because they believe that those students with disabilities may be a burden on the group and the reason behind the slow work. According to my experience I see that the relation and interaction between them is generally negative. But there is a lack of volunteer to help them or work with them. Further, I believe that the ordinary students in the groups works in a slow way taking into consideration the cases of their colleagues with disabilities. however, there are a few students who volunteer to help them or work with them.

What are your recommendations to support students with disabilities at the university level?
The CDSS should provide books for students with disabilities, especially the blind students should be provided by their books in a Word format. For example, I have taught psychology to 4 blind students. The students have classified the book into four sections, and they convert them into a Word format so that they can convert it in Braille. In fact, I am unsatisfied with this, and blamed myself a lot because I have not asked them about this issue before.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

No, thanks.

(4)

FM4

Can you tell me a little about yourself, academic degree, specialization and age?
I'm Lecturer, Department of social studies, I have 10 years of experience in teaching.

What kind of disabilities of the students have you taught?
I have taught 5 students with visual impairment and 13 students with learning disabilities one of them had ADHD.

How do you evaluate your experience and knowledge in the types of disabilities?
I've a good knowledge in this field because I have taught a subject on the kinds of disabilities. Also, I read some books on how to deal with students with disabilities.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?
Yes, I have a good background about the reasonable accommodation fitting for different disabilities cases.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?
I have a student with learning disabilities always comes to me in my office hours to explain to her some lessons because she cannot perceive explanation unless it is face-to-face. Also, I give her less difficult questions in the exam than her colleagues; however, unfortunately she could not pass the exam. Also, I change the presentation assignments for the blind students to subjective assignments. Additionally, I gave all my lecturer and PowerPoint presentation a Word format to blind students. I also enlarge the exam paper to A5 for a student with visual impairment in my class.

Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?

Yes, I have, but I think there are disadvantages and downsides of the reasonable accommodation because it is a big burden on the faculty member to explain the curriculum in a way fits each case of disability, especially we are tight on time. Moreover, some students with learning disabilities asks too many questions and they ask questions out of topic.

Also, I don't like to send the exam to the CDSS because I'm afraid exams questions would be leaked or e-mails would be hacked and leaked. Thus, I asked them to inform me about the required modifications and adjustments. They told me that fonts should be enlarged.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I don't think so because it is unfair not to provide reasonable accommodation for them; however, this should be in appropriate way.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

Once, I asked one of the students to tell me what's in the PowerPoint slide, and she gave me the full answer. Her escort came to me after the lecture to tell me that she is blind but she has an awesome ability to memorize things after hearing it once. Further, the escort reads lectures to this blind student before they are explained by the subject Professor. Unfortunately, the CDSS did not provide me with her name at the beginning of the semester. Therefore, the most important is that how I can provide here with reasonable accommodation if I don't know any information about her disability or even her name.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Yes, I discuss the student with disabilities about their needs and the challenges they encounter in your lecture, especially when the CDSS provides me with detailed information about their cases and disabilities.

What kinds of disabilities are you prefer to teach, and why?

I have no problem to teach all kinds of disabilities; however, I can teach students with speech and language disorders only after attending a training course provides me with the required information about their disabilities and how to deal with them.

What do you think about teaching students with learning disabilities?

I see that it is a difficult process because the students with learning disabilities face difficulties in assimilating the explanation; thus, they clutter the rest of students. Further, I see the annoyance on the face of the rest of the students when the student asks a lot out of topic and moves a lot.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

In fact, I have dealt with them but I haven't benefited from them. They didn't provide me with enough information about the students with disabilities. I have asked them to develop a training course in sign language but they have yet to fulfill my request. I found that they had a lot of brochures printed in Braille, which are known as the University facilities such as libraries, printing and copying centres, entertainment centre, and mosque. Therefore, I took what can be useful for my students and fits their abilities.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

I believe that the answer would be vary depending on the student and the faculty member difference. Once, I met a student with mobility impairment in the elevator, and she was very excited and swearing at one of my colleagues. I asked her about the subject, and she told me that the professor does not take into account her disability. The professor asked her to conduct a search. The student told her that she suffers from mobility impairment. However, the professor didn't pay any attention to the student's case. For me, I told her that she seems to be smart and can perform a good research. Also, she can write, and reach the library with her wheelchair. I actually felt that she was not satisfied with my words, and then I spoke with my colleague about the student and she told me that the student is begging to get a degree without performing anything or doing any effort because she has a mobility disability.

There are some departments don't accept students with disabilities, what do you think?

There are policies and rules for each department; for example, some areas are not suitable for some types of disabilities. Another example, a student who has speech and language disorders is not fit to study at the kindergarten department. Also, they aren't allowed to study at the department of social policy because they are not fit to be a social worker with a disability; because the client must feel strongly mentor to tell him the problems and thus solve them.

From your experience, how do you evaluate the students with disability academically and educationally?

Their proficiency varies between very high and very low. Some of them depends on memorization and indoctrination, without understanding and assimilation.

Do you think students with disabilities suffer from psychological or personal problems?

Yes, I think some of them irritable, even if they encountered minor problems.

How do you see the relation between ordinary students and students with disabilities?

It is difficult to monitor and observe the students, but I think the relation between them is very normal. In the sense that ordinary students do not make their colleagues feel that they are disabled.

What are your recommendations to support students with disabilities at the university level?
The CDSS should develop training courses for faculty members. Also, the centre should coerce the faculty members to work as writers for students at the exam time because there are employees working as writers.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

I am a supervisor in the theater club and I have deaf students as participants in the club, and I think they perform their role in the play in a good way through using sign language.

Also, I mention that I have a blind student wanted to ask me a question in the office, so I said to her come to my office but by the elevator because it is easier; however, she refused and came with me on the stairs. She said that it was her first time to take stairs instead of elevator, and she didn't know that there are guiding plates written in Braille on the stairs.

Also, one of my distinctive students was blind, and she wanted to replace the presentation with a search; but I found that she is able to she is able to effectively perform the presentation in a cooperation with her colleagues, and she has already done so. and had displayed outstanding and got a high degree

I think I have affected them in a positive way.

(5)

FM5

Can you tell me a little about yourself, academic degree, specialization and age?

I'm Lecturer, and I have a master degree in social service, youth stage.

What kind of disabilities of the students have you taught?

I have taught blind students and students with learning disabilities.

How do you evaluate your experience and knowledge in types of disabilities?

I have excellent knowledge in this field, and I know this from the student herself.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?

Yes, I have a good background about the reasonable accommodation.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

The faculty member should develop and formulate questions in a way fitting the abilities of the students with learning disabilities. Moreover, the blind students should have their exam in Braille language.

The faculty member should provide an opportunity for the student to take advantage of the tools available for the classroom and clarify some of the programs that can serve them in conducting assignments research. For example, facilitating access to the site for King Salman Central Library, as well as providing them with the opportunity to participate in the clubs if the student wish that.

Also, the University should take into consideration conditions of the student health and the type of obstruction and give them all means to contact with faculty member, such as the Twitter in social communication, through e-mail and through the office hours.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

Firstly, talking with the student in the office hours in an individual interview.

Secondly, communicating with the Centre of disability support services at King Saud University and giving them the student data to examine the case of her disability. examining the conditions of the students' health to ensure the health reports are right, and this is an essential responsibility of the Centre of disability support services.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

I always provide a chance to talk with the students with disabilities about their problems and challenges through showing the strengths of which themselves have proven to meet these challenges while commending their efforts and encouragement and give them the opportunity to talk about some of the difficulties and some situations that they encounter in their daily lives. Also, I give them the chance to discuss their colleagues who do not have a health problem or specific disability to support and motivate them.

What kinds of disabilities are you prefer to teach, and why?

I do not mind to teach all kinds of disability; but I do not prefer to teach the students with learning disabilities; as I had previous experience with one of the students with learning disabilities. She needed a long time in reading the questions, and she needed me to explain carefully and slowly.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

No, I haven't. from my point of view, the university should provide a definition of this centre and the benefits it presents to the students with disabilities.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

No, I haven't. I don't mind to attend these training courses in the future.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

Each student has a different point of view from the other, and this is due to several reasons. Firstly, the extent of the student sensitivity, and secondly the way the professor deals with the student and the extent of how the student accept and coexist with reality of her disability. Also, the extent of how the students satisfies about her grades in the exams and assignments.

There are some departments don't accept students with disabilities, what do you think?
Each department has its own policies and rules; for example, some areas are not suitable for some types of disabilities. Another example, a student who has speech and language disorders is not fit to study at the kindergarten department. Also, they aren't allowed to study at the department of social policy because they are not fit to be a social worker with a disability. So, I prefer to allow them to study at other departments and find the appropriate alternatives; because the main goal is to support not to deny them. It is necessary to allow them to study at appropriate departments and appropriate disciplines. Most importantly, they mustn't be deprived of their right to education.

From your experience, how do you evaluate the students with disability academically and educationally?

The students with disabilities are different depending on the degree and kind of disability. They also differ according to their psychological readiness and family support for them. But I see that they have the perseverance to achieve their academic goals.

Do you think students with disabilities suffer from psychological or personal problems?

Yes, some of them irritable and have psychological problems because they are human being. The individual is affected by and affects those who around him. So, they are affected by certain circumstances they encounter when they need others to support them, listen to their problems, and help them in taking the right decision.

How do you see the relation between ordinary students and students with disabilities?

They cooperate and respect each other's in the classroom.

What are your recommendations to support students with disabilities at the university level?

Three basic things (kindness, confidence and moral support).

(6)

FM6

Can you tell me a little about yourself, academic degree, specialization and age?

I'm lecturer in the Department of educational planning and management.

What kind of disabilities of the students have you taught?

I have taught a student with ADHD.

How do you evaluate your experience and knowledge in the types of disabilities?

I've a good knowledge in this field because my child suffers from ADHD.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?

No, I don't have.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

Firstly, I must understand that her actions are not incivility because her behaviors make me remember my child who suffers from the same disease. I know that they are irritable and may behave and act in the classroom inappropriately. Also, when I explain the lecture, I find her speak loudly and she gives exasperating responses as if someone else will say that she is unrespectable, but I'm very patient with her and sensitive to the situation.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?
It is unfair not to provide reasonable accommodation for them.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

In fact, I did not provide the CDSS with any information about her. I also did not talk to the student about her case; as she herself should go to the centre so as not to collapse because she is convinced that she isn't disabled. That's because in our society, the individual would be unacceptable if she has some kind of disability.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

I have never discussed the student about her case. Also, she did not come to me to explain the difficulties she encounters in my lecture.

What kinds of disabilities are you prefer to teach, and why?

There is no difference between all kinds of disabilities, and I will do my best to receive them information. However, I prefer to teach students with mobility impairment. Further, it is difficult to teach students autism, learning disabilities, ADHD, mental retardation. because they need a great effort. Also, teaching the deaf students is also a difficult process because they need to use the sign language teaching. Additionally, I also see that the process of teaching blind students is likely to be more difficult.

What do you think about teaching students with learning disabilities?

It requires a very patient and experienced teacher. From my experience, I had a friend suffering from dyslexia. She hides this problem from everyone until she has gotten the master's degree. She hides her disease fearing from the people's perception of inferiority. Sometimes, I think my friend is stupid (sorry for the word); as she made efforts more than each of us in order to obtain a high degree.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

Once upon a time, I heard about one of the faculty members who was very interested in teaching the students with disabilities. She works in the centre of disability support services, and I also heard about how the university pays more attention to this Centre. Therefore, I went to the CDSS to consult her about a student with disability in my class.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

Issuing cards for the students with disabilities to facilitate the process of providing reasonable accommodation for them. that's because there are necessary reasonable accommodations in the University that they have to be provided with to facilitate their learning and teaching process.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I have attended training courses on how to deal with and teach students with disabilities, but outside the university.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

The world is still fine! I expect that the relation and interaction between the students with disabilities and faculty members is good.

There are some departments don't accept students with disabilities, what do you think?

I am with the rules that students with disabilities are not allowed to study at some department in the College of Education. For example, when I was a member in the admissions committee in the Department of kindergarten, we didn't not accept students who have a stammering and speech disorders. Also, we didn't accept the students who have mobility disorders and impairment because the child would acquire these problems when they become teachers.

However, I do not see that there is a problem to accept a student with a disability does not affect her career later, such as mobility impairment.

I think they can be accepted in the departments of computer science or college of community service. Nevertheless, I see that there is injustice in this matter because there are Saudis with disabilities have not been accepted in many Saudi universities, but they excelled in universities outside the Kingdom of Saudi Arabia, and there are many examples. One of the laws of the Saudi law, "Education is the right of every Saudi citizen." This law doesn't determine the state of the citizen health; thus, why some of students with disabilities are deprived of education because of their health conditions.

From your experience, how do you evaluate the students with disability academically and educationally?

From my experience, I don't think her conditions with the other faculty members are good.

Do you think students with disabilities suffer from psychological or personal problems?

The student who I have taught is introverted and has no self-confidence, because she acts without thinking, so she makes a lot of mistakes.

How do you see the relation between ordinary students and students with disabilities?

Generally, the relations and interactions between them is good and depends on respect, as it seems to me. Ordinary students always help students with disabilities such as they provide them with summaries. I expect that media plays a big role in this matter.

Particularly, the student with disability I have taught sometimes make strange actions, so the rest of students mock her actions in the classroom.

What are your recommendations to support students with disabilities at the university level?

Every student has the right to study at the university if she mentally sounds, especially if they have the rate of grades allowing them to enter the university like the rest of their colleagues. The students with disabilities should be accepted at the departments fit their cases, and where they can excel. We should not deprive them from life, if they are blind, we are their vision, and if they are deaf, we are their hearing sense.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

No, thanks.

(7)

FM7

Can you tell me a little about yourself, academic degree, specialization and age?

I'm lecturer in the Department of social studies.

What kind of disabilities of the students have you taught?

I have taught a blind student with movement disorders and ADHD.

How do you evaluate your experience and knowledge in the types of disabilities?

I've a good knowledge about the different kinds of disabilities because I have worked in a centre cares the students with disabilities outside the kingdom of Saudi Arabia for a period of 3 months.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?

Yes, I have.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

Regarding the student with ADHD, I worked on simplifying and facilitating the information so that the student can assimilate the topics. Also, I noticed that the student lose her concentration completely after an hour of beginning of the lecture, so she decided to leave the lecture. Therefore, I think she needs medication. Also, the students can't pass many subjects and I don't think she can graduate from the university.

Do you think there is some kind of reasonable accommodation is inappropriate for the university students with disabilities?

Some members make concessions to the students under the pretext that they have disabilities, and change the way the questions; for example, there should be a writer for the blind students to read questions for them; so why the questions are modified or changed? For me, I think because the student with disability reach the university education, so she must be equal with her students.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Regarding the student with ADHD, I have held a meeting with the supervisor, psychologist and an administrator from the CDSS. The student attended the meeting with us. We talked about the problems faced by the student, but what brought to our attention that she was refusing to answer any question regarding her family. We perceived that the student was wary of any contact between the university and the family.

What kinds of disabilities are you prefer to teach, and why?

I do not have a bias for a particular kind of disability; however, more importantly, the diagnosis of the disability should be clear to me so that I can determine their needs.

What do you think about teaching students with learning disabilities?
If the student has the potential to continue and receive information at the university, I do not mind to teach her.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

I have dealt with the CDSS only for the students with ADHD to discuss her case and needs.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I have never attended a course at the CDSS; however, I do not mind attending courses in the future. But I have experience in the field of providing services for students with disabilities as I have worked in a centre cares the students with disabilities outside the kingdom of Saudi Arabia

If we ask students with disabilities about their experience with faculty members, what their answer would be?

I don't know, but it depends on the student and the faculty member.

There are some departments don't accept students with disabilities, what do you think?

If the disability does not prevent the student to excel academically, so I see that she has the right to study and even to pursue graduate studies.

From your experience, how do you evaluate the students with disability academically and educationally?

From my experience, I have taught blind student, and she was excellent and memorize information quickly. Also, she was keen to deliver projects before the dead line and did not miss or be late for her exams. But the student who has ADHD is unlikely to be proficient. She has a lower academic level. I do not think she will pursue her university studies or descent a job after graduation because she cannot apply the theoretical aspects that she learned in the university.

Do you think students with disabilities suffer from psychological or personal problems?

The normal individual sometimes has psychological pressure, so let alone a person suffers from a disability all his life. The support by the community and the family certainly relieves their psychological pressure.

The student who I have taught was neglected by her family so I contact the CDSS to communicate her family because she needs more attention and cares for her external appearance; as her teeth need to be cured and she suffers for skin infections. Further, her clothes are not arranged or even clean enough. Indeed, the centre contacted with her parents and told me that the parents are very negligent and did not diagnose her case since her childhood. Also, I think she needs a psychiatrist.

What are your recommendations to support students with disabilities at the university level?
The university should provide students with disabilities with educational and recreational programs.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?
No, thanks.

(8)

FM8

Can you tell me a little about yourself, academic degree, specialization and age?
I'm lecturer, and I have the master of education in measurement and evaluation

What kind of disabilities of the students have you taught?
I have taught a group of deaf students and a group of blind students.

How do you evaluate your experience and knowledge in the types of disabilities?
From my experience in this field, I think I've good knowledge. The situation was difficult with the first student with disabilities who I have taught, but the CDSS helped me a lot.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?
Yes, but I know only the information sent to me by the CDSS.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?
It is true that the CDSS sends us the effective ways of how to deal with the students with disabilities from psychological and academic terms. But I'm trying to deal with the student according to her abilities without she feels because I do not want her feel as something different. I also give priority to students with disabilities in office hours to explain to them the subject and discuss with them the problems and difficulties the encounter in my lecture.

Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?

Yes, I have the ability to provide the reasonable accommodation because students with disabilities need support. But the problem in the consolidation in the sections because the department asks us to unify the questions. Once, I taught a section most of its students were deaf. This section contained 25 deaf students. There were 5 ordinary students who were proficient. But, the CDSS informed me to facilitate the questions, so the ordinary students became obtaining a higher grade.

Also, I was to explain slowly and re-explain information many times. Therefore, the ordinary students felt incessantly. In this case, the deaf students must be separated in a separate section division because their number is large. This important step enables the faculty members to explain information in appropriate way.

Also, we aren't not in favor of sending questions to the centre before the exam by a day or two, but we are sending the exam questions before the exam by an hour or two hours.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I do not think so; because conditions of the students with disabilities differ from that of the ordinary students. This means that no matter how I made the exam questions easier for them do not get the grade A, but only two students.

What kinds of disabilities are you prefer to teach, and why?

I prefer blind students more than deaf students; because while explaining to deaf students, the lecturer is committed to the sign language specialist. Sometimes the specialist delays and we lost lecturer time. also, the linguistic level of the deaf students is lower the normal. So, it is difficult for me to recognize and distinguish the terms I use in my explanation. Also, the deaf students sometimes ask me about known simple terms and expressions.

What do you think about teaching students with learning disabilities?

I have never taught students with learning disabilities; thus, I can't judge.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

I communicate with them via e-mail only. I have a good experience with the CDSS, but unfortunately, they do not provide me with reports or information that there are students with disabilities in my section only after the beginning of the semester by a long time. For example, I sometimes talk to the escort as she is the student and this is an embarrassing thing for me and for the student.

Also, I faced some problems with a blind student because the CDSS provided me with information showing only that the student is blind, but I found later that this blind student suffers from many other health problems. This blind student has problems in the bone, back, anemia and severe anxiety. Thus, if the CDSS provided me with such information, I would change her project with something fitting her case.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

The Centre provides us with the types of reasonable accommodation available for each disability.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

The Centre develops simple training course that aren't suitable for us as faculty members.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

Frankly, I can't judge.

There are some departments don't accept students with disabilities, what do you think?

I have never been satisfied with this issue. I felt sorry when I heard some of my students with disabilities talking about their aims to study in some medical departments. Actually, I don't know why they aren't allowed to study in all departments, especially many of them are smart and studious. However, some departments are actually inappropriate for students with disabilities such as the department of psychology.

From your experience, how do you evaluate the students with disability academically and educationally?

In general, the ordinary students are more proficient than the students with disabilities, and they can perform much better in all exams. For example, I have taught about 8 blind students. Most of them were good and two of them were excellent and got high grades in the exams. For me, the deaf students are more proficient than blind students.

Do you think students with disabilities suffer from psychological or personal problems?

The students with disabilities are kept themselves to themselves, and I don't notice any interaction between them and their colleagues. I have encountered a student who have been crying a lot because she is suffering from family problems, but the rest were normal.

How do you see the relation between ordinary students and students with disabilities?
I think the relation between these students with disabilities and ordinary student are normal, but I did not see a relationship of friendship between them. I also didn't notice that they talk with each other's outside of the classroom, so I do not see that the integration achieved its objectives.

What are your recommendations to support students with disabilities at the university level?

- The faculty members need more knowledge in this field.
- Raising the awareness of the ordinary students that their colleagues with disabilities need a special treatment; for example, they have the right to get an alternative exam...etc.
- I hope that the Centre develop training courses through using video materials and send them to the faculty members who have students with disabilities in their classes.
- I wish that integration achieves its objectives because the students with disabilities are still kept themselves to themselves.
- I wish that the university give them the chance to study at the departments they desire; because they are first and foremost human beings and their tendencies and ambitions.

(9)

FM9

Can you tell me a little about yourself, academic degree, specialization and age?
I'm Assistant Professor.

What kind of disabilities of the students have you taught?
I have taught students with learning disabilities, students with ADHD, blind students and students with mobility impairment.

How do you evaluate your experience and knowledge in the types of disabilities?
I have a good knowledge about the different kinds of disabilities because I teach the subject of special needs care.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures? What are its disadvantages?

The advantages are more than disadvantages.

However, the disadvantages include the following:

- The students with disabilities have their exam in the CDSS, and this is very difficult for the faculty member; because if the student need to ask a question, the professor has to go to the centre, even she is far from the position of the centre. Also, if we talk with student via mobile, there would be misunderstanding. In fact, this may be true for the blind students because the need to write in Braille language. But, I don't prefer that the same thing is true for the rest of disabilities.
- The students with learning disabilities sometimes want their colleagues not to know their problems; however, the Centre calls her to do the exam in the CDSS, and this causes embarrassment to the student.
- The Centre informed me that the questions for the students with learning disabilities must be objective. However, the objective questions are sometimes more difficult than the essay questions. For example, I have a student with learning disabilities had a higher

degree in the essay questions more than the objective questions.

- The Centre enforce the students with disabilities to have their exam in the Centre. Also, it doesn't give the faculty member the chance to do what she sees to fit her students.
- For example, I put the student with learning disabilities in front of the board during the monthly exams because she has attention deficit disorders; however, she had higher grades. But when the university took the decision that all students with all kinds of disabilities should have their exams in the centre of disability support services (CDSS), her proficiency became lower and she got lower grades than before.
- Also, one of the blind students have a problem with her fingers; so, I had to test her verbally, and she got a very good score. But when the university took the decision that all students with all kinds of disabilities should have their exams in the centre of disability support services (CDSS), her proficiency became lower and she got lower grades than before. I told the specialists in the CDSS that she cannot write and, so I want to test her verbally. I was impelled to test her editorially because I didn't want to cause harms and problems to myself. I believe in the reality that I have to help all students, especially the students with disability, but at the same time I want to protect myself.
- I also don't guarantee the confidentiality and secrecy of the exam because the CDSS asks the faculty member to send the question before the exam by two or three days. Therefore, I don't guarantee that the exam would be leaked. For example, one of the CDSS supervisors helped one of my students in answering the test questions, therefore, she got a very good score. But when the supervisor was changed, the same student got pass score and didn't pass the other subject.
- During lecture, I can't concentrate with the student with disability although the Centre informed us to do that. That's because I have a large number of students in my section which sometimes reaches 40 students.
- Integration is an effective way but, in the case, that the time of the lecture should be 3 hours instead of 2 hours.
- Also, I expect that the Centre causes problems to the students; however, they believe that the take care of the students' interests.
- Also, one of the students with disabilities came to me in a deplorable condition to tell me that all records of lectures have been damaged and I don't know what I have to do. unfortunately, this student didn't pass the exam, and felt bad because of this matter.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

At the beginning of the semester I tell all students that their colleague has a disability and she need a special treatment. You shouldn't compare yourself with her. In contrary, it is unfair to deal with them in special way differs from that of their colleagues.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Yes, I do so during my office hours. I appointed one of my students to be assistant to all students with disabilities. She helps them in revisions and the presented information in the lecture.

What kinds of disabilities are you prefer to teach, and why?

I prefer to teach students with mobility impairment. I don't prefer to teach the sensory disabilities such as the blind and deaf students due to the difficulty in communicating with them. they always need a sign language specialist.

What do you think about teaching students with learning disabilities?

I don't prefer to teach the students with learning disabilities because they need specialist as well as it's difficult to teach them in our department.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

Yes, I have dealt with the Centre of disability support services (CDSS) during the periods of exams. They make us work as writers to the students although there are employees in the centre their job is to be an escort for the student. How to write for the student and I teach her the subject. The problem is that the administrative employees in the centre don't understand the subject and they can't answer any questions asked by the students. Therefore, this system must be changed because when the lecturer writes for the student, some signs show that the answer is wrong, thus the student change her answer.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

They pay more attention to the students with disabilities.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I have never attended any training course in the CDSS. I hoped that I got a training course in the centre to know how to effectively deal with my students who have learning disabilities because I encountered difficulties whilst dealing with her.

The Centre only sends us via email and mobile messages about the strategies that should be used with students with disabilities. Some specialists at the Centre were contact with me permanently, and others don't.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

It is varying from person to another. The faculty member who collaborate with the ordinary students would be more collaborating with the students with disabilities.

There are some departments don't accept students with disabilities, what do you think?

Our department allows the students with disabilities to study sociology, but they aren't allowed to study social working; because the social worker must be healthy so that she don't arouse pity of the customer.

From your experience, how do you evaluate the students with disability academically and educationally?

Unfortunately, all of them have a lower proficiency. This may be because our department is very difficult.

Do you think students with disabilities suffer from psychological or personal problems?
The student who has learning disabilities has always come and cried that she is enforced to study this department. Also, she doesn't want anyone to know that she has learning disabilities but the Centre make this thing clear to everyone. Regarding the blind student, she also was crumbling and hospitalized if she got a lower grade. Also, I have one of my students whose shyness is abnormal.

The problem arises when they are taught the subject of special needs care because they are very sensitive. Students with disabilities are generally kept themselves to themselves. Once, I developed an activity for all students with disabilities in my class as they have to go to the CDSS, work collectively and have the breakfast. It was a good idea, and I intend to do it again. Also, I think the more isolated group is the deaf one.

- How do you see the relation between ordinary students and students with disabilities?
I see that the relations and interactions with each other are good. They pay more attention to each other's and help them. Most importantly, they don't look to them with a pity. This is what happens in my class, but I don't know how they interact and deal with each other's outside the classroom.

What are your recommendations to support students with disabilities at the university level?

- The faculty members need extra time to explain the subject for the students with disabilities.
- Reducing the number of the students in the section containing students with disabilities to enable the faculty member concentrate with the student with disabilities. That's because the lecturer can't pay more attention to the students with disabilities during the lecture if there is a large number of students in the classroom.
- The faculty member should be allowed to deal with the student with disabilities freely to determine what is more appropriate for the students. The faculty member shouldn't be committed to specific strategies or rules regarding her teaching the students of disabilities. The way of dealing with two students with the same disability sometimes differs from one time to another due to their conditions.
- The students with disabilities should have the ability to choose the place where she desires to have her exam. She has to choose to have her exam in the CDSS or with the rest of her colleagues. If the university wants to apply integration and accommodation, so why they are isolated in the exam.
- I wish we get training courses on sign language in order to integrate the deaf students with us because they are very kept themselves to themselves.
- The centre of disability support services should pay more attention to the issue of the escorts through developing training courses for them and selecting them according bases to specific standards.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?
No, thanks.

(10)

FM10

Can you tell me a little about yourself, academic degree, specialization and age?
I'm lecturer in the department of social studies.

What kind of disabilities of the students have you taught?
I have taught a group of deaf students, blind students, students with learning disabilities and students with hearing impairment.

How do you evaluate your experience and knowledge in the types of disabilities?
I think I've a good knowledge in this field because I teach the subject of special needs care.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

In fact, the initiative to provide the reasonable accommodation was from the centre of disability support services (CDSS) not from me. The CDSS informed me that their students with disabilities in my class and the methods and strategies that are fit to them.

The mother of the student with hearing impairment attended to me at the beginning of the semester and provided me with important information about her daughter's case. Her mother recommended that her daughter shouldn't set next to the door so as not to be troubled with the external sounds. She also recommended me to explain in front of her daughter because she can read the lips. Therefore, if her mother didn't provide me with this information, I hadn't known many things about the student's case and dealt with her in a wrong way.

Regarding the blind students, I changed the exam method and strategies in a way fit to her case. I sometimes tested her verbally, and she worked harmoniously with her colleagues in groups.

Regarding the student with learning disabilities, I changed the way of asking questions. I also did not introduce her into group work because it was difficult for her to work with the rest of the students.

Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?

I don't think reasonable accommodation has any disadvantages.

Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?

Frankly, I don't think so.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I do not think so; because the students with disabilities make more effort than the ordinary student to get the scientific material.

What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?

This didn't happen with me. But it happened with one of my colleagues that the CDSS didn't inform her that there is a student with learning disabilities. Fortunately, I taught this student; therefore, I asked my colleague if she would change the questions for this student. I found my colleagues surprised that she didn't know that there is a student with learning disabilities in her classroom.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

My students did not come to discuss with me the problems they encounter in lectures. But I am a supervisor of the talented student program. Among the students, I have a blind student who has been persistent and defiant of all obstacles. She is independent and loves to do everything by herself.

What kinds of disabilities are you prefer to teach, and why?

I prefer to teach blind students due to their proficiency and diligence.

What do you think about teaching students with learning disabilities?

From my experience, I do not know how to teach students with learning disabilities. I have taught two students with learning disabilities, and I have been tired a lot with them. One of them was very emotional and irritable, and she answered unanswered questions so that the room would get over the laughing. Some students would have mercy on her, and others would make fun of her. Most importantly, some students refused to work with her in a group.

The other student was too shy to the fear. I think the students with learning disabilities are not appropriate for our department and do not have the required skills because it requires the student to face the public.

Have you dealt with the centre of disability support services (CDSS)? If yes, describe your experience with them? Are they collaborators?

Yes, the centre is the most appropriate place for the students with disabilities. The employees in the CDSS are helpful, kind and very close to the students.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

The Centre is very keen on the students and pays more attention to their interests. It always communicates with us via e-mail to provide us with all information about the students with disabilities and how to deal with them. It also supports students not only from the academic side but also from the social side.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I did not attend and did not receive an invitation from the Centre to attend a course. But I attended an off-campus course on disability provided me with the strategies and methods of how to deal with the different kinds of disabilities. I like to work in this field (disability), and it is one of my concerns.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

The talented blind student who I taught told me about two faculty members who had a positive influence on her and she wished to be like them one day in the future.

There are some departments don't accept students with disabilities, what do you think?
The social worker must be healthy, so it is difficult for a student with disabilities to train or work in hospitals or schools. That's because the books of our specialization indicate that when the person goes to the social counseling, she must be sound so that the client does not feel that the social worker in front of him needs more help.

From your experience, how do you evaluate the students with disability academically and educationally?
There are talented students and the weak students.

Do you think students with disabilities suffer from psychological or personal problems?
The blind students have high self-confidence, wear the best clothes, put on make-up powders and laugh with their classmates. The deaf student has no psychological problems and completed postgraduate studies.
However, I felt that one of the students with learning disabilities has psychological and personal problems such as irritability and strange movements in her face. She also spoke and talk out of the topic so that the of the rest students laugh at her. Sometimes, while I explain the lecture, she screamed saying I feel a headache, I felt a headache, I will get out of the lecture. The other student with learning disabilities doesn't have a self-confidence and doesn't like to read. Therefore, the university held a meeting with her mother and she seemed a very dominant mother, and told us that she neglected the student in her childhood because she was taught and sometimes found the effects of beating in her head.

What are your recommendations to support students with disabilities at the university level?
- As a faculty member, I need a training course provides me with information about the students with disabilities, and educates me how to deal them.
- Providing books in the Word format.
- The university should appoint distinguished graduates with disabilities in the university.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?
No, thanks.

(11)

FM11

Can you tell me a little about yourself, academic degree and specialization?
I am Assistant Professor, Department of Kindergartens.

What kind of disabilities of the students have you taught?
Visual impairment (severe visual impairment).

How do you evaluate your experience and knowledge in types of disabilities?
My knowledge is very limited, so is it possible to explain it to me?

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?
No, not much.

<p>From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?</p> <p>I read the questions in the test and enlarge the test paper.</p>
<p>Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?</p> <p>Yes, sure I have the ability to do so, and I do not think reasonable accommodation has disadvantages.</p>
<p>Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?</p> <p>I have no answer.</p>
<p>Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?</p> <p>Of course not, because it fair to provide them with all kinds of facilities. It's unjust to deal with students with disabilities by the same way of dealing with the ordinary students. it is unfair to equal them with the rest of students.</p>
<p>What are the steps that you follow if you feel that one of your students has some kind of disability, and you haven't been notified by the Centre of disability support services (CDSS)?</p> <p>I talk with the CDSS about the student with disabilities, as well as I ask the student about her needs.</p>
<p>Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?</p> <p>Yes of course.</p>
<p>What kinds of disabilities are you prefer to teach, and why?</p> <p>Of course, everyone has the right to learn</p>
<p>What do you think about teaching students with learning disabilities?</p> <p>I have never had that, and I expect it to be an easy challenge. Most importantly, I should first read about teaching students with learning disabilities.</p>
<p>Describe your experience with the centre of disability support services (CDSS) at your university. Are they collaborators?</p> <p>I had already dealt with them, and they delayed minutes in delivering the student's test, making the student tense and worried.</p>
<p>What kind of support does the CDSS provide to the students with disabilities, students learning disabilities and faculty members?</p> <p>In fact, I don't know.</p>
<p>Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?</p> <p>I did not attend because no one notified or informed me to attend such training courses.</p>
<p>If we ask students with disabilities about their experience with faculty members, what their answer would be?</p> <p>It is difficult to generalize.</p>

How do you see the relation between ordinary students and students with disabilities? She always sat alone.
What are your recommendations to support students with disabilities at the university level? Providing facilities for them and giving them extra time to freely communicate with the professor of subject and discuss the difficulties and problems they face in her lecture.
(12) FM12
Can you tell me a little about yourself, academic degree and specialization? I'm Assistant Professor of Fundamentals of Education (Kindergarten).
What's the kind of disabilities of the students you have taught? Most of students with disabilities I have taught were blind, and there was only one mobility-impaired student.
How do you evaluate your experience and knowledge in types of disabilities? I have good knowledge in this field, because in the subjects of our department we always address the kinds of disability.
Do you have knowledge in reasonable accommodation fitting for different disabilities cases? What does reasonable accommodation mean?
From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures? I have a student with mobility impairment. She comes from the hospital and have to come late by a full hour after the beginning of the lecture due to his mobility impairment. Therefore, I give her my papers and summaries of each the lecture.
Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities? I do not think so; because the reasonable accommodation is in the best interest of the student.
Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think? I do not think that's true, everyone has capabilities.
Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture? Yes, I always do that, sometimes they come to me to talk about some difficulties and complaints from outside the topic of the lecture.
What are the kinds of disabilities that you prefer to teach, and why? I do not mind teaching all kinds of disability.
What do you think about teaching students with learning disabilities? I do not prefer to teach students with learning disabilities and who have problems with their mental abilities and perception.

Describe your experience with the centre of disability support services (CDSS) at your university. Are they collaborators?	I have communicated the Centre since the beginning of its establishment. In fact, I was very happy because the students were unable to find anyone to help them.
What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?	They provide excellent support such as transportation, academic supervisors, psychiatrist and social workers. It also provides a better classroom where the students with disabilities are tested.
Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?	No, I have never attended these training courses, but if time permits, I will attend.
If we ask students with disabilities about their experience with faculty members, what their answer would be?	There are collaborator faculty members and there are hard faculty members.
There are some departments don't accept students with disabilities, what do you think?	I think they shouldn't be accepted if the department requires a strong effort such as the departments of the Faculty of Education, because the teachers need to make great effort and to be more patient. I think that students with disabilities are more prominent in the professional and technical department.
From your experience, how do you evaluate the students with disability academically and educationally?	They are very good, but they make efforts more than doubling the rest of the students. There are smart and studious students; for example, I met, by chance, one of the blind students after years of her graduation, and she is a data entry employee.
Do you think that students with disabilities suffer from psychological or personal problems?	Yes, they are very irritable, agitated and sensitive.
How do you see the relation between ordinary students and students with disabilities?	They deal with each other with mercy and compassion. But there is a point that bothers me very much; as sometimes ordinary students write assignments and work projects instead of students with disabilities, and put the names of students with disabilities, believing that they are helping them. I am willing to give the student with disabilities of my time and effort but in case she performs her assignments and projects with herself.
What are your recommendations to support students with disabilities at the university level?	I hope that the university will give students with disabilities the chance to take part in seminars and courses, or to be a celebration organizer. I hope that they will participate in all activities and events.
Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?	No, thanks.

(13)

FM13

Can you tell me a little about yourself, academic degree and specialization?

I'm Associate Professor, Educational Management and Planning.

What's the kind of disabilities of the students you have taught?

I have taught a student with mobility impairment and two deaf students.

How do you evaluate your experience and knowledge in types of disabilities?

I have good knowledge in kinds of disabilities, and I'm able to effectively deal with them because I worked with the Universal Access Program (Centre for People with Disabilities) which is based on the supervision of all students with disabilities.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

The student with mobility impairment was not in need of reasonable accommodation like the other students with disabilities. The deaf students attended the lecture with the sign language specialist. The specialist was very excellent and I did not feel that she attends the lecture. I did not protest to change the method and strategies of questions for the students with disabilities because their mental abilities are great. In contrast, the students with learning disabilities needs a long time to write and to facilitate questions of the exam.

Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?

Some faculty members may delete part of the scientific material, but I see that it is not permissible for the university student to graduate and the scientific outputs less than her colleagues. However, the lecturer can classify the scientific material especially for the student with learning disabilities because they may be scattered and forgotten and tested in each part, for example, she is tested 6 times and her friends 3 times.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

I do not think there are differences between the ordinary students, and we treat each student in a different way, so how the student with disabilities!

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

Frankly, I didn't do that.

What do you think about teaching students with learning disabilities?

It is very difficult to teach students with learning disability. there are many of them whose case isn't diagnosed.

Describe your experience with the centre of disability support services (CDSS) at your university. Are they collaborators?

Yes, I work as a consultant in the college and among the topics I work on is the centre of disability support services (CDSS). The centre is emerging and still in its infancy, and has not been effective in the last two years. But I think it started to be effective since the beginning of this year.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

They provide many services including the academic support such as subject's registration, test supervision and social guidance.

How do you see the students' attendance at the centre of disability support services (CDSS)?

There is a large attendance at the centre, but some students may be reluctant to present themselves to the centre, which may be for several reasons as following:

- The student does not know about the centre's services.
- She may have got a sensitive situation in the centre and you know that this class is very sensitive. Also, the location of the centre may be far from the college where the student is studying, especially since the university is vast and its buildings are very far apart.
- The faculty members don't encourage or motivate the students with disabilities to present themselves to the centre and benefit from its services.
- The student may be afraid of showing her disability because during registration there is a box to ask the student, do you have a disability? I think that many students with disabilities do not explain their disability because they are afraid of not to be accepted at the University. further, they continue to hide their disability.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

I noticed that there were meetings, not courses, but I did not attend any of them. the Centre develops courses for the centre staff more than providing courses for faculty members; because they are still developing and improving their professional skills.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

I do not know, we are still at the beginning.

There are some departments don't accept students with disabilities, what do you think?

In recent years, the number of female students in each Faculty of Education has decreased significantly in order to meet the requirements of the labor market and to act as a teacher.

Now, the students who are studying at the Faculty of Education are those who did not show up their disability during the registration, or did not believe they were accepted. The number of the student with learning disabilities studying at the University is the largest. Most of them study in the community college and obtain a diploma after studying for two years.

From your experience, how do you evaluate the students with disability academically and educationally?

All students with disabilities are good because they are mentally complete. But we can note the academic weakness of the students with learning disabilities because they suffer from learning troubles in the connection between letters and sounds, inability to blend sounds to make words, confusing basic words when reading.

Do you think that students with disabilities suffer from psychological or personal problems? They have a sense of inferiority because of the looks of others. They may have social withdrawal.

How do you see the relation between ordinary students and students with disabilities? Their relations and interactions were normal, and they had a friendship.

What are your recommendations to support students with disabilities at the university level? The most important thing for the faculty members is to understand how to deal with the students with disabilities; as we should not look to them with a pity. We should treat them as ordinary people.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about? No, thanks.

(14)

FM14

Can you tell me a little about yourself, academic degree and specialization?

I'm Lecturer, social studies, and this is the first term for me.

What's the kind of disabilities of the students you have taught?

I have taught a blind student.

How do you evaluate your experience and knowledge in types of disabilities?

I do not have an in-depth knowledge, but I do have a general knowledge; because we have a curriculum that we teach students about disability.

Do you have knowledge in reasonable accommodation fitting for different disabilities cases?

Can you explain to me what the reasonable accommodation is? (after explanation) Yes, I have knowledge about it.

From your experience, what is the type of reasonable accommodation you have provided to your students with disabilities during lectures?

At the beginning of the semester, the centre sends me the strategies of teaching the student with disabilities. The student was attending with her escort. I would have offered an alternative formula for the exam instead of oral editing.

Being the first and the only student with disability I teach, I face some difficulties in applying the recommended teaching ways by the Centre. That's because in the explanation, I use a lot of visual aspects such as images and video, and since the student is blind, it will be difficult for her to engage with us in the explanation and at the same time should not deprive the rest of the students of this method of teaching. Therefore, I avoided embarrassing the student by asking her about the things I explained at the beginning of the semester. She began to withdraw from participation, and I began to explain every picture I present in general without talking to her so as not to feel difference. Indeed, the student began to respond and engage in the lecture explanation with me. I see that she became more motivated to understand and assimilate what I explain in the lecture.

Do you have the ability to provide reasonable accommodation? what are the advantages and disadvantages of providing it?

Yes, I hear from my colleagues so much that some students use their disability as a kind of begging for additional grades, postponing the test, reducing subjects and changing the strategies of questions in the exam. There is no mind to provide the reasonable accommodation taking into consideration the case of a student with disabilities in view of the fact that she is a university student and must receive good educational outputs to meet the requirements of labor market.

Do you think there is some kind of reasonable accommodation inappropriate for university students with disabilities?

It's ok if it's reasonable. I asked a lot of my colleagues about how to deal with and teach my student with disability. They gave me advice on how to deal with the student I teach, and I think everyone understands this issue.

Some say that providing the reasonable accommodation for students with disabilities gives them an unfair opportunity with the rest of the students, what do you think?

Yes, it sometimes happens unintentionally; for example, the student who I tested her orally was asking me some of the questions I ask. I was subconsciously closer to her answer; for example, I tell you this information in the certain day of the certain lesson. If these answers were close to the ordinary students, they would certainly get higher grades.

Do you discuss the student with disabilities about their needs and the challenges they encounter in your lecture?

At the beginning of the semester, I told the student that I would be in the office if she needed me to answer her questions or had a problem in the classroom. But the student came to talk about problems with her family and did not talk to me about the challenges she encountered in the lecture.

What kinds of disabilities are you prefer to teach, and why?

In fact, we lack qualification in dealing with the student with disability, because I have had great difficulty in teaching the blind student. Also, I do not think I can work with students with learning disabilities or even any other disability. Generally, I think the situation with deaf students is less difficult than teaching blind students.

What do you think about teaching students with learning disabilities?

In previous years, I taught a student with disability when I was assisting the professor, I tried to teach her and, frankly, I did not feel difficult, perhaps because the explanation was face to face, but I did not experience teaching students with disabilities in a classroom full of students.

Describe your experience with the centre of disability support services (CDSS) at your university. Are they collaborators?

Yes, I have dealt with them. They sent me the ways and strategies of how to deal with the student and the appropriate ways to provide her with the appropriate reasonable accommodation.

What is the kind of support provided by the CDSS for students with disabilities and learning disabilities and faculty members?

There are social workers who communicate constantly with the student's family, and there is also a medical team.

Have you attended the training courses developed by CDSS about teaching the students with disabilities? why? Why not? And how far are you willing to attend such courses in the future?

No, I have never attended training courses developed by CDSS, and I do not think they offer training courses.

If we ask students with disabilities about their experience with faculty members, what their answer would be?

It is difficult to give an answer; because it varies from person to person.

There are some departments don't accept students with disabilities, what do you think?

I see that they have the right to study at the departments they desire, especially students with learning and mental disabilities, even a little so that they can meet requirements of the labor market.

From your experience, how do you evaluate the students with disability academically and educationally?

From my experience, the student is socially active, but she needs to work hard to develop her skills academically.

Do you think that students with disabilities suffer from psychological or personal problems?

The student I have taught was social and loved to participate and engage in lecture with the rest of students, but I think most of them are isolated and kept themselves to themselves outside the hall.

How do you see the relation between ordinary students and students with disabilities?

It varies depending on the personality of the students. There were students welcomed the blind student and helped her in many things. However, there were students do not want to work with the blind student in the group projects.

What are your recommendations to support students with disabilities at the university level?

Ordinary students and students with disabilities need rehabilitation and training. The Centre should select the escort and developing courses for them. The selection should be according to specific rules and criteria.

Are there any other points regarding the provision of reasonable accommodation at the University you want to talk about?

No, thanks.

Appendix M: Transcripts of the SWD and SLD Interviews

- 1: Learning Disability
- 2: visual impairment (blindness)
- 3: visual impairment
- 4: physical impairment

(1)

Fatimah-1*&4*

QUESTION

Can you tell me a little about yourself?

I'm Fatimah. I suffer from Multiple Sclerosis. It causes damage to the nerves as I cannot walk properly. I also suffer from Attention Deficit Hyperactivity Disorder (ADD). I faced some difficulties in studying but the centre of disabilities support and service helps me and provides me with a lot of services.

What's your field of study?

I study at the department of Kindergarten. I was graduated 2 weeks ago.

What did you take into consideration when you decided to complete your higher education?

I had no desire to complete my education unless my parents pushed me to complete my education; so, it's my parents' desire.

Why did you choose to study at this University?

It's one of the most important universities in Arab world, so when I was accepted to it, I didn't search for any other university.

Why did you decide to study this major?

Because I love children

What do you wish you had studied?

There is no.

How did you adapt to university life? What helped you? What didn't help you?

My colleagues helped me in my university study, but there are some faculty members who don't provide assistance to the students with disabilities, and they don't provide reasonable accommodation for me so that I failed to pass their subjects. They don't perceive our cases.

Did you explain your difficulties to the centre of disability support services at your University? What assistance did you receive?

Yes, they provided me with the support and services, and they asked me not to talk with faculty members about my case because it's their mission. Since then, I didn't fail in passing any subject.

When did you know the centre of disability support services at your University? And how?

One of my colleagues helped me to know everything about the centre and the services it provides. I communicated with them and they were so collaborating with me. They helped me in studying some subjects.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

There were some faculty members didn't perceive our case and they didn't pay attention to the differences between the students with disabilities and ordinary students. On the other hand, some of the faculty members perceived my case and they knew that I suffer from Attention Deficit Hyperactivity Disorder (ADD); thus, they provided me with summaries of the curriculum to facilitate my studying.

What comes to your mind when you remember the past years at university life?

Nothing to remember now. I was graduated and I hope to start new life.

Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?

The faculty members should be provided with training courses preparing them how to deal with the students with disabilities.

- Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(2)

Amani-(2)

QUESTION

Can you tell me a little about yourself?

I'm Amani sixth level, Department of Special Education, Learning Disability. I'm a member in some voluntary associations and students' consultant centre. I have several talents including speech, writing poetry, thoughts and stories. My colleagues called me the poet of centre of disability support and services.

What did you take into consideration when you decided to complete your higher education?

I decided to study at the department of special education because I seek to establish a centre for individuals with disabilities which will help the individuals with disabilities to be adapted with others in the community. I will equip it with advanced technologies and techniques in order to serve all types of disabilities. I hope also to complete my master and have Ph.D. in special education.

What is the nature of your disability?

I am totally blind since my birth because of retinal detachment.

What do you wish you had studied before your studying at the department of special education?

I preferred languages and translations, I knew that a totally blind student studied at the department of languages and translation; but unfortunately, I wasn't accepted at department of languages and translation; so I talked to the department director who told me that they are not able to make the effort they made with my colleagues.

Why did you decide to study this major?

Because I prefer English language since I was at the secondary education. I also have the ability to effectively study English language. Also, there was a responsible who told us that it's better for the totally blind students not to study at the department of languages and translation. Is not the blind can study like an ordinary student? There is a technical assistance that helps the blind students to transfer their writings into word advice translation.

What did you like most about your university study?

There are things that I liked and preferred such as the voluntary clubs, on the other hand, there are also things I don't like. The things I don't like including that some faculty members use projectors in the lecture and they don't perceive my case as a blind student. They ignore me. The professor asks ordinary students about thing presented in projector and ignores me. I hope that the curriculum is provided in Word Microsoft because the escort writes the all word said during lecture. Some professors ask me about a lecture that the escort didn't write.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

I did not find any response from members or the university administration.

How did you adapt to university life? What helped you? What didn't help you?

When I was at the preparatory year, I was a member at student consultant team and I adapted with them and their work. I was the only blind student in this team. I actually experienced many useful things helped me to know how to adapt the university life. The voluntary associations helped me a lot and provided me with capabilities of how to adapt with the ordinary students.

When did you know the centre of disability support services at your University? And how?

In the first day of my study at the university. Each member of the (CDSS) presented herself. Later, we explained our complaints to the director and she was collaborating with us.

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

The centre of disabilities support and services provides several courses including language courses and computer courses such as ICDL. Also, they provide us with guidance courses and self-development courses. We still need the (CDSS) to help us to be provided with reasonable accommodation.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

There were some faculty members didn't perceive our case and they didn't pay attention to the differences between the blind students and ordinary students. Some of the faculty members are collaborating. They really did their best for us especially during the last two years. They perceived our situation as blind students and they showed that they have the willingness to effectively provide reasonable accommodation for the students with disabilities. There was a faculty member who perceived my case and provided me with an exam differs from the other students' exams. The exam was considered as a conversation in order to be fit for my case a blind student. There is always a negative side and a positive side, but the positive sides are always less.

<p>How was the reasonable accommodation during exams?</p> <p>I didn't have my exam at the centre of disabilities support and services; I have my exam with the ordinary students. I faced many difficulties and problems during exam. I decided to have my exam with the ordinary students in order to feel that I'm look like them. When I have my exam with them, I can read and write without help. But when I need the supervisor to clarify anything, she takes long time to reach me.</p>
<p>Do they provide you with an extra time?</p> <p>Yes, they do. I needed extra time in the beginning of my study; but now I finish my exam during 1.5 hours.</p>
<p>What comes to your mind when you remember the past years at university life?</p> <p>Actually, I will miss my participation in the voluntary associations and student consultant centre.</p>
<p>Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?</p> <p>I suggest that there shouldn't be one centre for all colleges, but each college has to have its own centre of disabilities support and services. I hope also the officials to provide curriculum in word in order to be able understand the lecture like the rest of students. We need also a library with valuable sources of knowledge. The researchers should provide their researches, papers and studies in Word Microsoft in order to develop an electronic library useful for the students. The faculty members should be provided with training courses preparing them how to deal with the students with disabilities and blind students. Development of all University signs to be in Braille so that we can easy navigate at the university.</p>
<p>- Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.</p>

(3)

Maryam -2*
Questions
<p>Can you tell me a little bit about yourself?</p> <p>My name is Maryam I studied at the department of Special Education, Learning Disabilities specialization. I graduated from the university two weeks ago.</p>
<p>What is the nature of your disability? When did you become disabled?</p> <p>I'm completely blind since birth due to retinal detachment.</p>
<p>What did you take into consideration when you decided to complete your higher education?</p> <p>I took into consideration that I would inevitably face difficulties and problems during my university education because I decided to complete my university education at King Saud University which lies in Riyadh and I'm from Jizan city and the distance between Riyadh and Jizan is about 1200 kilometers. I took this decision because King Saud University provides all required services for the students with disabilities, while this is not available at the university in the city where I live. Also, I wanted to do something makes me and my family proud and bright. As a blind student, I took into my consideration that I would face challenges, but I did my best to overcome all of these challenges.</p>

Why did you choose to study at this University?

You actually know that the students with disabilities are exempt from aptitude tests. The online registration portal of Jazan university doesn't permit the students to complete registration without finishing aptitude test. This means that Jazan university isn't prepared to receive students with disabilities. That's why I decided to study at King Saud University which provides many different facilities for the students with disabilities. Also, King Saud University has a centre of disability support services (CDSS). This centre has a significant experience as a social foundation working for disabled individuals for almost 30 years. Finally, there are students with disabilities who graduated from King Saud University and taught us during pre-university education.

Why did you decide to study this major? What do you wish you had studied?

In the beginning, I didn't want to study at the department of Special Education because my ambition was to study at the College of Languages and Translation, but it stipulated the integrity of the senses. Because of my high grade in the secondary education, I was accepted to the department of special education at King Saud University and right now, I'm really interested in this major.

How did you adapt to university life? What helped you? What didn't help you?

The major factor helped me to adapt to my university life is that King Saud university has a great experiences and background in dealing and interacting with students with visual disabilities for 30 years ago. That's why we have not faced any significant difficulties. We may face simple difficulties such as a faculty member who doesn't perceive or understand us, but by virtue of my studying at the department of special education, I can say that most of our lecturers perceive and have awareness enough to effectively and positively deal with us. Also, there is another problem that I'm not social and I wish I would have developed my social side.

What did you like most about your university study?

At King Saud University, I liked the used teaching methods and techniques and the harmony between theoretical and practical teaching.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

Actually, I did not experience difficulties I cannot solve because everything was supported and easy to overcome. I completed my university study according to the plan submitted by the university. I performed all of my tests, projects and assignment at determined times. I didn't delete a subject or delay an assignment.

Does the centre of disability support services (CDSS) provide you with escorts?

No, it provides us with mobile numbers to communicate with them in a friendly manner. Most escorts were students at our department and they graduated and they are well known among the blind students.

When did you know the centre of disability support services (CDSS) at your University? And how?

When I chose to study at King Saud University, I contacted the deanship of admission and registration to allow me registering without adding the degree of aptitude tests and they turned us to contact centre of disability support services (CDSS) which already opened the system and allowed registration for the students with disabilities. On the first day of my university life, I went with my escort to the centre in order to record my information and data. I became registered to permanently go there.

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they collaborators?

Yes, they are collaborators, especially academic advising staff who facilitate the registration process and organize time tables for students. If a student could not register in a subject issuing a letter to the department and thus they cooperate with us in the registration process. Centre of disability support services organizes exams tables for students with disabilities. They also take into consideration that the blind students need more time for studying because they use Braille Sense. The centre also develops and organizes computer courses.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

The faculty members at my college were totally cooperating. They really did their best for us especially during the last two years. They perceived our situation as blind students and they showed that they have the willingness to effectively provide reasonable accommodation for the students with disabilities.

Describe your experience with reasonable accommodation in the exams? Did you find it helpful?

We the blind students had our exams in the centre of disability support services (CDSS). During exams, the students have many different options because the classrooms are equipped by devices, computers and all techniques helping us to effectively think and write. Also, if there is any complaint regarding the writer, the centre provides us with another writer. These methods take time, so we get an extra half hour.

Did you need extra time?

I did not need the extra time, but only one time because the exam was an essay and I wrote with the computer which needed nearly three hours to finish the exam.

What comes to your mind when you remember the past years at university life?

To me, university is the place where beautiful memories are made. I always remember these days at my university because they still burn brightly in my mind.

Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?

There should be training courses for faculty members. They have to be trained on how to perceive the special case of the students with disabilities. Faculty members should be developed in terms of providing reasonable accommodation for university students with disabilities through developing courses and workshops relating to this issue. It's very important issue because some of the faculty members in other than the departments of special education don't percept or understand the case and situations of the students with disabilities. There are some faculty members who deal with students in a bad way.

The centre of disability support services provides the faculty members with guidelines and instructions on how to interact and deal with the students with disabilities. The centre provides also instructions for the faculty members on how to provide reasonable accommodation for the students with disabilities. For example, if there is a student with hearing disabilities in classroom, the centre asks the lecturer to teach slowly so that the signal from specialist translation or printing the article in word format for student with visual impairment, the student can therefore turn them into Braille Sense. Finally, I believe that there should be training courses for faculty members.

Did the centre of disability support services follow up and supervise faculty members?

Unfortunately no, the centre provides only guidelines and instructions. The quality is highly required.

Note: This interview format is a Semi-Structured interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(4)

Ebtisam -3

Questions

Can you tell me a little bit about yourself?

My name is Ebtisam I'm 23 years old. I study the last level at the department of Special Education, Learning Disabilities specialization. I like reading and writing.

What is the nature of your disability? When did you become disabled?

Visual impairment, since my birth. Visual impairment is a genetic disease that runs in my family.

What did you take into consideration when you decided to complete your higher education?

To complete my education is my dream since I was young. During my primary education, I had a problem with a teacher and I hated to study her subject and I didn't perform homework. This teacher wrote a question on the board and asked me to answer the question. I wasn't able to answer that question due to surprise, so she mocked at me and told me that I couldn't even finish the primary education. This situation made me insist to complete my education in order to prove to myself and to all those who doubted my abilities that I am able to complete the education and have a good career. I want to prove that my disability can't prevent my insistence on achieving my goals.

Why did you choose to study at this University?

I choose to study at King Saud University because it's considered as one of the best universities in the Arab world. It's also one of the universities that pay great attention to the students with disabilities.

Why did you decide to study this major?

My ambition since my intermediate education was to study psychology, but I changed my opinion during the secondary education and I decided to study at department of Special Education, learning disabilities specialization is considered. During my secondary education, I found out that psychology was a very difficult field. I registered to social sciences but I found myself accepted to the department of special education. During my study at the department of special education I found out that I was accepted to the department that was suitable for me because this department provided me with information about individuals with disabilities including their rights in the society. I also knew that when I ask my rights, I don't ask compassion and charity.

What did you like most about your university study?

Self-dependence. I totally depended on myself. During the secondary education, the student can't rely on himself because there is who lead him, but the situation is totally different during the university life. At university I depended on myself in studying, attending lectures and performing projects and assignments. There is also the centre of disability support services facilitates many things for the students with disabilities.

Tell me about the difficulties and problems you had faced at your university?

There are some faculty members who didn't understand my health status as sometimes there were two exams at the same day. I didn't know that the centre of disability support services can interfere and solve the problem for me as a student with disability. I hoped that the faculty members perceive my health status without the intervention of the centre. There were also faculty members who presented lectures on projector without explaining what pictures mean. A student with visual impairment can't see the presentation and needs the lecturer to explain what the pictures mean. Some faculty members do not provide us with summaries of the subjects. So, the difficulty and problem I had faced at my university is that faculty members didn't understand and perceive my case as visually impaired student.

What experiences did you use to address these problems?

I used electronic amplifiers or I could ask someone to write the subjects in large font.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

In fact, I explained some of difficulties and problems to the centre of disability support services during first days at my university life. The university provided us with detailed information about the centre, its role and the services it provides for the students' disabilities. The centre provided me with escort in order to help me in writing because my writing was very bad. Also, the centre provided the visually impaired students with exams written in large font.

When did you know the centre of disability support services (CDSS) at your University? And how?

I knew the centre of disability support services during the first days at my university as the university provided us with detailed information about the centre, its role and the services it provides for the students' disabilities.

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

I think no one can deny that the employees at the centre of disability support services (CDSS) were very cooperating and helpful.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

There are some faculty members who were very cooperating and helpful and they perceived and appreciated my health status as a visually impaired student. The situation at the university was totally different from the pre-university education because the lecturer at the university perceived and appreciated my case. They tried to help me acquiring information during lectures. There was a professor who taught us a subject containing topics on the visual impairment. I felt happy especially when I was asked from my colleagues to provide them with answers for their questions. This professor gave me the chance to talk during lecture and to provide answers for the questions. The professor helped me to prove that I'm a human not just disabled individual.

Describe your experience with reasonable accommodation that you received during the lectures. Did you find it helpful?

There were some faculty members who weren't able to provide me with reasonable accommodation. There were also faculty members who presented lectures on projector without explaining what pictures mean. A student with visual impairment can't see the presentation and needs the lecturer to explain what the pictures mean. So, I was wondering

what I can do.
<p>Did faculty members provide you with summaries related to lecture topic before giving lecture in classroom so that you can enlarge it?</p> <p>No, there were no summaries but the professor could help us to identify and highlight the important topics in the book but I, however, didn't ask this.</p>
<p>Describe your experience with reasonable accommodation in the exam? Did you find it helpful?</p> <p>The centre provided me with an escort in order to help me in writing because I face difficulty in answering the essay questions. I can dispense the escort in answering the substantive questions such as determining whether sentences are true or false. They also enlarge the font enough in order to be able to read the questions.</p>
<p>What comes to your mind when you remember the past years at university life?</p> <p>My university life was important period in my life as I developed my character and social relationships. I was introvert and unsociable during my pre-university education, so it was very important to develop, improve and enhance my social skills. My experiences at the university helped me to develop, improve and enhance my social skills.</p>
<p>Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?</p> <p>Mobility inside the university is very difficult for me and I got lost many times, especially when the escort wasn't with me, because the university contains large numbers of halls and classrooms. The centre of disability support services also does not provide us with escorts or even mobile numbers of escorts, as the escort gets high salary between 2,500 to 3000 SR per month.</p>
<p><u>Note:</u> This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.</p>

(5)

<p>Soha-3&4</p> <p>Soha (Mobility Impairment) – (3 & 4)</p>
<p>Questions</p>
<p>Can you tell me a little bit about yourself?</p> <p>My name is Soha I'm a student at media department, Faculty of Arts level (5).</p>
<p>What is the nature of your disability? When did you become disabled?</p> <p>Physical Impairment - I have Spina bifida since my birth.</p>
<p>What did you take into consideration when you decided to complete your higher education?</p> <p>Before going to university, I was keen to know the facilities and aids that would be provided for me. I was also keen to know my rights and my duties. At first, I wasn't able to gather enough information, but after I entered the university, I was informed about the centre of disability support services (CDSS). The centre called me through a message on my mobile in order to provide me with detailed information about the centre and its role. They gave me information about my rights and they told me that I have to go to them if I needed any help regarding teaching process, learning process and exams. They also informed me that students with disabilities have the right to get cash reward, and they issue a letter to the ministry of labor and social development and I already got this cash reward.</p>

Why did you choose to study at this University?

Studying at King Saud University is my dream since I was young. Also, my mother studied at King Saud University. Another reason is that King Saud University always gets the first place in the Arab world, and I was looking for high-quality education.

Why did you decide to study this major?

In fact, I wanted to study in the Psychology department but they stipulated physical health and senses health as a condition for acceptance. So, I chose the media department.

How did you adapt to university life? What helped you? What didn't help you?

The most significant thing helped me to adapt to university life is that my parents, since I was in the fourth grade, decided to transfer me from association for disabled individuals to a public school. It was very difficult at the beginning but what my parents did helped me a lot to integrate with the university community and overcome the difficulties that I face.

What did you like most about your university study?

The university pays great attention to students with disabilities. The faculty members perceived and understood my disability case. They were cooperating and helpful and they supported and encouraged me to complete my education.

Tell me about the difficulties and problems you had faced at your university?

There are few faculty members who didn't perceive my case as a student with mobility impairment. I couldn't attend the exam due to medical excuse; however, they didn't perceive my healthy status and they refused to change date of exam. But actually, most of the faculty members perceived my disability and they were very cooperating and helpful.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

Actually, there was no need to explain difficulties or problems I faced to anyone because faculty members were proactive in talking with me and they were cautious on knowing my needs. they were very positive in their relationship with me

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

I can say that (90%) of them are cooperating. While (10%) of them are helpful enough to be role models.

Describe your experience with reasonable accommodation that you received during the lectures. Did you find it helpful?

I can remember a situation relating to geopolitics. I also have visual impairment as well as the mobility impairment. I have a problem in my vision called (see-saw nystagmus). So, I can't quite focus on maps or tiny things. We had an assignment included a map. I can't perform the assignment and I lost 5 grades. The professor of geopolitics noticed that I have (see-saw nystagmus). She perceived my healthy status and she developed an assignment fits my healthy status. I am very grateful and thankful to her.

Describe your experience with reasonable accommodation in the exam? Did you find it helpful?

The faculty members always ask me whether I want to have my exam at the centre of disability support services (CDSS). I prefer to have my exam with other students and I don't need any type of accommodation.

What comes to your mind when you remember the past years at university life?

The pre-university education was very difficult. I actually faced many problems and difficulties. There was a moral violence and domination by the managers. They deprived me of many things, for example, the school principal was to make lectures, activities and seminars in the upper floor although she knew that I stay in the downstairs. The university education is totally different as the university pays great attention to students with disabilities and provides them with all things facilitates teaching and learning process.

Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?

The government should work on providing education for all categories of disabilities including deaf, dumb, visual impairment, physical disability and mobility impairment. I have a lot of my colleagues with mobility impairments have not completed their education because they have not found a university accept them. So, all social institutions should pay more attention to individuals with disabilities.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(6)

Sahar-2*
Questions
<p>Can you tell me a little bit about yourself?</p> <p>I'm Sahar I'm an undergraduate student at King Saud University, department of Quranic studies, Level 8.</p>
<p>What is the nature of your disability? When did you become disabled?</p> <p>I'm completely blind since birth due to retinal detachment and glaucoma. Blindness is a genetic disease that runs in my family.</p>
<p>What did you take into consideration when you decided to complete your higher education?</p> <p>I had two goals. The first goal is that I must bear the burden of proving I'm not incompetent. I actually want to prove that being blind does not make her an incompetent. The community including my family view the blinds can't rely on themselves. I actually thank my God that family contently accepts my case but there is constant fear. In the beginning, I wanted to prove my ability to rely on myself, but I won't be able to prove this unless I'm far from my parents. In the beginning, I actually had problems and I faced many challenges but I was able to persuade my parents in order to permit me to complete my academic degrees and enter the university. I actually achieved my first goal and being far from my family taught me how to rely on myself. I became able to cook food and take care of myself in terms of clothing and appearance and everything that belongs to me in my daily life. I actually thank my God that I'm about to graduate and my family has now become believe in my capabilities. I believe that parents will not be convinced that their child with disability is able to rely on herself unless she is capable enough to prove the opposite.</p> <p>My second goal is to complete my academic degrees. All individuals including individuals with disabilities have the right to learn. I Thank my God that I was able to get high GPA in my secondary education and studied the field I prefer.</p>
<p>Why did you choose to study at this University?</p> <p>King Saud University does its best to provide all required services for individuals with disabilities. It provides the blind students with all needed services since more than 30 years. The university provides us with all required services including tests, classrooms, using modern technologies and using modern teaching techniques. As blind students, we have a centre of disability support services.</p>
<p>Why didn't you choose other universities?</p> <p>Princess Nourahbint Abdulrahman University doesn't accept blind students. King Abdulaziz University doesn't have Reasonable accommodation for students and it's very difficult for me to live outside the university.</p>
<p>Why did you decide to study this major? What do you wish you had studied?</p> <p>I chose to study the Islamic Studies because it was my dream since I was in primary school. I studied for a semester but I couldn't complete it, I don't know the reasons behind this. Then I decided to study the Quranic Studies was also one of my desires.</p>

How did you adapt to university life? What helped you? What didn't help you?

I have good relations with others, but it does not prevent the existence of borders and limits in my interactions with the individuals I don't know well. I carefully interact with other individuals. My family encouraged me to enhance my social relations with other people, but they also taught me how to interact with others carefully.

I was completely sure that I would face challenges and problems during my university education but I was able to positively face all of these difficulties and challenges. The first problem I faced was the escorts because the escorts should have knowledge in English language and this was considered as obstacle. The second problem is that the university doesn't provide escorts and this was considered a big obstacle for me, but I was capable enough to face and overcome this obstacle. I did my best in the preparatory year because some escorts were crude and perform their work carelessly. The second year was comfortable and I was relieved because of my escort who did her work effectively and helped me a lot. Due to her secretariat and commitment to information, I felt that she is a colleague not escort. Actually, I didn't totally rely on my escort like other colleague, but she only helped me in terms of thing I can't perform alone such as power point presentations and arrangements with my professors in terms of delivering projects and assignments. I also relied on my escort in terms of attending lectures, receiving information from my professors and recording lectures with her voice especially some lecturers prevent recording lectures directly. She also helped me to reach my classrooms and attending lectures. You can say that she is my other half in the university.

What did you like most about your university study?

Cooperation of my colleagues at the same classroom. I didn't feel estrangement, loneliness or differentness among them, even if I attended lectures without my escort.

What problems and difficulties did you face at university?

I faced some difficulties and problems including that the members didn't understand what blind means and blind students' needs although we are students with disabilities and we provide them with our requirements and needs. On the other hand, there are members who are acceding to our situation and they give their attention to our needs.

When did you know the centre of disability support services at your University? And how?

I knew it during second year because in my first year, I studied at a university building has no a Centre of disability support services.

Describe your experience with employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

In my opinion, the Centre of disability support services should be ranked as the first in Saudi Arabia. The employees are very cooperating and helpful and they give their attention to our needs and requirements. For instance, the blind student has three choices including writing with computer, bringing a writer in order to write the answers or Braille Sense. I'm one of the students using Braille Sense. During exams, the classrooms are equipped by devices, computers and all techniques helping us to effectively think and write. Also, if there is any complaint regarding the writer, the centre provides us with another writer.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

Some faculty members are cooperating and helpful and they provide summaries for the escort before lectures begins. There is sometimes an inadvertently neglecting in terms of topics should study from the book, but in fact I can't blame them because I'm only one blind student among about 30 sighted students.

There are some faculty members who neglect me in classroom. I sometimes complain to them that I can't study at the same speed as the rest of the students, so I need summery and my escort to record the lecture. It needs time and this is injustice to me in the evaluation and tests.

What comes to your mind when you remember the past years at university life?

I'm emotional persons and very influenced by my family. That's why I suffered during my university study because I live far from my family. My disability makes me needing my family more than any other individual with no disabilities. I actually faced many difficulties and problems during the four years of university study. There are many situations that will not be forgotten. One of these situations is a lecturer who wasn't able to perceive my case as a blind student. She had unjustly evaluated my grades.

Finally, what are your recommendations in order to improve and enhance the provision of Reasonable accommodation for students with disabilities at your University?

The faculty members should have the willingness for the provision of reasonable accommodation for university students with disabilities. Faculty members should be developed in terms of providing reasonable accommodation for university students with disabilities through developing courses and workshops relating to this issue. It's very important issue because many of the faculty members don't percept or understand the case and situations of the students with disabilities. I also recommend providing the graduate students with Braille Sense because it's very expensive and the student strongly needs it for her career. I ask the government to provide each blind student with Braille Sense. The Centre of disability support services should allow the escort to attend with the blind students because the students are convinced to pay additional financial costs every month. Transportation is not provided for them like the rest of students, and this adds another financial burden on the students because they must pay the costs of transportation.

Note: This interview format is a Semi-Structured interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(7)

Abeer- 1*& 4*

Questions

Can you tell me a little about yourself?

I'm Abeer. third level, Department of Applied Linguistics.

What is the nature of your disability? When did you become disabled?

I have mobility impairment since I was young. Also, I have learning disability diagnosed since I was at the primary education, and I suffer from Attention Deficit Disorder (ADD) that always makes me in need of repeating the explanation in order to understand the lecture topic.

What did you take into consideration when you decided to complete your higher education?

I have a strong resolve to complete my university education because I'm self-confident and I have self-esteem. I actually know that I'm able to do it.

Why did you choose to study at this University? I registered for three universities, but I was accepted to PNU.
Why did you decide to study this major? Because I prefer English language since I was at the secondary education. I also have the ability to effectively study English language.
What do you wish you had studied? No, because I wanted to study English language since I was at the secondary education. English is an interesting language.
What difficulties did you face at the university? Some faculty members are not collaborating with students with disabilities as I asked them to provide me with alternative questions to fit my case and they refused. I also asked them to record the lecture but they told me that university rules and regulations prevent all students without exception to record lectures.
Did you explain your difficulties to anyone at the University? What assistance did you receive? Yes I explained my case to an employee at the (CDSS) and she was cooperating with me as she communicated with the faculty members and explained my problem to them. The (CDSS) gave me a card revealing my case to the faculty members in order to provide me with the reasonable accommodation such as providing me with an exam fits for my case and giving me an extra time. Unfortunately, I did not know about the centre in the first month of my university study.
Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they collaborators? They were collaborating with me. They also allowed the volunteering students for the advanced levels to help us in parts we don't understand.
Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation? Some of the faculty members are collaborating. They really did their best for us especially during the last two years. They perceived our situation and they showed that they have the willingness to effectively provide reasonable accommodation for the students with disabilities.
What comes to your mind when you remember the past years at university life? At first, I had some fears from my study at the university and also the faculty members didn't perceive my case and they were strict with me as a student with disabilities; but after I had my Card, they perceived my case and collaborated with me.
Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University? The university should pay more attention to the students with disabilities. The faculty members and the students should provide collaboration to the students with disabilities.
- Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(8)

Amal -4*

Questions

Can you tell me a little bit about yourself? My name is Amal I'm a student at Law department, level (3), Princess NourahBint Abdulrahman

University
<p>What is the nature of your disability? When did you become disabled? Physical Impairment – I have hemiplegia due to a car accident four years ago and I am now in a wheelchair.</p>
<p>What did you take into consideration when you decided to complete your higher education? The individual can't achieve his goals without education. I want to become an effective person who can serve her society. My mother and my friends encouraged me to complete my education.</p>
<p>Why did you choose to study at this University? I didn't choose to study at Princess Nourahbint Abdulrahman University. I wanted to study at King Saud University because it's considered as a leading university in the Arab world. Unfortunately, I wasn't accepted to King Saud university, but I was accepted to princess Nourah university and it was like a shock for me because I didn't want to study at this university.</p>
<p>Why did you decide to study this major? I prefer law and I see that the society need women who are able to serve the society using law. Law is an effective way for developing the society through identifying individuals' rights and duties. If every individual knows his rights and his duties, the society will be developed.</p>
<p>What do you wish you had studied? My goal since I was young was to study medicine, but the accident was the reason to hate hospitals, physicians and medicine.</p>
<p>How did you adapt to university life? What helped you? What didn't help you? After the accident, I studied for two years at secondary school and I faced many difficulties and problem, but after attending to the university, the situation was totally changed to the better. During the pre-university education, the schools are not prepared for students with disabilities. Classroom at schools aren't equipped with electronic devices that facilitate teaching and learning process for the student with disabilities. There is no doubt that the students with disabilities face a lot of difficulties during pre-university education. The university is prepared to accept all students with different disabilities. PNU pays great attention to the disabled students and provides them with thing facilitates the process of teaching and learning. But, sometimes, the students with disabilities face difficulties at university. For me, I suffered from the problem of elevators which always being crowded or out of order.</p>
<p>Tell me about the difficulties and problems you had faced at your university? All restaurants at the university have windows for students with mobility impairment, but unfortunately, there is no any restaurant committed to this matter and there is no control or supervision from the university administration. Also, some classrooms are small in size and full of chairs that hinder my mobility inside classroom. So, I'm convinced to enter the classroom very early and leave it as the last student because they block the road with these chairs. But in general, the university students are more cautious than the pre-university students. Also, there are some problems relating to the faculty members who can't perceive my health status as a student with mobility impairment.</p>

<p>Did you explain your difficulties to anyone at the University? What assistance did you receive?</p> <p>Actually, there was no need to explain difficulties or problems I faced to anyone because I was able to do all things like other colleagues. As a student with mobility impairment, all what I need depends on other colleagues. They have to be cautious about our problems as students with disabilities. In fact, the university provided us with all things facilitate teaching and learning process for the students with disabilities. there is thecentre of disability support services which works on providing students with disabilities with services they need in order to help us solving our problems and overcome the challenges and difficulties we face at the university.</p>
<p>When did you know the centre of disability support services at your University? And how?</p> <p>I knew the centre of disability support services (CDSS) during my first level. I communicated with it when I had a problem related to the table and the employees at the centre helped me and gave me a card allowing me to get the reasonable accommodation. I use this card in solving many problems including the problem of study schedule.</p>
<p>Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?</p> <p>I don't communicate with all employees at the centre, but my supervisor is very cooperating and helpful.</p>
<p>Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?</p> <p>Our faculty members are very cooperating and willingness to provide us with reasonable accommodation. For me, I don't ask the accommodation because I'm able to perform everything.</p>
<p>Describe your experience with reasonable accommodation in the exam? Did you find it helpful?</p> <p>I can get extra time during the exams because I have a card from the centre of disability support services (CDSS) which allow me to get reasonable accommodation and get extra time in the exam if I need.</p>
<p>What comes to your mind when you remember the past years at university life?</p> <p>My days at the university are very beautiful as I became have new social relationships with new colleagues. I like my university although I wanted to study at other universities.</p>
<p>Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?</p> <p>The university has to allow the students with disabilities to have effective role such as allowing them to develop courses or competition because there are many students with disabilities have creative ideas.</p>
<p>I see you are a clever speaker; did you think about developing a course for the rest of students to raise their awareness toward the rights of students with disabilities?</p> <p>I do not like to appear and I feel that I'm not ready to face the audience so I prefer to develop my skills before developing awareness-raising courses because I want to affect the audience. I actually like to be effective at the university but I'm not ready yet.</p>
<p><u>Note:</u> This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.</p>

(9)

Arwa -1*

Questions

Can you tell me a little about yourself? I'm Arwa. third level, Department of History, College of Arts.
What did you take into consideration when you decided to complete your higher education? I have a strong resolve to complete my university education. I would like to study at the College of Mass Communication, but I was accepted to the department of history at the college of Arts.
What is the nature of your disability? When did you become disabled? My case was diagnosed as mathematics learning disability. I also suffer from memorizing problems as I face problems when I memorize long texts. At the secondary education, my teacher perceived my case and made me memorize three verses; while my colleagues were obliged to memorize ten verses.
Why did you choose to study at this University? I'm proficient at history and I have a good knowledge about history. I also prefer to watch historical dramas.
What do you wish you had studied? I would like to be accepted at the college of Mass Communication, but unfortunately my grade was less than the grade values required for the college of Mass Communication.
What did you like most about your university study? There is a big difference between study at the school and study at the university; because study at the university is more difficult. There are also some faculty members who don't perceive my case as a student with disability. Although they know my case; they don't cooperate with me; while the teachers at the secondary education perceived my case and they were collaborating with me.
How did you adapt to university life? What helped you? What didn't help you? When I was at the preparatory level, the centre of disabilities support and services (CDSS) provided the faculty members with detailed information about me and my case that I have learning disorders which helps me to adapt at university.
Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation? At the first level, the faculty members didn't know what is learning disability means, but when I provided them with my reports, they perceived my case and provided me with reasonable accommodation fits for my case. I also have my exam at (CDSS), so that I can concentrate on the exam because it's a very quiet place.
What comes to your mind when you remember the past years at university life? Skip this question.
Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University? The university should pay more attention to the students with disabilities. The faculty members and the students should provide collaboration to the students with disabilities. Also, there should be training courses for faculty members. They have to be trained on how to perceive the special case of the students with disabilities. Faculty members should be developed in terms of providing reasonable accommodation for university students with disabilities through developing courses and workshops relating to this issue. They have to know the differences between Learning disabilities and mental retardation. The students with disabilities in Saudi Arabia don't

get all of their rights, unlike developed countries.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(10)

Noha -4*

Questions

Can you tell me a little bit about yourself?

My name is Noha. I study English language (level 6).

What is the nature of your disability? When did you become disabled?

Dwarfism

What did you take into consideration when you decided to complete your higher education?

My goal is to get the academic certificate in order to have a good job. I want to prove that my disability can't prevent me from completing my higher education and achieving my future goals.

Why did you choose to study at this University?

My desire was to study at King Saud University. But, fortunately, I was accepted to Princess Nora Bint Abdul Rahman University. PNU strongly perceives and appreciates our cases as students with disabilities and it provides us with all required service facilitate our daily interactions at the university.

Why did you decide to study this major?

My goal is to study English language since I was at the sixth grade of my primary education. Also, I can say that my family has an influence on determining my tendencies and choosing English language. Additionally, my mother works as English teacher and she influenced on my tendencies to prefer English language.

What do you wish you had studied?

My dream since I was young is to study English language. The department of Psychology was my second option if I had not been accepted in the English language department.

How did you adapt to university life? What helped you? What didn't help you?

I have good relations with other people. I didn't feel any segregation at this university. My colleagues helped me to enhance my willingness to adapt and accommodate at this university. What helped me to achieve adaptation and overcome segregation is that my colleagues interacted with me in a way made me not feeling that I'm disabled student at the university.

Tell me about the difficulties and problems you had faced at your university?

In fact, I didn't face substantial difficulties but there is a simple problem such as toilets which I can't reach because of its height.

What experiences did you use to address and solve these difficulties and problems?

Originally, I do not go to public toilets so there is no problem.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

No, I didn't because all individuals at the university know that I'm a student with disability.

When did you know the centre of disability support services (CDSS) at your University? And how?

In the beginning, I didn't know that the university has the centre of disability support services (CDSS) but they informed us about the centre through an employee from the centre who communicated with us and gave us detailed information about the centre and the services it

provides for the students with disabilities.

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

Actually, I didn't go to the centre or I didn't directly interact with the centre employees. But I communicate with them through mobile or WhatsApp. They are very cooperating and helpful. For example, an employee required some papers from me, she understood and perceived my special case and she came to my college in order to take these papers. So, I can say that they do their best for supporting us.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

Our faculty members are cooperating and helpful. They totally perceive my case. They provide us with all required things facilitate the teaching and learning process for us. Their willingness to provide us with reasonable accommodation helped me to achieve adaptation at university. I don't feel any segregation.

Describe your experience with reasonable accommodation in the exams? Did you find it helpful? My mental capabilities are normal, so I'm equal with my colleagues in the tests. But I can get an extra half hour during the exam because I have award from the centre of disability support services (CDSS).

What comes to your mind when you remember the past years at university life?

Many situations to remember, for instance, I was very anxious all the time because I thought the study would be difficult. But I found it's easier than I expected. Now, I am actually enjoying my studies.

Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?

In fact, I don't face substantial difficulties or problems but there are simple problems such as problems with the elevator as the students with mobility impairments have problems with elevators that they can't reach university train station. University should pay more attention to students with mobility impairments.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(11)

Rehab -3*

Questions

Can you tell me a little bit about yourself?

My name is Rehab. I study Graphic Design and Digital Media

What is the nature of your disability? When did you become disabled?

I'm visually impaired for 4 years because of diabetes coma.

What's your field of study?

I study Graphic Design, although it is difficult for those in my case but I thank my God that I am currently studying in the last level.

<p>What did you take into consideration when you decided to complete your higher education?</p> <p>After I finished my secondary education, I planned to get the bachelor's degree. I had visual impaired. But, unfortunately, before my registration for the university, I was kept in hospital for a long time because of a severe diabetic coma. I totally lost my sight but six months after, one of my eyes started a little better. Then I decided to study Graphic Design I think it is easier than computer programming due to my situation.</p>
<p>Why did you choose to study at this University?</p> <p>Because most of my colleague's study at Princess Nora Bint Abdul Rahman University, my colleagues can therefore bring me to university. I actually need their help because I have no escort due to financial reasons. Additionally, I have sisters who serve as escorts.</p>
<p>Why did you decide to study this major?</p> <p>Because I love every think about computer since I was young.</p>
<p>What do you wish you had studied?</p> <p>I hesitated to study English language or graphic design, but I chose graphic design because it is closer to my tendencies. Although both fields of study are not useful to me in my future career because of my case, I decided to study what is closer to my tendencies.</p>
<p>How did you adapt to university life? What helped you? What didn't help you?</p> <p>My colleagues enhanced my willingness to adapt and accommodate at this university.</p>
<p>What did you like most about your university study?</p> <p>There's nothing special.</p>
<p>Tell me about the difficulties and problems you have faced at your university?</p> <p>I have a problem in quick understanding of subjects. Also, I can't write with my hand or iPad while the faculty members present lectures. This wasted a lot of time.</p>
<p>What experiences did you use to address and solve these difficulties and problems?</p> <p>Recording lectures with iPad device</p>
<p>Did you explain your difficulties to anyone at the University? What assistance did you receive?</p> <p>I explained some difficulties to some faculty members during my first year at the university. But I currently do not explain my case to faculty members because I'm registered in the centre of disability support services (CDSS) that's responsible for explaining my case to faculty members.</p>
<p>Does the centre of disability support services (CDSS) provide you with escorts?</p> <p>No, it provides us with mobile numbers to communicate with them in a friendly manner. Most escorts were students at our department and they graduated and they are well known among the blind students.</p>
<p>When did you know the centre of disability support services (CDSS) at your University? And how?</p> <p>During my first year at the university I heard about the centre but I didn't know what it means or what services it can provide for students with disabilities. I didn't register to the centre of disability support services (CDSS) only after a full year and half. One of my colleagues urged me to go to the centre in order to get the services it provides for the students with disabilities. The university did not officially inform me about the centre.</p>
<p>Did the university inform you about the centre of disability support services?</p> <p>The university did not officially inform me about the centre of disability support services. One of my colleagues urged me to go to the centre in order to get the services it provides for the students with disabilities.</p>

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful? I think that no one can deny that the employees at the centre of disability support services are very cooperating and helpful. They provide the faculty members with instructions and guidelines on how they can effectively provide reasonable accommodation for students with disabilities at the university. The centre provides the faculty members with the required information and data about the registered students, so the faculty members can therefore provide effective reasonable accommodation for the students with disabilities.
Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation? There are faculty members who understand and perceive my case and others who don't. Some faculty members provided me with the required things helping me to understand lectures such as writing in large fonts and allowing me to record the lecture. On the other hand, the faculty members who ignored my special case as a visually impaired student who need support and help from the others.
Describe your experience with reasonable accommodation in the exams? Did you find it helpful? In the past I suffered a lot because I had my exams with students without disability and there was no extra time. They didn't take into consideration my special case as a visually impaired student. Also, I faced difficulty in reading the questions because they were written in normal fonts. But after I registered to the centre, the situation became totally different because the centre prepares classrooms to be suitable for our special cases and there is also extra time as well as the question are written in large fonts.
What comes to your mind when you remember the past years at university life? Praise be to Allah, I'm now in the last level and I don't want to remember any situation.
Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University? I have no recommendations.
<u>Note:</u> This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

(12)

Abrar-3
Questions
Can you tell me a little bit about yourself? My name is Abrar. I'm a student at department of Graphic Design and Digital Media, I'm 23 years old.
What is the nature of your disability? When did you become disabled? Visual impairment, since my birth.
What is your field of study? Graphic Design – level (5)
What did you take into consideration when you decided to complete your higher education? I have ambition, goals and dreams and I found out that education is the way for achieving my goals.

Why did you choose to study at this University?

I chose Princess Nora Bint Abdul Rahman University because my sister studied at it. Also, students with visual impairment at King Saud University must study with Braille Sense and I don't want that because I studied in public education during my previous school grades.

Why did you decide to study this major?

In fact, my dream since I was young is to study at the college of Arts and Design. The department of graphic design was my second desire because I wanted to study interior design but it was difficult to me because of my case as a visually impaired student. I was tested to study at the interior design department but I wasn't able to pass the test. The interior design test made me more satisfied with my current major because it made me know that design interior department isn't suitable for me.

How did you adapt to university life? What helped you? What didn't help you?

Adaptation to university life wasn't difficult to me because I studied in public education during my previous school grades. The university also accommodated between students with disabilities and other students and this is considered one of the reasons made me choose to study at Princess Nora Bint Abdul Rahman University. There were no difficulties or constraints although I didn't explain my case to faculty members. I only asked them to enlarge test papers due to my visual impairment.

What did you like most about your university study?

In fact, I strongly like and prefer graphic design because it's my work field.

Tell me about the difficulties and problems you had faced at your university?

The difficulties I faced included the deadline determined for delivering projects and assignments. But I somehow found the argument for persuading faculty members to postpone delivery deadline of some assignments and projects, but this was a very rare thing. Sometimes I have to lie the faculty member.

Did you explain your difficulties to anyone at the University? What assistance did you receive?

Yes, I explained some of difficulties and problems I faced to the college coordinator. She was from the centre of disability support services. She facilitated the process of deletion and addition in the table in the beginning of each term. She also provided me with a card that allows me to record my lectures and ask faculty members to enlarge paper.

When did you know the centre of disability support services (CDSS) at your University? And how?

I knew the centre of disability support services after I finished my preparatory year.

Describe your experience with the employees at the centre of disability support services (CDSS) at your university. Are they cooperating and helpful?

My experience was relating to one employee working at the centre and she was considered my supervisor at College of Arts and Design. I can't deny that she was cooperating and helpful.

Describe your experience with faculty members in the classroom. To what extent do they cooperate in terms of providing reasonable accommodation?

They treated me like other students, and this was the thing I strongly wanted.

Describe your experience with reasonable accommodation in the exams? Did you find it helpful?

Graphic design department is more practical. In the final practical exam, I presented my project, while in the final written tests I wrote my answers on the paper unlike my colleagues who wrote their answers on Auto Correct paper.

What comes to your mind when you remember the past years at university life?

What comes to my mind is the preparatory year because I failed to pass in two subjects although I was able to pass them because they weren't difficult enough.

Finally, what are your recommendations in order to improve and enhance the provision of reasonable accommodation for students with disabilities at your University?

There are some faculty members who want to curiously know more information about the health status of student with disability, so they ask her colleagues and this is an annoying thing. Faculty members should not attract the attention of the students to the students with disabilities and no one has the right to disturb us to satisfy his curiosity in this way. The university should develop training courses for the faculty members on how they positively deal with the disabled students and how they effectively provide reasonable accommodation for the students with disabilities.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 50 minutes.

Appendix N: Transcripts of the CDSS Management Interviews

(1)

CDSS Management 1
Questions
Can you tell me a little bit about yourself? M.F. lecturer at the department of special education
What's your specialization? Autism Spectrum Disorder (ASD).
When and why did you decide to work at the centre of disability support services (CDSS)? Since 17/05/1436 AH. I was assigned by the university director to supervise the centre of disability support services (CDSS)
What's the significant thing about this position? Dealing and interacting with the wonderful students with disabilities.
To what extent does the university support the centre? Is it enough? The support is excellent. Yes, it's enough as we are provided with the modern technologies for the students with disabilities. The university always updates the technological devices of the centre.
What services does the (CDSS) provide for the students with learning disabilities in particular and students with disabilities in general? Academic advising - Social guidance - services provided by the Centre for all students with disabilities include: psychological counseling - support services) - enlarge Curriculum - Print Curriculum with Braille – the art of mobility – technical support – academic support.
How many students are provided with the services of the centre? 86 students, most of them from college of education.
Are all departments available to them at both colleges? Not all departments are available for the students with disabilities. For example, the college of education doesn't accept them to the department of psychology because these departments developed healthy senses as a condition for acceptance.
Are all students with all types of disabilities allowed to study at the university? All students with disabilities are allowed to study at the university except intellectual disability.
How does the student register for the centre? The students can register through the electronic gate +deanship of admission and registration
Who is responsible for diagnosing the case of students with learning disabilities? There is no diagnosis at the centre. The cases are diagnosed through the programs of learning disabilities in the secondary education.
In your opinion, why do the students with learning disabilities and students with disabilities in general hesitate to introduce themselves to the (CDSS)? On the contrary, the students apply to registration by themselves in order to get the services provided by the centre of disability support services. But unfortunately, some students pretend disease with the beginning of lecture in order not to attend the lecture as she claims fainting or shortness of breath which require the centre specialist and after knowing her case, she is ignored and exposed to a psychologist at the centre of disability support services.

If we ask students about their opinions on the services provided by the (CDSS), What do you think will be their answers?

I have no answer

How does the (CDSS) inform the faculty members about the reasonable accommodation needed for the students with disabilities?

The centre communicates with faculty members via E-mail and communication program + make interview with the faculty members+ sending brochures on the strategies for each student.

What assistance does (CDSS) provide to assist the faculty members having students with learning disabilities and students with disabilities?

Meeting the faculty member in order to clarify the facilities approved by the University in (Manual of rules and regulatory procedures for students with disabilities) as well as providing any further assistance requested by the faculty member.

What are the training programs developed by (CDSS) for faculty members in order to improve the provision of reasonable accommodation?

The centre develops workshops, meetings and seminars.

How were motivated faculty members to attend these training programs this year? Is it compulsory or optional?

It's very good – training programs developed by (CDSS) aren't compulsory

How do you see the level of faculty members' communication with you when they have questions about reasonable accommodation arrangements?

Excellent

Do you see that faculty members have the required awareness about reasonable accommodation or they rely on (CDSS) in this regard?

Some of the faculty members have awareness enough to effectively provide reasonable accommodation, while some others don't.

In your opinion, how can the (CDSS) develop and improve its services?

Working on providing everything the students with disabilities need and providing the latest technology that can support them.

Based on your work at the (CDSS), what comes to your mind?

I can remember two situation that make me happy and proud:

The first: a female student with visual impairment was able to win the first place at the scientific and cultural forum in Kuwait. (CDSS) administration and employees gave her a reward and cake in honor of her efforts.

The second: a female student with visual impairment was graduated from the department of languages and translation and she was keen to teach her colleagues at the first level of her specialization and she also developed a valuable training course in English language.

Finally, what are your recommendations for improving reasonable accommodation at your university?

There should be a follow-up mechanism with the faculty members as well as the university should motivate the faculty members developing their willingness in order to effectively provide the reasonable accommodation for the students with disabilities.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 30 minutes.

(2)

CDSS Management 2

Questions

Can you tell me a little about yourself?

I'm Dr. Reem Abdel Wahab, assistant professor at the department of special education, and director of the centre of disability support services (CDSS) at Princess NourahBint Abdulrahman University.

What's your major?

Department of special education. Major: Learning Disorders.

When and why did you decide to work in centre of disability support services (CDSS)?

Since the end of December 2016. About 6 months ago.

What's the most significant thing about your working as the director of (CDSS)?

I like the challenges I face every day. Although the Centre had the support and great interest by the Supreme authorities, Director of the University, student services secretary and Student Affairs Deanship, but the Centre is still in the process of development and it's incomplete. It forms only 20% - 30% of my perception before starting work.

What are the services provided by (CDSS) for the students with learning disorders, in particular, and students with disabilities, in general?

The centre of disability support services provides academic guidance and learning and psychological support. In the beginning of the semester, the centre provides the students with disabilities and the students with learning disability with academic guidance despite this service is actually provided by all colleges at the university. But because we are specialized in the field of special education and learning disorders, we are more understanding of the problems faced by students with disabilities and students with learning disability.

For example, according to the university systems and procedures, the students can't change the schedules of lectures, but the centre helps the students with disabilities to change or modify the schedules in the way that fit her case through sending e-mails to the officials. I faced only one problem when I sent an E-mail to the department of early childhood containing that there is a student with hearing impairment and needs to change the schedules of lectures. A member from the department came to me and required me not to enable this student to complete her study in the department of early childhood. I was shocked by this situation because the student had very good grades. The reason behind that was new condition requires that the student must have a good health; because the university focuses on preparing students with skills meet the requirements of labor market. I actually know that there are many students who want to have a good job after graduation, but there are also students who just want to learn. I asked the student to come to my office and when she came, I'm almost be sure that her hearing impairment isn't obvious at all and it won't effect on her learning at the department of early childhood, and the communication with the student was natural. I found out the student meet the conditions of the department, so I contact with the deanship of the education and they accept my request that the student complete her study at the department of special education. In fact, the culture of special education in Saudi universities is still very modern, and there are no regulations generalized on all universities from the Ministry of Education. The decision makers don't understand the requirements of the educational programs; whereas there was a committee to follow up the executive items for the rights of students with disabilities in higher education institutions in the Gulf Cooperation Council Countries attended the Princess NourahBint Abdulrahman University. From my experience in the regulatory and supervisory meetings, I can say that the Saudi universities are still at the beginning of the road (Baby steps).

How many students are provided with the services of (CDSS)?

115 students.

Which college does have a larger number of students, is it college of Arts or college of Education?

Most of students with disabilities study in college of education.

Are all specializations available for students with disabilities in the tow colleges?

Yes, all specializations are available for them. The students with disabilities are allowed to study in any specialization in the two colleges

Are students transferred to (CDSS) by the department or by themselves?

There is more than a student of some colleges were transferred to the Centre by a social worker, as the student's reports are sent to us based on reviews of faculty members that the student has a low level in most subjects, and then the Centre communicate with them and call the student in order to complete the remaining procedures. Generally, most students are transferred to the centre by the department because the students think that they don't need to the centre's services. The reason behind this may be because they don't attend the induction day which provides detailed information about the centres, so they don't know the services provided by the centres for the students with disabilities. I believe that the students with chronic diseases are outspoken more than the students with disabilities regarding providing the centre with detailed information about their cases. Although some students have a visible impairment such as the mobility impairment, they insist not to register for the centre services in order to prove to themselves and everyone else that they can do everything like the rest of the ordinary students.

Are all students with disabilities allowed to study at the university?

All students with disabilities are allowed to study to study at the university except the students with complete deafness or complete blindness. The students who have more benefits from Centre are the students with mobility impairments.

How does the centre inform the faculty members for reasonable accommodation needed by the students?

The faculty members are provided with training courses and they are discussed about methods of adapting the evaluation process and activities. The courses are mandatory for faculty members who teach students with disabilities.

Do you think that faculty members have sufficient awareness of reasonable accommodation`?

No, the faculty members don't properly activate one of the quality standards called universal Design for Learning (UDL) in order to fit for the individual differences during lecture. We are still in need of developing the faculty members experience regarding this field.

In your opinion, how can we develop the centre's services?

- First: resorting to specialists to arbitrate the procedures of the centre.
- Second: activating all university departments that serve the centre such as the medical departments, psychological departments and educational departments.
- Third: activating role of students at department of special education and providing them with chance for volunteering work centre.

What are your recommendations for improving reasonable accommodation?

- There must be regulations, rules and laws.

Note: This interview format is a Semi-Structured Interview; the questions are therefore distributed according to the participant's interests. So, the participants can focus on some questions and ignore others. The estimated time for this interview is about 30 minutes.

Appendix O:PNU Approval Letter



الرقم : ٤٦٣٠٥
التاريخ : ١٤٣٨/١١/٣ هـ
الموضوع: بشأن تسهيل مهمة الباحثة سرين بكري.

سعادة عميدة كلية التربية.
سعادة عميدة كلية الآداب
حفظها الله.
حفظها الله.
السلام عليكم ورحمة الله وبركاته، وبعد:

نفيد سعادتك بأن الباحثة/ سرين بنت طلال بكري، مبتعثه في جامعة ترينيتي في جمهورية أيرلندا لدراسة مرحلة الدكتوراه تخصص تربية خاصة بكلية التربية. ويصدر إعداد بحث بعنوان: (المواءمة الأكاديمية المقدمة للطالبات من ذوات صعوبات التعلم والإعاقة الأخرى: اتجاهات عضوات هيئة التدريس والطالبات بالجامعات)

نأمل من سعادتك التكرم بتسهيل مهمة الباحثة أعلاه بما يلي:

١. نشر الاستبيان الإلكتروني على أعضاء هيئة التدريس بجميع الأقسام من رتبة محاضر إلى أستاذ. https://docs.google.com/forms/d/e/1FAIpQLSfYHP661cG-Jem111-La98lv1K6pD1YI4ZsaXi041TO0WteJg/viewform?usp=sf_link
٢. إجراء مقابلات لبعض الطالبات المسجلات في مركز خدمات ذوي الإعاقة (الوصول الشامل)
٣. إجراء مقابلة مع رئيسة مركز خدمة ذوات الإعاقة (الوصول الشامل) أو من ينوبها.

ولسعادتكم فائق الشكر وبالغ التقدير.

عميدة البحث العلمي

د. أريج بنت عبد الكريم الخلف

د. أريج بنت عبد الكريم الخلف.

Appendix P: KSU Approval Letter

٢٩١٤٨

بسم الله الرحمن الرحيم

سعادة وكيل الدراسات العليا والبحث العلمي
ولفه الله
أرفع لسعادتك خطابي هذا وفيه أفيديكم برغبتي للحصول على موافقتكم لجمع البعثات بجامعتكم الموقرة وذلك لتطبيق الاستبانة
وأجراء بعض المقابلات لاستكمال متطلبات رسالة الدكتوراة والتي هي بعنوان "المواصفة الأكاديمية المقدمة للطلبات من
نوات صعوبات التعلم والإعاقات الأخرى: اتجاهات عضوات هيئة التدريس والطلبات بالجامعات"
علما بأن أدوات البحث المستخدمة عبارة عن:
1- استبانة موجهة للمجموعة الأولى وهن عضوات هيئة التدريس في كليتي الآداب والتربية من رتبة محاضر إلى أستاذ.
2- إجراء مقابلات لبعض الطليات المسجلات في مركز خدمات ذوي الإعاقه (الوصول الشامل) واللاتي يعانين من أي نوع
من أنواع الإعاقه (صعوبات التعلم، اعاقه سمعية، إعاقه بصرية، إعاقه البدينية، اضطراب فرط الحركة ونقص الانتباه،
التوحد،... الخ).
3- وأخيرا إجراء مقابلة مع رئيسة مركز خدمة نوات الإعاقه (الوصول الشامل) أو من ينوبها
تجدون برفقة هذا الخطاب
- خطاب من الملحقة بنيد بائي طالبة دكتوراة في جامعة Trinity College Dublin
- الاستبانة
- أسئلة المقابلة للطلبات من نوات الإعاقه
- أسئلة المقابلة لرئيسة المركز أو من ينوبها
- خطاب المشرف
- موافقة لجنة أخلاقيات البحث IRB

ولكم مني جزيل الشكر و التقدير

بشوقه سعادته
سعادة الدكتور / ص. م. لو كين يحفظه الله
شؤون البعثات والمحاضر
١١
٢٩١٤٨

بشوقه سعادته
بشوقه سعادته



Appendix Q: TCD Approval Letter



Coláiste na Tríonóide, Baile Átha Cliath
Trinity College Dublin

Ollscoil Átha Cliath | The University of Dublin

Approval Sereen Talal Bakri

22nd May 2017

Dear Sereen,

The School of Education's Ethics Committee has received and considered your application for approval of your PhD research project. It is the decision of the Committee that no additional information is needed regarding your application. Therefore, approval is granted for your research, on the condition that it is carried out as indicated on your application. Should there be a change in the design of your research project, you will need to re-apply again for approval from the School of Education's Ethics Committee.

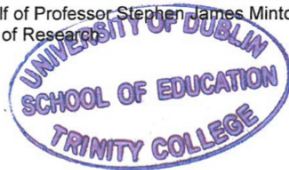
You are required to include a copy of this letter as an appendix to your thesis.

If you have any queries regarding this decision, please contact the Chair of the School of Education's Ethics Committee and Director of Research, Dr Stephen James Minton (mintonst@tcd.ie). We wish you all the very best with your research project.

Kind regards,

A handwritten signature in black ink, appearing to read 'Fiona McKibben'.

Fiona McKibben
Research Officer at the School of Education
on behalf of Professor Stephen James Minton
Director of Research



Scoil an Oideachais
3087 Foirgneamh,
Coláiste na Tríonóide, Baile Átha Cliath,
Ollscoil Átha Cliath,
Baile Átha Cliath 2, Éire.

School of Education
Room 3087,
Trinity College Dublin,
The University of Dublin,
Dublin 2, Ireland.

+353 1 896 3583
www.tcd.ie/Education