Article

Research on Aging
2019, Vol. 41(9) 891–911

DOI: 10.1177/0164027519860270
journals.sagepub.com/home/roa
SAGE

Religious Attendance, Religious Importance, and the Pathways to Depressive Symptoms in Men and Women Aged 50 and Over Living in Ireland

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Abstract

Objectives: We aimed to explore the relationship between religiosity and depressive symptoms longitudinally. **Method:** We used four waves (2009–2016) of the Irish Longitudinal Study on Ageing (TILDA) to create growth curve models (GCM) of depressive symptoms and religious attendance/importance in a sample aged 50+ in Ireland and structural models to assess the longitudinal associations between religious attendance/importance and depressive symptoms. We tested whether this relationship was mediated by social connectedness. **Results:** GCM showed that higher religious attendance at baseline was associated with lower baseline depressive symptoms, while higher religious importance was associated with higher baseline depressive symptoms. Social connectedness partially mediated the baseline associations between religious attendance and lower depressive

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symptoms. There were no associations between religious factors and the development of depressive symptoms over time. **Discussion:** This study found that the relationship between religion and depressive symptoms is complex, and any protective effect was driven by religious attendance.

Keywords

religion/spirituality, depression, social networks

Later life depression is a distressing mood disorder which is in turn a risk factor for a number of other poor health outcomes including mortality (Blazer, 2003). The pathways leading to both late onset and lifetime depression are multifaceted and have been shown to be complexly associated with age; the prevalence of major depressive disorder appears to be lower in older populations, whereas checklist-of-symptoms measures show an increase in depressive symptoms in older age (Fiske, Wetherell, & Gatz, 2009). In Ireland, 10% of adults aged 50 and over show clinically significant depressive symptoms, with women reporting higher depressive symptoms than men (O'Regan, Kearney, Savva, Cronin, & Kenny, 2013). This gendered pattern has been consistently shown around the world (Astbury, 2001), showing research that differentiates between men and women's mental health pathways is essential.

Protective factors for depression in older age include resources such as social support and coping styles (Fiske et al., 2009). Religious participation has been outlined in many studies of depression as a possible protective factor. In general, the weight of the evidence suggests that some aspects of religious beliefs, values, or behaviors are protective of mental health, in particular depressive symptoms (Smith, McCullough, & Poll, 2003). Much of the evidence of a religion–mental health link comes from U.S.-based samples; multiple studies from the United States have found associations between mental health and religiosity, whereas European studies have been less conclusive (Koenig, King, & Carson, 2012; Leurent et al., 2013). The United States has one of the largest percentages of people practicing religion in the world, whereas the European picture is more mixed, indicating that this difference may reflect some effect of living in a largely religious society; it has been argued that "religious people are happier in religious nations" (Okulicz-Kozaryn, 2010). As a historically religious society, Ireland represents a unique opportunity to study these associations. Women in Ireland, much like women elsewhere, are more likely to be religious (J. S. Levin,

Taylor, & Chatters, 1994; Timonen, Kamiya, & Maty, 2011). Although Ireland is still a predominantly Catholic country, the 2016 Irish census showed that the percentage of Catholics fell sharply between 2011 and 2016 from 84.2% to 78.3% of the population self-identifying as Catholic (Central Statistics Office, 2017). The Church's social standing has faced challenges in recent years due to a number of scandals and societal changes. Among these are ongoing revelations of abuse in "Mother and Baby" homes and challenges to Catholic doctrine such as recent public votes relating to the legality of same-sex marriage and abortion. Therefore, it is not only practical to test these pathways in the Irish context but also important to discover the mechanisms of the religion–mental health pathway within a secularizing society.

Further work is now required to provide evidence for the pathways behind the association between religion and depression (J. Levin, 2010). Broadly, the literature has identified a number of interconnected pathways through which religiosity, defined as the extent to which individuals practice and value their religion, could have an effect on mental health (Cheadle & Dunkel Schetter, 2017; George, Ellison, & Larson, 2002). Psychological explanations of the links between religiosity and mental health suggest that religiosity provides resources that enable increased coping and stress-buffering effects when encountering stressful life events (Smith et al., 2003). This is in turn related to a sense of meaning or coherence that is derived from religion, which can affect one's ability to cope with stress (Park, 2007). Older populations have been found to report a higher sense of coherence (Nilsson, Leppert, Simonsson, & Starrin, 2010). There is, however, evidence that religious coping can be both positive and negative and that this affects the psychological adjustment outcome (for a meta-analysis, see Ano (2005); for a review, see Pargament & Raiya, 2007).

Other theorists have emphasized the social role of religious participation. A social mechanism behind the association relates to the receipt of social support and social capital obtained through participation in organized religion. This support can be intangible, such as companionship, friendship, or advice, and tangible, such as practical help with tasks of everyday living or financial help (Koenig et al., 2012). Some studies have found that emotional support fully mediates the relationship between intrinsic religiosity and mental health variables (Hovey, Hurtado, Morales, & Seligman, 2014). Fenelon and Danielsen (2016) found that after disaffiliation, continued church attendance mediated any negative affect on well-being of disaffiliating. However, others have suggested that intrinsic religiosity and spiritual comfort seeking have effects that are independent from social support factors (Rasic,

Robinson, Bolton, Bienvenu, & Sareen, 2011; Steffen, Masters, & Baldwin, 2017). An understanding of why these findings are contradictory is important. If social support and network effects are relevant, these could be particularly important for older people; one study found that older people who attended church services felt that their congregation was more cohesive and this had indirect impacts on their sense of optimism and overall health (Krause, 2002).

Within these mechanisms, confounding or reverse causality is also plausible; negative experiences within religious setting may cause individuals to both move away from their religious practice and develop depressive symptoms. Similarly, those with fewer depressive symptoms may find it easier to maintain religious engagement and practice (Maselko, Hayward, Hanlon, Buka, & Meador, 2012). Beyond the social and psychological mechanisms, there is also the possibility of lifestyle effects. The religious are more likely to have healthier lifestyles, potentially influencing both their physical and mental health (Ahrenfeldt, Moller, Hvidt, & Lindahl-Jacobsen, 2018). Longitudinal evidence is therefore now needed to start to explore the direction of these effects. We seek to test three hypotheses relating to the association between religious practice and depressive symptoms in middle-aged and older women living in Ireland: Firstly, we investigate whether religious practice and belief are longitudinally predictive of depressive symptoms, indicating the possibility of a degree of causality in the relationship. Secondly, we investigate a social mechanism, by testing whether the relationship between religious factors and depressive symptoms is mediated by the size of social network (social connectedness). Finally, we investigate whether religious attendance has more influence over depressive symptoms than religious importance.

We therefore hypothesize:

(1) that religious factors will be predictive of lower depressive symptoms over time, reflected in a negative association between the intercept of religious factors and slope of depressive symptoms,
(2) that this relationship will be partly or fully mediated by social connectedness, and
(3) that any relationship will be more strongly driven by religious attendance versus religious importance.

Method

This study used data from four waves of the Irish Longitudinal Study on Ageing (TILDA). TILDA is a nationally representative longitudinal study collecting data on social, economic, and health circumstances of the population aged 50 and over in Ireland and their partners of any age (Whelan & Savva, 2013). The current analysis used data from participants with a religious affiliation, aged 50 and over, who had baseline data and participated in a total of two or more waves of data collection. This is possible as latent growth curve models estimate parameters using all available data. Participants who self-reported as not religious were not included in analyses. Data were collected at four waves between 2009 and 2016, with an average of 2 years between interviews. Sample details are given in Table 1.

Ethical approval for each study wave was obtained from the Trinity College Dublin Research Ethics Committee, and signed informed consent was obtained from all participants.

Measures

Depressive symptoms. Depressive symptoms were measured in TILDA using the Centre for Epidemiologic Studies Depression (CES-D) Scale, a validated and widely used measure (Radloff, 1977). In TILDA, the full 20-item CES-D was used in Waves 1 and 2, and a short version (CES-D 8) was used in Waves 3 and 4. The CES-D 8 has been found to be a valid short form of the CES-D, with high reliability (0.72; O'Halloran, Kenny, & King-Kallimanis, 2014). To ensure scales were consistent across all waves, only the 8 items that form the CES-D 8 were used at Waves 1 and 2. Items used in the CES-D 8 Scale are presented in Online Appendix D.

Religious attendance. Respondents who had previously reported having a religion were asked about their attendance at each wave with the question "About how often do you go to religious services?" Possible responses were never/almost never, once or twice a year, every few months, once or twice a month, once a week, and more than once a week. Nonreligious respondents were routed past this question and were not included in analyses. The item was scored from 0 (*never attends*) to 5 (*more than once a week*).

Religious importance. How important each respondent considered religion to be was assessed at each wave with the question "How important would you say religion is in your life; is it very important, somewhat important, or not too important?" This item was scored from 0 to 2.

Table 1. Descriptive Statistics of the Sample.

	Female (n = 3,737)				Male (n = 3,022)			
Measure	Wave 1	Wave 2	Wave 3	Wave 4	Wave 1	Wave 2	Wave 3	Wave 4
Age, mean (*SD*)	63.33 (9.50)	—	—	—	63.66 (9.46)	—	—	—
Secondary or higher education	73.2%	—	—	—	67.0%	—	—	—
Self-reported health								
Excellent	16.9%	14.4%	13.3%	13.7%	15.3%	13.4%	13.6%	12.0%
Very good	29.1%	32.9%	34.0%	34.7%	29.7%	32.5%	32.4%	34.6%
Good	32.3%	34.0%	34.3%	35.0%	32.7%	35.7%	34.8%	37.1%
Fair	16.9%	15.2%	15.1%	13.7%	18.0%	15.4%	15.5%	14.3%
Poor	4.8%	3.5%	3.3%	2.9%	4.4%	3.1%	3.6%	2.0%
Marital status								
Married/cohabiting	66.0%	64.0%	62.6%	61.5%	75.7%	74.6%	74.6%	74.3%
Single (never married)	7.7%	7.5%	7.5%	7.6%	11.5%	11.1%	10.4%	9.9%
Separated/divorced	7.8%	8.3%	8.3%	8.0%	5.0%	5.4%	5.2%	5.4%
Widowed	18.6%	20.2%	21.6%	23.0%	7.8%	9.0%	9.8%	10.4%
Religious affiliation								
Catholic	92.6%	91.5%	91.3%	91.1%	92.2%	90.1%	89.6%	89.4%
Religious attendance								
Never/almost never	9.1%	9.2%	10.0%	10.6%	11.1%	12.9%	12.3%	12.6%
Once or twice a year	9.1%	10.1%	11.0%	11.3%	12.1%	11.5%	13.5%	13.5%
Every few months	8.6%	8.9%	8.7%	9.9%	8.8%	9.5%	9.5%	9.9%
Once or twice a month	8.6%	10.3%	9.5%	9.4%	8.8%	9.4%	9.0%	9.7%
Once a week	48.5%	46.1%	45.4%	43.5%	49.8%	47.2%	46.3%	44.3%

(continued)

Table 1. (continued)

	Female ($n = 3,737$)				Male ($n = 3,022$)			
Measure	Wave 1	Wave 2	Wave 3	Wave 4	Wave 1	Wave 2	Wave 3	Wave 4
More than once a week	16.0%	15.4%	15.5%	15.3%	9.4%	9.6%	9.4%	10.1%
Religious importance								
Not important	13.9%	14.3%	14.8%	14.4%	23.7%	24.1%	24.9%	24.6%
Somewhat important	29.5%	27.1%	29.5%	30.7%	33.3%	32.3%	31.6% 5%	33.2%
Very important	56.6%	58.6%	55.7%	55.0%	43.1%	43.6%	43.5%	42.2%
Social connectivity, mean (*SD*)	10.46 (5.75)	10.02 (5.65)	9.17 (4.89)	8.45 (4.26)	11.54 (7.36)	10.21 (6.96)	9.62 (6.27)	8.58 (5.25)
CES-D 8, mean (*SD*)[a]	3.39 (4.08)	3.20 (3.96)	3.64 (4.04)	3.58 (3.83)	2.37 (3.39)	2.35 (3.40)	2.77 (3.50)	2.73 (3.36)

Note. $n = 6,759$.
[a]Details of Centre for Epidemiologic Studies Depression 8 Scale are provided in Online Appendix D.

Social connectedness. We used a count of close relatives and friends as a measure of social connectedness. Respondents were asked how many of their children (skipped if respondent has no children) and relatives they felt close to, and how many close friends they had. This was included as a total count measure. Social connectedness scores were truncated at 20 to facilitate convergence. The untrimmed measure ranged from 0 to 48. Ninety-two percent of values at Wave 1, 93% of values at Wave 2, 96% of values at Wave 3, and 98% of values at Wave 4 were between 0 and 20.

Covariates. Control variables were included on theoretical grounds. Due to the power required for analyses within the structural equation modelling (SEM) framework, parsimonious models with few covariates were used. We controlled for age, education (primary or none vs. secondary or higher), baseline self-reported health, and baseline marital status (married or cohabiting, single, separated or divorced, or widowed).

Analysis Strategy

Analyses were run grouped by gender to obtain separate estimates within the same model. Conditional growth models were estimated, and predictors and covariates were added to the conditional latent growth model. This determined whether components of religiosity explain initial differences in depressive symptoms and influence changes in depressive symptoms over time, after controlling for covariates. Root mean square error of approximation, comparative fit index (CFI), and Tucker-Lewis index (TLI) are presented for assessment of model fit.

Latent growth curve models were estimated to establish the latent intercept (to be interpreted as the baseline value) and the latent slope (to be interpreted as the development over time) of depressive symptoms, social connectedness, religious attendance, and religious importance. Positive and negative slope values imply increases and decreases of the value of the variable over time, respectively. The intercept for the reference group for categorical growth curve models is not calculated in Mplus 6.12 and is presented here as zero (Muthén & Muthén, 2010). StdYX standardized estimates are also presented.

As the relationship of interest concerns the development of depressive symptoms, we estimated the possible effect of two growth factors, the intercept and slope for religious attendance and religious importance on the development of depressive symptoms, as well as the effect of each baseline value on baseline depressive symptoms. The model controlled for important covariates such as age, education, baseline marital status, and baseline self-

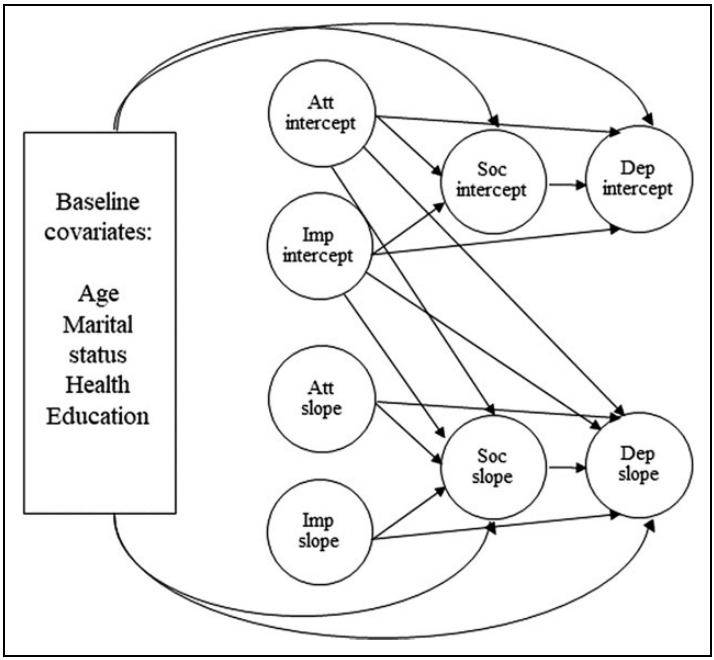

Figure 1. Mediation model plus covariates.

rated health. To test the mediating effect of social connectedness, we fit a latent growth curve model. The intercept and slope of social connectedness were then tested as putative mediators of the relationship between depressive symptoms and religious factors. A figure of the mediated model and covariates is presented in Figure 1. All analyses were conducted using Mplus 6.12 (Muthén & Muthén, 1998–2010). Full details of analysis strategy are given in Online Appendix E.

Robustness Checks

Further sensitivity analyses were carried out using a sample of respondents who participated at all four waves, using longitudinal weights to account for attrition. A sensitivity analysis excluding non-Catholic affiliated respondents was also conducted. A final sensitivity analysis used a dichotomized measure of depression using recommended cutoff scores for the CES-D 8 (Briggs, Carey, O'Halloran, Kenny, & Kennelly, 2018).

Results

Descriptive statistics are given in Table 1. The final sample consisted of 6,759 men and women aged between 50 and 94 at baseline, mean (SD): 63.48 (9.48). The sample was on the most part in good health, a majority had secondary education or higher, and a majority were married. The sample was predominantly Catholic, and the majority also attended religious services regularly and considered their religion to be important to them. Depressive symptoms were low and relatively stable, although there was some evidence of a small increase in depressive symptoms over time. There was large variability in depressive symptoms within the sample, and women reported higher depressive symptoms on average.

Growth Curve Models

Results for growth curve models are given in Table 2. Positive slopes for depressive symptoms for both men and women show that these increased over time. Negative slopes for religious attendance and social connectedness for both men and women, and for religious importance for women, show that these decreased over time. Estimated covariance between the slope and intercept is also presented. This was negative and significant for depressive symptoms and social connectedness for both men and women indicating that individuals with higher initial depressive symptoms developed further depressive symptoms at a slower rate. For those with higher than average initial social connectedness this meant a slower decline in the size of their social networks.

Structural Models

Fit statistics and model results are presented in Table 3. A first unmediated model suggested that once both religious attendance and religious importance are accounted for, religious attendance was associated with lower initial (intercept) depressive symptoms, while religious importance was associated with higher initial depressive symptoms. The association for initial attendance was consistent for men and women. The association with importance did not reach significance for women but was strong for men. There was no evidence of an association between either initial or development (slope) religious attendance or importance on the development of depressive symptoms for men or women.

A second model to test for mediation through social connectedness was fitted. Initial social connectedness was associated with lower initial

Table 2. Growth Curve Models for Depressive Symptoms, Religious Attendance, Religious Importance, and Social Connectedness.

	Estimates					Model Fit		
Measure	Intercept 90% CI	StdYX	Slope 90% CI	StdYX	I/S covariance 90% CI	RMSEA 90% CI	CFI	TLI
Depressive symptoms								
Female	3.309 [3.189, 3.430]	1.093	0.119 [0.072, 0.165]	0.163	−0.806 [−1.111, −0.501]	0.037 [0.028, 0.047]	0.987	0.984
Male	2.318 [2.209, 2.428]	0.884	0.183 [0.140, 0.226]	0.239	−0.651 [−0.904, −0.399]			
Religious attendance								
Female	0.212 [0.160, 0.263][a]	0.213	−0.035 [−0.045, −0.024]	−0.259	−0.010 [−0.022, 0.002]	0.026 [0.020, 0.032]	1.000	1.000
Male	0.000[a]	—	−0.023 [−0.034, −0.013]	−0.187	−0.006 [−0.017, 0.006]			
Religious importance								
Female	0.355 [0.299, 0.412][a]	0.401	−0.021 [−0.034, −0.007]	−0.174	−0.020 [−0.039, −0.001]	0.022 [0.012, 0.032]	1.000	1.000
Male	0.000[a]	—	−0.007 [−0.020, 0.006]	−0.057	−0.012 [−0.032, 0.009]			
Social connectedness								
Female	10.172 [10.034, 10.310]	2.967	−0.613 [−0.665, −0.561]	−0.804	−1.128 [−1.477, −0.780]	0.032 [0.023, 0.042]	0.991	0.989
Male	10.622 [10.439, 10.805]	2.828	−0.774 [−0.846, −0.702]	−0.867	−1.226 [−1.725, −0.727]			

Note. RMSEA = root mean square error of approximation; I/S = intercept/slope; CFI = comparative fit index; TLI = Tucker-Lewis index.
[a]No intercept value is calculated for the reference group (male) in growth models for ordered categorical variables.

Table 3. Structural Equation Models of the Baseline and Longitudinal Associations Between Depressive Symptoms and Religious Attendance, Religious Importance and Social Connectedness.

	Female				Male			
Measure	Unmediated	StdYX	Mediated	StdYX	Unmediated	StdYX	Mediated	StdYX
Depressive symptoms intercept								
Attendance intercept	−.628 (.110)***	−.202	−.570 (.108)***	−.184	−.776 (0.121)***	−.271	−0.688 (0.122)***	−.240
Importance intercept	.261 (.146)†	.071	.312 (0.146)*	.085	.692 (0.130)***	.232	0.709 (0.130)***	.238
Social intercept	—	—	−.167 (.021)***	—.190	—	—	−0.140 (0.018)***	−.203
Depressive symptoms slope								
Attendance intercept	.069 (.051)	.086	.069 (.050)	.086	.012 (0.079)	.014	0.007 (0.079)	.009
Attendance slope	−.547 (.608)	−.102	−.491 (.619)	−.091	−.475 (1.099)	−.088	−0.464 (1.064)	−.087
Importance intercept	.015 (.086)	.016	.025 (.093)	.027	−.111 (0.132)	−.128	−0.125 (0.136)	−.144
Importance slope	−.755 (.803)	−.135	−.766 (.801)	−.143	.576 (1.209)	.106	0.609 (1.112)	.119
Social intercept	—	—	−.003 (.010)	—.013	—	—	0.004 (0.009)	.018
Social slope	—	—	−.024 (.062)	−.025	—	—	−0.058 (0.055)	−.073
Social connectedness intercept								
Attendance intercept	—	—	.334 (.153)*	.095	—	—	0.613 (0.205)**	.148
Importance intercept	—	—	.302 (.198)	.073	—	—	0.136 (0.226)	.032
Social connectedness slope								
Attendance intercept	—	—	−0.017 (0.063)	−0.020	—	—	−0.135 (0.110)	−.130
Attendance slope	—	—	0.966 (0.631)	0.171	—	—	1.956 (1.450)	.294
Importance intercept	—	—	−0.063 (0.098)	−0.063	—	—	0.081 (0.203)	.075
Importance slope	—	—	0.271 (0.836)	0.048	—	—	−1.043 (1.619)	−.164
Model fit	Unmediated				Mediated			
RMSEA 90% CI	.062 [.060, .063]				.054 [.052, .055]			
CFI	.986				.984			
TLI	.984				.981			

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

depressive symptoms. When accounting for social connectedness within these models, the associations between initial attendance and initial depressive symptoms were reduced. The association between initial social connectedness and initial attendance was also significant in men and women. This provides evidence for initial social connectedness partially mediating the association between initial religious attendance and initial depressive symptoms. Initial or development social connectedness did not impact on the development of depressive symptoms in the models.

Including social connectedness in the model also marginally increased the association between initial importance and initial depressive symptoms, for both men and women. However, as there was no effect of initial importance on initial social connectedness, it was not a mediator in this relationship.

Robustness Checks

Results for models using a weighted sample for whom data were available at all waves ($n = 4{,}946$) are presented in Online Appendix A. Online Appendix B shows results for analyses using a Catholic sample only ($n = 6{,}356$). Finally, models using cutoff points for depression instead of CES-D score results are included in Online Appendix C. These analyses showed largely consistent results. Only models using cutoff points diverged slightly, with smaller effects and nonsignificant religious importance associations for women (Online Appendix C).

Discussion

The current study used a large data set in a population with high historic religiosity to assess the associations between religiosity and mental health. Growth curve models showed that there was a moderate negative association between initial religious attendance and initial depressive symptoms, showing that those with more frequent attendance had lower depressive symptoms at the time of the first measure. However, contrary to our first hypothesis, when accounting for both measured religious factors (attendance and importance), higher initial religious importance was associated with higher initial depressive symptoms. This provides some evidence for our third hypothesis, namely that any protective relationship between religious factors and depressive symptoms is driven by active religious participation. Further, these effects were stronger for men than for women. We found no associations between initial or development religious factors with the development of depressive symptoms.

We hypothesized that the relationship between religiosity and depressive symptoms could be explained through the social benefits gained through religious involvement. Models showed a small partial mediation of the association between initial religious attendance and depressive symptoms through social connectedness, suggesting that the relationship between attendance and mental health can in part be explained by the social benefits of being part of a religious group. Nevertheless, substantial variation could not be explained through social connectedness, indicating there may be other mechanisms through which religiosity is related to mental health.

Many contemporary studies of the religion–mental health link have highlighted the complexity of these effects. Maselko and colleagues (2012) found convincing evidence of bidirectional relationship between religious attendance and major depression. A large number have found comparable associations between religious factors and better mental health at one point in time (Dilmaghani, 2017; Hayward, Owen, Koenig, Steffens, & Payne, 2012; Kidwai, Mancha, Brown, & Eaton, 2014). Holt, Roth, Huang, and Clark (2017) found that the longitudinal relationship between religious behaviors and lower depressive symptoms was mediated by positive religious social support in a sample of African Americans. Another study using a sample of older African Americans found that church-based social support is positively associated with lower depressive symptoms and psychological distress (Chatters, Taylor, Woodward, & Nicklett, 2015). Both these studies concentrate on the importance of social support and specifically church-based social support. Our findings of the partial mediation of social network on the association between religious attendance and mental health provide initial evidence for the possibility that social support and social networks are part of the causal mechanism in these relationships.

We posited that social support obtained through religious participation may be particularly important for Irish women, as before the 1970s and 1980s many would have had fewer opportunities for acquiring social roles and social networks through the labor market (Walsh, 1993). However, the data from TILDA show that these associations were in fact similar and somewhat stronger for men, indicating that religious social participation is at least as important for men as women. Gender differences that suggested a stronger protective effect for men have been previously reported (McFarland, 2010). There is growing evidence suggesting that religious attendance is the most consistent predictor of positive mental health (Balbuena, Baetz, & Bowen, 2013; Fenelon & Danielsen, 2016; Li, Okereke, Chang, Kawachi, & VanderWeele, 2016; Manning & Miles, 2017). We

build on these findings and provide evidence that this relationship may be in part explained by the social benefit accrued through religious for both men and women.

Results from this study which showed an association between higher initial religious importance and higher initial depressive symptoms were more surprising. There have been few studies linking religious behavior to depressive symptoms, although a number of studies have found that different types of religious behavior, belief, or coping are associated with different mental health outcomes (Ahrenfeldt et al., 2017; Braam et al., 2004; Pargament & Raiya, 2007). Our findings would suggest that, for men in particular, attributing high importance to religion is associated with increased depressive symptoms, once religious attendance is accounted for. It is plausible that a distressing change in life circumstance accompanied by depressive symptoms could also be accompanied by an increase in the attributed importance of religion as a coping behavior. However, if this were the case, we would expect to see a relationship between the slopes of religiosity factors and depression, which was not the case in this study. Without longitudinal effects, both associations between religious attendance and importance with depressive symptoms could plausibly be explained by reverse causation.

The changing status of the Catholic Church in Ireland and the scrutiny it has come under due to abuse scandals of the past decades could also have a role in any possible detrimental effects of religiosity (Central Statistics Office, 2017; Inglis, 2017). Older Irish individuals, who have lived with the certainty of the status of the Church their entire lives, may find their views of their own roles within society challenged in this changing context. In particular, strong religious belief without the accompanying social support gained from attendance could be related to feelings of isolation in a society perceived as hostile to the religious. Further qualitative research may be beneficial in exploring these possibilities.

Our study does have some limitations; even though the longitudinal cohort brings with it many strengths, it is still an observational study and, as such, can be difficult to attribute causality. It is plausible that our measures of attendance and importance are not able to capture subtleties of religious feeling and participation. Religious attendance encompasses a number of factors such as religious social participation and community, worship, and commitment. In research that does not consider both importance and attendance, it is possible that attendance is confounded by other, more negative, aspects of religious beliefs and behaviors. Further, our use of size of social network does not distinguish between social support gained through religious participation and other types of social support. Social support, rather than

social network size, has been shown to be important in other studies (Schwarzbach, Luppa, Forstmeier, König, & Riedel-Heller, 2014). We were unable to make this distinction. Another limitation, which could be further explored in future research, is the exclusion of the nonreligious. This is a small but growing population in the over 50s in Ireland. Previous research on the nonreligious has shown that their mental health is not linearly associated with religiosity (Fenelon & Danielsen, 2016; King et al., 2013).

The strengths of the study include the use of a nationally representative, longitudinal data set, from a population which has not been studied in this context in the past. The large size of the data set allowed complex analyses and robustness checks. The data come from a historically Catholic country, which has undergone large-scale social change in recent decades, with religion at the center of these changes. The majority of studies investigating the link between religion and health have come from the United States. The current work adds to the literature by presenting research from an understudied, non-U.S.-based population, which has a unique profile of religious affiliation and practice.

Although we did not find longitudinal evidence for a causal effect between religiosity and mental health, we found a robust association between religious attendance and lower depressive symptoms at baseline. The association between religious importance and depressive symptoms was not as robust. However, it appears that certainly for men, higher initial religious importance is associated with higher initial depressive symptoms. We also find evidence that any modest protective effects of religious attendance on depressive symptoms are at least partly attributable to the social benefits afforded from regular religious participation. Substantial variation could not be explained through this mechanism, however, suggesting there may be more mechanisms behind the relationship. These mechanisms likely include lifestyle and psychological factors. This would be an important area of future research which may indicate specific areas where public health interventions could be targeted to improve the mental health of the older ageing population. We add to the discussion on religion and health by demonstrating that, in this historically religious sample, the relationship is complex and is, in part, tied to the social benefits of being religiously active.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The Irish Longitudinal Study on Ageing is funded by the Irish Department of Health, Irish Life plc, and The Atlantic Philanthropies. The current study is part of Joanna Orr's PhD project funded by the Irish Research Council (GOIPG/2016/1524). No funder played a role in the design or implementation of this research project.

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Supplemental Material

Supplemental material for this article is available online.

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