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An evolutionary description of cross-sex friendship

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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 that the Trinity College Library may lend or copy this thesis upon request.
Summary

In modern evolutionary theory, cross-sex friendship does not explicitly fit into the framework of sexual selection and parental investment, but it is possible that cross-sex friendship is employed as an arena for sexual strategies. In this research, cross-sex friendship was hypothesised as incorporated in the total human mating effort.

The incorporation of cross-sex friendship into sexual strategies was investigated by exploring sexual cognition in cross-sex friendship. Participants came from 3 cultural samples: the Republic of Ireland, the United Kingdom, and the United States, as well as a cumulative sample which included all participants- Irish, UK, American, and otherwise. Data were gathered by an online self-report survey.

Principal component analysis identified two factors pertinent to short- and long-term sexual desire in cross-sex friendship. These factors were Desire for Noncommittal Sexual Relationships and Anticipated Exclusive Romantic Relationships, respectively.

The expansiveness of sexual and romantic attraction was also explored in cross-sex friendship. Men were more expansive in their experience of sexual and romantic attraction in cross-sex friendship than women were. Men expressed more expansive low-commitment and high-commitment sexual intent than women in all comparisons. In addition, the desire to engage in sexual activity, the anticipation of sexual and romantic relationships, and the isolation of sexual and romantic motivations were also explored.
The intimacy of cross- and same-sex friendship was compared for men and women. Cross-sex friendship was significantly less intimate than same-sex friendship in all comparisons except for UK men. In addition, the benefits of insider's insight into the other sex and a buffer against loneliness were assessed in cross-sex friendship to reveal these benefits were not widely secured. This clarifies that cross-sex friendship is not adequately described by the existing research on generic and unique benefits of this friendship.

The age composition of typical long-term mating relationships was compared to the age composition of cross-sex friendship. It was hypothesised that the age discrepancy typical of mating relationships is evident in cross-sex friendship. While the age discrepancy of cross-sex friends was not as large as those found in long-term relationships, this age discrepancy was evident in all comparisons with the exception of UK men who were not significantly older than their cross-sex friends were.

Long-term mate preferences were explored in close cross-sex friendship. It was hypothesised that men and women's long-term mate preferences are evident in their cross-sex friends. Little support was found for these hypotheses as men's long-term preferences were identified in cross-sex friendship but these overlap with short-term preferences. There were largely inconclusive data about women's long-term mating preferences in cross-sex friendship.

These data provide scope to explore possible reproductive advantages of forging and maintaining cross-sex friendships.
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Chapter 1. Introduction

The nature of cross-sex friendship

In evolutionary theory, non-familial relations between men and women are primarily described in regards to reproductive success. Initially, the nature of cross-sex friendship seems incompatible with this. Cross-sex friendship is “a voluntary, nonfamilial, non-romantic, relationship between a female and a male in which both individuals label their association as a friendship” (Monsour, 2002, p.26). Using this description, cross-sex friendship does not dovetail with reproductive effort and the adaptive problems of mating.

From an evolutionary perspective, friendship addresses the adaptive problems of group living. The adaptive problems of group living, or peaceful coexistence, are addressed by humans through the formation of cooperative alliances and relationships characterised by reciprocal altruism (Buss, 2004). Reciprocal altruism is the “cooperation between two or more individuals for mutual benefit” (Tooby & Cosmides, 1992, p. 169). Evidence of cooperation in cross-sex friendship is found as cross-sex friends provide each other with practical assistance and instrumental aid (e.g., Lobel, Quinn, St. Clair, & Warfield, 1994; Davis & Todd, 1985).

There is a possibility that cross-sex friendship does not merely address the problems of group living. The function of and benefits gained from a relationship

---

1 There are several classes of adaptive problems derived from modern evolutionary theory (see Buss, 2004 for a review).
define the nature of the relationship. Evidence finds that cross-sex friendship appears to provide a different constellation of benefits compared to same-sex friendship (Monsour, 2002; Bleske-Rechek & Buss, 2001).

A key distinction between cross- and same-sex friendships among heterosexual adults is the scope for sexuality. Cross-sex friendship may directly aid reproductive success. A tendency to consider a cross-sex friend in a sexual or romantic light distances this relationship from platonic friendship, described as solving problems of group living, and aligns it with relationships directly aiding reproduction. Relationships that aid reproduction solve problems of mating. These problems include identifying and attracting mates, as well as maintaining and consummating these relationships (Buss, 2004).

The problems of mating are addressed in cross-sex friendship if the friendship aids the individual’s reproduction. If cross-sex friendship encompasses desires, attempts, and successes in forming mating relationships, then this provides powerful evidence that cross-sex friendship is incorporated in one’s total mating effort by directly aiding one’s reproductive success.

**Cross-sex friendship as reproductively advantageous**

Cross-sex friendship may have evolved as reproductively adaptive if, over ancestral history, it solved one or more of the problems of mating. As described above, these problems include identifying and attracting mates as well as maintaining and consummating these relationships (Buss, 2004). Theoretically, cross-sex
friendship may solve these problems as a reproductive adaptation or by proxy of an existing adaptation.

Adaptations are traits that have been preserved by natural selection because they promoted reproduction by meeting some environmental challenge (Gaulin & McBurney, 2004). They are specifically functional in nature and necessarily inherited from our ancestors through the process of natural selection to best supply us with a repertoire of effective means to cope with social and environmental problems (Buss, 2004). Specific adaptations have evolved to cope with the problems of mating as well as problems of survival (Buss, 2004). A genetic analysis will not be explored here; however, it is understood that adaptations have a genetic basis comprising many genes (Buss, 2004).

The evolution of an adaptation concerns the three keys principles of evolution by natural selection: variation, inheritance, and selection (Buss, 2004). First, variation concerns how members of a species vary in their ability to survive and reproduce (Buss, 2004). Individuals are not equally desirable mates nor equally successful at attracting mates. If a behaviour provides a reproductive advantage by aiding mate attraction and securing mates, then individuals possessing this behaviour are at a reproductive advantage relative to those whom do not (Buss, 2004).

Secondly, inheritance necessitates that the traits of reproductively successful individuals are bestowed upon their offspring (Buss, 2004). This concerns genetic inheritance (Buss, 2004). The inheritance of reproductively advantageous traits will
continue in each subsequent generation, thereby providing a reproductive advantage to its possessors relative to non-possessors.

Finally, selection concerns the process whereby the features that aid members of a species in survival and reproduction are better represented in subsequent generations relative to less successful features (Buss, 2004). As a result of the survival or reproductive advantage bestowed by the behaviour, possessors of the behaviour will be more numerous than their less adapted conspecifics in each subsequent generation, until it is a universal feature—an adaptation—of the species.

**Psychological mechanisms**

The adaptations of primary interest to evolutionary psychologists are psychological adaptations, also known as psychological mechanisms (Gaulin & McBurney, 2004; Buss, 2004). Psychological mechanisms are primarily information processing devices that aided our ancestors in their survival and reproductive problems by directing adaptive behaviour (Buss, 2004; Gaulin & McBurney, 2004). They are the psychological underpinnings of preferences and decisions that have historically aided survival and reproduction. Each evolved psychological mechanism pertains to a specific survival or reproductive problem (Buss, 2004). A psychological mechanism identifies relevant input for a specific social or environmental problem and provides adaptive output to cope with this (Buss, 2004). The output of a psychological mechanism is directed towards solving this specific adaptive problem. This output can be information to other psychological mechanisms, physiological activity, or behaviour - ultimately producing an adaptive response (Buss, 2004).
Our adaptations have amassed over our evolutionary history and, as a result, they are not necessarily suited to our 21st Century environment. The environment of evolutionary adaptedness (EEA) identifies the unique selection pressures responsible for the evolution of an adaptation (i.e., Buss, 2004; Tooby & Cosmides, 1992). While the selection pressures may not still exist, the adaptation may. In addition, the activation of a psychological mechanism does not necessarily result in an advantageous outcome on every occasion. These mechanisms evolved because they provided a more effective solution to a problem in our evolutionary past than the alternatives and so these mechanisms were selected for over time (Buss, 2004).

It is not presumed by existing research that forging cross-sex friendship is specifically a reproductive adaptation. Strictly describing cross-sex friendship as a reproductive adaptation is inappropriate as it presumes special design of the friendship for the problems of mating and there is currently insufficient evidence to classify cross-sex friendship in this way. The criteria of adaptations are prohibitively stringent (See Buss, 1998; Tooby & Cosmides, 1992; Symons, 1979). In addition, past research describes the primary benefits and functions of cross-sex friendship as non-sexual (e.g., Monsour, 2002).

Cross-sex friendship, however, does not need to be a specific adaptation to be reproductively advantageous. Instead, cross-sex friendship can be described as reproductively advantageous by proxy of existing adaptations that concern reproduction.

The application of sexual strategies to cross-sex friendship may be an arbitrary extension of sexual strategies. The sexual cognition of cross-sex friendship may merely be 'overflow' of evolutionary mating preferences. That is, the existing sexual strategies of men and women that apply in any situation would, of course, also apply to cross-sex friendship. If evidence of sexual strategies is found in cross-sex friendship, then cross-sex friendship is merely another domain where sexual strategies are enacted. However, if the constellation of preferences and desires in cross-sex friendship reveal a different story, then this may provide evidence that there is a specific 'opposite-sex friendship psychology' as has been argued by Bleske-Rechek and Buss (2001).

This hypothesised opposite-sex friendship psychology consists of evolved psychological mechanisms that specifically concern the maintenance of cross-sex friendship. These mechanisms mediate and manoeuvre these friendships to address the adaptive problems faced by men and women so that the benefits of maintaining cross-sex friendship outweigh the costs (Bleske-Rechek & Buss, 2001).
An opposite-sex friendship psychology suggests that the nature of cross-sex friendship is not exclusively under the umbrella of sexual strategies, nor is it necessarily platonic. An important implication of an opposite-sex friendship psychology is that the functions of this relationship and the benefits it provides are unique. The presence of an opposite-sex friendship psychology suggests that cross-sex friendship possesses its own regulating principles where men and women reap the benefits associated with friendship but also possibly creating sexual and romantic opportunities. This approach complements the complex and multifaceted nature of cross-sex friendship as, in some cases, it straddles friendship with mating benefits.

The possible advantages of incorporating cross-sex friendship into mating efforts include reaping the benefits of friendship while simultaneously introducing oneself as a potential suitor, assessing a prospective mate, and subsequently forming a mating relationship without the risks involved in hasty mating relationships. In addition, given the competitive nature of intrasexual competition, the cloaked guise of friendship may assuage competitors.

The possibility that cross-sex friendship may address the problems of mating in addition to the problems of group living is very important. This is not to say that cross-sex friendship is primarily a sexual relationship or all cross-sex friendships typically result in sexual relationships. Many human cross-sex friendships are purely platonic (Messman, Canary, & Hause, 2000).

The primary benefits of cross-sex friendship include the provisioning of intimacy, companionship, social support, a buffer against loneliness, and gaining an
insider's perspective of the other sex (e.g., Monsour, 2002). However, the benefits of cross-sex friendship may also concern a reproductive advantage gained from maintaining such relationships. While sexual access may not be secured in all, or even many, cross-sex friendships, it would have had dramatic reproductive fitness consequences when it did occur. According to modern evolutionary theory, characteristics of individuals who gain a reproductive advantage over their conspecifics should be selected for and inherited by their progeny (Buss, 2004). If maintaining cross-sex friendship has been reproductively advantageous in the past, this should be selected for over time.

In this context, cross-sex friendship should appear most prominently in reproductively-relevant contexts within the lifespan. The presence of cross-sex friendship, as well as its absence, will be explored throughout the lifespan with specific reference to the mating searching years.

If cross-sex friendship is linked to reproductive success, then the frequency and intensity of cross-sex friendship should also correspond to the years of reproductivity in humans. This delineates that cross-sex friendship will be infrequent prior to sexual maturation; these friendships will flourish in young adulthood, and then lessen as adults establish themselves in long-term relationships and sexual fertility declines. It follows that cross-sex friendship will be particularly prominent among single adults, though not exclusively, given the incidences of poaching, where coupled individuals are attracted away from their existing relationships (Schmitt & Buss, 2001), and infidelity, where partners violate the exclusivity of their relationship (Buss, 2004). Overall, the incidences of cross-sex friendship should be concordant
with the quest for mates, which differs markedly from the incidences of same-sex friendship in the lifespan.

**Cross-sex friendship across the lifespan**

Cross-sex friendship is rare in childhood and preadolescence as same-sex preferences dominate interactions at these times (e.g. Rawlins, 1992; Maccoby, 1988; Maccoby, 1990; Maccoby, 1999).

Cross-culturally, this preference for same-sex peers is found from the age of three or four years (Maccoby, 1994). Preschool children aged approximately four and a half years old do interact in mixed-sex groups but they spend three times as much time playing with same-sex peers than cross-sex peers (Maccoby & Jacklin, 1987). Four and five year olds interact in same-sex dyads about two thirds of the time in ten diverse cross-cultural samples from Liberia, Mexico, Japan, the Philippines, five regional samples of Kenya, as well as a sample in the United States (Whiting & Edwards, 1988). This same-sex preference describes the homosocial norm where individuals preferentially associate with their own sex (Rose, 1985).

By the age of approximately six and a half, children interact with same-sex playmates eleven times more so than cross-sex playmates (Maccoby & Jacklin, 1987). Cross-culturally, six to ten year olds were found to interact in same-sex dyads about 80% of the time in ten cross-cultural samples (Whiting & Edwards, 1988). In addition, same-sex peers typically occupy the position of “best friend” (Maccoby,
1999). Smith and Inder (1990) found supporting evidence of this as 90% of eight and nine year old New Zealanders’ best friends were of the same-sex as themselves.

Same-sex friendships were also more frequent than cross-sex friendships among preadolescents (Bukowski, Sippola, & Hoza, 1999). The unwillingness of some preadolescents to site any cross-sex friends whatsoever is indicative of the gender cleavage of this age (Buhrmester & Furman, 1987).

There are numerous explanations as to why children and preadolescents do not engage in cross-sex friendship at the same rate as same-sex friendship. Rose (1985) suggested that same-sex friendship is encouraged from a young age and so this model of friendship may become the prototype of friendship to which cross-sex friendships are compared. In addition, there are important external factors that inhibit cross-sex friendship in childhood. Monsour (2002) refers to social and structural barriers that impede the formation and maintenance of cross-sex friendship. Barriers that diminish opportunities for cross-sex friendship include single-sex education, gender prescribed extracurricular activities, and assortive grouping by adults such as allocation of girls to one activity and boys to another (Maccoby, 1988). These barriers and the prescribed gender roles in given settings vary a great deal in different cultures.

However, voluntary sex-segregation from preschool to puberty is also widely reported by researchers in numerous environments (e.g. Maccoby, 1988; Moller & Serbin, 1996; Leaper, 1994; Maccoby, 1990). Cross-cultural evidence finds that cross-sex interaction appears to decrease when children are able to choose their own playmates as they actively avoid their cross-sex peers (Whiting & Edwards, 1988).
Various differences between boys and girls may propel this sex-segregation in childhood and preadolescence. The discrepant communication and play styles of males and females have been suggested to create a hurdle in forming and maintaining cross-sex friendships (Moller & Serbin, 1996; Maccoby, 1999; Maccoby, 1988; Lewis & Phillipsen, 1998; Benenson, 1993; Moller et al., 1992; Bukowski et al., 1993; Whiting & Edwards, 1988; Maccoby, 1994; Maccoby & Jacklin, 1987; Smith & Inder, 1990; Ladd, Kochenderfer, & Coleman, 1997; Howe, 1993, Rawlins, 1992; Parker & Gottman, 1989; Monsour, 2002).

Rates of cross-sex interaction and friendship markedly increase at adolescence (Feiring, 1999; Kon & Losenkov, 1978; Kuttler, La Greca, & Prinstein, 1999; Furman & Shaffer, 1999; Rawlins, 1992; Buhrmester & Furman, 1987). As adolescence approaches, cross-sex friendship becomes more prevalent (e.g., Feiring, 1999; Rawlins, 1992) and the frequency of these friendships continue to increase through adolescence (e.g., Feiring, 1999; Kuttler et al., 1999; Buhrmester & Furman, 1987). As the juncture between childhood and adulthood, adolescence is a turning point in the relationships between males and females in terms of interest, interaction, and multiplicity of relationships. As described by Monsour (2002, p. 95), “In regard to cross-sex friendship interest, initiation, and maintenance, puberty is the single most important developmental milestone occurring the life cycle of the individual.”

Kuttler and her colleagues (1999) found 43% of 15 to 16 year olds had cross-sex friends, and 57% of 17 to 18 year olds had cross-sex friends. Additionally, Weiss
and Lowenthal (1975) found over 60% of high school students had at least one cross-sex friendship among their three closest friendships.

While the incidence of cross-sex friendship increases in adolescence, it does not surpass the prevalence of, and possibly the importance of, same-sex friendship (Furman & Shaffer, 1999). The homosocial norm is evident in adolescence as same-sex friendships are more frequent than cross-sex friendships (e.g., Furman & Shaffer, 1999), and same-sex friendships occupy the role of closest friend more so than cross-sex friendships (e.g., Buhrmester & Furman, 1987).

Late adolescence and early adulthood are key developmental stages for cross-sex friendship (Werking, 1997). This occurs, in part, as co-educational college and working environments put men and women in close proximity to each other (e.g., Sapadin, 1988; Lobel et al., 1994). For example, individuals who attend college are at an advantage for forming and maintaining cross-sex friendships relative to those who do not attend college (Rubin, 1985). Rose (1985) found all undergraduates had at least one close cross-sex friendship, while all recently graduated single men and 73% of single graduated women cited at least one close cross-sex friendship. The specific percentages of cross-sex friendships vary as Davis and Todd (1985) found that 57% of college men and 44% of college women had cross-sex friends.

While many college students maintain cross-sex friendships, these are typically a minority relative to same-sex friendships in one's social network of friends (Bleske & Buss, 2000; Davis & Todd, 1985). Young adults in the Netherlands report an average of 20% of their closest friends are cross-sex friends (Kalmijn, 2002).
Similarly, cross-sex friendships made up only 25% of friendships in Russian and American young adults in college (Sheets & Lugar, 2005).

The workplace is also a fertile ground for establishing cross-sex friendships (e.g., Booth & Hess, 1974; Kalmijn, 2002). The high numbers of women in traditionally male-dominated workplaces is a contemporary facilitator to establishing these friendships (Lobel et al., 1994; Sapadin, 1988). When working side-by-side, men and women are afforded the opportunity to befriend each other through regular contact (Sapadin, 1988; Booth & Hess, 1974).

In early adulthood, rates of cross-sex friendship are quite high but these drop through the progression of adulthood (Kalmijn, 2002; Werking, 1997; Wright, 1989). Cross-sex friendships generally constitute a minority of one’s friendships compared to same-sex friendships and these friendships are usually not the closest relationships to the individual (e.g. Bleske & Buss, 2000; Rawlins, 1992; Davis & Todd, 1985; Booth & Hess, 1974, Booth, 1972). Wright (1989) collapsed findings of several adult samples and concluded that about 40% of men and 30% of women have a close cross-sex friendship. Using a sample of adults aged 45 and older, 35% of men and 24% of women reported they had close cross-sex friends (Booth & Hess, 1974). This is a marked decline from the percentages of young adults with cross-sex friends.

Courtship and marriage may affect one’s friendship network (Rawlins, 1992). Cross-sex friendship is more common among single adults than coupled adults (i.e., Rubin, 1985; Rose, 1985). Also, single adults prefer to have a greater number of cross-sex friends than coupled adults (Bleske-Rechek & Buss, 2001).
Marriage, in and of itself, is associated with a reduction of cross-sex friendships for men and women (Rose, 1985, Rubin, 1985; Wright, 1989). In Weiss and Lowenthal’s study (1975), 66% of those recently married cited at least one cross-sex friend among their three closest friends. Similarly, Rose (1985) found that 53% of married women and 66% of married men between the ages of 20 and 28 years old had cross-sex friends. However, this seems to deteriorate over time. Rubin (1985) found that only 22% of cohabiting or married men and 16% of cohabiting or married women aged from 25 to 55 years old have cross-sex friendships. The limited existing research suggests it is atypical to find cross-sex friendships among married middle-aged men and women (Booth, 1972).

The social network of friends, same-sex and cross-sex, may shrink following marriage (Rawlins, 1992, Werking, 1997). From the early years of marriage, individuals may devote their energy to their marital relationship. From this perspective, friendship may be marginalised during this stage of life. Similarly, a couple’s choice to start a family has a pronounced affect on friendship as this increased responsibility and involvement in parenting and family-related activities hampers one’s efforts to maintain one’s friendship network (Rawlins, 1992). A longitudinal study of adults in the Netherlands found child-rearing affects the frequency of women’s cross-sex friendships more intensely than any other factor (Kalmijn, 2002). Marriage and child-rearing affect cross-sex friendship more than same-sex friendship or family relationships (See Monsour, 2002; Rubin, 1985; Kalmijn, 2002).
Romance often takes prominence over friendship, even best friendships, as romantic partners can usurp the centrality of friends in one’s life (Rubin, 1985). While friendships may occur side-by-side romantic relationships, romantic relationships often pose a significant barrier to the formation and maintenance of cross-sex friendship (Wright, 1989, Lampe, 1985; Rose, 1985; Werking, 1997). Romantic relationships affect both same-sex and cross-sex friendship, but the reduction of cross-sex friendship is more dramatic than that of same-sex friendship (See Monsour, 2002; Rubin, 1985; Kalmijn, 2002). This will be referred to here as extradyadic interference in cross-sex friendship.

The infrequency of cross-sex friendship following marriage is often attributed to the friendship posing a threat to the marital bond (e.g. Sapadin, 1988, Werking, 1997). Numerous studies refer to the widely held assumption that cross-sex friendship contains an inherent sexual component making the friendship inappropriate when involved in an exclusive romantic relationship—marriage or another significant attachment (Rubin, 1985, Werking, 1997; Wright, 1989).

Some adults may steer away from cross-sex friendship altogether to avoid speculation or suspicion that a cross-sex friendship is romantic in nature. This extradyadic interference is found in various stages of adulthood (see Monsour, 2002; Rawlins, 1992; Adams, 1985). It is presumed that marriage interferes with the formation and maintenance of cross-sex friendship more so than same-sex friendship because of the social taboo of these friendships existing alongside marriage (Rubin, 1985; Werking, 1997; Wright, 1989). Werking (1997) found that married individuals
without cross-sex friends reported their marriage was a barrier to developing cross-sex friendships.

The careful monitoring of cross-sex friendship is evident in dating and married participants to avoid potential strain in one’s romantic relationship or suspicion of impropriety (Werking, 1997). Typical maintenance tasks for cross-sex friendship between a married person and their cross-sex friend include encouraging a relationship between one’s spouse and cross-sex friend; portraying the friendship transparently for the benefit of one’s spouse; and negotiating the widely held negative assumptions about the nature of cross-sex friendship (Werking, 1997).

A partner’s jealousy or insecurity over cross-sex friendship can cause strife, which may hinder the development of cross-sex friendships (e.g., Lampe, 1985; Werking, 1997). Some spouses will outright object to cross-sex friendships and deem them inappropriate among married adults (e.g., Werking, 1997). Jealousy may arise because a romantic partner construes man-women relationships beyond marriage inappropriate given the implied sexual or romantic connotations (Werking, 1997).

Cross-sex friendships may be deserted by a coupled individual if it is perceived that the cross-sex friendship poses a significant threat to their romantic relationship (e.g., Werking, 1997). All married individuals sampled by Werking (1997) indicated that the potential for their spouses to object to their cross-sex friendships was a possible reason to terminate their friendships. Evidence also comes from Werking (1994) that 24% of recently terminated cross-sex friendships ended as a result of
romantic relationships with others or assumptions that the friendship dyad were romantically involved.

Overall, this presents the negotiation of cross-sex friendship to be more challenging for a coupled individual than a single individual. Some married individuals cite that the activities they engage in with their cross-sex friends changed subsequent to marriage (Werking, 1997). Single individuals had more intimate cross-sex friendships than coupled individuals as singles described themselves as feeling closer to their cross-sex friends (Booth & Hess, 1974, Rose, 1985). In addition, married older adults with cross-sex friends have less frequent interaction with these friends than their same-sex friends (Booth & Hess, 1974).

In addition, it is largely understood that kin come before friends (Rubin, 1985). Family members occupy a prominent role in the social network of adults (Sheets & Lugar, 2005; Kalmijn, 2002). Familial relationships are increasingly prominent through adulthood (O’Connor, 1993; Takahashi, Tamura, & Tokoro, 1997).

As one progresses from adulthood into old age, contact with friends is often withdrawn (Dickens & Perlman, 1981; Chown, 1981). Various factors associated with old age affect one’s network of friends such as retirement, widowhood, physical deterioration, illness, and often increased dependence on others (Chown, 1981). As a result, there are fewer opportunities for social interaction through the aging process (Chown, 1981). In late adulthood, most people report a handful of close friends, with a same-sex best friend cited by the vast majority of people (Jones & Vaughan, 1990).
In one study of adults over 63 years old, 96% of men and 92% of women indicated that their best friend was of the same-sex (Roberto & Scott, 1986). Similarly, among the elderly in Britain, cross-sex friends are a minority to same-sex friends (O'Connor, 1993). As found in other stages of adulthood, cross-sex friendships are often not formed in old age (Rawlins, 1992). Overall, cross-sex friendship is rare in old age (Chown, 1981).

The above analysis of cross-sex friendship sheds light on the trends of these friendships over the life course. According to past research, the frequency and intensity of cross-sex friendship differs from same-sex friendship. In this light, the experience of cross-sex friendship is not the same as that of same-sex friendship merely with a member of the other sex.

If cross-sex friendship was wholly independent of sexuality then the frequency and intensity of these friendships would not differ markedly from same-sex friendship in the lifespan. Given the possibility of confounding factors, a more conservative expectation is that cross-sex friendship does not fluctuate dramatically at turning points of sexuality in the lifespan. This is not the case.

At no point in the lifespan is there evidence that cross-sex friendship surpasses, or even equals, the frequency of same-sex friendship. Similarly, the closest friends of an individual are typically of the same sex in every stage of life. The prevalence and centrality of same-sex friendship throughout the lifespan is described by the homosocial norm where individuals preferentially associate with their own sex (Rose, 1985). However, the homosocial norm appears to be tempered during sexual
fecundity as cross-sex friendship becomes more prevalent in the reproductive years. Indeed, cross-sex friendship is particularly prominent in reproductively-relevant contexts with heightened incidences of cross-sex friendship among single adults (Rubin, 1985; Rose, 1985).

The increased prominence of cross-sex friendship during sexual fecundity could be construed as a negotiation between the homosocial norm and a quest for mates. The tendency to congregate with cross-sex friends predominantly in the periods of life associated with securing mates suggests there is a possible component of these friendships aligned with establishing mating relationships. When considering the various contexts in which men and women pursue and establish mating relationships, it is unsurprising that cross-sex friendship may be construed as a reservoir of potential mates.

Like other aspects of evolutionary psychology, this does not suggest any conscious decision making or motivation to construe cross-sex friends as mates (Buss & Schmitt, 1993). Instead, the reproductive fitness consequences of securing mates through friendship may play a role in the construct and experience of cross-sex friendship and differentiate these friendships from same-sex friendships.

In the current research, mating research is of central interest to identify how cross-sex friendship relates to mating tendencies in humans. The reproductive benefits of cross-sex friendship are explored using the framework of evolutionary psychology. However, there are accounts of how mating tendencies develop and affect one’s life other than evolutionary psychology. Social conditioning and gender-role socialisation
may be responsible for mating preferences (Fitness, Fletcher, & Overall, 2007). This has dramatic consequences for interpreting data in this area. Gender-role socialisation results from, "an interaction between social influences from parents, media, peers, books, and the simultaneous development of a mental self-schema through which children organise their representations of the world" (Basow, 2008, p. 81-82). The lifelong process of socialisation is hypothesised to shape ourselves and our interpretation of the world in a way that social influences permeate our very essence. Gender role socialisation may be responsible for demarcating how men and women perceive cross-sex friends and how the construct of cross-sex friendship overlaps with mating tendencies. Gender role socialisation research has been used to explain existing human mate preferences. While this approach is useful in some areas, there is not much support for gender-role socialisation playing a large role in mate selection (Buss & Barnes, 1986). In addition, there is inadequate framework in gender role socialisation research to account for the cross-cultural similarities found in mate preference research.

Social cognitive theory has been applied to gender to attempt explain the phenomenon of gender development. Since heterosexual mating and mate preferences arguably have their origins in gender development, this approach is of interest. As described by Bussey and Bandura (1999, p. 676), "Gender development is a fundamental issue because some of the most important aspects of people’s lives, such as the talents they cultivate, the conceptions they hold of themselves and others, the sociostructural opportunities and constraints they encounter, and the social life and occupational paths they pursue are heavily prescribed by societal gender typing". This is of interest when exploring how cross-sex friendship fits into one’s life.
However, social cognitive theory fails to explain the universals of mating such as cross-cultural mate preferences. Again, this approach is useful in some areas, but it is of limited utility in mating research. Given the importance of cross-cultural mating research to the current research, approaches concerning socialisation, modelling or social constructionism will not be used here.

For this reason, the relationship between sex and cross-sex friendship is approached from evolutionary psychology. Evolutionary psychology provides the most comprehensive explanation of existing cross-cultural mating research data (Buss, 2004).

**Current research**

The aim here is to identify if, and how, cross-sex friendship is incorporated in the total human mating effort. Humans reproduce sexually, not asexually, so humans exert energy, time, and resources when seeking and securing desirable mates. Cross-sex friendship may be an arena from which to draw mates. If there is a place for forging mating relationships from cross-sex friendship, the very essence of heterosexual male-female relationships will permeate cross-sex friendship. Specifically, cross-sex friendship was expected to be utilized in selecting and attracting mates.

Guided by sexual strategies theory, it was hypothesised that the instances in which men and women attempt to secure mates from their cross-sex friendships will characterise the asymmetry of the sexes in light of parental investment.
It is important to note that the argument is not that cross-sex friendships are always sexual. Many male-female friendships can be platonic with no interest or intention of ever encompassing a sexual or romantic component. The platonic nature of friendship is partially what defines it as such and the occurrence and frequency of these platonic cross-sex friendships is not denied. Cross-sex friendship may be behaviourally platonic, where there no manifest sexual activity in the friendship, as well as cognitively platonic, where the friends perceive each other in non-sexual and non-romantic terms. In these cross-sex friendships, sexuality and romance have no role whatsoever. The inappropriateness of inferring sexuality or romance in these friendships is accentuated by some adult cross-sex friends comparing the nature of these friendships to sibling relationships (Werking, 1997; Rubin, 1985).

While platonic friendships are acknowledged, they are not of primary interest here. Instead, cross-sex friendships where sexuality and romance are cognitive components of the friendships were emphasised. Sexuality may permeate cross-sex friendship in various ways. The implicit nature of sexuality in cross-sex friendship can be found in O’Meara’s (1989) description of cross-sex friendship as, “nonromantic in the sense that its function is purposefully dissociated from courtship rites by the actors involved. Nonromantic does not mean, however, that sexuality or passion are necessarily absent from the relationship” (O’Meara, 1989, p. 526). This notes the scope for sexuality and romance in cross-sex friendship. While a cross-sex friendship may be platonic in practice, investigating the sexual cognition of the participants may reveal latent trends that are not evident in overt behaviour.
Sexuality in cross-sex friendship can be investigated via sexual cognition and sexual behaviour. One only has to look to Jackson and Kirkpatrick’s research (2007) on sociosexuality to see the importance of the distinction between sexual cognition and sexual behaviour. Sexual cognition is broadly defined to include all aspects of sexual thought. Sexual cognition is an important reservoir of information as it reveals attractions and intentions within cross-sex friendship. The absence of current sexual activity or emerging romance defines these relationships as behaviourally platonic, but this does not necessarily entail the absence of sexual attraction, romantic attraction, sexual intent, jealousy, or any other facet of sexual cognition. Importantly, sexual cognition does not provide direct evidence of sexual strategies in cross-sex friendship; however, desire, a component of sexual cognition, plays a central role in the transition from cross-sex friendship to a sexual relationship.

Direct evidence of sexual strategies comes from behavioural evidence. Sexual behaviour in cross-sex friendship may be researched by investigating friends with benefits relationships, emerging romantic relationships between friends, and incidences of rape in cross-sex friendship.

The distinction between sexual cognition and sexual behaviour has important methodological implications. A drawback of investigating sexual behaviour is that one’s desires are often constrained. Using an example given by Buss (1998), the number of short-term sexual encounters experienced by heterosexual men and women is necessarily the same. For every man whom engages in sexual intercourse, so to does a woman, indicating identical behavioural patterns for both men and women. This neglects the reservoir of sexual psychology that indicates men and women differ
drastically in their desires for sexual encounters. This is particularly pertinent in cross-sex friendship where sexual and romantic desires are sometimes shelved to preserve the friendship (Harvey, 2003; Werking, 1997).

Sexual behaviour requires both individuals and is symmetric, indicating active participation by both members of the dyad, except in cases of rape\(^2\). For example, when investigating sexual intent, the desire to engage in sexual activity, it is symmetric when both of individuals would like to engage in a sexual relationship. Sexual intent is asymmetric when one member of the dyad would like to engage in a sexual relationship but this desire is unreciprocated.

Investigating behaviour in cross-sex friendship denies access to the unfulfilled, as well as unrequited, desires of men and women (Buss, 1998). This constraint is not evident in sexual cognition. Sexual cognition sheds light on the desires of an individual that are not actualised. While only one desire in a 1,000 may be consummated, this does not negate the other 999 desires. Relying exclusively on behavioural data results in a poverty of information about the sexual psychology of men and women.

In essence, behavioural data approximates the compromises between the desires of men and women that come to fruition. This contrasts with sexual cognition which lies bear the psychological mechanisms of mating for men and women. As described above, psychological mechanisms are the underpinnings of preferences and decisions that have historically aided survival and reproduction. Each evolved psychological

\(^2\) The definitional necessity of symmetry in sexual relationships is blurred in instances of rape as rape is a non-consensual sexual relationship.
mechanism is an adaptation that has developed over time and pertains to a specific survival or reproductive problem (Buss, 2004). Investigating psychological mechanisms opens a broad spectrum of differences between men and women that are unexposed in behavioural data.

Investigating sexual cognition relies on self-report measures of desired events, and prospective or anticipated behaviour. This leaves scope for overzealous self-presentation, inaccurate estimations of one's own behaviour, and skewed expectations of phenomena. For this reason it is important to note that the data gathered from sexual cognition and sexual behaviour differ in meaning. While an individual may be sexually attracted to a cross-sex friend, this differs from acting on this attraction and engaging in a sexual relationship. Specifically, behavioural manifestations of sexual desires in cross-sex friendship, such as sexual behaviour or romantic relationships, may not come to fruition in friendship. The internal validity of sexual cognition data is sometimes suspect as it cannot necessarily be cross-checked with behaviour.

With this in mind, it is worth reviewing the seminal research in sexual cognition which has shed light on various differences between men and women. These include men's desire for a greater number of sexual partners (Schmitt, 2003; Buss & Schmitt, 1993); men's desire for sexual intercourse after a shorter period of time (Schmitt, 2003; Buss & Schmitt, 1993); men's greater desire to seek short-term sexual relationships (Schmitt, 2003); men's greater tendency to over-infer sexual interest and intent (Abbey, 1982; 1987; Haselton, 2003; Haselton & Buss, 2000); men's more permissive attitudes towards casual, premarital, and extramarital sex (Oliver & Hyde, 1993); and men's greater receptivity to sexual offers (Clark & Hatfield, 1989).
Differences in sexual cognition of men and women are also evident in cross-sex friendship. Early research finds that men project sexuality into cross-sex friendship more so than women do (Monsour, 1992; Rose, 1985; Sapadin, 1988); men think about the sexual dimension of cross-sex friendship more often than women do (Monsour, Beard, Harris, & Kurzweil, 1994); and men report they could mix friendship and sex easily more than women do (Rubin, 1985). These findings, and others, provide insight into how men and women construe cross-sex friendship. Specifically, this suggests the possibility that men and women have distinctly different constructs of cross-sex friendship.

The sexual cognition of men and women in cross-sex friendship may markedly differ. Trends of asymmetry in sexual cognition may emerge between men and women revealing differences in how they apply sexual strategies to cross-sex friendship. The possibility that the sexual cognition of men and women is asymmetric draws attention to the discrepancy between sexual cognition and sexual behaviour, highlighting the value of investigating sexual cognition when researching cross-sex friendship.

Fluidity between sexuality and cross-sex friendship is necessary to suggest sexual strategies are employed in cross-sex friendship and that cross-sex friendship is not a rigidly platonic relationship. This fluidity of sexual partners and friendships is expressed in Sapadin’s (1988) data where 80% of men agreed that sexual partners could become cross-sex friends, with 64% of women agreeing. There is also evidence of men and women incorporating cross-sex friendship in their total mating effort as
66% of men and 46% of women feel cross-sex friends could become sexual partners. There were significant differences between men and women for both of these items (Sapadin, 1988). This describes a quality of sexual intent, or sexual awareness at the least, in many cross-sex friendships. This will be explored further with reference to how cross-sex friendship fits into modern evolutionary theory.

In this research, cross-sex friendship was explored to identify if men and women diverge when applying sexual strategies to cross-sex friendship as a component of their total mating effort. In the chapters that follow, comparisons were made using a large cumulative sample as well as individual cultural samples from the Republic of Ireland, the United States of America, and the United Kingdom. Expansiveness was an important concept in this research. Expansiveness describes the extent to which a phenomenon of cross-sex friendship, such as sexual attraction, is experienced by an individual across their multiple friendships. The methodology used throughout this research is outlined in Chapter 2.

Chapter 3 explores the possibility that sexual cognition associated with short- and long-term mating is evident in cross-sex friendship for both men and women. Sexual cognition in cross-sex friendship is then expounded upon in subsequent chapters. In chapter 4, the expansiveness of sexual attraction and flirtation in cross-sex friendship are investigated. Chapter 5 continues the exploration of expansiveness of attraction by investigating romantic attraction and jealousy. Chapter 6 primarily explores the expansiveness of sexual intent, the desire to engage in sexual activity.
Chapter 7 explores non-sexual benefits associated with cross-sex friendship. Chapters 8 and 9 then look to cross-cultural mate preference research to identify the presence of mate preferences in cross-sex friendship. In chapter 8 the age composition of cross-sex friendship is investigated to see if it corresponds to the mate preferences for age. Mate preferences are further investigated in chapter 9 where the qualities of one’s closest cross-sex friend are explored in light of cross-cultural mate preference research. The research questions throughout this thesis attempt to identify if cross-sex friendship addresses the problems of mating. This is described by sexual strategies theory but also with reference to the presence of an evolved opposite-sex friendship psychology.
Chapter 2. Method

Participants

Gender, age, and relationship status of participants

The responses of 1950 adult heterosexual participants were analysed: 577 men and 1373 women; accounting for 29.6% and 70.4% of the sample, respectively. The age range of participants was from 18 to 68 with a mean age of 27.24 (SD = 7.8) and a median age of 25 years. See figure 2.1 for the age distribution of participants.

Participants who were not heterosexual, did not have any cross-sex friends, or were under the age of 18 years old were excluded from all analyses.

Figure 2.1 Distribution of participants by age
Of these participants, 807 (41.4%) were single and 1143 (58.6%) were in exclusive heterosexual relationships. A heterosexual exclusive romantic relationship was defined as ‘a committed relationship between a man and a woman where both individuals should not have romantic or sexual relationships with others. This is typical of a boyfriend/girlfriend or husband/wife relationship’. Of the male participants, 315 were coupled and 262 were single. Of the female participants, 828 were coupled and 545 were single. See figure 2.2 for this distribution.

Figure 2.2 Distribution of sample by sex and relationship status

Friendship network of participants

No significant difference was found when comparing the number of cross-sex friends reported by men (n = 577) and women (n = 1373), z = -1.152, p > 0.05. Men indicated a mean of 4.1 cross-sex friends (SD = 1.2), and women indicated a mean of 4.0 cross-sex friends (SD = 1.3). See figure 2.3 for a histogram identifying the number of cross-sex friends reported by men and figure 2.4 for a histogram showing the number of cross-sex friends reported by women.
Men (n = 466) reported a mean of 4.21 same-sex friends (SD = 1.2) and women (n = 1177) reported a mean of 4.4 same-sex friends (SD = 1.0). See figure 2.5 for a histogram identifying the number of same-sex friends reported by men and figure 2.6 for a histogram showing the number of same-sex friends reported by women.
National residence of participants

The following nationalities were represented in the sample: 696 (35.7%) Irish participants; 642 (32.9%) American participants; 487 (25%) United Kingdom participants.
participants; and lastly, 125 (6.4%) participants indicated they were from other countries by selecting ‘Other’. See figure 2.7 for this distribution.

Figure 2.7 Sample distribution by country of residence

Measures

Participants completed a 154 item self-report survey online. Participants responded to items concerning their closest cross- and same-sex friendships as well as providing demographic information about themselves. The survey was organised in a logical format where similar items were grouped together. Where possible, items were randomised within a section (as described below). This survey is found in appendix 1 as it was presented to participants with the relevant instructions for each section.

The construction of survey items was guided by past research. The survey was designed with the assistance of three additional researchers in the field of psychology to address internal and external validity concerns. Each major section of the survey
will be described to explain the survey construction and design. The survey items discussed in chapters 3 through 7 are found in appendix 1 on pages 309-310. These items concern various aspects of cross-sex friendship such as sexual and romantic attraction; flirtation; previous sexual and romantic relationships; anticipated sexual and romantic relationships; and various circumstances in which the participant would have sexual intercourse with their cross-sex friends. Other items were included which addressed benefits associated with friendship such gaining an insider’s insight into the other sex and a buffer against loneliness. The inclusion of these items was guided by past research and will be discussed in due course.

The items used in this section were restricted items, where participants selected their response(s) among several pre-defined responses. For these items, participants considered each of their cross-sex friends individually when responding to each item. For example, when asked ‘Who do you find sexually attractive?’ participants ticked a designated box for each of their cross-sex friends to whom they were sexually attracted. Participants could enter multiple friends.

No more than five friendships could be considered for these items. This restriction to five friendships prevented the survey from becoming cumbersome to complete and restricted inclusion of relationships that may be considered acquaintances.

The data for each item were compiled by identifying the portion of friends to whom each item applied. This addressed the expansiveness of phenomena occurring in cross-sex friendship. Expansiveness describes the extent to which a phenomenon
of cross-sex friendship, such as sexual attraction, is experienced by an individual across their multiple friendships. Expansiveness concerns the individual's construct or working model of cross-sex friendship that may not be evident when exploring only one of his or her friendships.

In the example above, if a participant with four cross-sex friends indicated she was sexually attracted to 'friend 1' and 'friend 3', this represents 50% of her social world of cross-sex friends. Data were interpreted this way to gain an understanding of the overall construct and experience of cross-sex friendship.

Data from singular cross-sex friendships were not individually investigated. While past research typically addresses one particular cross-sex friendship dyad, this research sought to identify differences between men and women in their overall perception and experience of cross-sex friendship.

It is important to note that these items singularly concerned the participants' cross-sex friendship sexual cognition and presents data from only half of each friendship dyad. Whether the attractions, intentions, and desires described by each participant were reciprocated was not addressed here.

The items in this section draw on the research of numerous researchers. Sexual attraction is a phenomenon that has been widely researched in cross-sex friendship. The sexual attraction items in the current study were guided by the evolutionary psychology research by Bleske-Rechek and Buss (2001) as well as the friendship research by Reeder (2000), Kaplan and Keys (1997), and Sapadin (1988).
Items concerning romantic attraction in cross-sex friendship attempted to expound upon the mate acquisition research by Bleske-Rechek & Buss (2001) and cross-sex friendship romantic attraction research by Guerrero and Chavez (2005), Sprecher and Regan (2002), and Reeder (2000).

The investigation of flirtation attempted to extend the error management theory and sexual overperception bias research conducted by Haselton (2003) and Haselton and Buss (2000) to cross-sex friendship. The inclusion of flirtation items was guided by the research of Abbey (1982, 1987).

The item concerning previous sexual relationships with cross-sex friends expounded on the observations by Sapadin (1988) that the majority adults indicated that past sexual partners could become cross-sex friends. The similar item concerning previous romantic relationships with current cross-sex friends attempted to identify the expansiveness of this relationship shift occurring as researched by Schneider and Kenny (2000).

The items concerning anticipated sexual and romantic relationships emerging from cross-sex friendship explored the expansiveness of this occurring as previously described as a benefit of cross-sex friendship by Bleske-Rechek and Buss (2001) as well as Bleske and Buss (2000). These items attempted to elaborate upon the occurrence of this in various contexts ranging from romantic relationships to friends with benefits relationships as explored by past researchers (Williams et al., 2007;
Numerous items of this survey detail circumstances in which the participant would have sexual intercourse with their cross-sex friends. These items explored the expansiveness of this phenomenon as sexual access was viewed as a benefit of cross-sex friendship by Bleske-Rechek and Buss (2001) and Bleske and Buss (2000). Additional researchers have investigated sexual access in cross-sex friendship and the survey items here attempted to elaborate upon their findings (Afifi & Faulkner, 2000; Hughes, Morrison, & Asada, 2005; Mongeau et al., 2003; Meston & Buss, 2007; Schmitt, 2003; Williams et al., 2007; Sapadin, 1988; Oliver & Hyde, 1993).

Insider's insight has been described as a benefit of cross-sex friendship by many researchers (Monsour, 2002; Bleske & Buss, 2000; Sapadin, 1988) as has the benefit of gaining a buffer against loneliness (Monsour, 2002). The survey items included in this research explored the expansiveness of these existing benefits.

This section of the survey uses a unique approach to explore expansiveness in friendship. As a result, there were no existing measures to directly compare the reliability of the findings presented here. However, the differences found were in keeping with past research. For example, results concerning sexual attraction or other widely researched phenomena found sex differences in the direction predicted by past cross-sex friendship research. The benefit of the novel approach used in this research was that it also permitted an investigation of the expansiveness, or breadth, of these
phenomena occurring in cross-sex friendship. All participants who completed this section of the survey were included in the analyses in chapters 3 through 6.

In chapter 7, Interpersonal Description of Cross-sex Friendship, intimacy in friendship was explored in addition to two items from the section described above which identified the benefits of gaining insider’s insight into the other sex and a buffer against loneliness. The survey items discussed in chapter 7 are found in appendix 1 on pages 311 and 313.

Intimacy in close cross- and same-sex friendship was explored in this research. The items used in the current research were guided by research conducted by Kito (2005), Sheets and Lugar (2005), Lobel and his colleagues (1994), Monsour (1992) and Aukett and his colleagues (1988).

Self-disclosure was not specified in the definition of intimacy nor was emotional expressiveness. This allowed the participant to interpret the meaning of intimacy in their friendships. Past research suggests self-disclosure and emotionality are higher among women (See Aukett et al., 1988), and the closeness of men’s friendships is not manifest through self-disclosure (Rubin, 1985) but this may result from a methodological limitation of operationally defining intimacy by self-disclosure (Buhrmester & Furman, 1987).

The investigation of intimacy in cross- and same-sex friendship concerned each participant’s closest cross-sex and same-sex friend so participants were required
to have at least one cross-sex friend and one same-sex friend to allow direct comparison.

Data were gathered using a rating scale as participants selected their singular closest cross-sex friend and responded to the item, "On a scale of 1-7, with 1 indicating 'Very Close' and 7 indicating 'Not Close at All', how close do you feel to this person?" The lower the assigned value, the closer the participant felt they were to their friend. The same procedure was completed for the participant’s closest same-sex friend. All participants who completed this section of the survey were included in the analyses in chapter 7, Interpersonal Description of Cross-sex Friendship.

Wilcoxon signed rank tests were used to compare men and women for the intimacy item described above. The ratings of men’s closest cross-sex friend were compared to men’s closest same-sex friend. The ratings of women’s closest cross-sex friend were compared to women’s closest same-sex friend. Exploratory Mann Whitney ‘U’ tests were also performed for the responses to the intimacy item.

Many items of this survey attempted to identify the presence of mate preferences in cross-sex friendship. Mate preferences have been extensively researched (Buss, 1989; Buss et al, 1990, Buss & Barnes, 1986; Buss, Shackelford, Kirkpatrick, & Larsen, 2001; Hatfield & Sprecher, 1995; Hill, 1945; Hudson & Henze, 1969; McGinnis, 1956; Sprecher, Sullivan, & Hatfield, 1994; Todosijević, Ljubinković, & Arančić, 2003; Toro-Morn & Sprecher, 2003). Mating preferences were examined in chapter 8, Age Composition of Cross-Sex Friendship and chapter 9, Long-Term Mate Preferences in Close Cross-Sex Friendship.
In chapter 8, Age Composition of Cross-Sex Friendship, the ages of participants and their friends were compared. Open-ended items were used allowing participants to enter their ages as well as their friends’ ages. The survey items discussed in chapter 8 are found in appendix 1 on page 323. All participants who completed this section of the survey were included in the analyses in chapter 8.

The data presented here addressed the age composition of cross-sex and same-sex friendship. Data from singular cross-sex friendships were not individually investigated. Data identified the mean age of participants’ friends to gain an understanding of the overall experience of cross-sex friendship.

Participants identified the number of their cross-sex friends and gave the age of each of these individuals. The mean age of each participant’s cross-sex friends was subtracted from the participant’s age to identify the age difference between each participant and their cross-sex friend(s). This positive or negative numerical value identified the age discrepancy between each participant and their cross-sex friends.

Using a Mann Whitney ‘U’ test, these values were compared for men and women to identify any sex differences in the age composition of cross-sex friendship. For comparison, the same test was conducted to investigate the age composition of participants’ same-sex friendships.

The next analysis of age differences compared the ages of each participant’s cross-sex friends to the ages of their same-sex friends. A composite value was
created for each participant’s same-sex friends in the same way a value had been created for cross-sex friends using the mean age of the friends subtracted from the participant’s age. Wilcoxon signed rank tests compared the composite age difference described above for each participants’ cross-sex friends and same-sex friends. This was completed for both men and women.

Mann Whitney ‘U’ tests were used to compare the age composition of men and women’s cross-sex friendships. Wilcoxon signed rank tests were used to compare the age composition of cross-sex and same-sex friends for men and women.

In chapter 9, Long-Term Mate Preferences in Close Cross-Sex Friendship, the perceived qualities of one’s closest cross-sex and same-sex friend were explored. Rating scales were used to identify participants’ level of agreement with particular characterizations of their friends. Each participant rated his or her closest cross-sex friends on an inventory of 24 qualities. For each quality, participants described the extent to which he or she thought their closest cross-sex friend possessed this quality.

A 7-point scale was used to indicate the extent to which the closest cross-sex friend possessed each quality by ticking ‘Definitely Yes’ (1), ‘Yes’ (2), ‘Somewhat’ (3), ‘Neither Yes/No’ (4), ‘Somewhat No’ (5), ‘No’ (6), ‘Definitely No’ (7). That is, the lower the value of the integer assigned to each description, the more the participant felt that the given quality described their friend. The same procedure was completed for the participant’s closest same-sex friend.
The inventory of 24 items, partially derived from past mate preference research, was used in these sections to describe one's closest cross-sex and same-sex friend. These specific items from the survey are found in appendix 1 on pages 311-312. These items were randomised within the inventory. Several items were discussed in detail in this research. The research from which each of these items was extracted from will be reviewed individually.

The item *Physically Attractive* was extracted from Buss (1989), Buss (1990), as well as Buss and Barnes (1986). The item *Good Looks* was extracted from Hudson and Henze (1969), McGinnis (1956), Buss (1989), and Buss (1990). This is also nearly identical to the item *Good Looking* included in Buss & Barnes (1986).

The item *Good Earning Capacity* was extracted from research by Buss (1989), Buss (1990), Buss and Barnes (1986), and this item is similar to the item *Wealthy* which appeared in Buss and Barnes (1986). *Favourable Social Status* was extracted from research by Hudson and Henze (1969) and McGinnis (1956). The item *Favourable Social Status or Rating* was found in Buss (1990). The item *Ambition & Industriousness* was extracted from research by Hudson and Henze (1969), McGinnis (1956), Buss (1989), and Buss (1990). The similar item *Ambitious and Career-oriented* was found in Buss and Barnes (1986). The item *Good Financial Prospect* was included in research by Hudson and Henze (1969), McGinnis (1956), Buss (1989), and Buss (1990).

Each participant responded to the complete inventory of items to describe their closest cross-sex friend and subsequently responded to the same inventory of items to
describe their closest same-sex friend. All participants who completed this section of
the survey were included in the analyses in chapter 9.

The ratings of men’s closest cross-sex friend were compared to women’s
closest cross-sex friend ratings using Mann Whitney ‘U’ tests for between subject
comparisons. Within-participant comparisons were made between each participant’s
ratings of his or her closest same-sex and cross-sex friend using Wilcoxon signed
ranks tests.

Analysis

These data used an ordinal scale of measurement with the appropriate statistics as
intervals of the scale not presumed to be known and not presumed to be equal
(Bordens & Abbott, 2005). As a result, nonparametric statistics, specifically Mann
Whitney ‘U’ and Wilcoxon signed rank tests were used to compare men and women
for the items described above. In addition, principle component analysis was used in
chapter 3.

Excluding the principle component analysis, all men and women in the sample
were compared for each item. This was referred to as the cumulative comparison.
This included every eligible participant in the analysis. In addition to the cumulative
comparison, three cultural samples were compared. The first cultural sample
consisted of participants residing in the Republic of Ireland. The second cultural
sample consisted of participants residing in the United States of America. The third
cultural sample consisted of participants who resided in the United Kingdom. These
participants entered their country of residence as England, Scotland, Wales, or Northern Ireland. Some participants used variations of these locations and identified themselves as residing in the UK or Great Britain.

There were no significant differences between men and women in their number of cross-sex friends, nor were there differences among cultural samples in the number of cross-sex friends. For this reason, comparisons were made between men and women and cultural samples using the portion of one's friends whom the items applied to.

Single and coupled participants were not compared for methodological reasons. Single \( (n = 807) \) and coupled \( (n = 1143) \) participants had significantly different numbers of cross-sex friends, \( z = -4.524, p > 0.0001 \). The mean response of single participants was 4.2 cross-sex friends, while the mean response of attached participants was 3.9 cross-sex friends. This difference, marginal though it seems, indicates single participants claim to have more cross-sex friends than attached participants do. While this discrepancy in number is in keeping with past research (i.e., Rubin, 1985; Rose, 1985), comparisons were not made here because these would have drawn misleading and invalid conclusions about the social world of cross-sex friendship.

**Procedure**

All data were gathered using the online self-report survey described above. Given the methodological implications of web-based research, this data collection
method will be discussed; however, for a more extensive review of the opportunities and challenges of internet research in psychology see Kraut (et al., 2004).

Distribution of materials

Participants were recruited from various sources to participate in this online survey. Recruitment occurred via educational and employment organisations, radio appeals, and participant dissemination. Each of these will be described in turn.

Recruitment via educational and employment organisations

Educational and employment organisations in the Republic of Ireland, the United Kingdom, and the United States were contacted with appeals to distribute survey information as widely as possible. Initial contact was made via e-mail to an organisation or department. This e-mail stated that the survey was part of postgraduate psychology research that had received ethical approval from the Trinity College Psychology Department Ethics Committee.

The appeal included an e-mail for distribution to potential participants. This was created so the organisation’s representative could send this enclosed e-mail to their organisation’s community. This e-mail requested participation in a ‘survey concerning interpersonal relationships - primarily same-sex and opposite-sex friendships’.
References to the specific nature of the survey were not made during recruitment to avoid a biased sample of participants particularly interested in sexual cross-sex friendship. A direct link to the survey was provided as well as the researchers’ contact information and a statement concerning the confidential and anonymous nature of the survey. Both of these communications can be found in appendix 2.

Recruitment via radio appeals

Several notices were reported on national and regional radio stations to appeal to individuals to participate in this survey. Potential participants were asked to send an e-mail to friendsurvey@yahoo.co.uk. This e-mail account generated an automatic response requesting participation with a direct link to the survey. This communication can be found in appendix 3.

Recruitment via participant dissemination

Upon completion of the survey, participants were provided with a link to the survey webpage to share with others if they chose to do so. This is found in appendix 1 at the end of the survey.

Recruitment source of sample

These recruitment methods gathered a large sample of participants. As described above, participants received survey information from either an e-mail from
their workplace or college, a radio broadcast appeal, or they were referred by a friend. To identify the means through which participants received this online survey, participant selected one of the following, ‘Work’, ‘Friend’, ‘College’, ‘Advertisement’, ‘Other’ and, because this item was not mandatory, participants could choose to ignore this item.

Overall, 997 (51.1%) received this via work; 292 (15.0%) received this from a friend; 238 (12.2%) received this via college; 56 (2.9%) received this via an advertisement; 281 (14.4%) received this via another avenue as indicated by selecting ‘Other’; and 86 (4.4%) participants did not indicate how they received this survey. See figure 2.8 for this distribution.

Figure 2.8 Recruitment source of sample

Web-based research is a recent trend in psychology and, as a result, consideration has been taken concerning its utility. Use of a web-based sample raises several questions about the validity of this research. In their review of the validity of web-based research, Krantz and Dalal (2000, p.35) found “remarkable congruence between laboratory and web-based results”. Their assessment of the validity of
internet surveys, with particular reference to Likert scale items, indicates these are valuable tools for data collection.

The advantages of internet sampling include the ability to gather large samples. The sample size here, 1950 participants, was made possible by the ease of web-based data collection. Having a large sample also reduces the Type II error rate and increases the power of the statistics used (Krantz & Dalal, 2000).

Another advantage of web-based research is gathering a geographically diverse sample facilitating cross-cultural comparison (Bailey, Foote, & Throckmorton, 2000). This was particularly relevant here where three predominantly English-speaking cultural samples were gathered.

The ability to garner a sample that is more diverse than college students is also an asset of web-based research (Krantz & Dalal, 2000). Many studies in psychology, particularly concerning sexuality, use college students as participants. In this research, a concerted effort was made to not rely on a sample of college students. Indeed, only 12% of the sample was recruited from their college about this survey. While some of the participants recruited from other sources may have been college students, it is unlikely that the other 78% of participants recruited from their workplace, advertisement, friends, or other means were also college students.

Research has been conducted on the utility of human sexuality research conducted via the internet. Compared to college student participants, internet participants completing sexuality surveys are more diverse when comparing age and
sex as well as attitudes and disclosure of behaviour (Bailey et al., 2000). This diversity is important because a broader range of experience is accessed from the participants. Because the social desirability scores of internet respondents are lower than those of traditional samples of college students (Krantz & Dalal, 2000), internet surveys may offer more accurate responses, thus improving the internal validity of the research. However, it is important to note that data gathered from the internet concerning human sexuality “differed only moderately on some of the attitudinal variables” compared to traditional college samples (Bailey et al., 2000, p. 166).

Of course, there are also drawbacks to web-based research. These include scope for biased sampling and participant fraud (Krantz & Dalal, 2000). In the past, studies of human sexuality have been criticised for biased sampling with a particular emphasis on self-selection of participants (see Bailey et al., 2000 for a review). Biased sampling is an issue when taking into account what segment of the population has access to the internet.

The cross-cultural variation of internet access is an important issue. The samples used here came from developed countries where internet access was relatively frequent. Specific information about internet access in these geographical locations at the time of data collection is discussed to provide more insight into this.

At the time of data collection in 2004, no statistics are available for internet usage in the United States. To err on the side of caution, usage statistics gathered for 2003 will be discussed. In the United States in 2003, 62% of households had at least one computer with 55% of households having internet access (U. S. Department of
Commerce, 2005). Presumably many more could gain access to the internet from other sources such as work, school, and public locations such as libraries. Indeed, more than half of working adults used a computer at their workplace with 42% using the internet at work. In addition, 66% of adult students use the internet in their educational institution (U. S. Department of Commerce, 2005). The ethnic, age, and socio-demographic distribution of internet users indicate users tend to be non-Hispanic white or Asian, under the age of 65 years, and not working class.

At the time of data collection in 2004, 41% of households had internet access in the Republic of Ireland (Commission for Communications Regulation, 2004). Internet access was primarily gained at home. The percentages of Irish adults gaining internet access from home was 30% of all Irish adults. This was followed by 14% of all adults gaining access at their workplace, 8% of all adults gaining access from educational institutions, 5% from friend’s houses, 3% from cybercafés, 2% from public libraries, and 1% gaining access ‘on the move’ from devices such as mobile phones. These categories were not mutually exclusive. There were no significant differences between the sexes in usage. Similar to the American sample, older and poorer members of Irish society were less likely to use the internet.

At the time of data collection, data were only available for Great Britain and not all of the United Kingdom. Fifty-one percent of Great Britain households had internet access in 2004 (Office for National Statistics, 2006). Using earlier data from 2003, the internet was accessed from locations other than home as 64% of British adults had experience using the internet (Office for National Statistics, 2003). When identifying the locations of internet use in the previous 3 months in 2003, home was
the most frequently cited location followed by the workplace, the homes of others, educational institutions, public libraries and, lastly, internet café and shops (Office for National Statistics, 2003).

Biased sampling also occurs by self-selection of participants. As described above, no mention of sexual cross-sex friendship was made in the appeals for participants as this may have created a biased sample that overemphasised sexuality and/or romance in cross-sex friendship.

Participant fraud is also a concern when conducting web-based research. A safeguard against participant fraud was the length of this survey and the restrictions for inclusion in the sample. Participants whose responses were suspected to be fraudulent were eliminated by proxy of not completing the survey or they were ineligible for inclusion because they were too young to participate (all participants were 18 or older). A few cases occurred where participants responded with far-fetched responses but they did not complete the survey or they indicated they were younger than 18 and their responses were omitted.
Chapter 3. Sexual Strategy

A tendency to construe cross-sex friends as sexual partners has dramatic fitness consequences when these desires are actualised. The nature of cross-sex friendship is not predominately sexual (e.g., Monsour, 2002; Werking, 1997), but recurring sexual desire in a small minority of cross-sex friendships defines cross-sex friendship as potentially reproductively advantageous when these desires are acted upon (Bleske & Buss, 2000). Sexual strategies comprise the numerous sexual relationships of men and women (Buss & Schmitt, 1993). It was hypothesised that the desires of short-term and long-term sexual strategies are evident in cross-sex friendship. The presence of these desires indicates cross-sex friendship is not wholly independent from sexual strategies.

The evolution of an infrequent event, such as sexual intercourse in cross-sex friendship, is possible given the dramatic reproductive advantages of securing mates through friendship (Bleske & Buss, 2000). If even only a few sexual relationships in cross-sex friendship lead to the birth of a child, this preference is expected to persist in the mating repertoire of men and women (Bleske & Buss, 2000). A tendency to mix the benefits of cross-sex friendship with sexual access would have been reproductively advantageous for ancestors who have done just this.

Sexual Strategies

Men and women's existing mating tendencies may affect the enactment of cross-sex friendship. In this regard, the psychological mechanisms of men and women's
evolved mating strategies are hypothesised to be activated in cross-sex friendship. Sexual strategies theory provides an evolutionary framework for understanding mating relationships (Buss & Schmitt, 1993).

In sexual strategies theory, numerous evolved psychological mechanisms specifically address mate selection (Buss & Schmitt, 1993). Men and women have each evolved specific psychological mechanisms to cope with their mating problems (Buss & Schmitt, 1993). Psychological mechanisms are best explored through mating preferences and behaviours. These preferences have evolved because ancestors who exhibited these preferences were more reproductively successful than their peers who did not.

The preferences one exhibits in selecting sexual partners- the desires, attractions, and emotions- differentiate between appropriate and inappropriate mates in light of one’s specific mating problems (Buss & Schmitt, 1993). While mate preferences may be identifiable, the reproductive benefit underpinning each preference may not be psychologically accessible to the individual. For example, men are able to articulate their sexual attraction to young women, but the evolutionary advantage behind this preference, that mating with fertile women increases the likelihood of producing offspring, is not consciously articulated (Buss & Schmitt, 1993).

Specific psychological mechanisms have evolved to solve the mating problems of long- and short-term sexual strategies (Buss & Schmitt, 1993). Both men and women utilise long- and short-term sexual strategies depending on the given
context (Buss, 1998). The spectrum of long- to short-term strategies encompasses all sexual relationships between men and women (Buss & Schmitt, 1993). The outermost pole of long-term sexual strategies consists of particularly high-investing relationships such as lifelong monogamous marriage. In contrast, the outermost pole of short-term sexual strategies consists of minimal-commitment relationships such as one-night stands. All sexual relationships lie at various points between the outermost poles of short-term and long-term sexual strategies.

A key distinction between long- and short-term relationships is the commitment and investment implied. Short-term strategies are characterised by less investment and commitment than long-term strategies. Short-term strategies may be found prior to selecting a long-term partner, as an alternative to selecting a long-term partner, between long-term relationships, or even concurrent with long-term relationships (Buss, 1998, Buss & Schmitt, 1993). Current research on sociosexuality elaborates upon the structure and measurement of short-term mating (Jackson & Kirkpatrick, 2007).

Long-term strategies are characterised by increased commitment compared to short-term strategies. Long-term sexual strategies include exclusive romantic relationships. A heterosexual exclusive romantic relationship is defined here as a committed relationship between a man and a woman where romantic or sexual relationships with others are prohibited. Exclusive romantic relationships are typical of many boyfriend/girlfriend and husband/wife relationships.
The bonding in romantic relationships suggest investment on behalf of the individual for purposes of sexual reproduction, care of offspring, mutual sharing, social support, and protection (e.g., Kenrick & Trost, 1997). In our species, long-term mating typically involves attachment between partners and biparental care (Buss, 1998). The importance of commitment in long-term mating is suggested to stem from ancestral conditions where young offspring had a greater chance of survival with investment from both parents than from one parent (e.g., Buss, 2003).

Given the investment implied, the mating problems faced in long- and short-term sexual strategies differ. In long-term sexual strategies, men and women solve mating problems that accommodate their investment. The psychological mechanisms activated in long-term strategies evolved to protect the reproductive investment made. As a result, the preferences for long-term mates are more exacting than preferences for short-term mates for both men and women (Buss & Schmitt, 1993).

For men, the mating problems faced in long-term strategies include identifying reproductively valuable women, identifying women who can and will commit to long-term mating relationships, ensuring paternal certainty, and securing women who will be proficient mothers as well as of desirable gene quality (Buss & Schmitt, 1993). Men’s attempts to solve these mating problems are found in the preferences they exhibit for long-term mates. These preferences lead to siring healthy children with mates who shoulder the burden of child-rearing and protect the investment made by men.
Women’s long-term mating problems are identifying compatible men who on a long-term basis are willing and able to commit to relationships, willing and able to invest resources in her and her children and able to protect them from aggression; women also must identify proficient fathers of desirable gene quality and health (Buss & Schmitt, 1993; Buss, 2004).

Short-term sexual mateships involve different mating problems than do long-term mateships and they differ for men and women. As a result, these mating problems have evolved psychological mechanisms different from long-term strategies, and so different preferences in mating partners. Thus, men and women are hypothesised to differ in their mating adaptations.

In short-term mating, men face the problems of identifying sexually accessible and fertile women, maximising the number of sexual partners, and minimising commitment and investment to these mates (Buss & Schmitt, 1993). The solutions to these mating problems evolved because they aided aid men in securing impregnable mates without making a burdensome investment.

Research exploring men’s preferences for short-term mates supports this. For example, there is evidence supporting men's desire for a greater number of sexual partners than women (Schmitt, 2003; Buss & Schmitt, 1993); men's desire for sexual intercourse after a shorter period of time than women (Schmitt, 2003; Buss & Schmitt, 1993); men's greater desire than women to seek short-term sexual relationships (Schmitt, 2003); men's greater tendency to over-infer sexual interest and intent than women (Abbey, 1982; 1987; Haselton, 2003; Haselton & Buss, 2000);
men's more permissive attitudes towards casual, premarital, and extramarital sex than
women (Oliver & Hyde, 1993); and men's greater receptivity to sexual offers than
women (Clark & Hatfield, 1989).

The short-term mating problems women face are immediate resource extraction
from mates, assessing the long-term potential of mates, and selecting mates of
desirable gene quality (Buss & Schmitt, 1993). To understand the reproductive
benefits of short-term mating for women, the characteristics that women are more
exacting about in short-term contexts as opposed to long-term contexts shed light on
the divergent priorities for short-term mates (e.g., Buss, 2004).

Given the far-reaching claims of sexual strategies theory, great efforts have
been taken to find supporting evidence for these short- and long-term mating
problems as well as attempts to find solutions via mating decisions. To date, support
comes from various sources including the expressed preferences of men and women
in different mating contexts, observational data, physiological studies, laboratory tests
and demographic statistics (see Buss, 2004; Buss, 1998). The significance of cross-
cultural data cannot be underestimated. Though sexual strategies are highly context-
dependent, the ability to successfully predict sexual strategies in cross-cultural
research has given sexual strategies theory a solid foundation amongst competing
explanations concerning mating preferences (Buss, 1998).
Parental investment

Analysis of sexual strategies necessarily concerns parental investment because each sex’s mating problems primarily concern their level of parental investment. Parental investment is defined by Trivers as “any investment by the parent in an individual offspring that increases the offspring’s chances of surviving (and hence reproductive success) at the cost of the parent’s ability to invest in other offspring” (1972, p. 139).

Humans arguably display the greatest parental investment among mammals with parental investment often extending far beyond minimal required investment (Buss, 2004). Parental investment encompasses any investment of time, energy, or effort that increases the survival and reproduction of offspring at the expense of other reproductive investment (Trivers, 1972). Parental investment may also include the provisioning, protection, and promotion of offspring (e.g., Buss, 2004).

Parental investment has direct consequences in mating choices. As an investment made in one offspring inhibits a parent from investing in other offspring, high-investing behaviour constrains the number of offspring one can produce and also circumscribes parent’s mating efforts. The impact of parental investment on mating choices is twofold. First, parental investment affects the stringency of mating choices. Increased parental investment is associated with increased selectivity of mating partners (Trivers, 1972). Second, mating with heavily-investing mates is advantageous as the investment increases the likelihood of the offspring’s survival,
making high-investing mates desirable partners worthy of competition (e.g., Buss, 2004; Trivers, 1972).

The minimal obligatory parental investment on behalf of women is markedly more than the minimal obligatory parental investment required on behalf of men. For each child, a woman must endure a nine-month pregnancy and this minimal investment is often followed by significant post-natal care that includes, but is not limited to, breast feeding, guarding, and caring for the infant.

Men can inseminate scores of women in their lifetime without providing any further necessary investment. As the male's parental contribution can be negligible—nothing more than insemination—he has less to gain from mate selectivity in the short-term mating context.

Asymmetry in minimal parental investment predicts increased selectivity on behalf of women when accepting sex partners, and increased competition among men competing for sex partners (Trivers, 1972; Buss & Schmitt, 1993). Cross-species evidence of this asymmetric investment has been found in hundreds of mammalian species where the female is more heavily investing than her male counterpart is and, consequentially, she exercises greater selectivity when choosing a copulation partner. The male, as the lesser-investing sex, engages in more vigorous intrasexual competition for sexual access to these females (Trivers, 1985).^1

^1 Parental investment, not biological sex, dictates the employment of intrasexual competition in a given species (Trivers, 1972). Intrasexual competition is “competition between members of one sex, the outcomes of which contributed to mating access to the other sex” (Buss, 2004, p. 7). Support for this is found in sex-role reversed species where the male is the higher-investing sex and he exercises greater selectivity of mates while the female engages in fierce intrasexual competition for these heavily-investing partners (Trivers, 1972).
The discrepancy between men's and women's minimal parental investment is evident as, over the period of a year, a woman can typically produce one child while a man can produce many more children given his minimal obligatory investment is merely contributing sex cells (Buss, 1998). As a result of men's minimal obligatory parental investment, men devote a larger portion of reproductive effort to short-term sexual strategies than women do (Buss & Schmitt, 1993). In contrast, women's minimal parental contribution is considerable so long-term sexual strategies are more prominent in women's mating repertoire than are short-term strategies (Buss & Schmitt, 1993).

Sexual strategies theory has been misconstrued by some to suggest men are exclusively motivated to engage in short-term strategies and women are exclusively motivated to engage in long-term strategies. This is not the case. Men and women will pursue a strategy, either short-term or long-term, when the strategy maximises the reproductive benefits in that context (Buss & Schmitt, 1993). Sexual strategies are not pursued in a vacuum but are highly-context dependent. The incredible sensitivity to context and the strategic flexibility of humans to employ short- and long-term strategies has ultimately amassed as an intricate mating psychology consisting of a vast aggregation of evolved psychological mechanisms (e.g., Buss, 1998, Buss & Schmitt, 1993).

It was expected that the desires of short-term and long-term sexual strategies are evident in cross-sex friendship. This analysis was exploratory to establish if further investigation into the presence of sexual strategies in cross-sex friendship was
warranted. The purpose here was to demonstrate that the sexual cognition associated with short- and long-term mating is evident in cross-sex friendship for both men and women.

Principal component analysis was expected to reveal the presence of two factors. Principal components analysis has been used in the past to investigate sexual cognition and behaviour by other researchers (Jackson & Kirkpatrick, 2007). The two factors that were anticipated to emerge were the desire for short-term sexual opportunities and the desire for long-term sexual relationships with one’s cross-sex friends. The short-term sexual opportunity factor was expected to describe desire for low-investment relationships with one’s friends, while the long-term relationship factor was expected to describe desire for exclusive romantic relationships. These hypotheses were exploratory to identify if further inquiry was warranted. This attempted to find if such desires take shape in such a way to suggest there is a possibility of sexual strategies occurring in cross-sex friendship.

The factor scores of men and women were compared using Mann Whitney ‘U’ tests to identify differences for these factors. It was hypothesised that men show a greater desire for short-term sexual opportunities than women do. This expectation was derived from the differences in men and women’s tendencies to pursue short-term sexual strategies (Buss & Schmitt, 1993). Given men’s minimal obligatory parent investment, men devote a larger portion of their total mating effort to short-term sexual strategies (Buss & Schmitt, 1993). In keeping with sexual strategies theory, the tendency to identify cross-sex friends as potential short-term sexual partners was hypothesised to be greater for men than for women.
Another, perhaps counter-intuitive, prediction is that men and women do not differ in long-term relationship desires in cross-sex friendship. By definition, men and women both invest heavily in their long-term relationships. Past research does not provide justification to presume one sex would specifically identify cross-sex friends as long-term mates more so than the other.

Though women have a greater minimum parental investment than men, there is no justification to presume women would seek long-term mates in cross-sex friendship more so than men. Men have a greater tendency to pursue short-term sexual strategy than women do; however, this does not necessarily impose upon men’s capacity to pursue long-term strategies. While men are expected to more vigorously pursue short-term strategies, these strategies are not necessarily at the expense of long-term strategies. It is possible for the two to be concurrent. Indeed, men may pursue long-term strategies in cross-sex friendship to the same extent as women. As a result, no specific hypotheses were made concerning differences between men and women’s long-term sexual strategy desires in cross-sex friendship. Also, the differentiated advantages for men and women for gaining long-term mates from cross-sex friendship are unidentified in past research. This comparison was purely exploratory.

Cross-cultural data of cross-sex friendship is limited at best. As a result, exploratory cross-cultural hypotheses were included. It was hypothesised that the desires of short-term and long-term sexual strategies are evident in cross-sex friendship in all cultures.
In addition, Wilcoxon signed rank tests were used to compare the factor scores of factor one with factor two. This comparison was made for men and women in all samples as well as the cumulative sample.

**Method**

See chapter 2, specifically pages 41-45, for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on pages 309-310.

**Analysis**

Principal component analysis was used to identify factors and compare relevant scores of men and women. The Kaiser-Meyer-Olkin Measure of sampling adequacy indicated that the sample was satisfactory to proceed with principal component analysis. The KMO measure was 0.876. Also, the Bartlett’s test of sphericity was significant indicating that this is not an identity matrix. The associated probability was less than 0.001.

Principal component analysis with varimax rotation was used to produce eight components. The cumulative variance accounted for by these eight components was 66%. The items loading onto each component, the variance accounted for by each component, the eigenvalues, and the scree plot are found in appendix 4.
Factor scores derived from these factors were used in further analyses. The factor scores from factor one were compared for men and women using Mann Whitney ‘U’ tests. The same comparisons were made for factor two using Mann Whitney ‘U’ tests. Wilcoxon signed rank tests were used to compare the factor scores of factor one and two for men. The same comparisons were made for women using Wilcoxon signed rank tests.

Results

Two factors were included in this analysis. See figure 3.1 for survey item loadings on these factors. The cut-off value used to assess factor loadings on each factor was 0.5. These factors, Desire for Noncommittal Sexual Relationships and Anticipated Exclusive Romantic Relationships, accounted for 36% of the cumulative variance.

It was hypothesised that the desires of short-term and long-term sexual strategies are evident in cross-sex friendship. Support for this hypothesis was found but these factors should be interpreted with caution as this does not amount to a large portion of the cumulative variance.
### Figure 3.1 Loading of survey items on to Factors 1 and 2

<table>
<thead>
<tr>
<th>Survey items</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>With whom would you have sexual intercourse, if it would not interfere with your sexual and romantic relationships with others?</td>
<td>0.826</td>
<td></td>
</tr>
<tr>
<td>With whom would you have sexual intercourse, if it would not result in an exclusive romantic relationship or interfere with your existing friendship?</td>
<td>0.824</td>
<td></td>
</tr>
<tr>
<td>With whom would you have sexual intercourse if no one would find out?</td>
<td>0.818</td>
<td></td>
</tr>
<tr>
<td>With whom would you have sexual intercourse to get to know better?</td>
<td>0.634</td>
<td></td>
</tr>
<tr>
<td>With whom do you think you may have an exclusive romantic relationship in the future?</td>
<td>0.753</td>
<td></td>
</tr>
<tr>
<td>With whom would you like to have an exclusive romantic relationship?</td>
<td>0.701</td>
<td></td>
</tr>
<tr>
<td>With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?</td>
<td>0.626</td>
<td></td>
</tr>
<tr>
<td>With whom do you think you may have a sexual relationship in the future?</td>
<td>0.589</td>
<td></td>
</tr>
<tr>
<td>Whose sexual or romantic relationships with others do you become jealous of?</td>
<td>0.561</td>
<td></td>
</tr>
<tr>
<td>To whom have you been romantically attracted for as long as you have known him/her?</td>
<td>0.560</td>
<td></td>
</tr>
</tbody>
</table>


Rotation converged in 8 iterations.

**Factor 1: Desire for Noncommittal Sexual Relationships**

Factor one accounted for 27% of the variance with an eigenvalue of 7.11.

This factor will be referred to as the Desire for Noncommittal Sexual Relationships factor. The two items to load most highly on this factor were, ‘With whom would you have sexual intercourse, if it would not interfere with your sexual and romantic relationships with others?’ (loading: 0.826), and ‘With whom would you have sexual intercourse, if it would not result in an exclusive romantic relationship or interfere with your existing friendship?’ (loading: 0.824). The subsequent item to load on this
factor was, 'With whom would you have sexual intercourse if no one would find out?' (loading: 0.818). The final item to load on this factor above the 0.50 cut-off was, 'With whom would you have sexual intercourse to get to know better?' (loading: 0.634).

Factor scores were created from the principal component analysis described above. For factor 1, Desire for Noncommittal Sexual Relationships, the factor scores of men and women were compared using a Mann Whitney 'U' test. A significant difference was found between men (N = 577, M = 0.64, SD = 1.38) and women (N = 1373, M = -0.27, SD = 0.61), z = -14.83, p < 0.0001; with a mean rank of 1267.1 for men; and 853.0 for women. This indicates that men scored significantly higher than women for this factor. See figure 3.2 for the graphical distribution for this comparison.

Figure 3.2 Mean factor scores for factor 1 and 2
The factor scores of men and women from each cultural sample were also compared using Mann Whitney 'U' tests. Significant gender differences were found in all comparisons. The factor scores of men were significantly greater than women in all cultural samples indicating a greater desire for noncommittal sexual relationships than women. See figure 3.2 for the graphical distribution for all comparisons.

A difference was found between the factor scores of Irish men (n = 208, M = 0.8, SD = 1.4) and Irish women (n = 488, M = -0.2, SD = 0.6) for this factor, z = -10.676, p < 0.0001; with a mean rank of 473.1 for Irish men; and 295.4 for Irish women. A difference was found between the factor scores of American men (n = 169, M = 0.5, SD = 1.5) and American women (n = 473, M = -0.3, SD = 0.7) for this factor, z = -6.562, p < 0.0001; with a mean rank of 401.9 for American men; and 292.8 for American women. Last, a difference was also found between the factor scores of UK men (n = 157, M = 0.5, SD = 1.3) and UK women (n = 330, M = -0.4, SD = 0.5) for this factor, z = -7.429, p < 0.0001; with a mean rank of 312.7 for UK men; and 211.3 for UK women. Again, see figure 3.2 for the graphical distribution for all comparisons.

**Factor 2: Anticipated Exclusive Romantic Relationships**

Factor 2 accounted for 9% of the variance with an eigenvalue of 2.36. This factor will be referred to as the Anticipated Exclusive Romantic Relationships factor. The item loading most highly on this factor was, 'With whom do you think you may
have an exclusive romantic relationship in the future?' (loading: 0.753). The next two items to load on this factor were, ‘With whom would you like to have an exclusive romantic relationship?’ (loading: 0.701) and, ‘With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?’ (loading: 0.626). These were followed by, ‘With whom do you think you may have a sexual relationship in the future?’ (loading: 0.589) and, ‘Whose sexual or romantic relationships with others do you become jealous of?’ (loading: 0.561). The final item to load on this factor above the 0.5 cut-off was, ‘To whom have you been romantically attracted for as long as you have known him/her?’ (loading: 0.560).

For Factor 2, Anticipated Exclusive Romantic Relationships, the factor scores of men and women were compared using a Mann Whitney ‘U’ test. See figure 3.2 for the graphical distribution for all comparisons. There was a significant difference in the cumulative sample between men (N = 577, M = 0.13, SD = 1.23) and women (N = 1373, M = -0.05, SD = 0.88), z = -2.08, p < 0.05 with a mean rank of 1016.3 for men, and 958.3 for women.

The factor scores of men and women from each cultural sample were also compared using Mann Whitney ‘U’ tests. Significant differences were found between men and women in the American and UK samples when comparing factor scores for this factor. A significant difference was found between the factor scores of American men (n = 169, M = 0.1, SD = 1.2) and American women (n = 473, M = -0.2, SD = 0.8), z = -2.686, p < 0.01; with a mean rank of 354.4 for American men; and 309.7 for American women. Also, a significant difference was found between the factor scores of UK men (n = 157, M = 0.2, SD = 1.2) and UK women (n = 330, M = -0.1, 75
SD = 0.8) for this factor, $z = -2.270, p < 0.05$; with a mean rank of 265.0 for UK men; and 234.0 for UK women. The factor scores of men were significantly greater than women in these samples indicating men experienced a greater anticipation of exclusive romantic relationships in cross-sex friendship than did women. See figure 3.2 for the graphical distribution for all comparisons.

No difference was found between the factor scores of Irish men ($n = 208, M = 0.1, SD = 1.3$) and Irish women ($n = 488, M = 0.1, SD = 0.9$) for this factor, $z = -0.658$, $p > 0.05$; with a mean rank of 340.8 for Irish men; and 351.8 for Irish women.

**Factor 1 and 2: Wilcoxon signed ranks comparisons**

The Desire for Noncommittal Sexual Relationships factor scores were compared to the Anticipated Exclusive Romantic Relationships factor scores using Wilcoxon signed rank tests. See figure 3.2 for the graphical distribution for all comparisons.

There was a significant difference in the cumulative sample for men ($N = 577$, factor 1: $M = 0.6, SD = 1.4$; factor 2: $M = 0.1, SD = 1.2$), $z = -6.777, p < 0.001$. The same comparison was made in each cultural sample using a Wilcoxon signed rank test. Significant differences were found for men in the Irish sample, ($n = 208$, factor 1: $M = 0.81, SD = 1.4$; factor 2: $M = 0.082, SD = 1.3$), $z = -5.237, p < 0.001$; the American sample, ($n = 169$, factor 1: $M = 0.53, SD = 1.47$; factor 2: $M = 0.14, SD = 1.2$), $z = -3.016, p < 0.01$; and the UK sample ($n = 157$, factor 1: $M = 0.48, SD = 1.3$;
factor 2: $M = 0.15, SD = 1.2), z = -1.872, p < 0.01$. In all these comparisons, the mean of factor one was greater than factor two.

The Desire for Noncommittal Sexual Relationships factor scores and the Anticipated Exclusive Romantic Relationships factor scores were also compared for women. A significant difference was found for women in the cumulative sample ($N = 1373$, factor 1: $M = -0.3, SD = 0.6$; factor 2: $M = -0.05, SD = 0.9$), $z = -4.550, p < 0.001$), the Irish sample ($n = 488$, factor 1: $M = -0.24, SD = 0.6$; factor 2: $M = 0.05, SD = 0.9$), $z = -4.234, p < 0.001$; and the UK sample ($n = 330$, factor 1: $M = -0.35, SD = 0.5$; factor 2: $M = -0.13, SD = 0.8$), $z = -2.816, p < 0.01$. No significant difference was found for this comparison for American women, ($n = 473$, factor 1: $M = -0.27, SD = 0.7$, factor 2: $M = -0.18, SD = 0.8$), $z = -0.542, p > 0.05$. In all comparisons, the mean factor score for factor one was less than that of factor two. Again, this difference was not significant in the American comparison but in all other comparisons. See figure 3.2 for the graphical distribution for all comparisons.

**Discussion**

It was hypothesised that the desires of short-term and long-term sexual strategies are evident in cross-sex friendship. Support for this hypothesis was found but these factors should be interpreted with caution because they did not amount to a large portion of the cumulative variance in the factor analysis. These factors accounted for a cumulative variance of 36%. In spite of the small cumulative variance, the evolutionary significance of these factors should not dismissed: the reproductive
advantage of acting on these desires is so powerful that these desires could evolve in the sexual repertoire of men and women (Bleske & Buss, 2000).

These factors approximate the desires associated with short- and long-term strategies, respectively. This does not suggest that all cross-sex friendships implicitly or explicitly concern sexuality or romance. It does suggest, however, that sexual cognition associated with short- and long-term mating is found in cross-sex friendship for men and women. This has dramatic consequences for defining cross-sex friendship in evolutionary terms. Friendships are often characterised as solving problems of survival by aiding group living (e.g., Buss, 2004), but these results provide evidence that the sexual cognition underpinning sexual strategies is found in cross-sex friendship.

The desires described in these factors concern various facets of sexual strategies. In the instances where these desires are actualised, sexual relationships offer behavioural evidence of sexual strategies in cross-sex friendship. Sexual relationships in cross-sex friendship may be attempts to launch exclusive romantic relationships, friends with benefits relationships, acts of infidelity or poaching, casual sex, or rape. These are all evidence of cross-sex friendship as a means of securing mates.

**Factor 1: Desire for Noncommittal Sexual Relationships**

The items to load highly on Factor 1 describe a readiness to engage in sexual relationships with one’s cross-sex friends in circumstances highlighted by curtailed commitment and minimal interference with social relationships. The items to load
most highly concern sexual intercourse contingent upon the absence of social consequences. These consequences include interfering with other sexual and romantic relationships; disrupting the cross-sex friendship; and extradyadic knowledge of sexual intercourse. In terms of sexual strategies theory, these items concern minimal-commitment and investment in sexual relationships. In sum, these desires indicate the underpinning of short-term sexual strategies in cross-sex friendship.

Evidence from the literature supporting short-term sexual strategies in cross-sex friendship comes from self-report data concerning sexual behaviour. Some cross-sex friendships include sexual expression without the commitment of romance (i.e., Harvey, 2003). There is evidence of adolescents and young adults maintaining sexual relationships with cross-sex friends that are dissimilar from the construct of typical romantic relationships (Williams, Shaw, Mongeau, Knight, & Ramirez, 2007; Furman & Shaffer, 1999).

Friends with benefits relationships (FWBR) are an example of minimal-commitment relationships in cross-sex friendship. The data from Factor 1 will be discussed with specific reference to FWBR research as these relationships closely approximate behavioural manifestations of these desires. These relationships have been defined as “relationships between cross-sex friends in which the friends engage in sexual activity but do not define their relationship as romantic” (Hughes, Morrison, & Asada, 2005, p. 49). A prominent feature of FWBRs is that participants attempt to

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4 Some researchers operationally define a ‘friends with benefits’ relationship as necessarily including sexual contact, without explicitly including sexual intercourse. (Hughes et al., 2005; Mongeau, Ramirez, & Vorell, 2003).
define these ‘no strings attached’ sexual relationships by commitment avoidance and absence of ‘drama’ that is found in romantic relationships (Williams et al., 2007).5

Estimates of American college students engaging in FWBRs range from 43% to 63% (i.e., Hughes et al., 2005; Mongeau, Ramirez, & Vorell, 2003; Williams et al., 2007). It is important to note that samples are drawn from college student populations and so the rates may be overrepresented due to sampling error. However, FWBRs are a component of the sexual repertoire of these populations and therefore merit investigation of sexual strategies in cross-sex friendship. Considering the current sample differs from college students (participants were predominantly older professionals), it was of interest to identify if these desires were present in the current sample.

The similarities between FWBR and the desires discussed here are striking. This compatibility suggests that minimal-commitment sexual relationships and desires for these relationships are a prominent feature of some cross-sex friendships. The items to load on this factor dovetail with some of the motivations cited by American college students to engage in FWBR. These motivations include avoiding relational commitment; a desire to have a low-maintenance relationship while gaining sexual benefits; a desire for a sexual relationship with a friend; a desire to experience emotional intimacy or closeness with a friend; and a desire to engage in a friendship of this nature (Hughes et al., 2005, p. 56). In light of sexual strategies theory, friends

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5 This is described as the ‘idealised’ view of FWBRs. However, this is not necessarily actualised. Personal experience of FWBRs often leave participants with negative views of these relationships as they oftentimes do not live up to this idealised view. (Williams et al., 2007)
who engage in minimal-commitment sexual relationships such as FWBR are examples of short-term sexual strategies between cross-sex friends.

**Preservation of extradyadic relationships**

The item to load highest on this factor was, "With whom would you have sexual intercourse, if it would not interfere with your sexual and romantic relationships with others?". This item concerns the preservation of extradyadic relationships. It is unsurprising that shielding existing relationships from sexual activity in cross-sex friendship provides an enticement to engage in sexual cross-sex friendships. Other research has found that an existing romantic relationship on behalf of one or both friends is a frequent motivation to remain platonic in many cross-sex friendships (Messman et al., 2000; Lobel et al., 1994). This provides evidence that existing relationships are a deterrent to act on the motivation to introduce sex in cross-sex friendship.

Ultimately, this desire addresses the pursuit of more than one sexual strategy at a time. Pursuing simultaneous sexual relationships can provide a distinct evolutionary advantage. Sexual relationship with friends that do not impinge upon other relationships do not strain or divert the investment in these extradyadic relationships. These scenarios may result from poaching attempts. Poaching is defined as behaviour intended to attract someone who is already in a romantic relationship (Schmitt & Buss, 2001). The possibility that some individuals may attempt to poach their cross-sex friends from existing relationships is supported by past research. Schmitt and Buss (2001) found that assuming the role of a friend was a strategy used to attract an
individual away from their existing relationship. The desire to have a sexual relationship with a cross-sex friend without disrupting one’s extradyadic relationships could represent the perspective of a poachee. That is, cross-sex friends may be attempting to entice them from their existing relationships.

**Safeguarding cross-sex friendship**

The second most highly loading item on the first factor concerned preserving the existing friendship. This item was, “With whom would you have sexual intercourse, if it would not result in an exclusive romantic relationship or interfere with your existing friendship?”

The desire to restrain sexual intimacy burgeoning into anything more than a sexual friendship aligns this item with short-term sexual strategies. This item identifies the desires associated with FWBRs as the sexual component of the relationship is not directed towards beginning a romantic relationship or increasing commitment between the friends (Hughes et al., 2005). FWBRs combine the benefits of a friendship and sexual relationship without the burdens of a romantic relationship (Hughes et al., 2005). This is important when considering that friends with benefits primarily define their relationship as a friendship (Mongeau et al., 2003).

The desire to curtail intimacy is comparable to the emotional rules that frequently regulate FWBRs. Emotional rules, the most frequently reported rule in FWBRs, are found in over half of these relationships (Hughes et al., 2005). These rules prohibit friends from feeling romance, love, or jealousy in the friendship (Hughes et al., 2005).
These ultimately restrict the commitment and investment demands in these sexual relationships. This item is also comparable to the friendship rules of FWBR. Friendship rules, found in over a fifth of FWBRs, prioritise the existing friendship over the sexual component of the relationship and strive to preserve the friendship (Hughes et al., 2005).

Many friends are not willing to add a sexual component to their friendship because they prioritise the existing friendship more so (Reeder, 2000; Bell, 1981). Werking (1997) found that the potential to harm their friendship was a reason to refrain from acting on sexual urges in the majority of cross-sex friendships. Sexuality is often construed as a potential threat to cross-sex friendship and the friendship itself is prioritised above exploring the boundaries of the relationship (Sapadin, 1988). Indeed, safeguarding one’s friendship was the most frequently cited reason for maintaining a cross-sex friendship as platonic instead of pursuing a sexual relationship (Messman et al., 2000). It is worth noting that some FWBRs end in attempt to salvage the friendship from the stress created by the FWBR (Mongeau et al., 2003). This item directly addresses this by engaging in sexual activity on the condition that the friendship is preserved.

In addition, safeguarding one’s friendship is also the most prevalent reason given for deceiving one’s cross-sex friend about attraction to, or lack of attraction to, the cross-sex friend (A. Bleske-Rechek personal communication, March 14, 2010).
Covert sexual relationship

The next item to load on this factor, "With whom would you have sexual intercourse if no one would find out?", concerns social secrecy. Shielding sexual encounters from others' knowledge protects one's privacy and eliminates ramifications suffered through reputation damage or otherwise. Suffering reputational damage is considered a cost associated with short-term sexual strategies (Buss, 2004).

Messman and her colleagues (2000) found that the third most frequently cited reason for maintaining a cross-sex friendship as platonic was to avoid disapproval from one's larger social network (Messman et al., 2000). Indeed, secrecy rules are used in over a fifth of FWBRs to exclude others from knowing about the sexual relationship between the friends (Hughes et al., 2005). Suffering reputational damage is considered a cost associated with short-term sexual strategies (Buss, 2004).

The secrecy described by this item, in tandem with the first two items in this factor, identify a desire to engage in sexual behaviour when social consequences are withheld. For coupled participants, this item and first item of this factor concern extradidyadic desires towards one's cross-sex friends.

Sexual intercourse to become better acquainted

The final item to load on this factor, 'With whom would you have sexual intercourse to get to know better?' addresses a curiosity towards one's cross-sex friends. In regards to sexual strategies, this can be construed as an attempt to assess
cross-sex friends as potential long-term mates which is a short-term mating problem for women (Buss & Schmitt, 1993). Further research should investigate the relevance of this concept to sexual strategies.

**Sexual intent**

The first factor largely represents the desire to engage in sexual relationships but not the anticipation that this desire will be realised. All items included in this factor require suspending reality to engage in sexual relationships. This draws attention to the difference between sexual desire and sexual behaviour in cross-sex friendship. For cross-sex friendship to have a reproductive benefit, these sexual desires must be actualised. The item ‘With whom do you think you may have a sexual relationship in the future?’ did not load above the 0.50 cut-off of this factor. However, it did load just below the cut-off at 0.436. While there is a desire to engage in sexual relationships with one’s cross-sex friends, the participant does not necessarily expect this to occur.

The specific desire for sexual activity will be referred to as sexual intent. In consensual sexual relationships, sexual behaviour requires both friends, while sexual intent requires only one. Sexual intent may be symmetric, experienced by both members of the dyad, or asymmetric, experienced by only one member. When sexual intent is symmetric in cross-sex friendship, social, structural, and psychological barriers may be in place preventing sexual activity in spite of mutual intent (see Messman et al., 2000 for a review; Lobel et al., 1994). Presumably when desires for
noncommittal sexual relationships are actualised, these make up the FWBR population.

Friendships characterised by symmetric sexual intent would be more likely to begin a consensual sexual relationship than friendships characterised by asymmetric sexual intent. Sexual desire without anticipation of sexual intercourse may indicate asymmetric intent. If someone wants a sexual relationship with their friend, the attraction may be asymmetric, halting any possibility of sexual exploration. Absence of attraction was the second most frequently cited reason by American college students for maintaining a cross-sex friendship as platonic (Messman, et al. 2000), supporting the idea that many cross-sex friendships may be characterised by asymmetric intent. This is relevant given the many reports of asymmetric sexual intent and romantic attraction experienced on behalf of men (Kaplan & Keys, 1997; Bleske & Buss, 2000).

Desire for Noncommittal Sexual Relationships factor scores of men and women

Short-term sexual strategies account for a larger portion of men’s sexual repertoire than women’s so it is unsurprising that men scored significantly higher than women on this factor, Desire for Noncommittal Sexual Relationships. As hypothesised, men have a greater desire for short-term sexual strategies in cross-sex friendship than women do. This is in keeping with sexual strategies theory and suggests the psychological mechanisms activated in cross-sex friendship are similar to those of mateships.
This suggests that desire for short-term sexual opportunities is not only present in cross-sex friendship, but that the discrepancy expected by men and women’s asymmetric parental investment is also evident. This finding implies short-term strategies may operate in cross-sex friendship. In tandem with research concerning FWBR, short-term strategies do appear to operate in cross-sex friendship. This factor analysis provides evidence of short-term sexual desires in cross-sex friendship that are not part of a larger transition to long-term strategies. That is, these desires are not guided by increased commitment and investment, thus associating these desires with short-term sexual strategies.

It is important to remember that the overall perception and experience of cross-sex friendship was paramount to the individual relationships in this analysis. From this perspective, men perceive cross-sex friendship as an avenue to secure short-term mates more so than women. This has social ramifications for the divergent expectations and experiences of men and women in cross-sex friendship; however, in these data both men and women express a desire for short-term sexual access. The analysis of the individual items to load on this factor, and the more subtle differences between men and women depicted by these items, will be explored in chapter 4: Sexual attraction and flirtation in cross-sex friendship.

**Factor 2: Anticipated Exclusive Romantic Relationships**

While the first factor addressed desire for noncommittal sexual relationships in cross-sex friendship, Factor 2 was characterized by the expectation of exclusive romantic relationships emerging from cross-sex friendship. The items with the
highest loadings on this factor did not emphasise sexual desire, but evoked various contexts of romantic intent: anticipation of exclusive romantic relationships; romantic desire; the emergence of sexual relationships in the context of romantic relationships; jealousy; and long-standing romantic attraction.

**Desire and anticipation of an exclusive romantic relationship**

The first item to load on this factor was, ‘With whom do you think you may have an exclusive romantic relationship in the future?’ Exclusive romantic relationships are characterised by increased commitment and investment in the relationship.\(^6\) In regards to sexual strategies theory, exclusive romantic relationships are long-term strategies. While this item presumes desire to transform a friendship into an exclusive romantic relationship, it specifies the expectation that transition this will occur.

This item largely presumes symmetric romantic attraction between the cross-sex friends because a consensual exclusive romantic relationship generally requires romantic attraction on behalf of both individuals. Past research has identified that cross-sex friendship may be perceived by one or both of its members as a ‘stepping stone to romantic relationships’ (Sprecher & Regan, 2002). Whether this expectation is grounded in reality in every instance is unlikely. However, the expectation of an exclusive romantic relationship suggests the friendship is perceived to be transitioning into a romantic relationship at some point in the future.

\(^6\) A heterosexual exclusive romantic relationship was defined as ‘a committed relationship between a man and a woman where both individuals should not have romantic or sexual relationships with others. This is typical of a boyfriend/girlfriend or husband/wife relationship’.
Because this research was not longitudinal, it was not possible to identify if there was a change in relationship status from cross-sex friends to romantic partners. However, there is evidence that many cross-sex friendships transform into romantic relationships (e.g., Werking, 1997). This transition from friendship to romantic relationship provides behavioural evidence of long-term sexual strategies taking root in cross-sex friendship. In the current sample, 51% of coupled participants (585 participants) indicated that they were cross-sex friends with their partner prior to beginning their romantic relationship. That is, these were once cross-sex friendships that successfully transformed into exclusive romantic relationships.

The second item to load on this factor depicts the desire for a romantic relationship, ‘With whom would you like to have an exclusive romantic relationship?’ The pairing of this item with the first item on this factor emphasise the desire and anticipation for exclusive romantic relationships.

**Sexual intercourse in the context of an exclusive romantic relationship**

The next item to load on this factor was, ‘With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?’ This item highlights romantic intent on behalf of the participant as sexual activity in the friendship is contingent upon the development of an exclusive romantic relationship. In this regard, sexual activity was not described in the context of a minimal-commitment relationship as in Factor 1. Instead, sexual activity was described as investment-promoting, where sexual intercourse elevates the friendship to an exclusive romantic relationship.
While the first item in this factor referred to the participant’s expectation of a future romantic relationship, the next item to load on this factor concerned the expectation of a future sexual relationship, ‘With whom do you think you may have a sexual relationship in the future?’ In the larger context of this factor, this item addresses the sexual intent accompanying romantic attraction.

Sexual activity in friendship can be construed as a catalyst to transform a cross-sex friendship into a romantic relationship. Werking (1997, p. 30) suggested that sexual activity can, ‘(signal) the end of the “friendship” and the beginning of a “love relationship” since romance and sexuality are so closely aligned in romantic ideology’. In the context of other items in this factor, these two items, ‘With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?’ and ‘With whom do you think you may have a sexual relationship in the future?’ suggest sexual activity in these friendships is part of a larger transition to a romantic relationship.

**Jealousy in cross-sex friendship**

The next item to load on this factor was, ‘Whose sexual or romantic relationships with others do you become jealous of?’ Evolutionary psychologists interpret jealousy as a psychological mechanism activated in response to a perceived threat to one’s relationship (Buss, 2004). The experience of jealousy in cross-sex friendship suggests the individual perceives the bond with the friend to be threatened by extradyadic relationships. Both men and women experience jealousy in romantic relationships.
relationships, though activated by different triggers (Buss, Larsen, Westen & Semmelroth, 1992). The loading of jealousy on this factor supplements the hypothesis that the desires associated with long-term sexual strategies are found in cross-sex friendship.

**Long-term romantic attraction**

Enduring romantic attraction also loaded on this factor. The item, ‘To whom have you been romantically attracted for as long as you have known him/her?’ is similar to the majority of items to load on this factor as it concerns romantic underpinnings in cross-sex friendship. However, the other items in this factor identified the current state of the cross-sex friendship. This item addresses the trajectory of romantic attraction in the relationship. This may suggest the motivations to form and maintain some cross-sex friendships are born from romantic interest.

This factor portrays romantic intent towards one’s cross-sex friends. This factor differs markedly from the first factor because of the level of commitment implied in the relationships. The items in this factor do not describe sexual desire as found in factor one, but depict various contexts of romantic anticipation. Collectively, these items emphasise romantic interest and intent in cross-sex friendship.

**Anticipated Exclusive Romantic Relationships factor scores of men and women**

Though no specific hypotheses were made, men and women’s factor scores for were compared this factor. When comparing men and women, significant differences
were found in the cumulative, the US, and the UK samples. Men’s scores were higher than women’s scores on this factor in these samples indicating men anticipate exclusive romantic relationships emerging from their cross-sex friendships more than women. Both men and women benefit from long-term sexual strategies but it is particularly interesting that men, who devote a relatively larger portion of their mating effort to short-term mating, score higher than women. In light of the relatively greater parental investment made by women compared to men, this is somewhat surprising.

There was no significant difference between Irish men and women for this factor. Culturally, it would be expected that the UK and Republic of Ireland would be more similar given their geographical proximity and relatedness rather than the UK and United States. The tendency of UK and American men to anticipate romantic relationships in cross-sex friendship more so than women contradicts the notion that the psychological mechanisms associated with mating are implicated in cross-sex friendship universally and uniformly. This cultural variability is not astonishing given the dramatic cultural differences in the negotiation of social relationships; however, it warrants further investigation.

To shed light on the differences between men and women, the analysis of the items to load on this factor will be explored individually in Chapter 5: Romantic attraction and jealousy in cross-sex friendship.
Factor 1 and 2: Wilcoxon signed ranks comparisons

In all comparisons for men, the mean factor scores for factor one, Desire for Noncommittal Sexual Relationships, were greater than the mean factor scores for factor two, Anticipated Exclusive Romantic Relationships. The exclusivity implied by factor two, Anticipated Exclusive Romantic Relationships, presumes that this tendency would not be expansive in cross-sex friendship except when polygyny is implied. As a result it is unsurprising that the factor scores of factor one, Desire for Noncommittal Sexual Relationships were greater.

The results for women are in stark contrast to the results of men. In all comparisons the mean factor scores for factor two, Anticipated Exclusive Romantic Relationships, were greater than that of factor one, Desire for Noncommittal Sexual Relationships. This difference was not significant in the American comparison but in all other comparisons. This depicts the sexual cognition of women as dramatically different to that of men. The complexity of these data requires further research to elucidate the relationship described here.

Conclusion

The hypothesis that the desires of short-term and long-term sexual strategies are present in cross-sex friendship was supported by factor analysis. Though this was only a preliminary investigation, these data move towards clarifying the nature of cross-sex friendship. From an evolutionary perspective, short- and long-term sexual strategies concern the problems of mating while friendship has been thought to concern the problems of survival (Buss, 2004). A tendency to consider cross-sex
friends in a sexual or romantic light shifts this relationship from the exclusive benefits and functions associated with friendship (described as solving problems of group living) and aligns it with relationships which directly aid reproduction. In other words, cross-sex friendship potentially straddles the problems of survival as well as reproduction.

This study found that men, more so than women, construe cross-sex friendship as a reservoir for short-term mates and, to some extent, locating long-term partners. A tendency to construe cross-sex friends as desirable mates increases one’s pool of potential mates. This is particularly relevant when considering the large numbers of exclusive romantic relationships that originate from cross-sex friendship- a marginal majority of the romantic relationships in the current sample. In addition, the scope for short-term sexual strategies in cross-sex friendship is considerable with research already exploring FWBRs. The benefits of sexual cross-sex friendship include securing mates while simultaneously reaping the benefits of friendship. The results of the present study warrant further investigation into the sexual and romantic desires in cross-sex friendship and how these relate to existing premises of evolutionary psychology.

This analysis does not offer behavioural evidence of short-term and long-term strategies in cross-sex friendship. Rather, it explores the sexual cognition of men and women and can therefore only be interpreted as shedding light on the tendencies to construe cross-sex friends as mating partners. Future research should explore the actualisation of sexual and romantic desire in cross-sex friendship.
In addition, short- and long-term sexual desire in cross-sex friendship may have implications concerning the motivations behind forming and maintaining these friendships. This was beyond the scope of these data but future research should investigate the extent to which short- and long-term sexual desire affects the formation and maintenance of cross-sex friendship.

The research in this thesis will attempt to elaborate upon the sexual cognition of cross-sex friendship. Chapters 4, 5, and 6 delve further into the expansiveness of sexual and romantic attraction, sexual intent, and other items included in the factor analysis described here. Chapter 7 changes focus by exploring the non-sexual benefits associated with cross-sex friendship to consider if these adequately justify the formation and maintainence of these relationships. Then, chapters 8 and 9 return to sexual cognition by proxy of exploring the presence of mate preferences in existing cross-sex friendship. Cumulatively, these explore the possibility that cross-sex friendship aids reproductive success as individuals may construe their cross-sex friends as potential mates.
Chapter 4. Sexual Attraction and Flirtation

Sexual attraction in cross-sex friendship

In this chapter, two main variables of cross-sex friendship are addressed – sexual attraction and flirtation. Sexual attraction encompasses three broad areas: asymmetry, trajectory, and desirability. Flirtation in relation to current sexual attraction and perceived flirting by others are also discussed.

Sexual attraction does not constitute a sexual strategy. Instead, it suggests activation of mechanisms that identify potentially desirable mates (Buss, 2004). The most frequent motivation given by both men and women for engaging in sexual intercourse is “I was attracted to the person” (Meston & Buss, 2007). The presence of sexual attraction in cross-sex friendship is a corollary to the hypothesis that cross-sex friendship is incorporated into the total reproductive effort.

Sexual attraction in cross-sex friendship is experienced by at least one member of many young adult cross-sex friendships (Afifi & Faulkner, 2000). Twenty eight percent of college students reported sexual attraction to their cross-sex friends (Reeder, 2000), and 65% of professional men and 62% of professional women experienced sexual tensions and feelings in their cross-sex friendships (Sapadin, 1988).

Sexual attraction does not presume concurrent romantic attraction. Romantic attraction in cross-sex friendship is defined as wanting to transform a friendship into a
romantic relationship (Reeder, 2000). Less than half of individuals who are sexually attracted to their cross-sex friends are romantically attracted as well (Reeder, 2000). Romantic attraction will be described in due course but the infrequency of romantic attraction in cross-sex friendship suggests greater selectivity for romantic attraction than sexual attraction in cross-sex friendship.

Asymmetry of current sexual attraction experienced by men and women

Within a cross-sex friendship dyad, sexual attraction can be symmetric or asymmetric. Asymmetric sexual attraction occurs when only one friend in the dyad experiences sexual attraction. Asymmetric sexual attraction can have different consequences for the relationship compared to symmetric sexual attraction.

The intensity of sexual attraction in cross-sex friendship may vary. Bleske and Buss (2000) found that men are nearly twice as sexually attracted to their cross-sex friends as women. Kaplan and Keyes (1997) investigated sexual attraction experienced in close cross-sex friendships using a heterosexual sample of college students. They found that men experience a greater level of sexual attraction to their closest cross-sex friends. Also, a greater proportion of women (54%) compared to men (27%), express no sexual attraction whatsoever to their closest cross-sex friend (Kaplan & Keys, 1997).

Kaplan and Keys (1997) found that both men and women experience comparable ‘low levels of sexual attraction’ to their closest cross-sex friend – 16% of men and 14% percent of women reported this. A marked difference, however, was found
between the portion of men and women who reported experiencing ‘moderate levels of sexual attraction’ to their closest cross-sex friend. Forty-eight percent of men compared to only 22% of women reported moderate attraction (Kaplan & Keys, 1997). ‘High levels of sexual attraction’ were found among 9% of men and 10% of women (Kaplan & Keys, 1997).

Bleske-Rechek and Buss (2001) found that single and coupled college men indicate higher levels of sexual attraction to their cross-sex friends than single and coupled college women. Interestingly, single and coupled college men reported similar levels of sexual attraction to their cross-sex friends (Bleske-Rechek & Buss, 2001). This was not the case for college women – coupled women indicate lower levels of sexual attraction to their cross-sex friends compared to single women (Bleske-Rechek & Buss, 2001). Given the greater reproductive benefits of short-term mating for men than women, it is unsurprising that relationship status did not impinge on men’s sexual attraction in cross-sex friendship.

Ethnic and cultural variation of cross-sex friendship is a largely neglected area. This is unfortunate because culture is particularly important for evaluating universals of cross-sex friendship and the different roles cross-sex friends occupy in various cultures. Sexual attraction within cross-sex friendship may vary according to age, ethnicity, and race. Additional exploration of cultural factors may shed light on the variation of sexual attraction in cross-sex friendship and the variables affecting attraction in these friendships.

*Investigating sexual attraction in this context does not address the possibility of concurrent romantic attraction. Specifically, differential levels of sexual attraction may be associated with a concurrent desire to transform the friendship into a romantic relationship.

* An exception is Kaplan and Keys (1997) who found no difference between African American male and female college students in terms of sexual attraction towards one’s closest cross-sex friend.
Many studies involving cross-sex friendship use samples of homogeneous American college students. Given the typically limited age range of these students, their relatively high socioeconomic status, and their atypical social network, this may not shed light on cross-sex friendship as a universal social phenomenon.

It is important to note that Bleske-Rechek and Buss (2001) did not replicate their above-mentioned findings concerning asymmetric sexual attraction between men and women using an adult non-college sample. When using an adult sample with a mean age of 30 years old, Bleske-Rechek and Buss (2001) found that though men indicated increased attraction towards cross-sex friends relative to women, this difference was not significant.

This anomalous finding could have resulted, in part, because the female cross-sex friends of the adult sample participants were objectively not as sexually attractive as college-age women (Bleske-Rechek and Buss, 2001). College-age men may be particularly attracted to their cross-sex friends as their female peers better approximate peak fertility. Women of this age group are considered more attractive cross-culturally (Buss, 2004). Even so, adult non-college women indicated that their cross-sex friends were more sexually attracted to them than was reciprocated (Bleske-Rechek & Buss, 2001). This explanation has not been substantiated by other research however. Sapadin (1988) used a sample of professional adults in her research concerning sexuality in cross-sex friendship and her findings were similar to those using college samples. This study aims to explore sexual attraction in cross-sex friendship using a broad sample of predominantly non-college participants.
Previously, cross-sex friendship research has explored sexual attraction to one’s closest cross-sex friend or a particular cross-sex friend of the participant’s choosing. This approach investigates singular friendships that may not be representative of the participant’s larger perception and experiences of cross-sex friendship. While previous research has found that men express increased attraction to their cross-sex friends, the extent of sexual attraction has not been explored across a friendship network. Expansiveness describes the extent to which a characteristic of cross-sex friendship, such as sexual attraction, applies to multiple friends. Expansiveness concerns the individual’s construct or working model of cross-sex friendship that may not be evident when exploring only one of his or her friendships.

The current research uses a unique approach to investigate the expansiveness of sexual attraction, among other characteristics, in people’s cross-sex friendship networks. This approach is intended to shed light on the overall construct of cross-sex friendship by gathering information about participants’ overall approach to, and experience of, cross-sex friendship. While previous research typically addresses one particular cross-sex dyad, this research aims to explore differences in the overall perception and experience of cross-sex friendship by men and women.

The expansiveness of sexual attraction to one’s cross-sex friends is expected to differ significantly for men and women. Men and women are not expected to experience sexual attraction to similar portions of their cross-sex friends. If men and women experience sexual attraction to similar portions of their cross-sex friends, then this indicates their sexual cognition concerning sexual attraction is similar. On
the other hand, differences between the sexes in the portion of friends deemed attractive indicate divergent sexual cognition.

It was hypothesised that men are attracted to a significantly larger portion of their cross-sex friends than women. This hypothesis is compatible with previous research and dovetails with men’s reproductive adaptive problem of increasing partner number (Buss & Schmitt, 1993). Given men’s historical advantage of mating with numerous partners (Symons, 1979), men are expected to more readily identify women as potential mates. On the other hand, women are expected to be more selective when identifying potential mates (Trivers, 1985). Cross-sex friendship is expected to provide an arena for men to identify and secure mates more so than women.

This research concerns evolutionary hypotheses so there was a particular interest in the variation from one cultural group to another. In this study, cross-cultural comparisons were planned to identify trends in sexual cognition of cross-sex friendship spanning different cultural groups. Different cultural samples were compared to identify whether differences between men and women were robust across cultures – the Republic of Ireland, the United States of America, and the United Kingdom.

H1: Men are sexually attracted to a larger portion of their cross-sex friends than women are.
Three factors are particularly important to interpreting sexual attraction – asymmetry, trajectory, and mate desirability.

**Asymmetric and symmetric sexual attraction**

It is important to comment on the consequences of sexual attraction in cross-sex friendship and how this concerns cross-sex friendship research. Researchers have found that sexual feelings may be present and identified in cross-sex friendship but they do not impose on the cross-sex friendship (Lobel et al., 1994; Rubin, 1985). Dormant sexual attraction possibly contributes to the ‘zest’ enjoyed in some cross-sex friendships (Rubin, 1985). In Wright’s cumulative work (1989), he found sexual implications are usually present in adult cross-sex friendship, even if not overt.

Reeder (2000) reported that cross-sex friendships characterised by asymmetric sexual attraction were missing the ‘spark’ indicative of cross-sex friendships experiencing symmetric sexual attraction. Lacking this ‘spark’ ultimately left the cross-sex friendship ‘friendly rather than passionate’ (Reeder, 2000, p. 340). Asymmetric sexual attraction was rarely harmful or problematic in cross-sex friendship because this was unaccompanied by a desire to transform the friendship into something more, as found in friendships experiencing romantic attraction (Reeder, 2000). That is, the friendship could be maintained regardless of this sexual attraction because it did not impose on the friendship.

Investigating symmetric sexual attraction within a cross-sex friendship dyad requires studying both members of the dyad, not just one of the friends (See Reeder,
Research designs using both members of the dyad can convey the complexity of friendship that is not found otherwise (O’Meara, 1989). This methodological burden explains why so few studies investigate symmetric sexual attraction. Reeder (2000) investigated college student cross-sex friendship dyads to find that where symmetric sexual attraction was reported, participants often indicated that the attraction was not deemed important enough to jeopardise the existing friendship or they speculated that the relationship may change in the future (Reeder, 2000). The current research does not investigate dyads but this will have a significant bearing on my conclusions.

Where attraction has transformed cross-sex friendship into a sexual or romantic relationship, these relationships no longer meet the criteria of cross-sex friendship and are excluded.

**Trajectory of sexual attraction**

Trajectory refers to the course of a relationship over time. Many studies neglect the trajectory of sexual attraction in cross-sex friendship. Some friends report consistency in their feelings for a cross-sex friend as platonic, sexual, or romantic for the duration of the friendship (Reeder, 2000). However, there are reasons for supposing that sexual attraction is not typically a stable characteristic of cross-sex friendship.

It has been speculated that sexual attraction is more typical in the earlier stages of cross-sex friendship than the later stages (Kaplan & Keys, 1997; Rawlins, 1992).
Sexual attraction is more likely to dissipate than increase in cross-sex friendship (Reeder, 2000). Twenty-nine percent of individuals reported that they felt diminished sexual attraction towards their close cross-sex friend as the friendship progressed (Reeder, 2000). This suggests that a sizable portion of platonic cross-sex friendships have a history of sexual attraction. Diminished sexual attraction was associated with significantly longer friendships than cross-sex friendships characterised by current sexual attraction (Reeder, 2000). This possibly suggests sexual attraction is likely to dissipate in cross-sex friendship and leave a friendship without sexual attraction.

Sexual attraction in earlier stages of friendship seems to be replaced by objective sexual attraction where the participant was no longer attracted to the cross-sex friend (Reeder, 2000). Objective sexual attraction is defined here as identifying an individual as a sexually attractive person, though this individual is not specifically sexually attractive to the observer.

While diminished sexual attraction was the more frequent trajectory in cross-sex friendship, nearly one in five cross-sex friends reported the sexual attraction they felt towards their close cross-sex friend increased from earlier stages of the friendship (Reeder, 2000). An increase in sexual attraction was significantly associated with an increase in friendship attraction which is characterised as “feeling close and connected as friends” (Reeder, 2000). This raises the point that in some cases increased sexual attraction may be part of a transition from a platonic friendship to something more.
Cross-sex friendship research typically only concerns current cross-sex friends. Individuals engaging in sexual or romantic relationships where their relationship had transformed from friendship are rarely included as participants. For this reason, it is difficult to identify how attraction acted upon in cross-sex friendship changes the relationship as these relationships are no longer defined as friendships.

The trajectory of sexual attraction in cross-sex friendship is explored in the current study by examining current and enduring sexual attraction. Current sexual attraction only concerns the current state of the friendship without any bearing on the duration of the sexual attraction. Enduring sexual attraction identifies friendships where the participant has been sexually attracted to their cross-sex friend for the duration of the friendship. That is, sexual attraction was present during the formation stage of the friendship and this attraction has remained throughout the friendship. The presence of long-standing sexual attraction does not presume or provide evidence that the motivation of these friendships was sexually-related. This only charts the presence of sexual attraction in the participant’s cross-sex friendship.

Historically, men faced increased partner number as a reproductive adaptive problem (Buss & Schmitt, 1993). It follows that men will experience enduring sexual attraction towards a larger portion of their cross-sex friends than women. Enduring sexual attraction is expected to be more typical of men as this maintains a pool of friendships that could potentially be transformed into sexual relationships. This was expected in all cultures. In evolutionary history, men who were not attracted to women they were in repeated contact with potentially circumscribed their potential sexual partners. In this context, sustained sexual attraction reveals that the
friendship is not categorised by the participant as void of sexual potential. Enduring sexual attraction underscores sexual interest, albeit possibly minimal, in one’s cross-sex friends.

H2: Men experience enduring sexual attraction to a larger portion of their cross-sex friends than women do.

**Desirability of cross-sex friends as sexual partners**

While sexual attractiveness indicates the desirability of a mate, construing one’s friends as desirable sexual partners further supports the notion that cross-sex friendship is psychologically incorporated in one’s sexual strategies. The motivation to engage in sexual activity sheds light on this area. While physical gratification is frequently cited as a motive to engage in sex, some motives consist of seeking pleasure and satisfying a curiosity of what a sexual experience would be like with a particular person (Meston & Buss, 2007). By relating this to cross-sex friendship, participants were asked which of their cross-sex friends would be good sexual partners.

In tandem with the above hypotheses concerning men’s reproductive adaptive problem of partner number, it was expected that men would perceive a larger portion of their cross-sex friends favourably in this sexual context more so than women. The difference between men and women was expected in all cultural samples. Again, by construing a relatively larger pool of individuals as desirable mates, this potentially increases partner number for men.
H3: Men construe a larger portion of their cross-sex friends to be good sexual partners compared to women.

**Flirtation**

Flirtation relays information about the sexual component of a relationship. Flirtation signals sexual availability and possibly romantic attraction (Guerrero & Chavez, 2005). According to Egland and colleagues (Egland, Spitzberg, & Zormeier, 1996, p. 105), "flirtation is one of the means through which intimacy, relational definitions, sexual intentions, and sexual intercourse are achieved." Behaviours that may be interpreted in a flirtatious context include attentiveness, physical affection, and sexual innuendo (Egland, et al., 1996).

Flirtation can be described as a form of frivolous enticement providing arousal, novelty, and satisfaction of sensation-seeking (Egland, et al., 1996). In Sapadin’s (1988) work, 76% of men and 50% of women enjoyed sexual teasing and flirting with their cross-sex friends with a significant difference between men and women’s responses. Similarly, 66% of cross-sex friends passed sexual remarks, jokes, or teasing in their cross-sex friendships (Fuiman, 1997).

Flirting in cross-sex friendship may play a role in exploring the relational boundaries of the friendship when there is an interest in redefining the friendship (Egland, et al., 1996). Flirtation was found more frequently in cross-sex friendships characterised by romantic attraction than in friendships where romance had been
rejected or the friendship was described as strictly platonic (Guerrero & Chavez, 2005). Individuals wanting to transform their cross-sex friendship into something more may rely on flirtation as these ambiguous and indirect behaviours may be considered a low-risk means of communicating desire (Guerrero & Chavez, 2005). That is, flirtation may be construed as testing the waters to identify if interest is reciprocated within the friendship.

On the other hand, flirting between friends may be an activity enjoyable in its own right and not directed towards sexual access or altering the boundaries of the friendship. Flirtation in cross-sex friendship has been described in some relationships as 'relatively safe mock flirtation' (Egland, et al., 1996). In addition, this behaviour may play a role in enhancing one’s self-concept by reassuring participants’ of their own attractiveness (Egland, et al., 1996). Flirtation could be construed as the means through which cross-sex friends validate each other’s attractiveness as members of the other sex which has been described by some as a benefit of cross-sex friendship (Monsour, 2002). However, examining the characteristics of cross-sex friendship reveals that attraction to one’s cross-sex friend predicts flirting with the friend (Messman et al., 2000).

Lacking attraction is associated with the absence of flirtation (Messman et. al., 2000). While it is unsurprising that there is a relationship between no attraction and no flirtation, it is particularly interesting that this relationship is stronger than the relationship between the absence of flirting and existing relationships with third parties or attempts to safeguard the friendship (Messman et al., 2000).
In addition, there was no negative relationship (Messman et al., 2000) between existing relationships with third parties and flirting behaviours. While many cross-sex friendships report problems negotiating their cross-sex friendships in the face of romantic relationships, this did not seem to be of any consequence in regards to flirting. This is relevant to mate poaching. Human mate poaching is defined as behaviour intended to attract someone who is already in a romantic relationship (Schmitt & Buss, 2001). Protecting one’s friendship and existing relationships could be construed as reasons to constrain flirting behaviour, but this is not the case.

Cross-sex friends may exhibit various affectionate behaviours such as linking arms, hugging, kissing, and saying “I love you” which may be construed by observers as having sexual or romantic connotations but in the context and history of the friendship these behaviours are plainly platonic affection with no sexual or romantic meaning (Werking, 1997). For this reason, it is necessary to gather data from the perspective of the cross-sex friend that accounts for their perception of the behaviour within the context of the friendship. Much behaviour may be incorrectly construed by others to have a sexual or romantic meaning when, in the context of the friendship, it is innocuous. Given the subjective nature of the innuendo and interpretation involved in flirtation, this flirtation research relies on self-report where participants were not given specific behaviours to indicate flirtation. This eliminates classifying specific behaviours as flirtatious when the participant merely construes specified behaviours as affectionate within the context of the friendship. In this research, participants were asked “Who are you flirtatious towards?” instead of a checklist of behaviours they may use in their friendships or any other such measure.
It was hypothesised that men flirt with a larger portion of their cross-sex friends than women. This is supported by past research (Sapadin, 1988). Flirting behaviour suggests non-platonic innuendo which may aid men’s reproductive adaptive problem of partner number. Flirting with a larger portion of cross-sex friends may potentially lead to an increase in the number of sexual partners.

H4: Men flirt with a larger potion of their cross-sex friends than women.

Comparison of flirtation and sexual attraction

While sexual attraction suggests sexual interest, flirtation is a more complex issue as it is not necessarily synonymous with attraction. While it is possible to be attracted to a cross-sex friend and not flirt with them, it is also possible to flirt with a cross-sex friend and not be attracted to them. Ultimately, flirtation communicates attraction—whether or not the attraction is genuine in the relationship. Flirtation may be instrumental in a relationship by suggesting the possibility of sexual access. As stated earlier, flirtation conveys sexual intention and a means through which sexual intercourse occurs (Egland, et al., 1996). Flirting in cross-sex friendship may alter the exchange within a friendship.

In some instances, flirtation in cross-sex friendship may be a form of deception. Haselton (2003) explores the possibility that women may gain benefits in a relationship by insinuating that they are more attracted to an individual than is actually the case. If a woman flirts with her cross-sex friends but has no sexual or
romantic interest in these men, she is, in effect, deceiving them with the possibility of a future sexual or romantic relationship.

To forge mating relationships men and women entice mates by portraying themselves as desirable suitors and endearing themselves to potential partners. If a woman flirts with a cross-sex friend, he may meet the flirtation with relevant enticement tactics in attempt to secure her as a mate. A man may extend a cross-sex friend greater benefits than are associated with the equity of exchange in such a relationship. He may endear himself to her with a variety of behaviours that aid her - providing physical protection, offering favours, and bolstering her mate value through complimentary behaviour in the presence of others (Haselton, 2003).

While deception in cross-sex friendship was not directly measured, flirtation and sexual attraction to cross-sex friends were compared. By identifying a discrepancy between the portion of friends one flirts with and the portion of friends he or she is sexually attracted to, this sheds some light on the possibility of deception in cross-sex friendship. However, it is also possible that the flirtation in cross-sex friendship may be understood as platonic within the dyad. There are many alternative explanations for a discrepancy between sexual attraction and flirtation but this provides insight into an area where deception may occur. This form of deception is expected amongst women more so than men (Haselton, 2003). In this context, women would have historically benefitted more from cross-sex friendship than men. Women were expected to flirt with a larger portion of their cross-sex friends than they were sexually attracted to.
H5: Women flirt with a larger portion of their cross-sex friends than they are sexually attracted to.

There were no specific hypotheses when comparing the portion of friends men flirt with and the portion of friends men are sexually attracted to. This investigation was exploratory.

**Perception of flirtation**

Flirtation has been described as maintenance behaviour in some cross-sex friendships (Guerrero & Chavez, 2005). A comparison between the portion of cross-sex friends participants flirt with was compared to the portion of their friends they perceived flirted with them. The measure of perceived flirtation in cross-sex friendship is not presumed to be objective. Instead, this provides some insight into the participant’s perception and experience of flirtation in cross-sex friendship.

There are various ways to construe this comparison. The lack of past research and theory in this area preclude hypothesis formation. Firstly, the possibility of deception adds a variable which is difficult to predict given the limited research in this area. A case could be made that women flirt with more friends than flirt with them as an example of deception. This flirtation could be related to Haselton’s (2003) ideas about the possible benefits women derive in a relationship from insinuating attraction.

Alternatively, error management theory predicts that women underestimate men’s interest (Haselton & Buss, 2000). This may be extended to flirtation with
women perceiving fewer male friends flirt with them than is actually the case. Given
the subjective nature of this item, the accuracy of the perception of flirtation is
suspect.

In contrast, one could argue that women flirt with fewer friends than flirt with
them as women are relatively selective in choosing sexual partners. The
consequences of enticing undesired mates could be detrimental. Women may be
threatened, and even harmed, by unwanted sexual advances given the sexual
dimorphism of men and women.

The possible explanations for a discrepancy when comparing men’s reported
flirting and perception of flirtation by cross-sex friends are equally varied. First, error
management theory (Haselton & Buss, 2000), specific research on the sexual
overperception bias (Haselton, 2003), and research by Abbey (1987, 1991) indicate
that men overestimate women’s sexual interest. In this light, men would overestimate
the portion of friends who flirt with them.

Second, men face the reproductive adaptive problem of partner number.
Communicating sexual interest to women, even without concurrent sexual attraction,
may subsequently result in sexual access. This would be evolutionarily advantageous
in increasing partner number. Thus, the portion they perceive are flirting with them
may be greater than the portion of cross-sex friends who they flirt with.

Due to the deficiency of research in this area and the subjective nature of these
comparisons, no specific hypotheses were made for men or women. These
comparisons were included to explore the relationship between these variables and to guide future research.

Method

See chapter 2, specifically pages 41-45, for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on pages 309-310.

Results

Sexual attraction: current sexual attraction results

H1: Men are sexually attracted to a larger portion of their cross-sex friends than women are.

Mann Whitney ‘U’ tests were used to compare sexual attraction in cross-sex friendship. Comparisons were made between all men and women participants as well as each cultural sample. This was significant in the Irish sample ($z = -12.388$, $p < 0.0001$), the American sample ($z = -9.189$, $p < 0.0001$), the UK sample ($z = -9.091$, $p < 0.0001$), as well as the cumulative sample ($z = -17.903$, $p < 0.0001$). Additional statistical information is found in appendix 5.

This hypothesis was supported as men reported sexual attraction to a greater portion of their cross-sex friends than women in all comparisons. Irish men reported
a mean of 54.9% of their cross-sex friends, American men reported a mean of 56.0% of their cross-sex friends, UK men reported a mean of 50.1% of their cross-sex friends, and in the cumulative comparison men reported that a mean of 53.5% of their cross-sex friends were sexually attractive. See Figure 4.1.

Figure 4.1 Current sexual attraction in cross-sex friendship

Irish women only reported a mean of 24.6% of their cross-sex friends, American women reported a mean of 30.3% of their cross-sex friends, UK women reported a mean of 23.7% of their cross-sex friends, and in the cumulative sample women reported a mean of 26.5% of their cross-sex friends were sexually attractive. See Figure 4.1.

The differences between men and women were large in these comparisons. The mean difference between men and women in the cumulative sample was 27.0% of their cross-sex friends. In the cultural samples the mean differences were similar.
In Ireland, there was a mean difference of 30.3% between men and women; in the USA, 27.5%; and, 26.4% in the UK.

**Trajectory of sexual attraction: enduring sexual attraction results**

H2: Men experience enduring sexual attraction to a larger portion of their cross-sex friends than women do.

Enduring sexual attraction in cross-sex friendship was compared using Mann Whitney ‘U’ tests. This was significant in the Irish sample ($z = -9.452, p < 0.0001$), the American sample ($z = -8.887, p < 0.0001$), the UK sample ($z = -8.091, p < 0.0001$), and the cumulative sample ($z = -15.300, p < 0.0001$). Additional statistical information is found in appendix 6.

Men reported enduring sexual attraction to a significantly larger portion of their cross-sex friends than women in all comparisons supporting this hypothesis. Irish men reported enduring sexual attraction to a mean of 33.3% of their cross-sex friends; while Irish women reported a mean of 14.4% of their cross-sex friends. The same was found in the other comparisons as American men reported a mean of 37.3% and American women reported a mean of 15.6%, UK men reported a mean of 30.1% and UK women reported a mean of 12.3%. In the cumulative sample, men reported a mean of 33.4%, and women reported a mean of 14.5%. See figure 4.2.
The mean difference between men and women in the cumulative sample was 18.9% of their cross-sex friends. In the cultural samples the mean differences were similar. In Ireland, there was a mean difference of 18.9% between men and women; in the USA, 21.7%; and, 17.8% in the UK between men and women.

**Sexual attraction: desirable sexual partner results**

H3: Men construe a larger portion of their cross-sex friends to be good sexual partners compared to women.

This hypothesis was supported. Men indicated they anticipated a greater portion of their cross-sex friends to be good sexual partners than women did with significant differences in all comparisons: Irish, $z = -10.374, p < 0.0001$; US, $z = -$
Additional statistical information is found in appendix 7.

Irish men reported a mean of 53.1% while Irish women reported a mean of 28.7% of their cross-sex friends. American men reported a mean of 51.2% and American women reported a mean of 31.3%. UK men reported a mean of 48.3% and UK women reported a mean of 29.3%. In the cumulative sample men indicated a mean of 51.0% and women indicated a mean of 30.0% of their cross-sex friends. See Figure 4.3.

Figure 4.3 Cross-sex friends as desirable sexual partners

The mean difference between men and women in the cumulative sample was 21.0% of their cross-sex friends. In the cultural samples the mean differences were similar. In Ireland, there was a mean difference of 24.4% between men and women; in the USA, 19.9%; and, 19.0% in the UK between men and women.
Flirtation: current flirtation results

H4: Men flirt with a larger portion of their cross-sex friends than women do.

Using a Mann Whitney 'U' test, this hypothesis was supported in the cumulative
(z = -3.66, p < 0.001), Irish (z = -2.69, p < 0.01), and UK samples (z = -3.47, p <
0.01). No difference was found between men and women for this item in the
American sample, z = -1.04, p > 0.05. Additional statistical information is found in
appendix 8 for all comparisons.

In the Irish, UK, and cumulative samples men indicated they flirted with a larger
portion of their cross-sex friends than women did. The differences found between
men and women in these samples were consistent, though not large. The mean
difference between men and women in the cumulative sample was 5.9% of their
cross-sex friends. In the cultural samples the mean differences were similar. In
Ireland, there was a mean difference of 7.4% between men and women; 8.3% in the
UK; and, 2.5% in the USA. See Figure 4.4 for graphical information.
Flirtation and sexual attraction

H5: Women flirt with a larger portion of their cross-sex friends than they are sexually attracted to.

The portion of cross-sex friends whom men and women flirt with and what portion of their cross-sex friends they were sexually attracted to were compared using Wilcoxon signed rank tests. Women consistently flirted with a larger portion of cross-sex friends than they were sexually attracted to. This was significant in all comparisons supporting this hypothesis. The results of these tests are as follows: Irish sample ($z = -5.75, p < 0.0001$), American sample ($z = -2.25, p < 0.05$), UK sample ($z = -4.28, p < 0.0001$), and cumulative sample ($z = -7.29, p < 0.0001$). Additional information about these tests and the relevant descriptive statistics for these samples are found in appendix 9.
While there was a statistically significant difference between these groups, this was very small and not particularly meaningful. The mean difference between the portion of cross-sex friends women were sexually attracted to and flirtatious towards was 6.5% of their cross-sex friends in the cumulative sample. In the cultural samples the mean differences were similar. In Ireland, there was a mean difference of 7.8%; in the USA, 3.8%; and, 8.1% in the UK. See figure 4.5 for a graphical representation of these data.

Figure 4.5 Flirtation and sexual attraction to cross-sex friends

No specific predictions were made for men. In contrast to women, men flirted with a smaller portion of their cross-sex friends than they were sexually attracted to. This was significant in all comparisons. The results of the Wilcoxon signed ranks tests are as follows for each comparison: the Irish sample \( (z = -4.71, p < 0.0001) \), the American sample \( (z = -6.63, p < 0.0001) \), the UK sample \( (z = -2.71, p < .001) \), and the cumulative sample \( (z = -8.73, p < 0.0001) \). Appendix 9 provides additional information about these tests and the relevant descriptive statistics for these samples.
The mean difference between the portion of cross-sex friends men are sexually attracted to and flirtatious towards in the cumulative sample was 14.6% of their cross-sex friends. In the cultural samples the mean differences were similar. In Ireland, there was a mean difference of 14.2%; in the USA, 19.5%; and, 8.1% in the UK. See figure 4.5.

Flirtation and perception of flirtation

The portion of cross-sex friends whom men and women flirt with and what portion of their friends they perceive flirt with them were compared using Wilcoxon signed rank tests. No specific hypotheses were made about these comparisons.

For men, there was no significant difference between the portion of cross-sex friends men flirted with and the portion of cross-sex friends they perceived flirted with them in any comparison. See appendix 10 for the results of these tests and the relevant descriptive statistics for these samples. There was no mean difference between the portions of cross-sex friends men are flirtatious towards and who they perceive to be flirtatious towards themselves in the cumulative sample. In Ireland, there was a mean difference of 1.5%; in the USA, 0.4%; and, 3.7% in the UK. Figure 4.6 shows the graphical representation of these data.
In contrast, women indicated a larger portion of cross-sex friends flirted with them than they flirted with in all comparisons. The results of these tests are as follows: the Irish sample ($z = -4.24, p < 0.0001$), the US sample ($z = -4.22, p < 0.0001$), the UK sample ($z = -4.24, p < 0.0001$), and the cumulative sample ($z = -7.24, p < 0.0001$). See appendix 10 for additional information about these tests and the relevant descriptive statistics. While this was significant in each comparison, the mean differences for portion of friends flirted with and perceived to flirt were very small. The mean difference between the portions of cross-sex friends women are flirtatious towards and who they perceive to be flirtatious towards themselves in the cumulative sample was 5.1% of their cross-sex friends. In the cultural samples the mean differences were similar. In Ireland, there was a mean difference of 4.9%; in the USA, 5.5%; and, 5.4% in the UK. Figure 4.6 shows the graphical representation of these data.
Discussion

Sexual attraction discussion

Investigating sexual attraction in cross-sex friendship concerns the identification of potential partners. Construing a larger portion of one’s friends as potential partners increases the possibility of sexual strategies emerging from cross-sex friendship. This has significant implications for the utilisation of sexual strategies in cross-sex friendship.

The expansiveness of current and enduring sexual attraction in cross-sex friendship was greater for men than women. These hypotheses were supported in all comparisons and consistently across cultural samples. Men reported current and enduring sexual attraction to nearly double the portion of their cross-sex friends reported by women. This suggests men construe their cross-sex friends as potential partners more so than women.

Men’s relatively more expansive experience of sexual attraction in cross-sex friendship may merely be a generalisation of existing sexual strategies, a by-product of existing mate preferences, and not necessarily evidence of psychological mechanisms adapted specifically for a cross-sex friendship mating psychology. Nonetheless, it shows a chasm between men and women’s experience of cross-sex friendship.

A key distinction between men and women’s reproductive adaptive problems is the issue of partner number. Men’s reproductive adaptive problem of partner
number is presumed to be responsible for the dramatic differences between men and women concerning expansiveness of sexual attraction. Attraction was construed as identifying potentially desirable mates and so men’s greater tendency to construe their cross-sex friends as desirable mates provides a reproductive advantage to increase the pool of potential mates.

Sexual attraction during the trajectory of cross-sex friendship may be a by-product of a relationship between a man and a woman or it may be a central and influential component in the motivation and maintenance of cross-sex friendship. Previous research suggests men are more likely than women to begin cross-sex friendship spurring from sexual attraction (Rose, 1985; Bleske-Rechek & Buss, 2001). This is beyond the scope of this investigation but future research should analyse the extent to which sexual attraction motivates the formation and maintenance of cross-sex friendship.

Participants were also asked which of their cross-sex friends they construed to be good sexual partners. This hypothesis was supported as men indicated a greater portion of their cross-sex friends would be good sexual partners than women. There was a sizable difference between the means of men and women in all samples.

**Flirtation discussion**

Flirtation is a component of sexual communication as it largely conveys sexual interest. This is relevant to the application of sexual strategies in cross-sex friendship.
Men flirted with more of their cross-sex friends than women did in all comparisons except in the American sample. Also, there was a significant difference between the portion of cross-sex friends men flirted with and they were sexually attracted to. Men flirted with fewer friends than they were attracted to in all comparisons. This may result from efforts to maintain cross-sex friendships with women whom do not respond to flirtation favourably within friendship. Also, sexual attraction is often not pursued in cross-sex friendship so attraction may not result in a flirtatious relationship. Third-party relationships could be very relevant to this. The presence of significant others may reduce flirting behaviours, though Messman and her colleagues (2000) offer evidence that does not support this.

In contrast to the responses of men, women flirted with a larger portion of friends than they were sexually attracted to. This supports Haselton’s (2003) ideas concerning deception. The consistency of men and women’s diverging responses are noteworthy and warrant further investigation into this area.

Women perceive a greater portion of their friends flirt with them than they flirt with. This may result from the greater minimal parental investment women make compared to men and so they are more selective when displaying sexual innuendo. Also, the sexual dimorphism of men and women puts women at greater risk of assault and rape. Flirting signals sexual availability and so flirtation may leave women vulnerable to unwanted sexual advances. However, there are other possible explanations for this and further research should investigate this closely.
Conclusion

In all comparisons men were more expansive than women in the experience of sexual attraction in cross-sex friendship. Gaining cross-cultural support for these hypotheses suggests men and women perceive and experience cross-sex friendship differently from each other and that this difference is consistent with limited cultural influence.

In addition, some exploratory research was conducted about flirtation in cross-sex friendship. This provided limited information and further investigation is required to understand this phenomenon in cross-sex friendship.
Chapter 5. Romantic Attraction and Jealousy

Romantic attraction in cross-sex friendship

Romantic attraction in cross-sex friendship is defined as wanting to transform a friendship into a romantic relationship (Reeder, 2000). While sexual attraction does not presume romantic attraction, romantic attraction is typically concurrent with sexual attraction (Reeder, 2000). The undertones of romantic attraction may be stimulating in some friendships (Rubin, 1985), but the presence of romantic attraction results in various trajectories and may reveal trends concerning long-term sexual strategies in cross-sex friendship. Various aspects of romantic attraction in cross-sex friendship will be discussed here. These are the symmetry of romantic attraction experienced by men and women; the consequences of romantic attraction for cross-sex friendship research; the trajectory of romantic attraction; comparisons of sexual and romantic attraction; and finally, how jealousy relates to attraction.

Romantic attraction represents an attempt to forge a long-term relationship. Sexual strategies theory indicates that both men and women utilise long-term strategies and that men devote more reproductive effort to short-term sexual strategies than women do (Buss & Schmitt, 1993). This greater prominence of short-term strategies for men does not necessarily curtail men’s long-term strategies and so there is no premise to expect men seek long-term sexual strategies in cross-sex friendship less so than women. Sexual strategies theory does not directly address gender discrepancies in romantic attraction. As a result, sexual strategies theory is
inadequate in creating hypotheses and cross-sex friendship research leads the hypothesis formation here.

Romantic attraction is found asymmetrically and symmetrically in cross-sex friendship (Reeder 2000; Monsour et al., 1994). Cross-sex friendship may be perceived by one or both of its members as a 'stepping stone to romantic relationships' (Sprecher & Regan, 2002). Troubles in cross-sex friendship may characterise a disharmony in appraising the friendship on the spectrum from platonic to romantic. Both men and women describe the following to be problematic in cross-sex friendship: ambiguity about the romance/friendship status of a cross-sex friendship; unreciprocated love towards a cross-sex friend; and jealousy of the friend's other relationships (Bleske & Buss, 2000).

To maintain a cross-sex friendship, participants must reach a shared understanding about the intimacy of their relationship. This describes the emotional bond challenge whereby the dyad determines the nature of the emotional bond experienced in their relationship (O'Meara, 1989). Struggling with the emotional bond challenge is more prevalent among close friends than casual friends (Monsour et al., 1994). However, it is important to not overstate the intimacy struggles in cross-sex friendship. The emotional bond challenge amounted to 20% of the challenges mentioned by cross-sex friends (Monsour et al., 1994). While the emotional bond challenge poses a problem more so than other challenges in cross-sex friendship, the vast majority of individuals indicated this was not problematic (Monsour et al., 1994).
Research suggests that romantic attraction is not experienced symmetrically by men and women in cross-sex friendship. Men indicate a more frequent desire to have a committed romantic relationship with their cross-sex friends than women do (Bleske-Rechek & Buss, 2001). Similarly, unreciprocated romantic desire within cross-sex friendship is experienced by men more than women (Harvey, 2003; Bleske and Buss, 2000). Indeed, single college men approach cross-sex friendship as low-level or emerging romantic relationships (Wright, 1989). When asked about their closest cross-sex friendship, 53% of men and 31% of women reported beginning this friendship in hopes that a romance might develop; this was a significant difference between men and women (Kaplan & Keys, 1997).

In addition, men rated the potential for a romantic relationship as the sixth most beneficial aspect of cross-sex friendship while women rated the absence of a future romantic relationship as the seventh most beneficial aspect of cross-sex friendship when rating the top 10 benefits of cross-sex friendship (Bleske & Buss, 2000). These studies suggest men construe cross-sex friendship as a vehicle for acquiring romantic partners more so than women.

While past research typically addresses one particular cross-sex dyad, this research aims to identify if this trend is evident in the overall perception and experience of cross-sex friendship. To identify if men construe cross-sex friendship as a vehicle to secure romantic partners more so than women, participants were asked about the romantic attraction they experienced towards their network of close cross-sex friends. It was hypothesised that men express a desire for a romantic relationship with their cross-sex friends more so than women.
In addition, the commitment-skepticism bias of error management theory indicates that women underestimate men’s commitment to them in relationships (Haselton & Buss, 2000). Using the rationale of this theory, it follows that women would underestimate the romantic attraction experienced by their cross-sex friends when transforming cross-sex friendships into exclusive romantic relationships.

H1: Men experience a desire for a romantic relationship with a larger portion of their cross-sex friends than women.

The consequences of symmetric and asymmetric romantic attraction deserve comment. Some cross-sex friends acknowledge that, through the course of their friendship, they became aware of their friend’s qualities which would make them undesirable romantic partners or incompatible as a romantic couple (Werking, 1997). Similarly, many friends describe an absence of romantic attraction coupled with an identified characteristic of their friend such as being too ‘anal’ or ‘wild’ which made them incompatible for a romantic relationship (Reeder, 2000).

When romantic desire is articulated within a friendship it may be rejected. Upon realising that one’s cross-sex friend was attracted to them, 32% of cross-sex friends conceded that although the friend objectively possessed qualities of a desirable mate, the romantic desire was not reciprocated (Harvey, 2003). In these friendships, the desired friend did not immediately and essentially reject the notion of transforming the friendship into something other than platonic; however, the friend ultimately chose to not pursue a relationship beyond friendship.
In this context, the cross-sex friend can readily identify why a romantic relationship was not explored but these reasons did not encroach upon the friendship. Ultimately, while the dyad is suitably paired as friends they are perceived as incompatible romantic partners. This highlights the diverging roles of friends and romantic partners and that the desirable qualities of a friend are not necessarily the desired qualities of a romantic partner. This suggests the criteria for romantic partner and friendship differ, with the assumption that criteria for romantic partners are more stringent. Given the exclusionary criteria men and women both impose for romantic partners, this is unsurprising. However, the criteria for sexual partners is not as stringent for men (Buss & Schmitt, 1993) and so there may be greater fluidity between cross-sex friends and sexual partners than between cross-sex friends and romantic partners for men.

Symmetric romantic attraction has been found in some cross-sex friendships (Reeder, 2000). The trajectory of romantic attraction has methodological implications for investigating cross-sex friendship. Symmetric romantic attraction in cross-sex friendship may be indicative of a transition from friendship to romance. Kaplan and Keys (1997) speculate that developing a relationship from an established cross-sex friendship may be attractive in contemporary Western society where younger generations are bystanders of high divorce rates. There is evidence that some romantic relationships develop from cross-sex friendships (Werking, 1997; Afifi & Faulkner, 2000). However, friendships characterised by symmetric romantic attraction are difficult to investigate as these friendships may subsequently be obscured by romantic relationships.
Indeed, the consequences of symmetric romantic attraction may be responsible for the infrequency of romantic attraction reported in cross-sex friendship. As noted previously, romantic attraction in cross-sex friendship is reported far less frequently than sexual attraction (Reeder, 2000). These relationships may transform into romances and so they are no longer described within cross-sex friendship research. To support this, it is worth noting that in the current investigation 51% of coupled participants (585 participants) indicated that they were cross-sex friends with their partner prior to beginning their romantic relationship. That is, these were once cross-sex friendships that successfully transformed into exclusive romantic relationships.

While symmetric romantic attraction may transform a friendship into a romance, the trajectory of asymmetric romantic attraction may reveal distancing between the friends. Unreciprocated romantic feeling may be an unresolved issue in some cross-sex friendships (Werking, 1997). Asymmetric romantic desire can create an injurious, and ultimately detrimental, strain on cross-sex friendship (Reeder, 2000). Unreciprocated romantic attraction may lead to the demise of the friendship. Not only does this affect the investigation of romantic attraction in cross-sex friendship, but this may also shed light on motivations for forming and maintaining cross-sex friendships.

Romantic attraction may be left unexplored in cross-sex friendship. Similar to friendships experiencing sexual attraction, friendships experiencing romantic attraction may choose to reject romantic possibilities to protect their friendship (Harvey, 2003; Werking, 1997). In these cases, the friendship is considered more
valuable than a possible romance. Harvey (2003) found romantic feelings, either
shared or unshared, were suppressed in 30% of cross-sex friendships. Similarly, in
friendships experiencing asymmetric romantic attraction, this attraction may be veiled
so that it does not infringe on the friendship, possibly protecting the friendship from
unwanted tension (Harvey, 2003). Bleske-Rechek found that 34% of men and 20% of
women withheld information from a cross-sex friend about their romantic feelings
towards the friend and desire to date the friend (A. Bleske-Rechek personal
communication, March 14, 2010).

**Trajectory of romantic attraction**

To address the trajectory of romantic attraction in cross-sex friendship, men
were expected to experience enduring romantic attraction to a larger portion of their
friends than women. Enduring romantic attraction was identified by asking
participants who of their cross-sex friends they had been romantically attracted for as
long as they had known the friend(s). In keeping with the above hypothesis, past
research suggests men incorporate cross-sex friendship in their long-term sexual
strategies more so than women (Bleske-Rechek & Buss, 2001). As a result, it is
expected that men will express enduring romantic attraction to their cross-sex friends
more so than women.

H2: Men experience enduring romantic attraction to a larger portion of their friends
than women.
Not all attraction is enduring. Many individuals experience attraction to a friend but the attraction diminishes while friendship remains. Romantic attraction is rarely a stable quality of cross-sex friendship. Romantic attraction tends to dissipate over time in cross-sex friendship (Reeder, 2000). This suggests that a sizable minority of platonic cross-sex friendships have a history of romantic desire. Specifically, decreased romantic attraction was found in 39% of cross-sex friendships. This was more common than current romantic attraction or increased romantic attraction (14.3% and 8.7% of participants, respectively) (Reeder, 2000).

Extinguished romantic attraction, where romantic attraction has dissolved in the cross-sex friendship, was excluded from these hypotheses. There is no cross-sex friendship research exploring gender differences for extinguished romantic attraction. In addition, no differences were expected between men and women as there is no rationale in sexual strategies theory to expect they faced divergent reproductive adaptive problems concerning extinguished romantic attraction. Differences were only expected in domains where men and women faced divergent reproductive adaptive problems. The tendency to identify a cross-sex friend as a desirable partner and then have a change of heart is not expected to address reproductive adaptive problems for men or women. For this reason, extinguished romantic attraction was excluded from these hypotheses. Indeed, no differences were found comparing men and women in any samples.
Sexual and romantic attraction: discrepancies in current attraction

Sexual attraction signifies a potential sexual partner while romantic attraction signifies a potential romantic partner. Sexual relationships require less commitment relative to romantic relationships. According to sexual strategies theory, the commitment required of romantic relationships results in increased stringency when selecting romantic partners (Buss & Schmitt, 1993). Also, past research reports that less than half of individuals who are sexually attracted to their cross-sex friends are also romantically attracted to them (Reeder, 2000). As a result, men and women are both expected to be more exclusionary when identifying desirable romantic partners compared to sexual partners.

H3: Men are romantically attracted to a smaller portion of their cross-sex friends than they are sexually attracted to.

H4: Women are romantically attracted to a significantly smaller portion of their cross-sex friends than they are sexually attracted to.

Jealousy in Cross-sex Friendship

An offshoot of attraction is jealousy. Evolutionary psychologists interpret jealousy as a psychological mechanism that is activated in response to a perceived threat to one’s relationship (Buss, 2004). Both men and women experience jealousy in romantic relationships, though it is activated by different triggers (Buss et al., 1992). The relevance of jealousy to cross-sex friendship is evident as both men and
women consider jealousy of a cross-sex friend’s other relationships to be problematic in cross-sex friendship (Bleske & Buss, 2000). This suggests the psychological mechanisms associated with jealousy are found in cross-sex friendship.

Both men and women experience jealousy in their relationships, however, jealousy is often activated by different triggers for each sex. Buss and his colleagues (1992) found 60% of men consider imagining their mate having sexual intercourse with another person to be more distressing than an emotional attachment to another. This contrasts with 85% of women who were more distressed by their partner forging an emotional bond with another individual. These responses are specifically linked with violations of men and women’s solutions to their reproductive adaptive problems.

For men, the experience of jealousy serves to increase paternity certainty and so increased distress resulting from sexual infidelity is consistent with the paternity certainty hypothesis. Reducing the possibility of cuckoldry is a reproductive adaptive problem faced by men (Buss et al., 1992). For women, a partner’s emotional infidelity is more distressing as women face the reproductive adaptive problem of securing resources from mates. This jealousy triggered by an emotional bond spurns the division of a mate’s resources and commitment among multiple partners (Buss et al., 1992; Buss & Haselton, 2005). That is, this draws women’s attention to the potential channelling of resources and investment to others, a problematic situation for a woman expecting commitment from her mate.
While jealousy was expected in cross-sex friendship, the prevalence of jealousy in cross-sex friendship has been largely unexplored by past research. Identifying jealousy in the social world of cross-sex friendship has different meaning than identifying jealousy in a singular cross-sex friendship. Jealousy in one cross-sex friendship may be indicative of a strained friendship or even a transition from friendship to a sexual or romantic relationship. On the other hand, jealousy as a recurring theme in cross-sex friendship may reveal tendencies that are not compatible with platonic friendship.

Jealousy is expected to be present in some cross-sex friendships but this investigation is exploratory so the prevalence and possible discrepancy between men and women in experiencing jealousy are not specifically predicted.

In the current study, participants were asked if they experienced jealousy of their cross-sex friends' sexual or romantic relationships with others. The triggers of jealousy were not clarified beyond "the (cross-sex friend's) sexual and romantic relationships". This was included primarily to explore the expansiveness of jealousy in cross-sex friendship. No specific hypotheses were made as there is limited available research concerning jealousy in cross-sex friendship. Indeed, participants were merely asked if they experienced jealousy of their cross-sex friends' third party relationships. No stipulation was made as to what triggered the jealousy.

Also, the relationship between jealousy and romantic attraction was explored. The portion of friends whom participants were romantically attracted to was compared to the portion of friends whom trigger jealousy in the participant. It was
not presumed that these were necessarily the same friends. Using data of this nature does not allow for investigation of specific friendships to identify if romantic attraction and jealousy frequently occur simultaneously. In this regard, this analysis was only exploratory. The same comparison was made between jealousy and sexual attraction. Again, no hypotheses were made concerning this relationship as these comparisons were exploratory.

**Method**

See chapter 2, specifically pages 41-45, for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on pages 309-310.

**Results**

**Romantic attraction: current romantic attraction results**

H1: Men experience a desire for a romantic relationship with a larger portion of their cross-sex friends than women.

Participants indicated which of their cross-sex friends they would like to have an exclusive romantic relationship with. Men and women’s responses were compared using Mann Whitney ‘U’ tests. This hypothesis was supported as men experienced romantic attraction to a significantly larger portion of their cross-sex friends than
women did. This was found in the Irish sample ($z = -5.425, p < 0.0001$), the American sample ($z = -5.974, p < 0.0001$), the UK sample ($z = -5.833, p < 0.0001$), and the cumulative sample ($z = -9.722, p < 0.0001$). Additional statistical information is found in appendix 11.

Irish men reported current romantic attraction to a mean of 22.8% of their cross-sex friends and Irish women reported current romantic attraction to a mean of 12.2% of their cross-sex friends. American men reported a mean of 20.1% and American women reported a mean of 9.0%. UK men reported a mean of 19.2% and UK women reported a mean of 7.8% of their cross-sex friends. In the cumulative sample, men indicated they would like an exclusive romantic relationship with a mean of 20.8% of their cross-sex friends, while women indicated they would like an exclusive romantic relationship with a mean of 10.3% of their cross-sex friends. See Figure 5.1 for a graphical depiction.

Figure 5.1 Current romantic attraction in cross-sex friendship
The mean difference between men and women in the cumulative comparison was 10.5% of cross-sex friends. The mean differences between men and women for this item in the cultural samples are as follows: Ireland, 10.6%; USA, 11.1%; and UK, 11.4% of cross-sex friends.

**Trajectory of romantic attraction: enduring romantic attraction results**

H2: Men experience enduring romantic attraction to a larger portion of their friends than women.

This hypothesis was supported as men reported enduring romantic attraction to a larger portion of their friends than women did. Significant differences were found in the Irish sample \((z = -5.645, p < 0.0001)\), the American sample \((z = -4.078, p < 0.0001)\), the UK sample \((z = -4.617, p < 0.0001)\), and the cumulative sample \((z = -8.110, p < 0.001)\). See appendix 12 for details of these statistics.

The reports of enduring romantic attraction in cross-sex friendship differ between men and women in each sample. Irish men reported a mean of 26.3%; while Irish women reported a mean of 15.0%. American men reported a mean of 24.2% while American women reported a mean of 15.6%. UK men reported a mean of 23.0% and UK women reported a mean of 12.6% of their cross-sex friends. In the cumulative sample men reported a mean of 24.57% of their cross-sex friends while women reported a mean of 14.98%. A graphical depiction is provided in figure 5.2.
The mean difference between men and women in the cumulative sample was 9.6% of cross-sex friends. The mean difference between men and women in each cultural sample is as follows: Ireland, 11.3%; USA, 8.6%; and UK, 10.4% of cross-sex friends.

**Sexual and romantic attraction: current attraction results**

H3: Men are romantically attracted to a smaller portion of their cross-sex friends than they are sexually attracted to.

H4: Women will be romantically attracted to a significantly smaller portion of their cross-sex friends than they will be sexually attracted to.

Wilcoxon signed rank tests were used to compare sexual and romantic attraction experienced by men and women in cross-sex friendship. It was
hypothesised that sexual attraction was more expansive than romantic attraction in cross-sex friendship. This hypothesis was supported in all comparisons.

Figure 5.3 Current sexual and romantic attraction in cross-sex friendship

Men reported they were sexually attracted to a significantly larger portion of their cross-sex friends than they were romantically attracted to in all comparisons. The mean difference between the portions of cross-sex friends men are sexually and romantically attracted to was 32.1% in Ireland ($z = -10.153, p < 0.001$), 36.0% in the USA ($z = -9.53, p < 0.001$), 30.9% in the UK ($z = -8.85, p < 0.001$), and 32.7% of friends in the cumulative comparison ($z = -16.979, p < 0.001$). Figure 5.3 presents these data graphically. See appendix 13 for additional information about the Wilcoxon signed rank tests and the descriptive statistics.

Women reported similarly. The mean difference between the portions of cross-sex friends women are sexually and romantically attracted to was 12.4% in Ireland ($z = -10.949, p < 0.001$), 21.3% in the USA ($z = -13.091, p < 0.001$), 15.9%
in the UK \((z = -10.171, p < 0.001)\), and 16.2% in the cumulative sample \((z = -20.212, p < 0.001)\). In all comparisons, women were sexually and romantically attracted to a smaller portion of friends than men were. See Figure 5.3. See appendix 13 for additional information about the Wilcoxon signed rank tests and the descriptive statistics.

**Jealousy: current jealousy results**

The experience of jealousy in cross-sex friendship was compared for men and women. The details of the Mann Whitney 'U' tests used to compare the samples of men and women and the relevant descriptive statistics are found in appendix 14.

Men and women experienced jealousy in 13.0% to 20.3% of their cross-sex friendships, respectively. In the Irish and American samples there was no significant difference between men and women's experiences of jealousy in cross-sex friendship, \(z = -1.618, p > 0.05\), and, \(z = -0.187, p > 0.05\), respectively. In the UK and cumulative sample men experienced jealousy in a larger portion of their cross-sex friendships than women, \(z = -3.567, p < 0.0001\) and, \(z = -2.797, p < 0.01\), respectively.

UK men experienced jealousy in of a mean of 20.3% of their cross-sex friendships and UK women experienced jealousy in a mean of 13.0% of their cross-sex friendships. In the cumulative sample, men indicated experiencing jealousy in a mean of 17.9% of their cross-sex friendships, while women experienced jealousy in a mean of 14.5% of their cross-sex friendships. Neither of these are particularly large
differences. Figure 5.4 presents these data graphically. No specific hypotheses were made for these comparisons.

Figure 5.4 Jealousy in cross-sex friendship

![Graph showing jealousy in cross-sex friendship](Image)

**Jealousy: jealousy and romantic attraction results**

The experience of jealousy and romantic attraction were compared in cross-sex friendship. Additional information about the Wilcoxon signed rank tests and the relevant descriptive statistics are provided in appendix 15. No specific hypotheses were made for these comparisons.

For men, significant differences were found in the Irish sample ($z = -2.260, p < 0.05$), the American sample ($z = -2.050, p < 0.05$), and the cumulative sample ($z = -2.251, p < 0.05$). No significant difference was found for UK men ($z = -1.009, p > 0.05$).
In the comparisons producing significant results, men were romantically attracted to a great portion of their cross-sex friends than they experienced jealousy of the friends' sexual and romantic relationships with others. Irish men experienced jealousy in a mean of 18.53% of their cross-sex friendships and were romantically attracted to a mean of 22.79% of their cross-sex friends. American men experienced jealousy in a mean of 15.56% of their cross-sex friendships and were romantically attracted to a mean of 20.09% of their cross-sex friends. In the cumulative sample men experienced jealousy in a mean of 17.93% of their cross-sex friendships and were romantically attracted to a mean of 20.77% of their cross-sex friends. UK men experienced jealousy in a mean of 20.32% of their cross-sex friendships and were romantically attracted to 19.16% of their cross-sex friends. See figure 5.5.

Figure 5.5 Jealousy and romantic attraction in cross-sex friendship

This is very different from the findings for women for this comparison. When comparing women's experience of jealousy and romantic attraction in cross-sex friendship, significant differences were found but in the reverse: women experienced
jealousy in a greater portion of their cross-sex friendships than they experienced romantic attraction. This was true of the Irish sample ($z = -2.316, p < 0.05$), the American sample ($z = -5.454, p < 0.001$), the UK sample ($z = -4.320, p < 0.001$), and the cumulative sample ($z = -6.993, p < 0.001$).

Irish women were romantically attracted to a mean of 12.17% of their cross-sex friends and experienced jealousy in a mean of 14.57% of their cross-sex friendships. American women were romantically attracted to a mean of 8.99% of their cross-sex friends experienced jealousy in a mean of 14.52% of their cross-sex friendships. UK women were romantically attracted to a mean of 7.77% of their cross-sex friends and experienced jealousy in a mean of 12.96% of their cross-sex friendships. In the cumulative sample, women were romantically attracted to a mean of 10.31% of their cross-sex friends and experienced jealousy in a mean of 14.45% of their cross-sex friendships. See figure 5.5.

**Jealousy: jealousy and sexual attraction results**

Jealousy and sexual attraction in cross-sex friendship were compared for men and women. No specific hypotheses were made for these comparisons. Significant differences were found in all comparisons. Both men and women expressed sexual attraction to a greater portion of cross-sex friends than jealousy. Additional information about the Wilcoxon signed rank tests and the relevant descriptive statistics are provided in appendix 16.
Men were sexually attracted to a larger portion of their cross-sex friends than they experienced jealousy over. The results of the Wilcoxon signed ranks tests are as follows: the Irish sample ($z = -10.49, p < 0.0001$), the US sample ($z = -9.74, p < 0.0001$), the UK sample ($z = -8.42, p < 0.0001$), and the cumulative sample ($z = -17.20, p < 0.0001$). The mean differences between the experience of jealousy and sexual attraction in cross-sex friendship for men ranged from 29.8% to 40.5%. See figure 5.6.

Women were also sexually attracted to a larger portion of their cross-sex friends than they experienced jealousy over. The results of the Wilcoxon signed ranks tests are as follows: the Irish sample ($z = -8.16, p < 0.0001$), the US sample ($z = -10.02, p < 0.0001$), the UK sample ($z = -6.87, p < 0.0001$), and the cumulative sample ($z = -14.86, p < 0.0001$). The mean differences between the experience of jealousy and sexual attraction in cross-sex friendship for women ranged from 10.0% to 15.8%. See figure 5.6.
Discussion

The expansiveness of romantic attraction and jealousy in cross-sex friendship were explored in the investigation of sexual strategies in cross-sex friendship. Overall, it was hypothesised that men are more expansive in cross-sex friendship in regards to romantic attraction than women. All hypotheses directly comparing men and women on expansiveness of romantic attraction were supported.

Men’s greater tendency to construe their cross-sex friends as desirable mates provides a reproductive advantage to increase the pool of potential mates. A key distinction between men and women’s reproductive adaptive problems is the issue of partner number. Men’s reproductive adaptive problem of partner number may unexpectedly be responsible for the dramatic differences between men and women concerning expansiveness of romantic attraction. The reproductive adaptive problem of partner number typically is associated with short-term sexual strategies but these data indicate men are also more interested in investment-intensive relationships with their cross-sex friends than women are.

Romantic attraction in cross-sex friendship

All hypotheses concerning romantic attraction were supported. Men experienced current and enduring romantic attraction to a significantly larger portion of their cross-sex friends than women did. In all comparisons, men reported they were romantically attracted to nearly double the portion of cross-sex friends than reported
by women; however, this amounted to just more than a 10% difference between these means.

The exclusionary nature of this item, as well as many other exclusive romantic relationship items, must be discussed. To expect an exclusive romantic relationship to develop from cross-sex friendship suggests participants would only select a maximum of one friend for this item. These romantic relationships are necessarily exclusionary and so expecting an exclusive romantic relationship with more than one friend is contradictory. From this perspective, the median and mean of each group was expected to be relatively low. When looking at the descriptive statistics of this item, the median of all groups was 0.0 and the means of the groups only varied by a few percent with all groups indicating they anticipated an exclusive romantic relationship with less than 12% of their cross-sex friends. In addition, many participants were in existing exclusive romantic relationships and presumably many of these individuals would not want an exclusive relationship with a friend.

Men’s greater tendency towards romantic attraction in cross-sex friendship may concern tendencies towards polygyny, where a man is permitted to marry more than one woman. Evidence of polygamy is found in the majority of cultures when reviewing archival and other data (Ember, Ember, & Low, 2007). In this regard, it is not surprising that men express greater multiple interest in their cross-sex friends. This may be a manifestation of the desire for polygyny.

Given the exclusionary nature of these relationships, there is a recurring trend of romantic attraction in cross-sex friendship. The reproductive consequences of such a
trend are quite significant if even only a few of these relationships are reproductively successful. In the current sample, 51% of coupled participants (585 participants) indicated that they were cross-sex friends with their partner prior to beginning their romantic relationship. This is not to say that 51% of friendships become relationships. Most individuals maintain more than one friendship compared to only one exclusive romantic relationship and so the chances of a cross-sex friendship becoming a relationship are slim relative to the number of one’s cross-sex friends. However, if half of the current participants identified and secured their current mate via cross-sex friendship this describes cross-sex friendship as reproductively advantageous in identifying and securing long-term mates.

The consequences of romantic attraction in these friendships were not pursued with longitudinal data so conclusions cannot be drawn about these friendships becoming romantic relationships. Future research should investigate the trajectory of cross-sex friendships experiencing romantic attraction to identify predictors of subsequent romantic relationships.

**Sexual and romantic attraction in cross-sex friendship**

It was hypothesised that men and women were romantically attracted to a significantly smaller portion of their cross-sex friends than they were sexually attracted to because of the more intensive commitment required of romantic relationships. This hypothesis was supported in all comparisons as men and women reported sexual attraction to a larger portion of their cross-sex friends than romantic attraction in all cultural samples. However, it is important to note that the very nature
of exclusive romantic relationships precludes expansion of romantic desire except in cases of polygamy.

**Jealousy in cross-sex friendship**

No specific hypotheses were made when comparing the expansiveness of jealousy experienced by men and women in their cross-sex friendships. When participants indicated that they experienced jealousy from their cross-sex friends' sexual and romantic relationships with others, some significant differences emerged across comparisons. In the Irish and American samples, no significant differences were found between men and women. Significant differences were found when comparing men and women in the cumulative and UK samples. In these comparisons, men experienced jealousy to a larger portion of their cross-sex friends’ relationships than women; however, in these comparisons the differences between the group means were only a few percent.

No specific comparisons were made when investigating jealousy and romantic attraction. In all comparisons women reported significant difference between the portion of cross-sex friends whom they where romantically attracted to and whom they were jealous of their third party relationships. Women indicated they experienced jealousy in a greater portion of their cross-sex friendships than romantic attraction.

In the Irish, American, and cumulative samples, significant differences were found between the expansiveness of jealousy and romantic attraction in cross-sex
friendship for men; however, men experienced romantic attraction to a greater portion of friends than jealousy. The comparison of UK men’s jealousy and romantic attraction towards their cross-sex friends did not produce a significant difference.

Interpreting the findings concerning jealousy in cross-sex friendship require caution. There were significant differences in the portion of cross-sex friends whom men and women were sexually and romantically attracted to and so significant differences between men and women in the experience of jealousy are not singularly informative. Additional investigation about the experiences of jealousy in cross-sex friendship and the triggers of jealousy in cross-sex friendship are required before drawing any conclusions about this phenomenon.

As stated earlier, it was not presumed that the portion of friends the participant was attracted to was necessarily the same friends whom the participant experienced jealousy over third party relationships. Data of this nature does not allow for investigation of specific friendships to identify if attraction and jealousy occur simultaneously. This analysis was only exploratory and interpretation is limited.

Conclusion

In all comparisons men were more expansive than women in the experience of romantic attraction in cross-sex friendship. The significant cross-cultural support for the romantic attraction hypotheses suggests men and women perceive and experience cross-sex friendship differently from each other and that this difference is consistent, regardless of cultural influences.
Men’s relatively more expansive experience of romantic attraction in cross-sex friendship may merely be a generalisation of existing sexual strategies, a by-product of existing mate preferences, and not necessarily evidence of psychological mechanisms adapted specifically for a cross-sex friendship mating psychology. Nonetheless, it shows a chasm between men and women’s experience of cross-sex friendship. In addition, the exploratory data concerning jealousy in cross-sex friendship shed light on this phenomena and how prevalent it is in cross-sex friendship.
Chapter 6. Sexual Intent

Sexual intent is defined here as the desire to engage in sexual activity, regardless of whether or not sexual intercourse ever occurs. This concerns sexual interest as well as motivation to engage in sexual intercourse. Sexual intent is inextricably linked to sexual behaviour as it indicates a desire to utilise sexual strategies. Sexual intent in cross-sex friendship is synonymous with identifying sexual urges within friendships, whether or not these ever come to fruition. Importantly, the motivation to utilise sexual strategies in cross-sex friendship and the ability to do so are often not simultaneous. Sexual intent highlights the distinction between sexual cognition and sexual behaviour.

Sexual intent does not presume romantic attraction. The desire to engage in a sexual relationship with a cross-sex friend does not necessarily indicate an interest in transforming the friendship into a romantic relationship. In some cross-sex friendships, sexual intent may occur independently of any interest in emotional involvement or romantic commitment to the friend. In this regard, sexual intent without romantic intent is indicative of short-term sexual strategies due to the low investment implied. Sexual intent coupled with romantic attraction is suggestive of long-term sexual strategies as a result of the greater investment implied.

Sexual intent may exist symmetrically or asymmetrically in cross-sex friendship at some point during a friendship. When sexual intent is asymmetric, or only experienced by one friend of the dyad, the absence of subsequent sexual activity does
not negate the intent on behalf of the individual but instead may be indicative of unreciprocated intent. In addition, symmetric sexual intent does not necessarily result in sexual activity.

The prominence of sexual intent in cross-sex friendship can be explored by investigating how participants rate their desire for sexual activity when initiating, maintaining, and dissolving these friendships. Using both and college and non-college samples, Bleske-Rechek and Buss (2001) found that neither men nor women rated a desire for sex as the most important reason to initiate cross-sex friendship. This highlights that sexuality is not the primary motivation in cross-sex friendship initiation. Similarly, when rating the ten most important reasons to dissolve a cross-sex friendship, lack of sex was not among these reasons for men or women (Bleske-Rechek & Buss, 2001). This clarifies that cross-sex friendships are predominantly pursued for the associated interpersonal benefits, and not sexual gratification.

While sexual intent may not be the driving force behind cross-sex friendship, sexual intent is a characteristic of many cross-sex friendships. Though men did not rate their desire for sex among the ten most important reasons to initiate or terminate a cross-sex friendship, these responses were rated as significantly more important relative to women’s ratings of importance (Bleske-Rechek & Buss, 2001). Men, both single and coupled, considered a desire for sex as a more important reason to initiate a cross-sex friendship than women did (Bleske-Rechek & Buss, 2001). Similarly, college and non-college men rated, “There wasn’t enough sex in our relationship” as a more important reason to terminate a cross-sex friendship compared to women.
Bleske-Rechek & Buss (2001). Sexual motivations were more prominent among men than women in cross-sex friendship (Bleske-Rechek & Buss, 2001).

In contrast, women judged a prospective friend's lacking sexual attraction as well as lacking desire for sex as a more important reason to initiate a cross-sex friendship as compared to men (Bleske-Rechek & Buss, 2001). The skewed configuration of sexual intent in cross-sex friendship could be responsible for many difficulties faced between men and women when negotiating expectations and boundaries of cross-sex friendship.

Bleske-Rechek and Buss’ (2001) research suggests cross-sex friendship is used by men to pursue short-term sexual strategies. Men want to have sexual intercourse with their cross-sex friends more often than women do (Bleske-Rechek & Buss, 2001). Interestingly, men and women are seemingly aware of the asymmetric sexual intent in their friendships. Non-college men indicated they wanted to engage in sexual intercourse with their cross-sex friends more often than this desire was reciprocated and non-college women indicated that their cross-sex friends wanted to engage in sexual intercourse with them ‘somewhat more often’ than they wanted to engage in sex (Bleske-Rechek & Buss, 2001). Women indicating that their cross-sex friends desire sexual intercourse more frequently than they do portrays an awareness of additional desires within cross-sex friendship (Bleske-Rechek & Buss, 2001). Bearing in mind that these friendships were maintained at the time of investigation, unreciprocated sexual desire does not weigh heavily on these friendships as the men and women continued to maintain these relationships. Again, this suggests that sexuality is not the primary concern in many cross-sex friendships; and also that men
and women are often aware of the imbalance of the sexual dynamics in cross-sex friendships.

Asymmetric sexual intent may reveal implicit themes of cross-sex friendship. This asymmetry may be indicative of the discrepancy between men and women’s overall construct and experience of cross-sex friendship. Specifically, cross-sex friendship may be perceived as an arena for sexual opportunity by one sex more so than the other.

If men and women utilise sexual strategies in their cross-sex friendships in the manner proposed by sexual strategies theory, then men will express a greater sexual interest in their cross-sex friends than women. This addresses the reproductive adaptive problem of partner number for men. According to sexual strategy theory (Buss & Schmitt, 1993), it is hypothesised that men exhibit a preference for a greater number of sexual partners than women. A preference for a larger number of mates results in an increased reproductive advantage by securing more mates than men whom do not exhibit this preference. In our evolutionary history, the reproductive advantage granted to men desiring many mates would be selected for over time as some of these desires would likely be consummated and result in more offspring (Buss, 1998). That is, men preferring fewer mates would have been out-produced by men desiring a larger number of mates.

It follows that men have evolved stronger sexual intent toward reproductively viable members of the other sex. Experiencing intent to a greater number of women
increases one’s pool of eligible mates. Thus expansive sexual intent attempts to address the reproductive adaptive problem of partner number.

The ability to gain sexual access to fertile women is an important limiting factor of men’s reproductive success (Symons, 1979). In ancestral history, men who did not feel sexual intent towards women would be less reproductively successful than those who did. Lacking intent could have dramatic reproductive consequences for men as a result of many missed reproductive opportunities. Sexual intent towards a greater number of women would be selected for as this potentially increases the number of consummated relationships. While not all these relationships may be consumed or even produce children, the reproductive advantage bestowed upon men of expansive sexual intent would be quite powerful. The current research investigates the expansiveness of sexual intent in cross-sex friendship. It was expected that men’s sexual intent is more expansive in cross-sex friendship than women’s sexual intent.

Low-commitment sexual intent

Given the discrepancy between men and women’s minimal parental investment, low-commitment sexual intent was expected to be more expansive for men than women in cross-sex friendship. Sexual intent for low-commitment sexual relationships in cross-sex friendship was explored with 2 items controlling for different, but relevant, social consequences of sexual activity in cross-sex friendship. Sexual intent with limited relational consequences to the friendship was investigated. Participants were asked which of their friends they would have sexual intercourse with if it would not result in an exclusive romantic relationship or interfere with the
existing friendship. This item was included to specifically explore how possible consequences within the friendship affect the willingness to begin sexual relationships with friends.

Men were expected to experience sexual intent towards a greater portion of their cross-sex friends than women in this circumstance.

H1: Men, more so than women, will engage in sexual activity with their cross-sex friends if it would not result in an exclusive romantic relationship or interfere with the existing friendship.

Sexual intent with limited consequences to third-party relationships was also investigated. Participants’ willingness to engage in sexual intercourse with their cross-sex friends, while limiting the consequences of this to their sexual and romantic relationships with others, was explored. It was hypothesised that men experience sexual intent towards a greater portion of their cross-sex friends than women in this circumstance.

H2: Men, more so than women, will engage in sexual activity with their cross-sex friends if it will not interfere with their sexual and romantic relationships with others.

**High-commitment sexual intent**

Sexual intent for high-commitment sexual relationships was investigated. Participants were asked which of their cross-sex friends they would have sexual
intercourse with if it resulted in an exclusive romantic relationship. From an evolutionary perspective, the greater minimal parental investment of women compared to men would suggest women would engage in high-commitment sexual relationships more so than low-commitment sexual relationships. However, this does not address the relative expansiveness of high-commitment sexual relationships relative to men. Indeed, this does not make any statement about how the expansiveness of high-commitment sexual intent would differ between men and women.

On the other hand, cross-sex friendship research suggests men construe cross-sex friends as potential romantic partners (Wright, 1989). In addition, men construe a romantic relationship emerging from cross-sex friendship as a benefit of cross-sex friendship more so than women do (Bleske & Buss, 2000). It was hypothesised that men experience high-commitment sexual intent towards a greater portion of their cross-sex friends than women.

H3: Men, more so than women, will engage in sexual activity with their cross-sex friends if it were to result in an exclusive romantic relationship.

Comparison of high- and low-commitment sexual intent

High- and low-commitment sexual intent were compared in cross-sex friendship. Given the relatively greater costs of high-commitment sexual relationships compared to low-commitment sexual relationships, the expansiveness
of low-commitment sexual intent was expected to be greater than high-commitment sexual intent.

H4: Men will engage in sexual activity with a larger portion of their cross-sex friends if it would not result in an exclusive romantic relationship than if it resulted in an exclusive romantic relationship.

In evolutionary history, the burdens of single parenthood would have been significant. As a result, selection would have favoured high-commitment sexual relationships for women. Women’s relatively high minimal parental investment would suggest that high-commitment sexual relationships would be more desirable than low-commitment sexual relationships. In evolutionary history, it is hypothesised that the increased investment from a male partner eases the burden of child-rearing and so women seek increased investment relationships. As a result, it was expected that the sexual intent of women will be more expansive for high-commitment rather than low-commitment sexual relationships.

H5: Women will engage in sexual activity with a larger portion of their cross-sex friends if it would result in an exclusive romantic relationship than if it would not result in an exclusive romantic relationship.

**Anticipation of sexual and romantic relationships**

The following items concern the anticipation of sexual and romantic relationships with one’s cross-sex friends. These items differ from the previous items
because sexual intent only refers to desire while anticipation refers to an expectation of behaviour. As discussed before, an important distinction between sexual cognition and sexual behaviour is that behaviour is necessarily symmetric, while sexual cognition, as found in sexual intent, may be unreciprocated.

The first item addressed the issue of presumed symmetry in a relationship. While a friend may experience sexual intent in a friendship a sexual relationship may not be anticipated because, among other possible reasons, the sexual intent is not reciprocated. This is not to say that participants are accurate in their assessment of their friendships transforming into sexual relationships. Instead, data from this item provides some insight into participants’ perspective on the trajectory of their friendships.

Past research has found that men over-perceive women’s sexual intent from innocuous behaviours such as smiling or friendliness (e.g., Abbey, 1982, 1991). This over-perception of sexual interest and intent has been identified in various research designs using exposure to photographs and videos as well as short vignettes (See Haselton & Buss, 2000 for a review). Specifically, this item concerns error management theory.

Error management theory includes the sexual over-perception bias. The sexual over-perception bias concerns men’s tendency to overestimate women’s sexual interest in them. This predictable cognitive bias, hypothesised to result from reproductive selectional pressures, reduces the potential for missed sexual opportunities for men (Haselton & Buss, 2000). The tendency to overestimate sexual
opportunities would lead men to perceive a greater likelihood of future sexual relationships with their cross-sex friends than women. In turn, this attempts to address men’s reproductive adaptive problem of partner number by increasing the number of women men identify as potential mates (Buss & Schmitt, 1993).

Consistent with the sexual over-perception bias of error management theory, men were expected to anticipate sexual relationships with their cross-sex friends more expansively than women.

H6: Men anticipate sexual relationships with a larger portion of their cross-sex friends than women.

Similar to the romantic attraction hypotheses of the romantic attraction and jealousy chapter (chapter 5), men were expected to anticipate romantic relationships with a larger portion of their cross-sex friends than women. This was expected as a result of past cross-sex friendship research (i.e., Bleske-Rechek & Buss, 2001; Wright, 1989). Sexual strategies theory does not posit any discrepancies between men and women in such a context. As stated before, both men and women pursue long-term sexual strategies but specific differences between the sexes are not clarified.

In other research, the commitment-skepticism bias of error management theory indicates that women underestimate men’s commitment to them in relationships (Haselton & Buss, 2000). It follows that women would undermine the romantic attraction experienced by their cross-sex friends when transforming cross-
sex friendships into exclusive romantic relationships. Where symmetric romantic attraction occurs, women would underestimate this romantic attraction and, as a result, the subsequent probability of a romantic relationship emerging from the friendship. This presumably is only a small portion of cross-sex friendships; however, this is still an important factor when investigating the anticipation of romantic relationships.

Im sum, it was hypothesised that men anticipate romantic relationships with their cross-sex friends more expansively than women.

H7: Men anticipate romantic relationships with a larger portion of their friends than women.

Anticipation of sexual and exclusive romantic relationship comparison

It was hypothesised that men anticipate sexual relationships with a larger portion of cross-sex friends than romantic relationships. Firstly, sexual relationships are less commitment-intensive than romantic relationships. Anticipating a larger number of sexual relationships than romantic relationships indicates sexual relationships in cross-sex friendship are expected to occur outside the context of romantic relationships.

H8: Men anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships with.
In evolutionary history, desires for committed mates would have been selected for; but, it is important to acknowledge the presence of women’s short-term sexual strategies. Women engage in both long-term and short-term sexual strategies. As sexual relationships often occur outside exclusive romantic relationships, expectations for sexual relationships presumably subsume expectations for exclusive romantic relationships among adults. That is, most adult romantic relationships include a sexual relationship. It was hypothesized that women anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships.

H9: Women anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships with.

Isolation of sexual intent in cross-sex friendship

While sexual intent is the desire to engage in sexual activity, this does not address the potential that this sexual desire may motivate the maintenance of the cross-sex friendship. Some cross-sex friendships may be forged and maintained by proxy of sexual intent. The tendency to end cross-sex friendship when the possibility of sexual access is eliminated was explored to isolate the influence of sexual intent in maintaining cross-sex friendship.

According to social exchange theory “our social behaviour is an exchange process, the aim of which is to maximize the benefits and minimize the costs” (Myers, 2007, p. 775). The benefits of friendship outweigh the costs. If eliminating the
potential for sexual access results in termination of the friendship, this suggests that future sexual access was an important benefit in maintaining the friendship. In this circumstance, merely eliminating the potential for a sexual relationship, not even a current sexual relationship, creates an imbalance where the costs outweigh the benefits and the individual is no longer willing to maintain the friendship. This highlights sexual access as a central motivation and key benefit of cross-sex friendship.

Extrapolating from evidence that men exert a greater reproductive effort in short-term sexual strategies than women (Buss & Schmitt, 1993), it was predicted that men foresee ending a larger portion of their cross-sex friendships than women when the possibility of sexual access is eliminated. Also, women judge a prospective friend’s lacking desire for sex as a more important reason to initiate a cross-sex friendship as compared to men (Bleske-Rechek & Buss, 2001). This expresses a divergence of the benefits and possible motivations of cross-sex friendship involving sexual strategies. In this regard, potential sexual relationships would be valued by men more so than women in the social exchange of cross-sex friendship.

H10: When the possibility of sexual access is eliminated, men foresee ending a larger portion of their cross-sex friendships than women.

**Isolation of romantic attraction in cross-sex friendship**

Social exchange theory, described above, addresses the cost-benefit analysis of social relationships. A balance of social exchange must be maintained in any
relationship for individuals to maintain the relationship. The elimination of a future romantic relationship was identified to explore if this was an important factor in the maintenance of cross-sex friendship. Participants were asked which of their cross-sex friends they would end their friendship with if there was no possibility of an exclusive romantic relationship developing with the person in the future. The admission that the absence of a romantic future would result in the termination of the friendship indicates that a future romantic relationship was an important factor in maintaining the friendship. By eliminating the potential for a romantic relationship, this creates an imbalance where the costs outweigh the benefits and the individual is no longer willing to maintain the friendship.

Men were expected to foresee ending a larger portion of their cross-sex friendships than women when the possibility of romance is eliminated. This is consistent with past cross-sex friendship research that some men approach cross-sex friendship as low-level or emerging romantic relationships (Wright, 1989). This item attempted to isolate the influence of romantic attraction in maintaining cross-sex friendship by exploring the tendency to end cross-sex friendship when the possibility of romantic relationship is eliminated.

H11: When the possibility of romance is eliminated, men foresee ending a larger portion of their cross-sex friendships than women.
Method

See chapter 2, specifically pages 41-45, for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on pages 309-310.

Results

Low-commitment sexual intent

H1: Men, more so than women, will engage in sexual activity with their cross-sex friends if it would not result in an exclusive romantic relationship or interfere with the existing friendship.

Participants were asked which of their cross-sex friends they would engage in sexual intercourse with if it would not result in an exclusive romantic relationship or interfere with their existing friendship. Comparisons were made between all men and women participants as well as each cultural sample using Mann Whitney ‘U’ tests. See appendix 17 for additional information about these tests. The hypothesis was supported as men reported sexual intent in this circumstance to a significantly larger portion of their cross-sex friends than women in all comparisons.

The results of the Mann Whitney ‘U’ tests are as follows: the Irish sample, $z = -11.839, \ p < 0.0001$; the US sample, $z = -7.885, \ p < 0.0001$, the UK sample, $z = -9.601, \ p < 0.0001$; and the cumulative sample, $z = -17.266, \ p < 0.0001$. In the
cumulative sample, the discrepancy between the means of men and women was 26.3%. The Irish, American, and UK samples varied similarly with differences of 31.3%, 23.6%, and 24.6% between the means of men and women, respectively. See figure 6.1.

Figure 6.1 Sexual intent without romantic consequences or friendship interference

H2: Men, more so than women, will engage in sexual activity with their cross-sex friends if it will not interfere with their sexual and romantic relationships with others.

Participants were asked a similar item concerning which of their cross-sex friends they would have sexual intercourse with if it would not interfere with their sexual and romantic relationships with others. This hypothesis was supported as men experienced sexual intent towards a greater portion of their cross-sex friends than women did in this circumstance. This was found in the Irish sample \( (z = -10.299, p < 0.0001) \), the US sample \( (z = -7.482, p < 0.0001) \), the UK sample \( (z = -9.060, p < 0.0001) \), and the cumulative sample \( (z = -15.939, p < 0.0001) \). See appendix 18 for
additional information about these Mann Whitney ‘U’ tests and descriptive statistics. Significant differences were found across all comparisons with sizable mean differences between men and women ranging from 20.8% to 27.2%. See figure 6.2.

Figure 6.2 Sexual intent without consequences to third-party relationships

<table>
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<th>Mean % of cross-sex friends</th>
<th>Irish men</th>
<th>Irish women</th>
<th>U.S. men</th>
<th>U.S. women</th>
<th>U.K. men</th>
<th>U.K. women</th>
<th>Total men</th>
<th>Total women</th>
</tr>
</thead>
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<td>60</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

**High-commitment sexual intent**

H3: Men, more so than women, will engage in sexual activity with their cross-sex friends if it were to result in an exclusive romantic relationship.

Mann Whitney ‘U’ tests were used to compare sexual intent where the sexual relationship would result in a romantic relationship. Comparisons were made between all men and women participants as well as each cultural sample. This hypothesis was supported as men reported sexual intent in this context to a significantly larger portion of their cross-sex friends than women in all comparisons. The results are as follows: the Irish sample ($z = -5.945, p < 0.0001$), the US sample
(z = -4.952, p < 0.0001), the UK sample (z = -6.274, p < 0.0001), and the cumulative sample (z = -9.892, p < 0.0001). See appendix 19 for additional information about these Mann Whitney ‘U’ tests and descriptive statistics. Mean differences between men and women ranging from 10.5% to 12.3%. Figure 6.3 shows the differences between groups.

Figure 6.3 High-commitment sexual intent

Comparison of high- and low-commitment sexual intent

H4: Men will engage in sexual activity with a larger portion of their cross-sex friends if it would not result in an exclusive romantic relationship than if it would result in an exclusive romantic relationship.

Wilcoxon signed rank tests were used to compare men and women’s sexual intent with and without romantic consequences in cross-sex friendship. It was hypothesised that sexual intent without romantic consequences is present in cross-sex
friendship more so than sexual intent with romantic consequences for men. This hypothesis was supported in all comparisons with sizable mean differences. The results of the Wilcoxon signed rank tests are as follows: the Irish sample ($z = -7.30, p < 0.0001$), the US sample ($z = -5.76, p < 0.0001$), the UK sample ($z = -5.40, p < 0.0001$), and the cumulative sample ($z = -11.08, p < 0.0001$). Additional information about these tests and the descriptive statistics are found in appendix 20. The mean differences between men’s high- and low-commitment sexual intent in these samples ranged from 13.2% to 21.2%. See figure 6.4.

H5: Women will engage in sexual activity with a larger portion of their cross-sex friends if it would result in an exclusive romantic relationship than if it would not result in an exclusive romantic relationship.

Women were hypothesised to experience sexual intent with romantic consequences in cross-sex friendship to a larger portion of cross-sex friends than sexual intent without romantic consequences. For women, this hypothesis was not supported in any of the comparisons. A significant difference was found between these items in the American ($z = -2.58, p < 0.01$), UK ($z = -1.33, p < 0.01$), and cumulative samples ($z = -3.175, p < 0.01$) but women expressed greater sexual intent without romantic consequences. It is important to note that the mean differences were negligible in these comparisons. In the Irish sample there was no significant difference these contexts of sexual intent ($z = -1.45, p > 0.05$). The details of these Wilcoxon signed rank tests and the descriptive statistics are found in appendix 20. The mean differences between women’s high- and low-commitment sexual intent in these samples ranged from 1.4% to 2.2%. See figure 6.4.
Anticipation of sexual relationships

H6: Men anticipate sexual relationships with a larger portion of their cross-sex friends than women.

It was hypothesised that men anticipate sexual relationships with a larger portion of their cross-sex friends than women. This hypothesis was supported in all comparisons. Appendix 21 provides the mean, median, standard deviation (SD) and Mann Whitney ‘U’ results for this item in three national samples and the cumulative sample. There was a mean difference of 12.3% between men and women in the Irish sample ($z = -5.487, p < 0.0001$), 11.75% in the American sample ($z = -5.727, p < 0.0001$), 10.75% in the UK sample ($z = -6.403, p < 0.0001$), and 12.7 in the cumulative sample ($z = -10.555, p < 0.0001$). See figure 6.5 for a graphic distribution of these data.
Anticipation of exclusive romantic relationships

H7: Men anticipate romantic relationships with a larger portion of their friends than women.

The hypothesis that men anticipate romantic relationships with a larger portion of their cross-sex friends than women was supported as significant differences were found in all comparisons of men and women. These findings were significant in the Irish ($z = -2.13, p < 0.05$), American ($z = -4.526, p < 0.0001$), UK ($z = -4.413, p < 0.0001$), and cumulative samples ($z = -6.470, p < 0.0001$), but the differences between men and women were not large. See appendix 22 for additional information about these Mann-Whitney ‘U’ tests and the relevant descriptive statistics. The mean difference between men and women in the Irish sample was 8.3%, 8.2% in the American sample, 8.45% in the UK sample, and 8.5% in the cumulative sample. See figure 6.6 for a graphical display of these data.
Figure 6.6  Anticipation of exclusive romantic relationships

Anticipation of sexual and exclusive romantic relationship comparison

H8: Men anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships with.

H9: Women anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships with.

Wilcoxon signed rank tests were used to compare men and women’s anticipation of sexual and romantic relationships in cross-sex friendship. It was hypothesised that sexual relationships were anticipated more than romantic relationships for men and women in all comparisons.

This hypothesis was supported for men in all comparisons. The results of these are as follows: the Irish sample ($z = -6.12, p < 0.0001$), the US sample ($z = -$...
4.16, \( p < 0.0001 \), the UK sample (\( z = -3.99, \ p < 0.0001 \)), and the cumulative sample (\( z = -8.66, \ p < 0.0001 \)). Additional information about these Wilcoxon signed rank tests and the descriptive statistics are found in appendix 23. The mean differences between men's anticipation of sexual and romantic relationships in these samples ranged from 4.6% to 9.4%. See figure 6.7.

For women, this hypothesis was supported in the Irish sample (\( z = -3.72, \ p < 0.0001 \)), the US sample (\( z = -4.02, \ p < 0.0001 \)), and the cumulative sample (\( z = -5.14, \ p < 0.0001 \)), but not the UK sample (\( z = -1.21, \ p > 0.05 \)). However, the mean differences were negligible in all these comparisons ranging from 0.9% to 2.0%. Additional information about these Wilcoxon signed rank tests and the descriptive statistics are found in appendix 23. See figure 6.7.

Figure 6.7 Anticipation of sexual and exclusive romantic relationships
Isolation of sexual intent in cross-sex friendship

H10: When the possibility of sexual access is eliminated, men foresee ending a larger portion of their cross-sex friendships than women.

Participants were asked which of their cross-sex friends they would end their friendship with if there was no possibility of a sexual relationship developing with the friend in the future. The responses of men and women were compared using Mann Whitney 'U' tests.

Men indicated they would end a larger portion of their cross-sex friendships than women in this circumstance in the Irish ($z = -3.790, p < 0.0001$), US ($z = -3.113, p < 0.01$) and cumulative ($z = -4.715, p < 0.0001$) samples but not the UK sample ($z = -1.330, p > 0.05$). Appendix 24 shows the results of the Mann Whitney 'U' tests for these samples and the relevant descriptive statistics. The mean differences between men and women were negligible in all comparisons. In the Irish sample it was 2.4%, in the American sample it was 2.2% of friends; in the UK sample it was 1.8% of friends; and, in the cumulative sample it was 2.3% of friends. See figure 6.8 for a graphical display of these data.
Isolation of romantic attraction in cross-sex friendship

H11: When the possibility of romance is eliminated, men foresee ending a larger portion of their cross-sex friendships than women.

Participants were asked which of their cross-sex friends they would end their friendship with if they knew there was no possibility of an exclusive romantic relationship developing with the friend(s) in the future. It was hypothesised that men foresee ending a larger portion of their cross-sex friendships than women when the possibility of a romantic future is eliminated from the friendship. The Irish ($z = -3.162, p < 0.01$), UK ($z = -2.130, p < 0.05$), and cumulative sample ($z = -3.803, p < 0.001$) all support this hypothesis but the US sample did not ($z = -1.872, p > 0.05$). Appendix 25 provides additional information about these Mann Whitney ‘U’ tests and the relevant descriptive statistics for these comparisons.
The mean differences between men and women were negligible in all comparisons. In the Irish sample there was a mean difference of 2.5%; in the American sample there was a mean difference of 1.8%, in the UK sample there was a mean difference of 1.4%, and in the cumulative sample there was a mean difference of 2.0%. See figure 6.9.

Figure 6.9 Termination of cross-sex friendship due to no romantic future

Discussion

Low-commitment sexual intent

All hypotheses concerning low-commitment sexual intent were supported. Men expressed low-commitment sexual intent to a larger portion of their cross-sex friends than women. These hypotheses concerned sexual intent while reducing the
social consequences of sexual activity. These hypotheses concern relationships that would be construed as short-term sexual strategies as the social consequences and commitment of the relationships were reduced. Men's more expansive sexual intent for low-commitment relationships is compatible with the reproductive adaptive problem of partner number where men seek a greater number of sexual partners than women (Buss & Schmitt, 1993). In some ways, this presents men as sexually opportunistic in cross-sex friendship as they are willing to seize low-commitment sexual opportunities substantially more so than women.

The sexual intent identified in these platonic cross-sex friendship draws attention to the potential introduction of sexual strategies into these friendships. Men's mean responses suggest that sexual intent is an undercurrent in many cross-sex friendships. The overall mean percentage for men was 35.6% for the first item, sexual intent without romantic consequences or friendship interference, and 33.0% for the second, sexual intent without third-party relationship consequences. These findings suggest men have an increased awareness of their cross-sex friends as potential sexual partners and would seize the opportunity to mate in short-term contexts. Other research has identified that a desire for sex was considered a more important motivation to form a cross-sex friendship for men than women (Bleske-Rechek & Buss, 2001). These data did not address if sexual intent was a motivation behind forming cross-sex friendship but this is an area which should be explored further to identify the extent to which sexual intent is a motivational factor in forming cross-sex friendships.
Women are far less inclined to consider engaging in sexual activity in their cross-sex friendships but the percentages for women are still quite high in each sample. The mean percentage for women for the first item, sexual intent without romantic consequences or friendship interference, was 9.0% and 8.9% for the second item, sexual intent without third-party relationship consequences. Sexual strategies research remarks upon women's short-sexual strategies but does not delve into the incidences of this occurring. These data support the claim that men more readily pursue short-term sexual strategies than women but they also bring to light the surprisingly high portion of cross-sex friends women would engage in low-commitment sexual activity with.

**High-commitment sexual intent**

The hypothesis concerning high-commitment sexual intent was supported. Men expressed more expansive high-commitment sexual intent than women. High-commitment sexual intent concerns long-term sexual strategies as it addresses the desire to forge committed romantic relationships. One of the central characteristics of long-term strategies is that they involve greater commitment than short-term sexual strategies. Sexual strategies theory does not specify the discrepancy between the pursuit of long-term strategies for men and women but these results appear to be somewhat counterintuitive given the premise of women's greater parental investment. This area requires further research into the pursuit of long-term strategies and cross-sex friendship. These data do not suggest cross-sex friendship is necessarily motivated to form romantic relationships; however, the portion of friends participants would engage in sexual intercourse with if it began a romantic
relationship is very high considering these relationships are platonic friendships with means ranging from 5.8% to 20.0%.

**Comparison of high- and low-commitment sexual intent**

A comparison was made between the portion of friends participants would engage in sexual activity if it did and did not begin a romantic relationship. It was hypothesised that men would have sexual intercourse with a larger portion of their cross-sex friends if it would not result in an exclusive romantic relationship than if it did result in an exclusive romantic relationship. This hypothesis was supported in all comparisons with sizable mean differences for men.

On the other hand, women were hypothesised to engage in sexual activity with a larger portion of their cross-sex friends if it would result in an exclusive romantic relationship than if it would not resulted in an exclusive romantic relationship. This hypothesis was not supported in any comparisons. In contrast, women would engage in sexual intercourse with a significantly larger portion of cross-sex friends if it did not result in an exclusive romantic relationship in three of the four comparisons. It is important to note that these differences were small with negligible differences between the means. The only comparison to have no significant difference was among Irish women.

The hypothesis was not supported for women but it is worth noting that the exclusive romantic relationships are necessarily exclusionary and so the tendency to desire an exclusive relationship with an individual would presumably constrain the
desire to have an exclusive romantic relationship with more than one cross-sex friend.

These hypotheses provide evidence of increased interest in short-term sexual strategies than long-term sexual strategies for both men and women. This research, coupled with research about friends with benefits relationships, indicates low-commitment sexual intent and sexual activity occur prominently in cross-sex friendship. The finding of women's greater low-commitment sexual intent relative to high-commitment sexual intent is surprising considering the premise of sexual strategies theory, however, this merely suggests that cross-sex friendship may be a reservoir of potential short-term mates for women as well as men. This finding is compatible with past research stating that many women report sexual desire in some of their cross-sex friendships (Bell, 1981).

**Anticipation of sexual relationships**

The anticipation of sexual relationships categorically changes the nature of cross-sex friendship. Even if sexual intercourse is not expected to alter the boundaries of the friendship, the friendship is no longer considered a platonic cross-sex friendship. The introduction of a sexual relationship may indicate a transition to a friends with benefits relationship or even the beginning of an exclusive romantic relationship. It was expected that men would anticipate sexual relationships with a larger portion of their friends than women. This hypothesis was supported in all comparisons with an overall difference of 12.3% between the means of men and women.
If there was a realistic expectation of a sexual relationship emerging from cross-sex friendship, then no difference between men and women in reporting this expectation would occur. However, men anticipate sexual relationships occurring more so than women in cross-sex friendship. These findings complement previous research on the sexual over-perception bias of error management theory where men over-perceive the sexual intent on behalf of women (Haselton, 2003; Haselton & Buss, 2000). Except in cases of rape, the expectation of sexual intercourse presumes symmetric intent as sexual activity is unlikely to occur unless both individuals desire it. Men anticipating sexual relationships with a greater portion of cross-sex friends than women indicates they perceive reciprocated sexual intent in the friendship.

In addition, other research has found that many women feel pressured to introduce a sexual component into their cross-sex friendships (Bell, 1981). This indicates that some men seek a sexual relationship with their cross-sex friends and attempt to introduce a sexual component to their cross-sex friendship.

Anticipation of exclusive romantic relationships

The hypothesis that men anticipate romantic relationships with a larger portion of their cross-sex friends was supported as significant differences were found in all comparisons of men and women. These findings were highly significant in the cumulative, American, and UK samples, but the differences between men and women were not large. Overall the mean difference between men and women was 8.4%.
While the mean percentages were overall quite low, men’s responses doubled those of women as more men anticipate romantic relationships with their cross-sex friendship than women. In addition, many participants were in existing exclusive romantic relationships and presumably many of these individuals would not expect an exclusive relationship with a friend. This draws attention to a consistent percentage of individuals whom identify cross-sex friendships as burgeoning romantic relationships.

It is important to note that items such as this may concern a motive in existing cross-sex friendships that is tied to long-term mating prospects. This item did not directly address motivation but the potential of a romantic relationship emerging from a cross-sex friendship is possibly a motivation to begin and maintain some of these friendships. There is evidence that single college men approach cross-sex friendship as low-level or emerging romantic relationships (Wright, 1989).

Similar to the expectation for sexual intercourse, a difference between men and women when comparing items concerning expectations of relationship transformation suggests one gender under- or over- perceives the likelihood of a relationship transformation occurring; otherwise there would be no difference between the sexes.

This discrepancy may be explained to some extent by the commitment-scepticism bias of error management theory. This describes the tendency for women to under-estimate men’s level of commitment to their relationship (Haselton & Buss, 2000). In evolutionary history, the error of misjudging a man’s level of commitment
to a relationship would be particularly costly for women due to women's relatively higher minimal parental investment. By overestimating a man's commitment to her, a woman may find herself bearing the burden of single parenthood if the father abandons her after conception (Haselton & Buss, 2000). Indeed, it is supposed that women are apt at identifying feigned commitment to avoid such a situation (Haselton & Buss, 2000). In this context, women may be underestimating their cross-sex friends' romantic attraction to themselves. This tendency would be adaptive for women as it prevents overemphasising men's commitment to their relationship.

**Anticipation of sexual and exclusive romantic relationship comparison**

It was hypothesised sexual relationships were anticipated more than romantic relationships for men and women. This hypothesis was supported for men in all comparisons. For women, this hypothesis was supported in all comparisons except the UK sample; however, the mean differences were negligible in all these comparisons.

Sexual relationships were expected with a larger portion of cross-sex friends than exclusive romantic relationships for two primary reasons. First, adult romantic relationships largely incorporate sexual relationships. From this perspective, the expectation of many sexual relationships may be a by-product of the expectation of an exclusive romantic relationship. Secondly, exclusive romantic relationships are necessarily exclusionary and so this reduces the portion of friends whom one could engage in an exclusive romantic relationship with.
Isolation of sexual intent in cross-sex friendship

The isolation of sexual intent in cross-sex friendship was explored by identifying which friendships would be terminated if sexual access was eliminated. The underlying assumption of this item concerns equity theory in friendship. The prospect of sexual access in these friendships creates equity, however, the existing benefits of the friendship are not valued enough to maintain the friendship.

In all samples, except the UK sample, men indicated they would end a larger portion of their cross-sex friendships if there was no possibility of a sexual relationship developing with the friend more so than women. The mean differences between men and women were negligible in all comparisons and the overall mean difference between men and women was only 2.2% of friends. This difference is so small that it is barely meaningful.

Even with a small difference this finding could be construed as important if it was consistent. However, this was not entirely consistent across cultures as there was no difference between UK men and women for this item. This indicates that exclusively maintaining cross-sex friendship for short-term sexual strategies occurs in a very small portion of friendships and this is not a consistent difference between men and women across cultures. The potential for sexual access was not identified as a key maintenance factor in cross-sex friendship for either men or women. Additional research should explore the nature of these friendships to identify the characteristics of dyads in the minority in which this is the case.
Isolation of romantic attraction in cross-sex friendship

Similar to the above item, the isolation of romantic attraction was identified in cross-sex friendship. This concerned the exclusive pursuit of long-term sexual strategies in cross-sex friendship. Men were expected to foresee ending a larger portion of their cross-sex friendships than women. The Irish, UK, and cumulative sample all support this hypothesis but the American sample did not. Overall, there was a mean difference of 1.9% between mean and women. This is a very small difference between men and women and the finding is not consistent.

This indicates that the maintenance of cross-sex friendship exclusively for long-term sexual strategies is negligible. Romantic relationship potential was not identified as a key maintenance factor in cross-sex friendship for either men or women.

Conclusion

Sexual intent was explored in cross-sex friendship. The vast majority of hypotheses were supported as men’s sexual intent was more expansive than women’s in cross-sex friendship. Men indicated that they would have sexual intercourse with a significantly larger portion of their cross-sex friends than women in every circumstance. This includes if intercourse launches an exclusive romantic relationship. This suggests men sexualise their cross-sex friendships to a greater extent than women and identify their cross-sex friends as potential mates more so than women. This is the case for both low-commitment and high-commitment sexual intent.
The anticipation of sexual and romantic relationships were also explored. Overall, men anticipated more sexual and romantic relationships in cross-sex friendship than women. These findings are compatible with error management theory.

Last, sexual intent was isolated as a key factor in maintenance of cross-sex friendship. Men, more so than women, indicated that they would more readily end their friendships with cross-sex friends if sexual access or romantic relationships were eliminated in the future. This is an interesting finding but accounted for a negligible portion of cross-sex friendships. Sexual intent and romantic attraction were not identified as key maintenance factors in cross-sex friendship, however, even this slight tendency in individuals may have a selection pressure.
Chapter 7. Interpersonal Description of Cross-sex Friendship

Humans are intensely social animals maintaining a variety of relationships throughout the lifespan including kinships, friendships, romantic relationships, and professional alliances. These relationships provide various benefits to the participants in the different contexts in which they exist. In particular, the benefits of interpersonal relationships, including friendship, concern the satisfaction of basic human needs as well as practical assistance (e.g., Davis & Todd, 1985).

Friendship often fits within a network of relationships. One singular friendship does not typically satisfy all the social needs, nor offer a perfect complement, to an individual. Ultimately, this creates a social network of people whom an individual draws upon in various contexts- a colleague may help with career advice; a friend may offer companionship; and a romantic partner may offer a shoulder to cry on. While different relationships provide different benefits, friendships can occupy a variety of roles in one’s life and the diversity of friendships cannot be underestimated. Most individuals maintain a network of friendships with each of these providing distinct benefits to the individual. As Rubin described,

"Throughout our lives...we have friends and "just" friends, old friends and new friends, good friends and best friends- each relationship meeting some part of ourselves that cries out for expression. One friend taps our intellectual capacities more deeply than others, another connects most profoundly to our emotional side."
One calls upon our nurturant, caretaking qualities, another permits our dependency needs to surface. One friend touches our fun-loving side, another our more serious part. One friend is the sister we wish we had, another offers the mothering we missed.” (Rubin, 1985, p. 56).

**Generic benefits of friendship**

Benefits of friendship that can be met in either same-sex friendship or cross-sex friendship are termed generic benefits. The generic benefits of friendship include the provisioning of intimacy, companionship, social support, and a buffer against loneliness (Monsour, 2002).

Experiencing intimacy is an important generic benefit of friendship (Monsour, 2002). Intimacy is, "an interactive process in which a person feels understood, validated, and cared for as a result of a partner’s response” (Breckler et al., 2006, p. 553). In friendship research, intimacy is often described by self disclosure but it may also concern emotional expressiveness (Monsour, 1992). Self disclosure is “the process of people revealing to one another increasingly personal and intimate details about themselves” (Breckler et al., 2006, p. 528), while emotional expressiveness is, “the verbal and non-verbal expression of emotions” (Monsour, 1992, p. 278).

According to Rubin (1985, p. 74), “Intimacy requires some greater shared expression of thought and feeling...some willingness to allow another into our inner life, into the thoughts and feelings that live there”. Intimacy concerns revealing personal thoughts and feelings that promote psychological closeness with another
person (Kito 2005, Buhrmester & Furman, 1987). By this token, intimacy incorporates responsiveness to a partner’s expression (Breckler et al., 2006). While physical and sexual contact may be components of some constructs of intimacy, they are not incorporated in the construct of intimacy used here.

Intimacy is a central characteristic of important relationships and often distinguishes between a friendship and an acquaintanceship. The absence of intimate relationships can produce loneliness. Loneliness is “the painful awareness that one’s social relationships are deficient” (Myers, 2007, p. 552). Providing a buffer against loneliness is an important benefit of friendship. Friendship is important for alleviating loneliness, even in the presence of kin or romantic partners (Rubin, 1985).

As loneliness describes social isolation, it is unsurprising that the provisioning of social support is a benefit of friendship. Social support is defined as, “information from others that one is cared for, respected, esteemed, and loved.” (Buhrke & Fuqua, 1987, p. 342).

Companionship is also an important interpersonal benefit of friendship as it provides the opportunity to enjoy oneself in the company of others (Buhrmester & Furman, 1987). The simultaneous and often integrated experience of the benefits of friendship is evident as companionship often creates a forum to experience intimacy through self-disclosure, and it has been suggested that social support is a manifestation of intimacy (Monsour, 1992). Similarly, affirmation and validation are described in relation to the provisioning of social support as well as intimacy (Breckler et al., 2006; Davis & Todd, 1985).
As these benefits are generic, they are secured in both same-sex and cross-sex friendship (Monsour, 2002). This does not presume that the extent to which these are reaped is identical in these friendships, nor does it presume that these benefits are invariable throughout the lifespan. In addition, these are not the only benefits of friendship (See Monsour, 20002; Rawlins, 1992; Rubin, 1985 for a thorough review).

**Unique benefits of cross-sex friendship**

Cross-sex friendship also provides unique benefits that are not available from same-sex friendship (Monsour, 2002). Gaining an insider’s perspective from a member of the other sex is an important benefit of cross-sex friendship (e.g., Monsour, 2002). This touchstone to the other sex is termed insider’s insight as it aids understanding the perspective of the other sex.

Gaining information about the other sex from a member of that sex is a widely discussed benefit of cross-sex friendship (e.g., Bleske & Buss, 2000; Monsour, 2002; Sapadin, 1988; Werking, 1997; Rubin, 1985). Bleske and Buss (2000) hypothesise that the information gleaned from cross-sex friends is beneficial because gaining knowledge about the other sex aided mating efforts in our ancestral past. This is reportedly the most liked aspect of cross-sex friendship (Sapadin, 1988), and ranked among the most beneficial aspects of cross-sex friendship by both men and women (Bleske & Buss, 2000).
The value of an insider’s perspective betrays the discrepancy between men and women as this insight is only instrumental if the genders do, in fact, occupy different social spheres. Smith and Inder (1990) describe cross-sex friendship as adaptive by shedding light on the multiplicity of interpretations of the world held by the other sex. The foreign thoughts, feelings, and actions of the other sex may be deciphered with insider insight to reduce the discrepancy of these two worlds.

Adult cross-sex friendship provides an opportunity to reveal sex-role discrepant information which may facilitate understanding the communication and intimacy styles of the other sex (Werking, 1997; Kaplan & Keys, 1997). This information may aid current friendships and relationships as well as incipient relationships by providing useful information about mate attraction (Bleske & Buss, 2000). That is, this may be an avenue where cross-sex friendship indirectly aids reproductive success by assisting in securing mates.

Specific benefits of cross-sex friendship will be explored here. These are the experience of intimacy, gaining an insider’s perspective to the other sex, and providing a buffer against loneliness. The experience of intimacy in cross-sex friendship was of central importance. In addition, exploratory investigations about gaining an insider’s perspective to the other sex and providing a buffer against loneliness were conducted. This chapter attempts to clarify that cross-sex friendship is not adequately described by the existing research on generic and unique benefits of cross-sex friendship.
Intimacy in friendship

Intimacy is an important component of friendship. There is evidence that men and women experience intimacy differently in friendship (e.g., Aukett, et al., 1988; Rubin, 1985) and this trend appears early in life (e.g., Rawlins, 1992; Buhrmester & Furman, 1987). To fully understand the perspective of men and women in cross-sex friendship, past research about intimacy in cross- and same-sex friendship across the life span will be explored. This research compared the experience of intimacy in cross-sex friendship and same-sex friendship among adults.

Childhood friendship

As young children have limited cognitive and interpersonal skills, it is unsurprising that their parents, particularly their mothers, provide intimacy more so than their peers (Buhrmester & Furman, 1987). As same-sex preferences take root in early childhood, this suggests that the generic benefits of friendship are primarily met by same-sex friendship for young children instead of cross-sex friendship. However, the widespread withdrawal from cross-sex interaction denies an insider perspective to the help children understand the perspective of the other sex (Monsour, 2002). This is salient in early childhood as concepts concerning themselves, others, and their relationships to others are forming and knowledge gleaned about the other sex could be incorporated into children’s emerging concepts of the genders (Monsour, 2002).

Friendships have a place the social network of children’s lives but this is not to say childhood friendship takes precedence over familial relationships. Family
members, particularly parents, are primary providers of intimacy for children (Buhrmester & Furman, 1987). However, the supplemental intimacy gained from friendship may be a significant feature of satisfying children’s desire for intimacy (Buhrmester & Furman, 1987). Same-sex friendships, the most typical friendships found in childhood, reveal differences in the experiences of intimacy which may indicate early understandings and expectations of the quality of relationships.

Intimate disclosure in girlhood same-sex friendship steadily increases from childhood to adolescence while this comparable pattern is not found for boys (see Rawlins, 1992 for a review; Buhrmester & Furman, 1987). Boyhood same-sex friendships are characterised by less self-disclosure, less physical proximity, and less eye contact compared to girlhood same-sex friendships (Maccoby, 1999).

Boys’ same-sex friendships are characterised by a developmental increase in intimacy, but boys do not achieve the same levels of intimacy in their friendships as compared to girls (Buhrmester & Furman, 1987). This could result from a methodological limitation of operationally defining intimacy by self-disclosure (Buhrmester & Furman, 1987). It is possible that boys engage in equally intimate relationships as girls, but that self-disclosure is not the means through which intimacy is achieved (Buhrmester & Furman, 1987). Given the divergent play styles of boys and girls it is possible that intimacy is expressed in boys’ same-sex friendships via "actions and deeds" (Buhrmester & Furman, 1987, p. 1111).
Adolescent friendships

Friendship in adolescence differs from childhood friendship as adolescents increasingly explore intimate and companionate relationships (Rawlins, 1992; Buhrmester & Furman, 1987). Adolescent friendship is distinctly different from childhood friendship as it is characterised by increased interpersonal intimacy (Newcomb and Bagwell, 1995; Kuttler et al., 1999). Significantly, friends begin to surpass family members as sources of intimacy (Rawlins, 1992; Buhrmester & Furman, 1987). These friends serve as emotional resources for each other providing increased emotional support compared to their younger counterparts (Sippola, 1999; Kuttler et al., 1999).

As adolescent friendships become more mature and operate more autonomously from one’s familial relationships, with the characteristics of companionship, self-disclosure, loyalty, and commitment become increasingly prominent (Rawlins, 1992; Buhrmester & Furman, 1987; Newcomb and Bagwell, 1995). In addition, these friendships can foster self-esteem and aid individual identity development and self-concept (Rawlins, 1992; Kuttler et al., 1999; Monsour, 2002). Adolescent friends participate in exploring their emerging identities through self-understanding as well as validation of each other (e.g., Rawlins, 1992). However, this is not to say that same-sex and cross-sex friendships are identical in providing these benefits to adolescents.

The intensity of girls’ same-sex friendships is greater than boys’ same-sex friendships; and these friendships are characterised by increased intimacy,
companionship, self-disclosure, prosocial support, and esteem support (See Kuttler et al., 1999 and Rawlins, 1992 for a review).

The intensity of female same-sex friendship dyads is apparent in contrast to the more diffuse male same-sex friendships (Rubin, 1985). Adolescent boys’ same-sex friendships have been characterised as ‘less involved’ compared to female adolescent same-sex friendships (see Rawlins, 1992 for a review). Evidence suggests that adolescent boys gain more esteem support, ego support, and greater emotional gratification from their cross-sex friends than their same-sex friends (e.g., Kuttler et al., 1999; Rawlins, 1992; Sippola, 1999). This suggests that boys gain psychological intimacy with their female friends which is not found with their same-sex friends (Maccoby, 1999).

Additional evidence concerning the interpersonal benefits reaped by boys in cross-sex friendship comes from the outcomes of boys with no other friendships. Similar to childhood, friendless young adolescents may turn to cross-sex friends. Considering the notion that cross-sex friendship provides generic benefits of friendship when same-sex friendship is not available, this pattern is associated with “more positive perceptions of competence” among boys. In contrast, this pattern is associated with “less positive perceptions of well-being” among girls (Bukowski et al., 1999, p. 457). This contradicts the notion that friendship, in and of itself, is inherently beneficial to the individual as adolescent girls with only cross-sex friends are at a disadvantage relative to their peers.
Friendships are unique and not all research supports the notion that adolescent boys benefit from cross-sex friendship more so than girls or that boys’ cross-sex friendships are more satisfying than their same-sex friendships. Some research finds that adolescents report less companionship in their cross-sex friendships than their same-sex friendships (Buhrmester & Furman, 1987, Kuttler et al., 1999). In addition, some studies have found that the intimacy of adolescent cross-sex friendship is deficient in comparison to same-sex friendship (See Monsour, 2002 for a review). This describes companionship and intimacy as greater among adolescent boys’ same-sex friendships rather than their cross-sex friendships.

In addition, the finding that girls gain increased prosocial support from same-sex friends than cross-sex friends was not evident among older adolescent girls when cross-sex friendship becomes more normative through the course of adolescence and less differentiation was found between same-sex and cross-sex friendships (Kuttler et al., 1999). These findings highlight that not all cross-sex or same-sex friendships are the same and that individual variation as well as the social development of adolescents must be taken into account.

**Adulthood friendship**

Cross-sex friendship is evident in adulthood. Similar to same-sex friendship, close adult cross-sex friendship provides companionship, affection, intimacy, as well as the opportunity to be candid and enjoy one’s self (e.g., Werking, 1997; Monsour, 2002; Bleske-Rechek & Buss, 2001). Adult friends are a source of social and
emotional support (e.g., Werking, 1997, Rawlins, 1992; Monsour, 2002), as well as
offering a buffer against loneliness (e.g., Werking, 1997; O'Connor, 1993).

It is not surprising that men and women choose to befriend each other given the
various benefits derived from cross-sex friendship. However, there is evidence that
these benefits are not equally distributed between the sexes.

The vantage point from which men and women perceive cross-sex friendship can
be deduced from their experiences with same-sex friendship. Similar to earlier life
stages, the same-sex friendships of men and women differ in their communication and
interaction styles (e.g., Kalmijn, 2002; Rawlins, 1992). Rubin (1985) found that male
and female friendships are markedly different in content and quality. Wright (1989)
describes women's same-sex friendships as 'face-to-face', and men's same-sex
friendship as 'side-by-side'. While 'sharing/enjoying' was cited by both men and
women as what they liked most about their same-sex friendships, men's responses
emphasised activities or group orientation, and women's responses emphasized
dyadic and interpersonal communication (Sapadin, 1988). Research sheds light on
the perspective from which people perceive and experience cross-sex friendship by
comparing experiences of cross- and same-sex friendship.

In adulthood, women's same-sex friendships are described as more intensive than
men's same-sex friendships. Cross-cultural evidence from New Zealand and the
United States finds that women's same-sex friendships are more emotional and
intimate than men's same-sex friendships (See Aukett et al., 1988). Talk is a central
and enriching pastime emphasising self-disclosure and emotional support (Wright,
1989). These relationships are characterised by intimacy, support, reciprocity, acceptance, and loyalty (e.g., Sapadin, 1988; Rose, 1985; See Rawlins, 1992 for a review). As well, intimacy, enjoyment, and nurturance were rated higher in women’s same-sex friendships than in men’s same-sex friendships (Sapadin, 1988).

Men describe their same-sex friendships as offering greater companionship and loyalty than their cross-sex friendships (Rose, 1985). However, men’s same-sex friendships are more distant compared to women’s same-sex friendships as men are less inclined to risk emotional vulnerability and display (Rubin, 1985). These friendships are more activity-oriented with a less intimate range of conversation than cross-sex friendships (Sapadin, 1988; Rawlins, 1992; Werking, 1997). As one man described same-sex friendship in an interview,

“There are other forms of intimacy than sharing feelings directly. The imagery that comes to my mind is Huckleberry Finn and Tom Sawyer, for example- that kind of deep sharing of doing things together. There’s the intimacy of people who play together and work together that’s very powerful and that creates lasting bonds.” (Rubin, 1985, p. 73).

From this perspective, men may have a different range of intimacy in same-sex friendship which does no rely heavily on self-disclosure. Men’s discussions with their friends often concern topical conversation such as sports or work and their interactions are characterised as “emotionally contained and controlled” (Rubin, 1985, p 62). Rubin (1985) describes men’s friendships as characterised by bonding, but not necessarily intimacy. That is, there is a connection between the individuals but it does not rely on the emotional expressiveness that grants access to the inner life of the
other (Rubin, 1985). This contrasts with Werking’s (1997) view that intimacy is apparent in male same-sex friendship but that it is not perceived by men as rich as the intimacy in their cross-sex friendships.

Cross-cultural research from Russia and the United States indicates women overall experienced greater intimacy in their same-sex friendships than their cross-sex friendships, while men experienced greater intimacy in their cross-sex friendships compared to their same-sex friendships (Sheets & Lugar, 2005). Similarly, research on cross-sex friendship in older adulthood reports that single middle-aged and elderly men disclose more to their cross-sex friends than their same-sex friends (Booth & Hess, 1974). In a longitudinal study of Dutch adults, men whom reported loneliness in earlier waves of data collection later reported increased cross-sex friendships. This was interpreted that the experience of loneliness was an impetus to seek out female friends (Kalmijn, 2002).

A study of New Zealander adults found that women gained emotional support, therapeutic value, and discussed personal problems with their same-sex friends more so than their cross-sex friends (Aukett et al., 1988). In contrast, the majority of men gained emotional support, therapeutic value, and discussed their personal problems with their cross-sex rather than their same-sex friends, however, a sizable portion of men discussed personal problems with both same-sex and cross-sex friends (Aukett et al., 1988).

This contrasts with several cross-cultural studies. Self-disclosure was found to be higher between same-sex friends in men and women compared to cross-sex friends in
Japanese and American college students (Kito, 2005). Similarly, Davis and Todd (1985) found that college same-sex friends were closer and interacted more than college cross-sex friends. Also, Rose (1985) found intimacy is fulfilled in same-sex friendship more so than cross-sex friendship for both men and women. According to Wright (1989), this inconsistency is unsurprising considering the diversity and variety of friendships. It is also possible that cross-sex friendship among college students, as sampled by Kito (2005) and Davis and Todd (1985) are not as rich as cross-sex friendship in later stages of adulthood.

The experience of intimacy is a generic benefit of friendship; however, there is inconsistency in past research concerning the intimacy of same-sex and cross-sex friendship. There is support that women’s same-sex friendships are more intimate than their cross-sex friendships (i.e., Sheets & Lugar, 2005). Comparisons of intimacy of men’s cross- and same-sex friendships are less conclusive. Some research has found that men’s cross-sex friendships are more intimate than their same-sex friendships (e.g., Sheets & Lugar, 2005); however, there is also evidence that the intimacy of same-sex friendship surpasses cross-sex friendship for both men and women (e.g., Kito, 2005). Importantly, much of the research that investigates intimacy in adulthood draws from young adult populations such as the work done by Kito (2005), Sheets and Lugar (2005), Davis and Todd (1985), Rose (1985), Aukett and colleagues (1988), and Kalmijn (2002). In the current study, the intimacy of same-sex and cross-sex friendship was compared by asking participants how close they feel they are to their closest same-sex and cross-sex friend.
Comparisons were made between the perceived intimacy in cross- and same-sex friendship. It was expected that men and women describe their closest same-sex friendship as more intimate than their closest cross-sex friendship.

H1: Men rate their closest same-sex friendship as more intimate than their closest cross-sex friendship.

H2: Women rate their closest same-sex friendship as more intimate than their closest cross-sex friendship.

**Insider's insight to the other sex**

In addition to the provisioning of intimacy, various benefits are derived from cross-sex friendship. If cross-sex friendship is a relationship characterised by interpersonal benefits to the participants, then the benefits of friendship will presumably weigh heavily in participants' assessment of their friendships. In contrast, if these benefits are scarcely found in cross-sex friendship, then this leaves scope for the possibility that men and women derive benefits from cross-sex friendship that are not necessarily interpersonal in nature. Benefits associated with mating efforts may be evident in cross-sex friendship.

Providing an insider's insight into the other sex is a unique benefit of cross-sex friendship. This benefit is heavily researched (Monsour, 2002; Bleske & Buss, 2000; Sapadin, 1988) and so it is expected that men and women report this benefit prominently in their cross-sex friendships. To identify how relevant this benefit is to
the experience of cross-sex friendships, the social network of one’s cross-sex friends was assessed for the presence of this benefit. Considering the diversity of the experiences of friendship (Rubin, 1985), this approach gathers data about each participant’s understanding of cross-sex friendship as a larger construct by incorporating their closest cross-sex friendships instead of just evaluating one particular relationship.

The portion of one’s cross-sex friends whom provided insider’s insight was identified to find the incidences of insider’s insight being utilised in these cross-sex friendships. It was expected that this benefit was secured in the majority of cross-sex friendships.

H3: It was hypothesised that the majority of men’s cross-sex friends provide an insider’s insight to the other sex.

H4: It was hypothesised that the majority of women’s cross-sex friends provide an insider’s insight to the other sex.

A buffer against loneliness

The extent to which men and women derive the benefits of cross-sex friendship were explored in their social network of cross-sex friends. It was expected that when participants are lonely they seek the company of their cross-sex friends. Cross-sex friendship is identified as a source of companionship (Bleske & Buss, 2000; Rose,
1985), as well as a buffer against loneliness (Monsour, 2002). A buffer against loneliness is considered a central component of friendship (Monsour, 2002).

The portion of one’s cross-sex friends whom were sought when feeling lonely was identified to see if these friends provided the benefit of a buffer against loneliness. Participants were asked which of their friends they seek when feeling lonely. This was phrased as such to explore the nature of these relationships by identifying actual behaviour in the relationships. Data about which of their friends they feel they could potentially seek during these times was not gathered because this item concerned actual benefits derived by the friendships. It was expected that the company of the majority of cross-sex friends were sought during loneliness by both men and women.

H5: It was hypothesised that the majority of men’s cross-sex friends were sought in loneliness.

H6: It was hypothesised that the majority of women’s cross-sex friends were sought in loneliness.

Method

See chapter 2, specifically pages 45-46, for detailed information about the methodology used when investigating intimacy in cross-sex friendship. The items analyzed here may be found in appendix 1 on pages 312 and 314. For information about the insider’s insight and buffer against loneliness items see chapter 2,
specifically pages 41-45, for detailed information about the methodology. These items may be found in appendix 1 on pages 309-310.

Results

Intimacy in friendship

H1: Men rate their closest same-sex friendship as more intimate than their closest cross-sex friendship.

H2: Women rate their closest same-sex friendship as more intimate than their closest cross-sex friendship.

Wilcoxon signed rank tests were used to compare the perceived intimacy of closest same-sex and cross-sex friendships in each sample. These hypotheses were supported as men and women reported they are closer to their closest same-sex friend than their closest cross-sex friend in the Irish sample (men: $z = -2.82, p < 0.01$, mean difference = 0.4; women: $z = -7.69, p < 0.0001$, mean difference = 0.7), the US sample (men: $z = -2.56, p < 0.05$, mean difference = 0.4; women: $z = -7.80; p < 0.0001$, mean difference = 0.7), and the cumulative sample (men: $z = -4.27, p < 0.0001$, mean difference = 0.3; women: $z = -13.78, p < 0.0001$, mean difference = 0.7). Data from women in the UK sample also supports this hypothesis ($z = -7.33, p < 0.0001$, mean difference = 0.8) but not UK men ($z = -1.41, p > 0.05$, mean difference = 0.2). See figure 7.1. Bear in mind that a lower value rating indicates
greater closeness. See appendix 26 for additional information about the descriptive statistics and Wilcoxon signed rank tests for each comparison.

Figure 7.1 Intimacy in cross- and same-sex friendship

![Graph showing intimacy in cross- and same-sex friendship](image)

For the purposes of comparison, Mann Whitney ‘U’ tests were performed on the ratings men and women gave their cross-sex friend and their same-sex friend. These were peripheral to the hypotheses but provide greater insight into these data and how friendship is experienced. First, Mann Whitney ‘U’ tests were performed on men and women’s perception of their closest cross-sex friendships. See appendix 27 for the descriptive statistics and results of Mann Whitney ‘U’ tests for each comparison. No significant differences were found in the cumulative sample or the national samples. Again, a lower value rating indicates greater closeness. See figure 7.2.
In addition, the perceived intimacy of same-sex friendship was compared for men and women using Mann Whitney ‘U’ tests. In all comparisons, women rated their closest same-sex friendship as more intimate than men rated their closest same-sex friendship. See figure 7.3. The descriptive statistics and results of Mann Whitney ‘U’ tests for each comparison are found in appendix 28.
Insider’s insight to the other sex

H3: It was hypothesised that the majority of men’s cross-sex friends provide an insider’s insight to the other sex.

H4: It was hypothesised that the majority of women’s cross-sex friends provide an insider’s insight to the other sex.

Men and women indicated what portion of their cross-sex friends provide insight into the other sex. The hypotheses were largely supported as the majority of cross-sex friends provided insight into the other sex. This was found in the cumulative sample for men (mean: 53.3%) and women (mean: 50.5%), for Irish men (mean: 54.2%), for US men (mean: 53.5%) and US women (mean: 55.6%), and UK men (mean: 53.3%). This hypothesis was not supported for Irish women (mean: 47.7%) or UK women (mean: 48.0%). See figure 7.4.

Figure 7.4 Portion of cross-sex friends providing insight into the other sex
An exploratory analysis into the differences between the benefits derived from cross-sex friendship by men and women was also conducted. The portion of cross-sex friends men and women indicated provide insight into the other sex were compared using Mann Whitney ‘U’ tests. In all comparisons, except the Irish sample, there was no significant difference between the portion of friends providing insight for men and women. See appendix 29 for the descriptive statistics and results of Mann Whitney ‘U’ tests for each comparison.

A buffer against loneliness

H5: It was hypothesised that the majority of men’s cross-sex friends were sought in loneliness.

H6: It was hypothesised that the majority of women’s cross-sex friends were sought in loneliness.

Men and women indicated what portion of their cross-sex friends they sought when feeling lonely. The hypotheses were not supported as neither men nor women sought the company of the majority of the cross-sex friends when lonely. The mean responses for men and women were very similar in all comparisons and less than 50% of the participant’s cross-sex friends. The mean percent for each group is as follows: Irish men: 32.2%, Irish women: 32.8%, US men 40.1%, US women: 35.4%, UK men 36.9%, UK women: 38.4%, total men: 35.9%, and total women: 35.2%. See figure 7.5 for graphical display.
These data were compared using Mann Whitney ‘U’ tests in an exploratory analysis. In all comparisons there was no significant difference between the portion of friends sought by men and women. See appendix 30 for the descriptive statistics and results of the Mann Whitney ‘U’ tests for each comparison.

**Discussion**

This chapter attempted to knowledge of the generic and unique benefits of cross-sex friendship. This was evaluated in two ways. First, the securing of the generic benefit of intimacy was compared in cross-sex friendship and same-sex friendship. Second, the portions of cross-sex friendships were identified where the benefits of insider’s insight and companionship during loneliness were secured. This attempted to see how expansively these benefits are reaped in one’s cross-sex friendship network.
It was hypothesized that men and women experience cross-sex friendship differently from same-sex friendship. Cross-sex friendship is characterised by less intimacy than same-sex friendship. This indicates that cross-sex friendship occupies a different social role from same-sex friendship as it is not merely the same as a same-sex friendship with a member of the other sex.

The widely researched unique benefit of providing an insider’s perspective to the other sex was secured in about half of cross-sex friendships. Also, the benefit of providing a buffer against loneliness was not largely secured in cross-sex friendship. Additional research is warranted to illuminate the benefits of cross-sex friendships that do not reap these benefits.

**Intimacy**

Hypotheses concerning men and women’s increased perception of intimacy in same-sex friendship were supported in all comparisons with the exception of UK men who reported no difference in intimacy between these friendships. This is comparable to Kito’s (2005) cross-cultural findings of Japan and the United States where same-sex friendship was rated as more intimate than cross-sex friendship for both men and women. This contrasts with past cross-cultural research from Russia and the United States where men perceived the intimacy of their cross-sex friendships as greater than their same-sex friendships (i.e., Sheets & Lugar, 2005). In the current study, the discrepancy between intimacy in men’s cross- and same-sex friendships was smaller than that of women.
Even though both men and women rated their same-sex friendships as more intimate than their cross-sex friendships, women’s same-sex friendships were described as closer than men’s same-sex friendships. This was identified in all comparisons using Mann Whitney ‘U’ tests. This is similar to Aukett and colleagues’ (1988) cross-cultural findings where women’s same-sex friendships were more intimate than men’s same-sex friendships. This supports Werking’s (1997) finding that women perceive cross-sex friendships as less intimate than their same-sex friendships, but enjoyable nonetheless.

These data come from a sample that is markedly older than many investigations of friendship. Many studies rely on college students, such as the two cross-cultural studies mentioned above (Kito, 2005; Sheets & Lugar, 2005), for gathering data about the nature of friendship which may not be representative of the larger adult population. However, evidence supporting, as well as contradicting, the discrepancy of intimacy in men’s friendship can also be found among older samples (i.e., Rubin, 1985; Sapadin, 1988). Future research should explore this anomaly.

The experience of cross-sex friendship differs from same-sex friendship for men and women. From this perspective, insight can be gained about the benefits women derive from cross-sex friendship. As many women’s same-sex friendships are described as intense, women may find cross-sex friendship less demanding (Harvey, 2003). As one female interviewee described cross-sex friendship, “it feels less loaded emotionally than with a woman friend” (Rubin, 1985, p. 162). This can be described as a, “cooler ambivalence of a friendship with a man” (Rubin, 1985, p. 161). The

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9 There was no significant difference between men and women’s experience of intimacy in cross-sex friendship. There was no difference in any sample using Mann Whitney ‘U’ tests.
intensity of same-sex friendship may cause friction from the increased demands made upon each other. It follows that cross-sex friendship may offer women less conflict than same-sex friendship (Werking, 1997).

In addition, there is evidence that cross-sex friendship offers women more companionship than same-sex friendship (Rose, 1985). Indeed, women rated the companionship of having a dinner companion as the most beneficial aspect of cross-sex friendship (Bleske & Buss, 2000).

Also, in societies where there are differences between the expected behaviours of men and women, women may feel cross-sex friendships liberating as a means to ‘be one of the guys’ on some level. Women say a positive aspect of cross-sex friendship is the opportunity to explore more male-typical characteristics such as a competitive streak (Rubin, 1985). This represents a self-conscious perspective of women where cross-sex friendship creates a bridge between the barriers of men and women. The acknowledgement of these sex-barriers is even more evident when women appreciate recognition from men in ‘a man’s world’ (Rubin, 1985). However, these specific findings are limited by social and cultural factors.

On the other hand, men experience cross-sex friendship differently from same-sex friendship. A defining characteristic of men’s cross-sex friendships is that they are described as more nurturing than their same-sex friendships (e.g., Rawlins, 1992; Sapadin, 1988; Werking, 1997; Rubin, 1985). Men rated being able to talk openly as the most beneficial aspect of cross-sex friendship (Bleske & Buss, 2000). Men are less guarded in their cross-sex friendships than their same-sex friendships (Rubin,
Importantly, men characterise their cross-sex friendships as offering more intimacy, self-affirmation, acceptance, and ego support than their same-sex friendships (Werking, 1997; Rawlins, 1992; Harvey, 2003; Rose, 1985; Rubin, 1985; See Sapadin, 1988 for a review). Indeed, this somewhat contradicts the current findings as cross-sex friendship was less intimate than same-sex friendship.

Women offer men compassionate concern, emotional support, receptivity, and sensitivity in cross-sex friendship which create a comfortable environment for men to confide (Rawlins, 1992; Werking, 1997). Women are aware of this as they describe their role in their cross-sex friendships as characterised by providing nurturance and listening (Rubin, 1985). This highlights that the interpersonal benefits gained by men in cross-sex friendship include a broad range of self-expression and emotional discourse (Werking, 1997).

Men report cross-sex friendship gives them the opportunity to be more open, while women describe the expressiveness of these relationships as more restrictive than their same-sex friendships (e.g., Wright, 1989; Rubin, 1985). Men have characterised their cross-sex friendships as significantly more caring and accepting than women did (Sapadin, 1988).

**Social network of cross-sex friendship**

The social networks of cross-sex friends were investigated to identify seeking companionship during loneliness and insider’s insight into the other sex. While participants secured these benefits from cross-sex friendship, the prominence of these
benefits was surprisingly low in the larger context of the social network of cross-sex friends. No significant differences were found between men and women which suggests cross-sex friendship is similarly experienced by men and women in these domains.

**Insider’s perspective**

A unique benefit of cross-sex friendship is gaining an insider’s perspective to the other sex (e.g., Bleske & Buss, 2000; Monsour, 2002; Sapadin, 1988; Werking, 1997). This insight is presumably most valuable when it sheds light on specific relationships an individual is currently negotiating or currently engaged in. While the opportunity to gain an insider’s insight into the other sex is among the most researched unique benefits of cross-sex friendship, only about half of cross-sex friendships were sources for information about the other sex. This is surprisingly low considering this is reportedly the most liked aspect of cross-sex friendship (Sapadin, 1988), and ranked among the most beneficial aspect of cross-sex friendship (Bleske & Buss, 2000).

A duality of the role of cross-sex friends for men and women may shed light on this anomaly. This benefit appears to be deficient in cross-sex friendships characterised by asymmetric or symmetric romantic attraction (Guerrero & Chavez, 2005). These dyads discussed relationships with third parties markedly less than to cross-sex dyads where romance was outright rejected or both members of the dyad construed the friendship as purely platonic (Guerrero & Chavez, 2005). If the benefit of gaining an insider perspective is reduced in these contexts, this may affect the relationship. This could explain why an insider’s benefit is not a benefit in some
In friendships characterised by symmetric romantic attraction, it is possible that another benefit usurps this benefit—namely the possibility of romance.

In regards to asymmetric romantic attraction, women are more likely to not reciprocate a friend’s affections (Harvey, 2003; Bleske and Buss, 2000). This may create a strain on the friendship and so discussing third party individuals is eschewed (Guerrero & Chavez, 2005). This may help explain the marginally lower numbers of women gaining an insider’s insight from their male friends.

In addition, men rated gaining information about the other sex as the second most beneficial aspect of cross-sex friendship, but men rated the inability to discuss other women with their cross-sex friends as the sixth most costly aspect of cross-sex friendship (Bleske & Buss, 2000). Discussion of the other sex as a taboo subject in cross-sex friendship contradicts the notion that cross-sex friends provide insider’s insight; instead this creates a duality in the nature of some cross-sex friendships where discussing other women is perceived as costly, and so men whom feel this do not benefit from an insider’s perspective. This may help explain how a unique benefit of cross-sex friendship which appears so prominent in past research, is in fact, not widely secured.

**A buffer against loneliness**

Surprisingly, only about 35% percent of men and women’s cross-sex friends were sought for their companionship when the participant experienced loneliness. There
was no significant difference between the portion of cross-sex friends’ men and women sought in any comparison. It is surprising that only a minority of cross-sex friends were sought in this context considering that a buffer against loneliness and companionship are described as central generic benefits of friendship (Monsour, 2002). Overall, cross-sex friendship does not appear to readily provide the benefits of friendship that are so widely researched.

If cross-sex friends are perceived as deficient to in comparison to same-sex friends for both sexes, then this may help explain the homosocial norm. However, equity theory explains that relationships are maintained if the participants perceive them to be equitable. While there is much diversity in the experience of friendship, equity is important in friendship relationships. Equity theory concerns, “the idea of perceived fairness or balance in interpersonal relationships, such that both partners perceive that they are receiving relatively equal outcomes” (Breckler et al., 2006, p. 552).

Social equity indicates that neither participant in a relationship is over- or underbenefitted relative to the other member. Instead, “the ratios of inputs to outcomes are identical for the two parties” (Messman et al., 2000). This does not presume that the benefits derived by participants are identical in nature, but that the members are gaining comparable benefits from the relationship.

The concept of equity is important in relationships so neither individual perceives they are being exploited. While inequity may occur in some relationships, participants in equitable relationships report the highest satisfaction (see Messman et
al., 2000). If a relationship is perceived as inequitable, it may be terminated. It is from this perspective that evaluating existing relationships is so valuable. For the most part, friendships that are maintained provide benefits to each participant and are characterised as equitable in so far as that these relationships are maintained by the participants. From this perspective, the nature of these relationships may reveal the benefits underpinning friendship.

Presumably the benefits derived from cross-sex friendship, which motivate individuals to maintain these friendships, have not been depicted by the interpersonal descriptions measured here. When comparing same-sex and cross-sex friendship, some researchers insinuate that the perceived benefits of cross-sex friendship may be deficient in comparison to same-sex friendship (See Monsour, 2002 for a review). Friendship is voluntary and participants choose to engage in these specific relationships because they are individually satisfying.

The divergence of benefits secured in cross-sex friendship may be obscured by the methodology used to study cross-sex friendship. That is, psychologists largely explore the interpersonal benefits of cross-sex friendship. Much research explores interpersonal benefits such as the provisioning of intimacy, companionship, social and emotional support, as well as a buffer against loneliness (e.g., Monsour, 2002). These benefits, taken in isolation, describe cross-sex friendship as a setting for psychological experience and nurturing. Presuming that interpersonal benefits are the most important benefits of friendship negates the larger context in which friendship exists and how friendship is integrated in one’s life.
Friendship does not occur in a vacuum. Much of the research on friendship is conducted by psychologists, so it is unsurprising that this presents a description that is largely psychological and dyadic. Friendship research depicts friendship as quite insulated and dyadic as the benefits derived by the participants are restricted within the context of the friendship. This provides a myopic description of friendship as there is limited exploration of how friendship aids individuals beyond the exclusive scope of the friendship.

The one recurring benefit of cross-sex friendship that is not so exclusionary is gaining an insider's perspective. This aids individuals in their relationships with members of the other sex in a larger social context than the dyadic friendship. In addition, there is evidence that friends provide each other with practical assistance and instrumental aid (e.g., Davis & Todd, 1985), this is often described in task-oriented terms where friends can be relied upon such as when one's car breaks down or when one is moving from one residence to another. Again, this describes friendship in quite dyadic and myopic terms.

Cross-sex friendship can be construed in the context of aiding survival and reproduction. The benefits derived from cross-sex friendship that specifically aid survival and reproduction may accentuate the cleavage between men and women in the adaptive problems they have faced in evolutionary history. Bleske-Rechek and Buss (2001) found that men and women describe several benefits of cross-sex friendship that were unrelated to interpersonal benefits. For example, a benefit of cross-sex friendship for women that is largely neglected is physical protection.
Gaining physical protection from others is particularly relevant when considering our history of sexual dimorphism as women have been more vulnerable to attack compared to men (Buss, 2004). It is hypothesised that women faced the recurring adaptive problem of requiring protection for themselves and their children (Bleske-Rechek & Buss, 2001). As a result, women whom found protection from men were at an advantage and so a preference for protective male companions would have evolved (Buss & Schmitt, 1993). These companions need not be romantic partners, but could be cross-sex friends as well (Bleske-Rechek & Buss, 2001).

Bleske-Rechek and Buss (2001) found evidence to support the hypothesis that cross-sex friendship is a strategy to gain physical protection for women. Third to a having a ‘dinner companion’ and a ‘friend respected by others’, women rated ‘protection’ as the most beneficial aspect of cross-sex friendship (Bleske & Buss, 2000). Women reported that receiving physical protection from a friend was a more important reason to initiate a cross-sex friendship than men did; and women received protection from their cross-sex friends more frequently than men. Importantly, women consider this protection highly beneficial (Bleske & Buss, 2000). However, male protection may be an additional benefit in cross-sex friendship for women, but this may not be a factor in selecting cross-sex friends (Bleske-Rechek & Buss, 2001).

Research on baboons has identified cross-sex friendship occurring between males and females of this species. In these “special friendships” females gain protection and feeding ground from their male friends in exchange for occasional sexual access (Smuts, 2007). This complex relationship provides each member with benefits. This aids the female’s survival via protection and opportunities for food and
this aids the male’s reproduction but providing opportunities to mate. The equity of such relationships highlights the reproductive adaptive problems faced by the sexes of this species. The divergence of benefits derived from cross-sex friendship in humans may hold true as well.

Conclusion

The above analysis of cross-sex friendship sheds light on the benefits derived from these friendships. In this light, the experience of cross-sex friendship is not the same as that of same-sex friendship merely with a member of the other sex. The intimacy of cross-sex friendship is consistently deficient in comparison to same-sex friendship. In addition, the benefits of providing insider’s insight to the other sex and a buffer against loneliness are not gained in all cross-sex friendships.

If the benefits of cross-sex friendship can be construed as directly or indirectly affecting one’s survival and reproduction, then cross-sex friendship may contribute to the increased fitness of an individual. If cross-sex friendship is adaptive, exploring the aspects of these friendships that aid survival and reproduction could shed light on the advantages historically associated with the coexistence of men and women in these friendships. The unique benefits of cross-sex friendship that could be construed as aiding one’s survival or reproduction are providing an insider perspective to the other sex, sexual access, increased access to the other sex, physical protection, and other-sex companionship (Monsour, 2002).
The unique benefit discussed here, providing an insider’s perspective to the other sex, could be construed as indirectly affecting one’s reproduction as information garnered from cross-sex friends aids each sex in negotiating their relationships with the other sex. A unique benefit of cross-sex friendship that may aid reproduction is gaining sexual access to the cross-sex friend.

Men and women maintain friendships with individuals of both sexes, but it is possible that the constellation of interpersonal benefits for cross-sex friendship is far from identical to the benefits of same-sex friendship. These analyses indicate cross-sex friendship is not adequately described by the existing research on generic and unique benefits of this friendship.
Chapter 8. Age Composition of Cross-Sex Friendship

Friendship and mating relationships differ in several ways. Importantly, mating relationships entail some explicit or implicit consideration of reproduction. If cross-sex friendships, in some light, overlap with mating efforts then the preferences associated with mating partners will be identified among one’s cross-sex friends. Various mating preferences are identified and recorded cross-culturally. Of specific interest here are age preferences in mates and the age composition of mating dyads. Quantitatively, age preferences for long-term mates and actual ages of long-term mating partners have been identified cross-culturally (e.g., Buss et al., 1989). These data concern long-term mating, namely marriage partners. The actual age composition of cross-sex friendship was compared to the typical age differences of marriage partners and preferences of marriage partners. It was hypothesised that the age discrepancy typical of mating relationships is evident in cross-sex friendship.

Cross-cultural research has found trends in the age preferences of mates. Long-term mate preferences research typically concerns preferences for marriage partners. A sizable difference was reported by men and women for the preferred age of a spouse in each of the 37 cultures from 6 continents and 5 islands sampled by Buss and his colleagues (1989). Firstly, men prefer women who are younger than themselves. Youth is a cue to the reproductive value of a woman (Buss, 2003; Buss & Schmitt, 1993; Symons, 1979). It is hypothesised that in ancestral history men who mated with young, fertile women were more likely to successfully procreate and this
led to a preference for younger women (i.e., Buss, 2004; Buss et al., 1989). Men consistently favour brides who are younger than themselves and in no culture did men favour women older than themselves or typically mate with older women (Buss et al., 1989). This was highly statistically significant in each culture examined. The mean age difference preferred by men was to have a wife 2.66 years younger than themselves (Buss, 1989).

Women cross-culturally prefer men who are older than themselves. This preference is hypothesised to result from the differential reproductive success of women whom mated with resource-rich men wielding wealth and status (Buss, 2004). Increased age is associated with the acquisition of resources, wealth, and status cross-culturally (Buss, 1989; Buss, 2003; Buss, 2004). Women prefer marriage partners whom are older than themselves by a mean of 3.42 years (Buss et al., 1989). Women do not typically mate with substantially older men. Buss (2003) speculated that this was due to the greater risk of widowhood which would leave a woman to fend for herself as well as the reduced likelihood of compatibility which may cause marital strife and possible dissolution of marriage.

Other cross-cultural studies have investigated mate preferences. In a study of the USA and People’s Republic of China, men in both countries preferred a younger spouse than women and women preferred an older spouse than men (Toro-Morn & Sprecher, 2003). Similarly, Jordanian men preferred a younger wife and Jordanian women preferred an older husband (Khallad, 2005). In addition, single American women were more willing than men to marry older than themselves by 5 years, while
single American men were more willing than women to marry someone younger than
themselves by 5 years (Sprecher, Sullivan, & Hatfield, 1994).

There appears to be consistency across generations for such preferences.
Three different generations of college students in the United States replicated these
findings of marital partner preferences by using a mate preference inventory. These
studies found that men preferred to be older than their wives by between 1.2 and 2.3
years in all samples. Women preferred to be younger than their husbands by between
2.0 and 3.4 years in all samples (Hudson & Henze, 1969; see also Hill, 1945;
McGinnis, 1956). Women typically preferred a larger age difference between the
husband and wife than men did (Hudson & Henze, 1969). This is similar to Buss’
cross-cultural findings (Buss et al., 1989).

The actual age difference of men and women at marriage is comparable to the
preferred age differences reported by men and women. Data about the actual age
difference between men and women at marriage were gathered from 27 cultures to
find age differences that ranged from 2.17 years (Ireland) to 4.92 years (Greece) with
husbands older than wives in all cultures (Buss, 1989). Cumulatively, the mean age
difference between husband and wife was 2.99 years with the wife younger than the
husband. This is remarkably similar to the preferred age difference between husband
and wife which was 3.04 years. It is noteworthy that smaller age differences in
marriage were found in cultures preferring smaller age differences and larger age
differences in marriage were found in cultures preferring larger age differences (Buss,
1989). This comparison of preferences and actual age data suggest that evolutionary
analyses are valuable in delineating what men and women look for in their romantic partners.

Extensive evidence of the age composition of marriage partners from other countries is available. It is important to note that such descriptive statistics do not assess the statistical significance of a difference between ages of men and women at marriage. The countries sampled in this research will be examined ahead of other data. These are the Republic of Ireland, The United States of America, and the United Kingdom which includes England, Wales, Scotland, and Northern Ireland.

In the Republic of Ireland the available data indicate men are consistently older than women at the age of marriage. In both 2002 and 2005 the mean age difference between Irish brides and grooms was 2.1 years (Central Statistics Office, Ireland, 2007). The mean age difference between Irish brides and grooms from 1991 to 1996 was 1.9 years (Central Statistics Office, Ireland, 2007). Archival data about all marriages occurring in the Republic of Ireland from 1957 to 1969 indicate that the age difference between men and women ranged from 3.5 to 2.2 years per year with the husband older than the wife (Walsh, 1972). The difference grew smaller with time but this is only an observation of the descriptive statistics (Walsh, 1972).

This trend in age difference at marriage is found in the United States of America. In the US in 2000, the mean age difference between existing married couples was 2.4 years with the husband older than the wife (U.S. Census Bureau, 2000). Data are also available for median age at marriage in the USA from 1890 to
2008. The mean difference between median ages of brides and grooms during this time is 2.4 years with the groom older than the bride (U.S. Census Bureau, 2008).

Additional archival regional studies have been conducted within the United States. Data gathered from Sturbridge, Massachusetts from 1730 to 1850 indicated a consistent age difference between bride and groom of approximately 3 years where the groom was older than the bride (Osterud & Fulton, 1976). Another extensive study was conducted in Oklahoma. Upon review of all intelligible marriage licences in Payne County, Oklahoma between 1895 and 1932, 85.7% of marriages were between a man at least one year older than his wife and the typical age difference was three years between husband and wife (Duncan, McClure, Salisbury, & Simmons, 1934). In Hawaii from 1961 to 1963 71.8% of grooms were at least a year older than their brides (Schmitt, 1966). This is similar to marriages occurring in Philadelphia, Pennsylvania in 1931 where husbands were older than their wives by at least one year in 79.4% of marriages (Bossard, 1933).

This age difference at marriage is also found in data from the United Kingdom. Archival data from England and Wales includes the mean age difference between bride and groom in all marriages from 1851 to 2007. When investigating all marriages, including remarriages, there was a mean difference of 2.0 years between the bride and groom with the groom older than the bride (Office for National Statistics, 2006, 2009). The statistics for first marriages in England and Wales are slightly different. The archival data of English and Welsh marriages between 1851 and 2007 indicate that the age difference between brides and grooms for first
marriages was 1.8 with the groom older than the bride (Office for National Statistics, 2006, 2009).

Additional archival marriage data from England is available from 1550. These data provide the mean age at marriage for men and women for each decade. The mean age differences for each decade of marriages occurring in England from 1550 to 1924 ranged from 2.14 years to 6.01 years between the husband and wife (Hollingsworth, 1964). In all cohorts, the wife was younger than the husband (Hollingsworth, 1964).

Scottish marriage data are available from 1855 to 2007. In these years, the mean age difference between Scottish brides and grooms, including remarriages, was 2.6 years with the groom senior to the bride (General Register Office for Scotland, 2008). This differs slightly for first marriage statistics. The mean age difference for first marriages in Scotland from 1855 to 2007 was 2.0 years with the groom older than the bride (General Register Office for Scotland, 2008).

Data gathered from the Northern Ireland Statistics and Research Agency (2007) indicates that from 1981 to 2007 there was a mean age difference of 2.2 years between brides and grooms. When only investigating first marriages, there was a mean difference of 1.9 years between spouses (Northern Ireland Statistics and Research Agency, 2007). In both comparisons men were older than women with a smaller age difference between spouses at first marriage.
Similar contemporary data are found in other cultures of the world. For example, the mean age difference between existing married couples in Puerto Rico in 2000 was 3.1 years with the husband older than the wife (U.S. Census Bureau, 2000). Additional studies from Nepal (Yabiku, 2005); Java (Malhotra, 1997); a Yangzi Delta Farming Community in China (Murphy, 2001); and a Hmong community in the USA (Hutchison & McNall, 1994) report similar age differences between men and women at marriage.

Archival data from various regions of the world show similar age differences at marriage. For example, marriage data of individuals under 50 years old in 14 countries in Europe, North America, and Oceania indicated that the mean age difference at marriage was typically around three years with the husband older than the wife (Hajnal, 1953).

Agarwala (1957) gathered marriage age data in the 1940s and 1950s from 6 African samples, 5 North American samples, 5 South American samples, 10 Asian samples, 11 European samples, and 2 Oceanic samples. The median age of women was consistently younger than the median age of men. The smallest difference between the median ages was 2.27 years and the largest difference was 6.5 years (Agarwala, 1957). It is important to note that these data excluded individuals over the age of 52.5 years old at the time of marriage.

There are several European archival studies to draw on. Data were gathered about the age of marriage in the Netherlands from 1850 to 1993, excluding the years 1911 to 1935 as no data were available at this time (van Poppel, Liefbroer, Vermunt,
Smeenk, 2001). Data from all other years indicate a consistent difference between the ages of spouses at marriage with the husband older than the wife (van Poppel et al., 2001). The mean age difference ranged from 1.5 years to 4.5 years (van Poppel et al., 2001). There is evidence of this same trend in 19th Century Flanders (Matthijs, 2003).

This same trend is found in Scandinavia. The median age difference of men and women at first marriage in Sweden from 1881 to 1953 was approximately three years; however, in the end of the 19th century it was closer to two years with husbands older than their wives (Chambliss, 1957). When examining all Norwegian marriages from 1961 to 2006 there was a mean age difference of 3.1 years between spouses. When only investigating first marriages in Norway, there was a mean age difference of 2.7 years between spouses (Statistics Norway, 2008). This smaller age difference at first marriages has been recorded in other countries where such data are available such as England and Wales (Office for National Statistics, 2006, 2009), Scotland (General Register Office for Scotland, 2008), and Northern Ireland (Northern Ireland Statistics and Research Agency, 2007).

The mean age difference at marriage in Russia from 1959 to 1996 was approximately 2.5 years with the husband senior to his wife (Avdeev & Monnier, 2000). Additional archival data from Russia was found from an investigation of 19th century peasants where men were typically older than their wives (Avdeev; Blum; Troitskaia; & Juby, 2004).
Similar data is available from Asia. Archival studies in Asia report similar trends in age at marriage but with a larger difference between men and women in countries such as India (Dandekar, 1974) and Pakistan (Ahmed, 1969). Marriage age data from India spanning 1901 to 1970 indicates a consistent difference between the ages of husbands and wives (Gulati, 1976). For each decade, the mean age difference ranged from 4.4 years to 7 years (Gulati, 1976). Malaker (1979) compared methods of gathering the age at marriage and found that there was a consistent age difference between Indian husbands and wives from 1911 to 1971 where the husband was older than the wife. The difference was approximately 5 years. A study highlighting a larger age difference between brides and grooms in India was conducted by Chekki (1968). The mean age difference among the Lingayats of India was 8 years with the groom senior to the bride (Chekki, 1968).

In addition, a review of the ages of marriage in Japan from 1920 to 1995 suggests that the age difference between men and women was generally around 3 years with husbands older than wives (Retherford, Ogawa, Matsukura, 2001).

This research investigates if cross-sex friendship is incorporated in the total human mating effort. If sexual strategies are implicated in cross-sex friendship, then men and women’s age preferences for mates will be found in cross-sex friendship. It was hypothesised that the age discrepancy typical of mating relationships is evident in cross-sex friendship.

Evidence that cross-sex friendship is related to mating efforts can be deduced by identifying if the ages of cross-sex friends represent the age preferences of mating
partners. It was hypothesised that men’s cross-sex friends are younger than themselves while women’s cross-sex friends are older than themselves. This age difference was not expected in the age composition of same-sex friendship.

In addition, it was expected that the age composition of cross-sex friendship will reflect the age discrepancy found in marriage instead of resembling same-sex friends’ ages. Cross-sex friendship and same-sex friendship are similar in many ways. However, it was expected that cross-sex friendship amongst heterosexual adults differs from same-sex friendship in reproductively-relevant ways. Here, the age composition of cross-sex friendship is expected to differ from same-sex friendship and, instead, to approximate, the age composition of mates. It was hypothesised that men’s cross-sex friends are younger than their same-sex friends. Similarly, it was hypothesised that women’s cross-sex friends are older than their same-sex friends.

H1: There is a difference between the ages of men and women’s cross-sex friends where men are older than women.

H2: Men’s cross-sex friends are younger than their same-sex friends.

H3: Women’s cross-sex friends are older than their same-sex friends.
Method

See chapter 2, specifically pages 47-48 for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on page 310.

Results

H1: There is a difference between the ages of men and women’s cross-sex friends where men are older than women.

Significant differences were found between the ages of men and women’s cross-sex friends supporting this hypothesis. Significant results were found in all samples investigating the age differentiation of cross-sex friends using Mann Whitney ‘U’ tests. These results are as follows: Irish sample: $z = -7.08, p < 0.0001$; US sample: $z = -6.69, p < 0.0001$; UK sample: $z = -5.08, p < 0.0001$; and, the cumulative sample: $z = -11.75, p < 0.0001$. See appendix 31 for additional information about these Mann Whitney ‘U’ tests and the relevant descriptive statistics.

Men reported they were older than their cross-sex friends in all comparisons. The mean age differences are as follows: Irish men were older than their cross-sex friends by a mean of 0.3 years; American men by a mean of 0.6 years; UK men by a mean of 0.4 years; and in the cumulative sample men reported they were older than their cross-sex friends by a mean of 0.5 years. See figure 8.1 to compare these data.
Similarly, women reported they were younger than their cross-sex friends in all comparisons. Irish women were younger than their cross-sex friends by a mean of 1.2 years; American women by a mean of 1.4 years; and UK women by a mean of 1.6 years; and in the cumulative sample women were younger than their male friends by a mean of 1.4 years. See figure 8.1 to compare these data.

Figure 8.1 Age distribution of cross-sex friendship

For the purposes of comparison, the ages of men and women's same-sex friends were included. Using a Mann Whitney 'U' tests, there were no significant differences when comparing the ages of men's same-sex friends and women's same-sex friends in any comparison except Americans. In the American sample both men and women reported they were younger than their same-sex friends with a difference of 0.4 years between the means. See appendix 32 for the relevant descriptive statistics and the results of these Mann Whitney 'U' tests.
H2: Men’s cross-sex friends are younger than their same-sex friends.

The age distribution of participants cross- and same-sex friends were compared using Wilcoxon signed rank tests. It was hypothesised that men’s cross-sex friends are younger than their same-sex friends. This was supported as men’s cross-sex friends were significantly younger than their same-sex friends in the Irish \( z = -3.45, p < 0.001 \), US \( z = -4.33, p < 0.0001 \), and cumulative samples \( z = -6.09, p < 0.001 \). This was not found for UK men \( z = -1.63, p > 0.05 \). See appendix 33 additional information about these Wilcoxon signed rank tests and the relevant descriptive statistics.

Irish men reported they were older than their cross-sex friends by a mean of 0.3 years and younger than their same-sex friends by a mean of 0.4 years. American men reported they were older than their cross-sex friends by a mean of 0.6 years and younger than their same-sex friends by a mean of 0.6 years. In the cumulative sample men reported they were older than their cross-sex friends by a mean of 0.5 years and younger than their same-sex friends by a mean of 0.4 years. UK men reported they were older than their cross-sex friends by a mean of 0.4 years and younger than their same-sex friends by a mean of 0.1 years but this was not significant. See figure 8.2.
H3: Women’s cross-sex friends are older than their same-sex friends.

Women’s cross-sex friends were significantly older than their same-sex friends in all comparisons. The results are as follows: Irish sample: $z = -7.36, p < 0.0001$; US sample: $z = -8.09, p < 0.0001$; UK sample: $z = -6.06, p < 0.0001$; and, cumulative sample: $z = -6.09, p < 0.001$. See appendix 33 for additional information about these Wilcoxon signed rank tests and relevant descriptive statistics.

Irish women were younger than their cross-sex friends by a mean of 1.2 years and younger than their same-sex friends by a mean of 0.5 years. American women were younger than their cross-sex friends by a mean of 1.4 years and younger than their same-sex friends by a mean of 0.2 years. UK women were younger than their cross-sex friends by a mean of 1.6 years and younger than their same-sex friends by a mean of 0.4 years. In the cumulative sample, women’s cross-sex friends were older
by a mean of 1.4 years and their same-sex friends were older than them by a mean of 0.3 years. See figure 8.2.

**Discussion**

The hypotheses that the age discrepancy typical of mating relationships is evident in cross-sex friendship were largely supported. This suggests there is possibly something at work in cross-sex friendship other than the benefits and functions of traditional friendship. However, the support for these hypotheses needs further evaluation.

It was hypothesised that there is a difference between the ages of men and women's cross-sex friends where men are older than women. In all samples, with the exception of UK men, this was supported. UK men reported their cross-sex friends were not significantly younger than themselves.

The age differences between cross-sex friends were significant and in the direction predicted but they were not as large as those found in mate preference research and marriage archives\(^\text{10}\). Cross-culturally, the mean desired age difference between spouses is 3.04 years, which is comparable to the actual mean age difference found between spouses of 2.99 years (Buss et al., 1989). The age difference of cross-sex friends ranged from 0.3 years to 1.6 years.

\(^{10}\) In addition, the standard deviations for the ages were quite large.
Considering the social networks of individuals are often structured by age by proxy of educational institutions and life stage, as well as the observation that individuals are attracted to those similar to themselves in a variety of domains, it is interesting that this consistent, albeit small, age difference was found. This may result from the mediation of mating preferences with friendship preferences. The functions and benefits of friendship are clearly important for the maintenance of friendship. Also, the characteristics of friendship may play a role as similarity, be it age or interests, often situates individuals in each other’s social world from where they can forge a friendship.

It is possible that some cross-sex friends represent the age preference of mating partners while other friends do not, creating a mean age of cross-sex friends that indicates a smaller difference. In this regard, some cross-sex friendships may potentially concern sexual strategies while others do not.

Second, it was hypothesised that the age composition of cross-sex friendship is comparable to mating relationships while the same is not true of same-sex friendship. It was hypothesised that men’s cross-sex friends are younger than their same-sex friends and women’s cross-sex friends are older than their same-sex friends.

All these hypotheses were supported as the ages of cross-sex friends were significantly different from same-sex friends and, importantly, they differed in the direction predicted by mate preference research. The age differences of cross-sex and same-sex friends are significant, but not as dramatic as the actual mating partner age preferences.
The evidence provided here supports the claim that cross-sex friendship is different from same-sex friendship as the characteristics of cross-sex friendship differ from same-sex friendship. That is, cross-sex friendship is not just a friendship with the other sex.

If there was no role for mate preferences to play in cross-sex friendship, then cross-sex friendship would not be expected to differ from same-sex friendship in this reproductively-relevant domain. Indeed, while same-sex friends are more similar in age to the participants, the ages of cross-sex friends are skewed in the direction of the mating partner age preferences. Other research to make a note of the age discrepancy in cross-sex friendship was in keeping with this finding as Booth and Hess (1974) noted that men tend to be older, as well as more educated, than their female friends in older adulthood cross-sex friendships (Booth and Hess, 1974).

There are many factors involved in the selection and maintenance of cross-sex friendship. These data suggest mate preferences are possibly one of the many factors involved in cross-sex friendship.
Chapter 9. Long-Term Mate Preferences in Close Cross-Sex Friendship

According to sexual strategies theory, specific mate preferences in our ancestral history led to higher reproductive success (Buss & Schmitt, 1993). The recognition of long-term mate preferences in close cross-sex friendship was explored to identify a possible reproductive advantage of cross-sex friendship. A friendship with a member of the other sex may increase one’s fitness by securing mates directly through the friendship. The reproductive fitness consequences of securing mates through friendship may play a role in the construct and experience of cross-sex friendship. This may differentiate cross-sex friendship from same-sex friendship as well as create divergent experiences of cross-sex friendship for men and women.

This does not suggest that all cross-sex friendships have relational underpinnings indicative of long-term mating relationships. Instead, this examines tendencies in cross-sex friendship that suggest they are not all platonic by design. A tendency, even a slight tendency, to construe a cross-sex friend as a desirable mate and transform the friendship into a mating relationship, reiterated over thousands of generations, could have had fitness consequences. It is possible that men and women implicitly value reproductively-relevant mate preferences in cross-sex friendship and so, in effect, consider them when selecting and maintaining cross-sex friendship. Not only does this suggest the possibility for differing motivations for maintaining cross-sex friendship from same-sex friendship, but there is a possibility that the benefits of cross-sex friendship dovetail with mating efforts. Exploring the presence of mate
preferences in cross-sex friendship will identify if this is a reasonable avenue of
inquiry.

The mate preferences men and women exhibit are a consequence of their
reproductive adaptive problems. Reproductive adaptive problems, or mating
problems, are specific issues that men and women must confront in mating (Buss,
2004). These problems were confronted in ancestral history and identifying solutions
to these problems aided reproduction. In long-term strategies, men face several
reproductive adaptive problems. These are identifying reproductively valuable
women, identifying women who can and will commit to long-term mating
relationships, ensuring increased probability of paternal certainty, and securing
women who would be proficient mothers as well as of desirable gene quality (Buss &
Schmitt, 1993; Buss, 1998). Men’s attempts to solve these problems are found in the
preferences they exhibit for long-term mates. These preferences lead to siring healthy
children with mates who shoulder the burden of child-rearing and protect the
investment made by men.

Women’s long-term reproductive adaptive problems include the identification
of men who are willing and able to commit to relationships on a long-term basis,
invest resources in her and her children, protect them from aggression; they also
include the identification of proficient fathers of desirable gene quality (Buss &
Schmitt, 1993). Like other aspects of evolutionary psychology, this does not suggest
any conscious deliberation about reproductive success (Buss & Schmitt, 1993).
Men and women are hypothesized to exhibit similar preferences for mates where men and women faced the same reproductive adaptive problems (Buss & Schmitt, 1993). Men and women exhibit similar long-term mate preferences for traits that facilitate commitment and foster the maintenance of long-term relationships such as love (Buss, 1998; Buss, Shackelford, Kirkpatrick, & Larsen, 2001), dependable character (Buss et al., 2001; Hudson & Henze, 1969; Buss, 1989; McGinnis, 1956; Hill, 1945), emotional stability (Buss et al., 2001; Buss, 1998; (Hudson & Henze, 1969; McGinnis, 1956; Hill, 1945), and intelligence (Buss, 2003), among other traits.

Sexual strategy theory also predicts that where men and women faced different reproductive adaptive problems, they exhibit divergent mate preferences (Buss & Schmitt, 1993). Differences in the mating preferences of men and women are only predicted in domains in which they faced dissimilar adaptive problems (Buss, 1998). The differences between men and women in mate preference research are often small (Todosijević, Ljubinković, & Arančić, 2003). Indeed, the similarities between men and women largely overwhelm their differences; however, differences occur consistently for reproductively relevant criteria.

The two largest sex differences found in long-term mate preference research are that women value financial potency more so than men (Buss et al., 1990), and that men value physical attractiveness more so than women (Buss, 1989; Buss et al., 1990; Buss, 1987; Buss & Barnes, 1986; Hamida, Mineka, & Bailey, 1998; Buss, 2003). While men and women exhibit many other mate preferences, in the current study physical attractiveness and financial potency will be explored due to the robust cross-cultural evidence supporting them.
Individuals who solved their reproductive adaptive problems were more reproductively successful and so these preferences have been inherited over generations. If men and women describe their cross-sex friends as possessing qualities that solve their reproductive adaptive problems, then long-term sexual strategies may be implicated in cross-sex friendship. Without some reproductively-relevant motive in cross-sex friendship, there is no explanation for men and women to recurrently befriend cross-sex friends who are possessors of their reproductive solutions.

The cross-cultural research on long-term mate preferences permits the formulation of hypotheses concerning these preferences in cross-sex friendship. Long-term mate preference research concerns preferences for marriage partners as marriage is a cross-cultural example of a long-term sexual strategy. According to Daly and Wilson (1988, p. 520), the union of marriage is defined as “a cross-culturally general institutionalization of reproductive alliance, entailing mutual obligations between the spouses during child rearing, rights of sexual access (often but not necessarily exclusive and usually controlled by the husband), and legitimization of the status of progeny.” Formal marriage alliances are evident in all societies (Buss & Schmitt, 1993). The likelihood of an individual engaging in a long-term strategy can be extrapolated from data indicating that over 90% of men and women in all societies marry during their lifetime (see Buss, 1985)
Men long-term preferences

In evolutionary history, men who consummated relationships with fertile women bore more children from these unions relative to men who consummated relationships with less fertile women (i.e., post-menopausal women). It follows that a preference for fertile women produced more offspring relative to preferences for women who are less fertile so this preference has been inherited and selected for over time (Buss, 1993; Buss, 1998).

Fertility, "the probability of present reproduction", generally reaches its apex in the early to mid-twenties for women (Buss & Schmitt, 1993, p. 208). Fertility differs from reproductive value which is the “expected future reproduction” of the individual which typically peaks in women’s mid-teens (Buss & Schmitt, 1993, p. 208).

Direct assessment of a woman’s reproductive capacity is not possible at a glance, nor would it have been possible in evolutionary history (Buss & Schmitt, 1993). Indirect cues such as youth and health allow inferences about the fertility and reproductive value of a woman (Buss, 2003; Buss & Schmitt, 1993; Symons, 1979). Cues of reproductive capacity include various physical, behavioural, and social cues (Buss & Schmitt, 1993). Physical cues, the most relevant cues here, include healthy skin, hair, and eyes; good muscle tone; symmetry; desirable waist-to-hip ratio; and an absence of lesions (Buss, 2003; Buss & Schmitt, 1993; Symons, 1979; Singh, 1993). These cues now embody what humans define as “attractive”, and men should emphasise attractiveness more than should women.
The preferences of men who did not prize these indicators of reproductive value would not evolve because mating with less fertile, or indeed infertile, women would not produce children. According to sexual strategies theory, it is hypothesised that men have evolved a preference for women displaying cues of reproductive capacity (Buss & Schmitt, 1993). “Attractiveness” is the embodiment of these characteristics.

There is much support that men are attracted to such qualities (Buss, 2004). Various terms have been used to identify attractiveness in mates. These include physical attractiveness, sexual attractiveness, attractiveness, good looks, beauty, and sexy. Mate preference research has found that men value the qualities physical attractiveness and good looking in potential long-term mates more so than women do (Buss et al., 1990; Buss, 1989; Buss 1987; Buss & Barnes, 1986; Hamida et al, 1998). This is one of the most consistent psychological sex differences to be evaluated (Buss, 2003). In mate preference research, men’s preference for attractiveness is the second largest sex difference as men value the qualities ‘good looking’ and ‘physical attractiveness’ more so than women do (Buss et al., 1990).

Cross-culturally, men are more exacting in their preferences for attractiveness in long-term mates than women (Buss, 1989; Buss et al., 1990\textsuperscript{11}). In another cross-cultural study, men rated physical attractiveness as more important than women did in the USA, Russia, and Japan (Hatfield & Sprecher, 1995). Chinese and American men also expressed a stronger preference for physically attractive and sexy looking

\textsuperscript{11} Results should be interpreted with caution as samples were not wholly representative and skewed to young participants (mean ages ranging from 16.92 to 29.56 (Buss, 1990).
marriage partners than Chinese and American women, respectively (Toro-Morn & Sprecher, 2003). Also, Hamida and colleagues (1998) found that both college and adult men valued traits concerning physical attraction and youth more so than women. Youth, facial attractiveness, thinness, and low waist-to-hip ratio were all assigned greater importance by men than women (Hamida et al., 1998).

Men's greater preference for attractiveness has also been found in investigations using samples from different generations. In a review of six mate preference studies from 1939 to 1996, men consistently valued physical attractiveness more so than women (Buss et al., 2001).

Similarly, data gathered from these American mate preference studies spanning half a century found that men valued good looks more so than women (Buss et al., 2001)\textsuperscript{12}. In a cross-cultural study of mate preferences, men valued good looks in long-term mates more than women in 34 of the 37 cultures investigated (Buss, 1989). The remaining three countries, India, Poland, and Sweden, did not produce significant differences between men and women but the differences were in the predicted direction. These countries, however, reported a significant difference between men and women in the predicted direction for physically attractive long-term mates. Jordanian men valued good looks in a long-term mate more so than women (Khallad, 2005). Serbian men find the qualities beauty, good looks, attractiveness, and thinness to be more desirable than Serbian women; however, there was no significant difference for the quality of physical attractiveness (Todosijević et al., 2003).

\textsuperscript{12} The importance of good looks in a long-term mate increased for both American men and women during this time. The prominence of visual media in the USA showcasing beauty may be one of many factors responsible for this (Buss, Shackelford, Kirkpatrick, & Larsen, 2001).
Using a sample of single American adults from the National Survey of Families and Households, Sprecher and her colleagues (1994) found that men were less willing than women to marry someone who was not good looking.

Youth is another important indicator of reproductive capacity (Buss & Schmitt, 1993). However, youth was excluded from the current analysis. Cross-sex friends tend to be broadly similar in age (Monsour, 2002) so inquiring about the youth of one’s cross-sex friend using a self-report rating system would be a less accurate than a quantitative comparison of actual ages. To gain an accurate assessment of youth and identify if preferences for youth were found in cross-sex friendship, the age composition of cross-sex friendship was explored in chapter 8. The approach used was a more accurate assessment of youth than a self-report rating as it relies on the exact age of the participant compared to the participants’ closest cross-sex friends.

Attempts have been made to provide alternative explanations for men’s preferences for physical attractiveness such as gender socialisation and social-role stereotyping (see Eagly, 1987; Maccoby & Jacklin, 1974). From this standpoint, the preference for physical attractiveness is learned by boys as a social process and corresponds with the cultural construct of masculinity. However, this explanation does not account for the cultural consistency that men value attractiveness cross culturally nor does this give an explanation for why this preference has come to be (see Schmitt & Buss, 2001). Importantly, a social constructionist account provides no explanation as to why the specific features of a woman that men prize correlate with fertility (see Schmitt & Buss, 2001).
It is predicted by sexual strategies theory that men value indicators of fertility in potential long-term mates (Buss & Schmitt, 1993). A preference for women in their reproductive prime results in greater reproductive success because these women are more likely to conceive than their older female counterparts. This bestows a reproductive advantage to men exhibiting a preference for indicators of fertility.

The current research specifically addressed mating preferences operating in cross-sex friendship where men and women were expected to differ. If sexual strategies are utilised in cross-sex friendship it is expected that men’s cross-sex friends better address their reproductive adaptive problems than women’s cross-sex friends. Also, women’s cross-sex friends better address their reproductive adaptive problems than men’s cross-sex friends. In addition, men and women are expected to identify their cross-sex friends as better addressing their reproductive adaptive problems compared to their same-sex friends.

In this instance, it was hypothesised that men’s cross-sex friends more closely embody men’s mate preferences than their same-sex friends. This was examined using the qualities physically attractive and good looking. Given the sample only included heterosexual adults, any other finding would be highly surprising. In addition, men were expected to rate their closest cross-sex friend as more physically attractive and good looking than women rated their closest cross-sex friend as these embody men’s mate preferences.

H1: Men’s cross-sex friends more closely embody men’s mate preferences than their same-sex friends.
H2: Men’s cross-sex friends more closely embody men’s mate preferences than women’s cross-sex friends.

**Women long-term preferences**

The largest sex difference in mate preference research is that women value financial potency more so than men (Buss et al., 1990). Cross-culturally, women express preferences for long-term mates with economic resources (Buss, 1989). This preference functions to supply provisioning for oneself and one’s children (Buss, 1989; Buss, 2003; Symons, 1979). Due to the asymmetry between men and women in parental investment, women value mates who can provide economic support because it would have increased the likelihood of her offspring surviving in ancestral history. As a result, a preference for mates willing and able to give provisioning has been selected over time and is evident in contemporary mating decisions (Buss, 2004).

In long-term mating contexts, women more so than men have been found to value qualities indicative of a mate’s ability to accrue resources. This has been confirmed cross-culturally for the qualities of ambition, good earning capacity, professional degrees, and wealth (Buss, 1989). Comparable results have been found for the qualities of social status as well as the quality ambition and industriousness, both of which are associated with resource acquisition (Buss, 1989; Buss, 1988; Buss et al., 1990).
Across cultures, the mate preferences for ‘good financial prospect’, and the relative importance of ‘good earning capacity’ produced the largest sex differences as these are valued substantially more by women than men (Buss et al., 1990). Buss (1989) found that women value good financial prospects about twice as much as men do in long-term mates. In 36 of the 37 cultures assessed, women valued good financial prospects and good earning capacity in long-term mates significantly more so than men (Buss, 1989).

In another study, women value a good earning capacity and good earning potential in a long-term mate more so than men did (Buss & Barnes, 1986). Jordanian women also valued good financial prospects in a long-term mate more so than Jordanian men (Khallad, 2005). Hamida and colleagues (1998) found that women rated good job prospects to be more important than men did when assessing potential long-term mates. In a review of 6 American mate preference studies from 1939 to 1996, women consistently valued good financial prospects more so than men (Buss et al., 2001; see also Hudson and Henze (1969).

One line of research that is relevant to mate preference research concerns existing sex differences resulting from the unequal distribution of power and wealth in human societies. As described by Eagly’s social role theory, the division of labour according to sex has dramatic consequences for gender-role expectations and sex-typed skills. This, in turn, dramatically affects, or even shapes, the social behaviour of men and women. This presumes that if men and women occupied similar roles in regards to power and status in society, their behaviour would be more similar. There is limited

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^ Examination of these studies reveals that men and women value good financial prospects in a potential long-term partner increasingly across studies over time (Buss, Shackelford, Kirkpatrick, & Larsen, 2001).
support for this in regards to mate preferences. For example, increased access to wealth by women does not result in a lessening of mate preferences for status and wealth. According to the mechanisms of socialisation, one would expect women would not value this in a mate if they could access it themselves. However, this is not the case. In fact, women’s preferences for wealth and status are intensified as they make gains in these areas (Ellis, 1992). While some may argue this does not negate the role of socialisation or social role influence for this preference, describing mate preferences by this mechanism does not offer any explanation to how widespread cross-cultural preferences came about (Buss & Barnes, 1986). Relying on descriptions of social structure do not account for differences between men and women for mate preferences.

Social status is an important long-term mate preference for women. Cross-culturally, an elevated social status suggests control of resources which would help to better provide for one’s family through greater access to food, resources, and care (Buss, 2003).

Women, more so than men, value social status in a potential marriage partner (Buss et al., 2001). Cross-cultural evidence found women value social status more than men do in the vast majority of 37 different cultures examined (Buss, 1989). It is worth noting that the economic and political systems of these cultures varied considerably (see Buss, 1989). Other studies have found similar results. Chinese women expressed a stronger preference for marriage partners with a high social status more so than Chinese men (Toro-Morn & Sprecher, 2003). Jordanian women valued favourable social status in a long-term mate more so than Jordanian men (Khallad,
Women value money, status, and position in long-term mates more so than men in the USA, Russia, and Japan with the greatest difference between Japanese men and women (Hatfield & Sprecher, 1995).

In a review of three mating preference studies conducted in the United States in 1939, 1956, and 1967; Hudson and Henze (1969) identified that women ranked favourable social status relatively higher than men did at each time period. Similarly, Hamida and colleagues (1998) found that women valued social status more so than men. American women expressed a stronger preference for marriage partners with high social status, high earning potential, and wealth more so than American men (Toro-Morn & Sprecher, 2003).

Ambition is an indicator of future success in occupational status. Ambition and industriousness suggest a future of resource provisioning as ambitious men are more successful than unambitious men (see Buss, 2003). Women value long-term mates who are ambitious and career-oriented more so than men (Buss & Barnes, 1986). Women place a premium on ambition in long-term mates and find unambitious men extremely undesirable (Buss & Schmitt, 1993).

In a cross-cultural study, women valued ambition and industriousness in long-term mates significantly more than men in 29 of the 37 cultures investigated (Buss, 1989). In a study of long-term mate preferences, women rated potential for success as more important than men did in the USA, Russia, and Japan (Hatfield & Sprecher, 1995). Also, Jordanian women valued ambition and industriousness in a long-term mate more so than Jordanian men (Khallad, 2005). Women valued ambition in long-
term mates more so than men in the USA and Japan but this was not found in Russia (Hatfield & Sprecher, 1995).

College women rated ambition as more important in a long-term mate than men (Hamida et al., 1998). In a review of 6 mate preference studies in America using college students spanning half a century, women valued ambition and industriousness more so than men (Buss et al., 2001).

Additional studies offer supporting evidence that women value financial acquisition more so than men. Chinese women expressed a stronger preference for marriage partners with a high earning potential, having material possessions, and having power more so than Chinese men (Toro-Morn & Sprecher, 2003). Using a sample of single American adults from the National Survey of Families and Households, Sprecher and her colleagues (1994) found that women were less willing than men to marry someone who was unlikely to hold a steady job, someone who earned less than themselves, or someone with less education than themselves. Serbian women find the qualities strength and enterprising to be more desirable than Serbian men; however, there was no significant difference for the qualities of ambition, capability to earn, and success in job (Todosijević et al., 2003).

If mating preferences are evident in cross-sex friendship women will describe their cross-sex friends as approximating their reproductive adaptive problems. Specifically, women’s cross-sex friends were expected to more closely embody women’s mate preferences than their same-sex friends. The mate preferences examined were good earning capacity, favourable social status, ambitious and
industrious, and having good financial prospect. Women’s cross-sex friends were also expected to more closely embody these mate preferences than men’s cross-sex friends.

H3: Women’s cross-sex friends more closely embody women’s mate preferences than their same-sex friends.

H4: Women’s cross-sex friends more closely embody women’s mate preferences than men’s cross-sex friends.

In this regard, these data do not identify if mating preferences are identified in the social world of cross-sex friendship as found in previous chapters. Instead, this explores the singular cross-sex friendship each participant describe as their closest cross-sex friendship.

If cross-sex friendship dovetails with mating strategies, then the reproductive adaptive problems of each sex should be addressed by their cross-sex friends. Men were hypothesised to identify their cross-sex friends better approximately solutions to their reproductive adaptive problems than women would identify their cross-sex friends approximately solutions to men’s reproductive adaptive problems.

Similarly, women were hypothesised to identify their cross-sex friends as better approximating solutions to their reductive adaptive problems than men would identify their cross-sex friends as approximating solutions to women’s reproductive adaptive problems. The underpinning of this is that men and women selectively form
and maintain friendship with individuals who possess salient qualities in potentially suitable mates.

This comparison gives an overview of the differences between men and women when approaching cross-sex friendship, but it does not address the differences between each participant’s cross-sex and same-sex friends. Additional comparisons were made between participants’ closest cross-sex and same-sex friends. It was expected that participants’ cross-sex friends will better approximate their mating preferences than same-sex friends. That is, established mates preferences will be found in one’s cross-sex friends but not same-sex friends. If there is no reproductive advantage to cross-sex friendship, then cross-sex and same-sex friends will not differ for characteristics specifically relevant to reproductive adaptive problems.

Method

See chapter 2, specifically pages 49-50, for detailed information about the methodology used here. The items analyzed here may be found in appendix 1 on pages 312-315.

Results

Men’s mate preferences in cross-sex friendship

H1: Men’s cross-sex friends more closely embody men’s mate preferences than their same-sex friends.
H2: Men’s cross-sex friends more closely embody men’s mate preferences than women’s cross-sex friends.

It was hypothesised that men’s long-term mate preferences are present in their closest cross-sex friendships. First, it was hypothesised that men’s closest cross-sex friends possess these qualities more so than men’s closest same-sex friends. The ratings men gave their closest cross-sex and same-sex friend for each relevant item was compared using Wilcoxon signed rank tests.

Second, it was hypothesised that men’s closest cross-sex friends possess these mate preferences more so than women’s closest cross-sex friends. This was explored by comparing the ratings men gave to their closest cross-sex friends and women gave to their closest cross-sex friend using Mann Whitney ‘U’ tests for each relevant item.

**Physically attractive**

Men were expected to rate their closest cross-sex friend as more physically attractive than their closest same-sex friend. The physical attractiveness of participants’ closest cross- and same-sex friends were compared using Wilcoxon signed rank tests. This was supported as men rated their closest cross-sex friend as more physically attractive than their closest same-sex friend. See appendix 34 for the descriptive statistics and the results of the Wilcoxon signed rank tests.

Men rated their cross-sex friend as more physically attractive than their closest same-sex friend in all comparisons. The median response for men was 2.0 for cross-
sex friends in all comparisons. This indicates that men rated their closest cross-sex friend as 'physically attractive'. On the other hand, men gave a median response of 3.0 for same-sex friends in all comparisons indicating they rated their closest same-sex friends as only 'somewhat physically attractive'. There was a mean difference of 1.2 for Irish men, 0.8 for American men, 1.1 for UK men, and 1.0 in the cumulative comparison for these items. See figure 9.1

For comparison, Wilcoxon signed rank tests were used to compare the ratings women gave to their closest cross- and same-sex friends. Significant differences were found in all comparisons as women rated their closest same-sex friend as more physically attractive than their cross-sex friend. See appendix 34 for the descriptive statistics and the results of the Wilcoxon signed rank tests. Graphical display found in figure 9.1.

Figure 9.1 Physical attractiveness in cross- and same-sex friendship
Men were also expected to rate their closest cross-sex friend as more physically attractive than women rate their closest cross-sex friend as physically attractive. The physical attractiveness ratings of participants’ closest cross-sex friend were compared for men and women using Mann Whitney ‘U’ tests. This was supported in all comparisons. Men rated their closest cross-sex friend as physically attractive significantly more so than women rated their closest cross-sex friend in all comparisons. See appendix 35 for the descriptive statistics and results of the Mann Whitney ‘U’ Tests for each sample.

In the Irish sample there was a difference of 0.6 between the means of men and women; in the American sample a difference of 1.0; in the UK sample a difference of 1.1; and, in the cumulative sample a mean difference of 0.5 between men and women. See figure 9.1.

**Good looks**

Men were expected to rate their closest cross-sex friend as good looking more so than their closest same-sex friend. Wilcoxon signed rank tests compared the extent to which men rated their closest cross- and same-sex friends as good looking. Indeed, men rated their closest cross-sex friend as good looking more so than their closest same-sex friend. See appendix 36 for descriptive statistics and the results of the Wilcoxon signed rank tests. All comparisons were significant.

The mean rating of men’s closest cross-sex friend was 2.2 and the mean rating for closest same-sex friend was 3.0. The median rating of men’s cross-sex friends
was 3.0 and the median rating of men’s closest same-sex friend was only 2.0 in all comparisons. This indicates that men rated their closest cross-sex friends as ‘good looking’ while rating their closest same-sex friend as only ‘somewhat good looking’. There was a mean difference of 0.8 for Irish men, 0.7 for American men, and 0.8 for UK men for these items. See figure 9.2.

For the purposes of comparison, Wilcoxon signed ranks tests were used to compare women’s ratings of their closest cross- and same-sex friend for this item. Women consistently rated their closest same-sex friends as better looking than their closest cross-sex friends. See figure 9.2. This was significant in all comparisons. See appendix 36 for the descriptive statistics and the results of the Wilcoxon signed rank tests for each comparison.

Figure 9.2 Good looks in cross- and same-sex friendship

![Graph showing ratings of cross-sex and same-sex friends for men and women from different countries](image)

Men were expected to rate their closest cross-sex friend as good looking more so than women rate their closest cross-sex friend as good looking. This was
compared using Mann Whitney ‘U’ tests. See appendix 37 for the descriptive
statistics and results of the Mann Whitney ‘U’ tests.

Men rated their closest cross-sex friend as good looking more so than women
rated their closest cross-sex friend. The medians indicate that men rated their closest
cross-sex friend as ‘good looking’ in all comparisons. Women only rated their closest
cross-sex friend as ‘somewhat good looking’ except for American women who rated
their closest cross-sex friend as ‘good looking’ but still less so than American men. In
the Irish sample there was a difference of 0.6 between the means of men and women;
in the American sample a difference of 0.4; and in the UK sample a difference of 0.7;
and in the cumulative sample a difference of 0.6 between the means of men’s and
women’s responses for this item. See figure 9.2.

**Women’s mate preferences in cross-sex friendship**

H3: Women’s cross-sex friends more closely embody women’s mate preferences than
their same-sex friends.

H4: Women’s cross-sex friends more closely embody women’s mate preferences than
men’s cross-sex friends.

Women’s long-term mate preferences were hypothesised to be present in their
closest cross-sex friendships. Women’s closest cross-sex friends were hypothesised
to more closely embody women’s mate preferences than their closest same-sex
friends. Wilcoxon signed rank tests were used to compare the ratings women gave
their closest cross-sex and same-sex friend for each relevant item. It was also
hypothesised that women’s closest cross-sex friends more closely embody women’s mate preferences than men’s closest cross-sex friends. Mann Whitney ‘U’ tests compared the ratings women and men gave to each of their closest cross-sex friends for each relevant item.

**Good earning capacity**

Women were expected to rate their closest cross-sex friend as having a good earning capacity more so than their closest same-sex friend. This was not supported in any comparison. Women did not rate their closest cross-sex friend as having a better earning capacity than their closest same-sex friend in any sample. The range of mean ratings women gave their closest friends was 2.4 to 2.8. The median rating women gave their closest cross- and sex same-sex friend was 2.0 in all groups indicating women rated both of their closest friends as having a ‘good earning capacity’. See figure 9.3. The descriptive statistics and the results of the Wilcoxon signed rank tests for each comparison are found in appendix 38.

For the purposes of comparison, men’s ratings of their closest cross-sex and same-sex friend were compared using Wilcoxon signed rank tests. The only significant differences for these items were found here. These were between Irish men and men in the cumulative sample. In both these comparisons, men rated their closest same-sex friend as having a better earning capacity than their closest cross-sex friend. See figure 9.3. The descriptive statistics and the results of the Wilcoxon signed rank tests for each comparison are found in appendix 38.
Women were also expected to rate their closest cross-sex friend as having a good earning capacity more so than men rate their closest cross-sex friend. This was compared using Mann Whitney ‘U’ tests. See appendix 39 for the descriptive statistics and the results of these Mann Whitney ‘U’ tests. This was supported in the cumulative sample as women rated their closest cross-sex friend’s earning capacity to be better than men rated their closest cross-sex friend’s earning capacity. The difference between the means was 0.6. This was not supported in any of the other comparisons. See figure 9.3. See appendix 39 for the descriptive statistics and the results of these Mann Whitney ‘U’ tests.

**Favourable social status**

Women were expected to rate their closest cross-sex friend as having a favourable social status more so than their closest same-sex friend. This was compared using Wilcoxon signed rank tests. See appendix 40 for the results of these
Wilcoxon signed rank tests and the descriptive statistics. This was supported in the cumulative sample as women rated their closest cross-sex friend’s social status to be more favourable than their closest same-sex friend but there was only a mean difference of 0.1 between the ratings for cross- and same-sex friends for this item. This was not supported in the Irish, American, or UK samples. In fact, Irish women rated their closest same-sex friend as having a more favourable social status than their closest cross-sex friend with difference of 0.2 between the mean ratings for cross- and same-sex friends for this item. See figure 9.4.

Figure 9.4  Favourable social status in cross- and same-sex friendship

For the purposes of comparison, men’s ratings of their closest cross-sex and same-sex friend for ‘favourable social status’ were compared using Wilcoxon signed rank tests. There was no significant difference between men’s closest cross- and same-sex friends in any sample. See appendix 40 for the descriptive statistics and the results of the Wilcoxon signed rank tests for each comparison.
Women were expected to rate their closest cross-sex friend as having a favourable social status more so than men rate their closest cross-sex friend. This was compared using Mann Whitney ‘U’ tests. This was not supported as there were no significant differences between men and women in any of these comparisons. See appendix 41 for the descriptive statistics and the results of the Mann Whitney ‘U’ tests. See figure 9.4.

Ambition and industriousness

Women were expected to rate their closest cross-sex friend as ambitious and industrious more so than their closest same-sex friend. Wilcoxon signed rank tests were used to compare this. See appendix 42 for the descriptive statistics and the results to the Wilcoxon signed rank tests.

This was not found in the Irish or UK samples. However, women rated their closest cross-sex friend as ambitious and industrious more so than their closest same-sex friend in the cumulative and American comparisons. The mean difference between women’s ratings of their closest cross- and same-sex friend was 0.2 in the cumulative sample and 0.3 in the American sample. See figure 9.5.
Women were expected to rate their closest cross-sex friend as ambitious and industrious more so than men rate their closest cross-sex friend. This was compared using Mann Whitney ‘U’ tests. This was not found as women did not rate their closest cross-sex friend as more ambitious and industrious than men rated their closest cross-sex friend. See appendix 43 for these Mann Whitney ‘U’ tests and descriptive statistics. All participants rated their closest cross- and same-sex friend as ‘ambitious and industrious’ or ‘somewhat ambitious and industrious’. See figure 9.5.

**Good financial prospect**

Women were expected to rate their closest cross-sex friend as having good financial prospect more so than their closest same-sex friend. Wilcoxon signed rank test compared this. This was not found in any comparison. See appendix 44 for the descriptive statistics and the results of the Wilcoxon signed rank tests. See figure 9.6.
Women were expected to rate their closest cross-sex friend as having good financial prospect more so than men rate their closest cross-sex friend. This was compared with Mann Whitney 'U' tests. See appendix 45 for the results of the Mann Whitney 'U' tests.

This was not found in the Irish, US, or UK sample comparisons as women in each sample did not rate their closest cross-sex friend as having good financial prospect more so than men rated their closest cross-sex friend. However, in the cumulative comparison women rated their cross-sex friend as having better financial prospects than men did but with only a mean difference of 0.2 between the responses of men and women.
Discussion

Men's mate preferences in cross-sex friendship

It was hypothesised that men identify their cross-sex friends as better approximate solutions to their reproductive adaptive problems than women identify their cross-sex friends as approximate solutions to men's reproductive adaptive problems. It was also hypothesised that men's cross-sex friends better approximate their mating preferences than their same-sex friends.

Both of these hypotheses were supported. Men rated their closest cross-sex friend as physically attractive and good looking more so than women rated their closest cross-sex friends in all comparisons. On one hand, it is improbable that men's closest cross-sex friends are objectively more physically attractive and better looking than women's closest cross-sex friends. Instead, it is more likely that men perceive their closest cross-sex friends to be more attractive. This may be a by-product of men's attempts to address the reproductive adaptive problem of partner number whereby identifying a greater pool of women as attractive leads to a greater pool of potential desirable mates. On the other hand, men may selectively befriend women whom they find attractive. This may be relevant to evidence that men approach cross-sex friendship as low-level or emerging romantic relationships (Wright, 1989) and cross-sex friendship is sometimes perceived as a 'stepping stone to romantic relationships' (Sprecher & Regan, 2002). From this vantage point, men's tendency to identify their closest cross-sex friends as more physically attractive and good looking is relevant to long-term mating strategies.
Men also rated their closest cross-sex friends as physically attractive and good looking more so than their closest same-sex friends in all comparisons. Support that cross-sex friendship markedly differs from same-sex friendship in reproductively-relevant domains suggests that there is the possibility of something other than friendship operating in cross-sex friendship. Given that the sample is heterosexual, it is unsurprising that men favoured women over men for qualities that are sex-linked. This cannot presume that this is necessarily a function of sexual strategies in cross-sex friendship as it is possibly a by-product of any cross-sex interaction between heterosexual individuals. However, further investigation indicated that this difference was not found for women. Women rated their closest same-sex friend as more physically attractive and good looking than their closest cross-sex friends. This may merely be indicative of women's lacking attraction to their cross-sex friends, nonetheless, this indicates that these responses are not predicted solely by heterosexual tendencies to favour the other sex.

These hypotheses investigated the possibility that long-term mate preferences are found in cross-sex friendship. These hypotheses were supported in all cultural samples in every comparison. These samples included an Irish, United Kingdom, and United States sample. All participants were also included in a cumulative sample.

There is existing evidence that men construe cross-sex friendship as relevant to long-term mating efforts. Men indicated a more frequent desire to have a committed romantic relationship with their cross-sex friends than did women (Bleske-Rechek & Buss, 2001). In another study, 53% of men and 31% of women reported
beginning a cross-sex friendship in hopes that a romance might develop (Kaplan & Keys, 1997). When rating the top 10 benefits of cross-sex friendship, men rated the potential for a romantic relationship as the sixth most beneficial aspect of cross-sex friendship while women rated the absence of a future romantic relationship as the seventh most beneficial aspect of cross-sex friendship (Bleske & Buss, 2000).

Also, unreciprocated romantic desire within cross-sex friendship is experienced by men more than women (Harvey, 2003; Bleske & Buss, 2000). This suggests men construe cross-sex friendship as a vehicle for acquiring romantic partners more so than women. Indeed, single college men approached cross-sex friendship as low-level or emerging romantic relationships (Wright, 1989).

The current findings indicate men's long-term mating preferences are found in their closest cross-sex friends. However, men value physical attractiveness and good looks in long-term as well as short-term mating contexts. Men's preferences for long-term mates are more stringent than their short-term mating preferences, but these preferences broadly overlap. Because these preferences are indicative of men's long-term mate preferences as well as men's short-term mate preferences (Buss & Schmitt, 1993), these findings do not exclude the possibility that these may be indicative of short-term preferences. Future research is required to clarify the nature of this.

Women's mate preferences in cross-sex friendship

Women's closest cross-sex friends were hypothesised to more closely embody women's mate preferences than their closest same-sex friends. It was also
hypothesised that women’s closest cross-sex friends more closely embody women’s mate preferences than men’s closest cross-sex friends. There was little support for these hypotheses.

There was minimal support that women perceived their closest cross-sex friends as having a good earning capacity. Women did not rate their closest cross-sex friend as having a better earning capacity than their closest same-sex friend in any sample. Second, women did not rate their closest cross-sex friend’s earning capacity to be better than men rated their closest cross-sex friend’s earning capacity in any cultural samples. However, in the cumulative sample women rated their closest cross-sex friend’s earning capacity to be better than men rated their closest cross-sex friends earning capacity. This difference had the greatest mean difference of any items pertaining to women’s reproductive adaptive problems with a difference of 0.6 between the means.

There was also minimal support that women perceived their closest cross-sex friends as having a favourable social status. In the cumulative sample women rated their closest cross-sex friend’s social status to be more favourable than their closest same-sex friend, however, there was only a mean difference of 0.1 between the ratings of this item. This was not supported in any of the cultural samples. The opposite finding was evident in the Irish sample. Irish women rated their closest same-sex friend as having a more favourable social status than their closest cross-sex friend.
Finally, women did not describe their closest cross-sex friends as having a favourable social status more so than men described their closest cross-sex friends. No significant differences were found for this item in any cultural comparisons.

There was also minimal support that women perceived their closest cross-sex friends as ambitious and industrious. In the cumulative sample women rated their closest cross-sex friend as more ambitious and industrious than their closest same-sex friend, however, there was only a mean difference of 0.2 between the ratings of this item. American women also described their closest same-sex friend as significantly more ambitious and industrious than their closest cross-sex friend but the mean difference was only 0.3 for these items. This was not supported in the Irish or UK samples.

Also, women did not rate their closest cross-sex friend as more ambitious and industrious than men rated their closest cross-sex friend. This was not significant in any comparison.

There was minimal support that women perceived their closest cross-sex friends as having good financial prospects. Women did not perceive their closest cross-sex friend to have better financial prospects than their closest same-sex friend in any comparison.

In the cumulative sample women rated their closest cross-sex friend as having better financial prospects than men rated their closest cross-sex friend, however, the difference between the means of men and women for this item was only 0.2. This
difference was not found in any of the cultural samples as women in each sample did not rate their closest cross-sex friend as having better financial prospects more so than men rated their closest cross-sex friend.

There was minimal support that women perceive their closest cross-sex friends to address their reproductive adaptive problems. With the exception of one comparison, all significant differences were found in the cumulative sample but not reproduced in the cultural samples. Also, the differences between these groups were so small they were barely meaningful.

In the instances where women rated their closest cross-sex friend as better addressing their reproductive adaptive problems than their closest same-sex friends or men rated their closest cross-sex friend this may in fact be a result of financial disparity between men and women as men are often more financially successful than women. In addition, it is possible that individuals befriend others of similar socioeconomic groups so there is little disparity between friends financial standing.

There are many limitations to this research design. First, there are prevalent sociocultural differences between men and women that may be responsible for the differences described here. That is, some qualities are more closely associated with one gender than with the other. For example, in many cultures men have greater access to wealth and economic goods and hold higher social status than women. This creates difficulty in isolating the differences between men and women resulting solely as a consequence of sexual strategies. Given these sociocultural differences, it is not
surprising that women and men would both rate their male friends higher in items concerning financial potency.

This does not presume to address the causal relationship between these qualities and cross-sex friendship. Instead, this investigates the notion that when individuals form cross-sex friendships, they select members of the other sex to befriend who simultaneously address their reproductive adaptive problems.

In addition, it is important to note that these items concern mate preferences and not actual mating behaviour or specific characteristics of existing long-term mates. While there is evidence that mating preference resemble mating choices (see Buss, 2003; 2004), mate preference research must be interpreted with caution. Individuals do not typically find mates who embody their mate preferences. That is, each mate is not an ideal mate. Not all mate preferences are expected to be found in a desirable mate as men and women generally do not mate with 'ideal' mates who fulfil their mate preferences concisely.

These mate preferences were related to participants' perception of his or her closest cross-sex and same-sex friends. This was not an objective measure of the qualities of the friends, but the subjective interpretation given by the participant. This is important because the suitability of a mate is not an objective measure and deception play an important role in mate enticement.

When interpreting these results, it is important to note that this research addressed the closest cross-sex friend, not the larger social world of cross-sex friends.
Other sections of this research address the larger social world of cross-sex friends. Because the findings of this section strictly pertain to one’s closest cross-sex friend, it is possible that men and women do pursue sexual strategies with cross-sex friends but these may not specifically appear in the assessment of close cross-sex friendship.

There is another important ramification of only investigating close cross-sex friendship when researching mate preferences. Many adults describe their cross-sex friendships as similar to sibling relationships drawing attention to the inappropriateness of inferring sexuality or romance in these particular friendships (Werking, 1997; Rubin, 1985). One would suspect that friendships of a ‘sibling’ nature are more evident among close cross-sex friends than other cross-sex friends as attraction, an indicator of mate desirability, tends to be associated with friendships of a shorter duration or less intimate nature (Kaplan & Keys, 1997; Rawlins, 1992; Reeder, 2000). Investigating the social world of cross-sex friends instead of only close cross-sex friends may indicate mate preferences are evident in cross-sex friendship but not necessarily close cross-sex friendship.

Conclusion

The objective of this section was to identify if participants perceived their closest cross-sex friend possessing qualities found to be desirable in mates. There was support that men construe their closest cross-sex friends as desirable mates, but it is not possible to differentiate between short-term and long-term mating contexts with these data. Also, there was some support that women construe their closest cross-sex
friends as possessing what they desire in a long-term mate, but the support is very weak and the differences are so small that they are not meaningful.

These data do not indicate sexual strategies are a primary driving force in close cross-sex friendship. Men and women appear to form and maintain close cross-sex friendships independent from a possible reproductive function. Because a friend happens to be of the other sex, this does not signify a sexual or romantic component to the friendship. However, given the high incidences of sexual and romantic relationships that emerge from cross-sex friendships, it is possible that humans have an opposite-sex friendship psychology concerning sexual strategies but this may not be prominent in very close cross-sex friendship.
Chapter 10. Discussion

The aim here was to identify if, and how, cross-sex friendship is incorporated in the total human mating effort. In modern evolutionary theory, cross-sex friendship does not explicitly fit into the framework of sexual selection and parental investment. However, it is possible that cross-sex friendship is employed as an arena for sexual strategies.

The incorporation of cross-sex friendship into sexual strategies was investigated by exploring sexual cognition in cross-sex friendship. Data concerning the expansiveness of various aspects of sexual cognition were explored. These were: sexual attraction, romantic attraction, flirtation, jealousy, sexual intent, the anticipation of sexual and romantic relationships, and the isolation of sexual and romantic motivations. The expansiveness of several benefits of friendship was explored as well as the age distribution of friendships. In addition, intimacy and mate preferences were explored in close cross-sex friendship.

This research revealed trends of asymmetry in sexual cognition between men and women in how they apply sexual strategies to cross-sex friendship. Many hypotheses supported the notion that the differences between men and women in cross-sex friendship can be explained by sexual strategies theory. To begin, factor analysis revealed two factors which largely overlap with short-term and long-term sexual strategies. These were Desire for Noncommittal Sexual Relationships and Anticipated Exclusive Romantic Relationships, respectively.
The presence of sexual cognition associated with short-term sexual strategies will be discussed first. To begin, the factor scores for the factor Desire for Noncommittal Sexual Relationships were significantly different for men and women. Men indicated a greater desire for minimal-commitment sexual encounters than women. This is compatible with sexual strategies theory.

Additional evidence of men’s greater emphasis on short-term sexual encounters in cross-sex friendship was found in this research. Many hypotheses focused on men’s reproductive adaptive problem of maximising their number of sexual partners and minimising commitment and investment to these mates (Buss & Schmitt, 1993). Given the methodological approach taken, these data were able to explore the expansiveness of phenomena such as sexual attraction and intent in cross-sex friendship.

Men’s efforts to increase partner number and reduce commitment in their sexual relationships were evident in their approach to cross-sex friendship. Men, more so than women, indicated they would engage in sexual activity with their cross-sex friends if it would not result in an exclusive romantic relationship, interfere with the existing friendship, or interfere with their sexual and romantic relationships with others. Men also indicated they experience enduring sexual attraction to a larger portion of their cross-sex friends, they are sexually attracted to a larger portion of their cross-sex friends, and they construe a larger portion of their cross-sex friends to be good sexual partners more so than women. In addition, men anticipate sexual relationships with a larger portion of their cross-sex friends than women.
In regards to curtailing commitment, men are willing to engage in sexual activity with a larger portion of their cross-sex friends if it wouldn’t result in an exclusive romantic relationship than if it were to; men anticipate sexual relationships with a larger portion of their cross-sex friends than they anticipate romantic relationships with; and men are romantically attracted to a smaller portion of their cross-sex friends than they are sexually attracted to. These findings do not reveal as much about men’s unique perspective of sexual cross-sex friendships as the above mentioned findings. This is because women’s responses were similar to men’s due to the exclusivity of the romantic relationships compared to sexual relationships. Women’s responses will be discussed in due course.

Nonetheless, men appear sexually opportunistic in comparison to women in cross-sex friendship due to their greater tendency to identify cross-sex friends as potential and desirable mates. Indeed, men may utilise cross-sex friendship as a vehicle to gain sexual access to women (Bleske & Buss, 2000). For example, Bleske and Buss (2000) found a relationship between asymmetric romantic attraction experienced on behalf of the woman of a cross-sex dyad and subsequent sexual intercourse between the friends. This portrays men as sexually opportunistic in situations where sexual access may be granted in spite of the fact that they do not reciprocate their friend’s attraction (Bleske & Buss, 2000). Additionally, men identify the potential for sexual intercourse with their close cross-sex friend as more beneficial than women (Bleske & Buss, 2000).

In sum, men are more expansive in their sexual interest in cross-sex friendship than women, and their sexual interest is more expansive than their romantic interest in
all comparisons. The data from each sample here—Irish, American, UK, and the cumulative sample—all supported this. Sexual strategies theory can help explain this by men’s greater devotion of reproductive effort to short-term sexual strategies than women. In sum, these findings are compatible with sexual strategies theory.

Long-term sexual strategies were also of interest. As mentioned earlier, factor analysis revealed two factors which largely overlap with short-term and long-term sexual strategies. The second factor, Anticipated Exclusive Romantic Relationships, concerns the application of long-term sexual strategies in cross-sex friendship.

From the analysis of factor scores of this factor using Mann Whitney ‘U’ tests, it was determined that men, more so than women, anticipate romantic relationships emerging from cross-sex friendship, but this was not supported in the Irish sample. The cultural variability of these data does little to indicate a clear role of romance in cross-sex friendship for men and women.

Nonetheless, men’s more expansive anticipation of romantic relationships may stem from polygynous mating preferences. The more expansive anticipation of romantic relationships most succinctly identifies polygyny because this system permits a man to marry more than one woman. Polygamous mating systems have been found in the majority of cultures when reviewing archival and other data (Ember, Ember, & Low, 2007). In this regard, it is not surprising that men express greater multiple interest in their cross-sex friends. Indeed, this may shed light on polygamous preferences that are otherwise not identified in these cultures.
Long-term mating strategies were explored in cross-sex friendship by investigating the age distribution of cross-sex friends and the long-term mating preferences of men and women. Initial support for long-term mate preferences in cross-sex friendship came from the age differences of cross-sex friends. The age composition of cross-sex friends was similar to long-term mate preferences for marriage partners and actual age differences of married couples. While the age composition is similar, it is not as pronounced as those of long-term partners. In addition, age preferences for partners may concern mating contexts other than just long-term mating, or in this specific case, marriage partners. Nonetheless, these findings are compatible with sexual strategies theory.

Additional support of mate preferences in cross-sex friendship was found as men identified their closest cross-sex friend possessing their long-term mate preferences—physical attractiveness and good looks. It is important to note that while there is robust cross-cultural evidence that these preferences are valued in long-term mating, these qualities are not exclusively desirable in long-term contexts for men. These qualities are also desirable in shorter mating contexts as well. In addition, the presence of these qualities in one’s closest cross-sex friend may not indicate long-term mating strategies in cross-sex friendship.

Women’s long-term mate preferences were not possessed by their close cross-sex friends more than by their close same-sex friends or more than by men’s cross-sex friends. Additionally, the results concerning men’s greater social status, earning capacity, and financial prospects may be artefacts of the economic asymmetry between men and women in the countries sampled.
The hypotheses concerning the sexual cognition of sexual strategies in cross-sex friendship were primarily supported concerning short-term mating. There was consistent evidence supporting men’s greater inclination towards short-term sexual strategies in cross-sex friendship than women in the cultures sampled. This is compatible with sexual strategies theory.

On the other hand, there was very limited evidence concerning long-term mating strategies in close cross-sex friendship. This limited evidence, however, suggested men were more inclined than women to construe cross-sex friends as possessing the qualities of desirable long-term mating partners. Sexual strategies theory does not account for this finding.

Numerous findings in the present research are surprising given the premise of sexual strategies theory; in particular, men’s greater interest than women in developing commitment-fostering relationships. Men, more so than women, indicated more expansive desire for romantic relationships as well as more expansive enduring romantic attraction to their cross-sex friends than women. Men would also engage in sexual activity with their cross-sex friends if it were to result in an exclusive romantic relationship more than women would. Finally, men anticipate romantic relationships with a larger portion of their friends than women.

In addition, given the greater minimal parental investment of women, one would expect women’s interest in their cross-sex friends to concern commitment-fostering relationships more so than minimal-commitment relationships. However,
this was not the case. Women did not indicate much long-term interest in their closest cross-sex friends; instead there was greater interest in short-term sexual encounters with cross-sex friends. It is possible that cross-sex friendship provides an arena for women to explore short-term sexual strategies more than was previously expected.

Even though sexual strategies theory does not immediately account for these findings, this does not suggest an evolutionary explanation is inappropriorate. Indeed, relying on socialisation or social cognitive theory to explain these findings merely describes the differences between men and women as resulting from gender-role socialisation and modelling. This does not explain the origination of such differences and why these occur cross-culturally. For this reason, an evolutionary approach was used when interpreting these data.

The possibility of a specific opposite-sex friendship psychology may explain these findings as the application of sexual strategies theory to cross-sex friendship cannot entirely account for them. At this point, it is ambitious to describe cross-sex friendship as wholly regulated by an opposite-sex friendship psychology. It is not yet possible to determine that the mating strategies enacted in cross-sex friendship are independent of existing sexual strategies. Further research may find otherwise, however, as there is scope that cross-sex friendship is an independent suite of adaptations.

As mentioned by Symons (1979), the classification of a phenomenon as a specific adaptation should only be done when adequate evidence supports this claim. From this perspective, cross-sex friendship is not considered a specific adaptation as
such limited evidence is available at this time. Further cross-sex friendship research must explore the possibility of an opposite-sex friendship psychology.

In past research, friendship has been described very differently from reproductively-relevant relationships in terms of the benefits derived and the functions served. Possible interpersonal benefits derived from cross-sex friendship, and the scope for developing reproductively-relevant relationships from cross-sex friendship, shed light on the complex nature of cross-sex friendship. Future research must explore the matrix of benefits derived and functions served by cross-sex friendship to identity if this is indicative of an opposite-sex psychology.

A brief summary of the interpersonal benefits of cross-sex friendship will be reviewed to contribute to this point. There are various interpersonal benefits associated with friendship; one particular benefit is the experience of intimacy (Monsour, 2002). When comparing intimacy in close cross-sex and same-sex friendship, same-sex friendship was rated as more intimate in all comparisons except for among UK men. For these other groups, this indicates a qualitative difference between cross-sex and same-sex friendship. This does not indicate cross-sex friendship is inferior to same-sex friendship, but the associated benefits may differ. Intimacy is one of the central benefits derived from friendship (Monsour, 2002) and so this describes cross-sex friendship as having a different nature than same-sex friendship. Opposite-sex psychology may explain this and other benefits derived from cross-sex friendship in a unifying paradigm.
Two additional benefits of cross-sex friendship are providing a buffer against loneliness and providing insider’s insight to the other sex. The methodological approach used here permitted the investigation of the expansiveness of these benefits in the social world of cross-sex friendship. A buffer against loneliness was only secured in 32-40% of cross-sex friendships and insider’s insight was identified in 48-56% of cross-sex friendships. While past research highlights such benefits are important to the maintenance of cross-sex friendship, there was not strong support of the widespread prevalence of these benefits in cross-sex friendship. This indicates a breach between cross-sex friendship research and the experience of cross-sex friendship described by participants here.

In this regard, the benefits that are heavily researched in cross-sex friendship do not appear to be widely secured. This suggests there are benefits of cross-sex friendship that are yet to be identified. Given the premise of social exchange theory, the benefits of maintaining a relationship must surpass the costs (Myers, 2007, p. 775). This again indicates that further research must be conducted in this area. Developing the notion of an opposite-sex friendship psychology may help in this regard.

A matrix of cross-sex friendship benefits, including mating benefits, is found in the anthropological research conducted by Smuts involving baboons. This cross-species evidence finds a comparable construct to human cross-sex friendship. This provides insight into how the benefits of cross-sex friendship are negotiated in other species. Smuts (2007) investigated the ‘special friendship’ of baboons in Tanzania and Kenya where both males and females derive benefits from these affiliations. In
particular, the female gains protection for herself and her young as she maintains proximity to her Friend when risking aggression from others. Males, on the other hand, gain increased sexual access from their female Friends (Smuts, 2007).

Baboons’ cross-sex friendship suggests a currency of benefits involving sexual access. The comparison between humans and baboons require caution given the dramatic differences between humans and baboons. Most importantly, the mating system of baboons is promiscuous (Smuts, 2007). This contrasts with the mating system of humans which has been described as serial polygamy where, “successive marriages and mating outside of marriage are common” (Buss & Barnes, 1986, p. 559). The benefits of sexual access vary from one mating system to another.

Also, baboons exhibit greater sexual dimorphism and so physical protection may be substantially more beneficial amongst baboons. The ethological and anthropological research conducted by Smuts suggests that cross-sex friendship can exist in a matrix of group and reproductive benefits. This provides evidence that the coupling of friendship and sexual access is adaptive among other species. However, Smuts (2007) does not suggest that baboons solely engage in sexual cross-sex friendships14. Nonetheless, the baboon comparison provides food for thought about the evolution of adaptations in human cross-sex friendship.

Another way of construing cross-sex friendship is that it facilitates securing mates without affronting competitors. It is possible that cross-sex friendship is a Trojan

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14 Recent research finds that yellow baboons in Kenya establish platonic cross-sex friendships (Nguyen, Van Horn, Alberts, & Altmann, 2009). While about half of female’s cross-sex friendships were with the genetic fathers of their infants, the remaining cross-sex friendships were not. In these relationships, mothers and their infants gained protection from their male companions without granting sexual access in exchange (Nguyen, et al., 2009).
horse in the mating market as it creates the opportunity to insinuate oneself to potential mates without appearing to do so or appearing as a threat to competitors. It is possible that cross-sex friendship creates a forum to introduce oneself as a suitor and assess prospective mates without the burdens of short-term or long-term mating. In many situations, cross-sex friendship may operate to obtain mates, reaping the benefits of friendship alliance, while assuaging competitors with a cloaked guise of friendship.

When considering the costs and benefits of such an arrangement it is possible that this behaviour has aided our ancestors in the past. For example, this behaviour is unlikely to infringe upon other sexual strategies or affect one's mate value - both of which may result from hasty sexual relationships. One must only look to sexual strategies emerging from cross-sex friendship, romantic relationships, and friends with benefits relationships, to see evidence of cross-sex friendship benefiting reproductive success. Cross-sex friendship is a reservoir for individuals to secure mates. Cross-sex friendship may be construed as a phenomenon that straddles solutions to the problems of group living, by forging cooperative alliances, as well as the problems of mating, by aiding reproduction.

In sum, overwhelming evidence concerning cross-sex friendship sexual cognition indicates men and women construe their cross-sex friends as potential mates. The importance of a parsimonious explanation of sexual cross-sex friendship refrains from assuming the presence of an opposite-sex friendship psychology at this time. There is some evidence to support the possibility of an opposite-sex friendship
psychology and this line of research should be pursued to clarify the nature of cross-sex friendship.


Buss, D. M.; Abbott, M.; Angleitner, A.; Asherian, A.; Biaggio, A.; Blanco-Villasenor, A.; Bruchon-Schweitzer, M; Ch’u, H.; Czapinski, J.; Deraad, B.; Ekehammar, B.; El Lohamy, N.; Fioravanti; M; Georgas, J.; Gjerde, P.;


Appendices

Appendix 1:

Anonymous interpersonal relationship survey

The following survey concerns interpersonal relationships - primarily same-sex and opposite-sex friendships.

This survey is STRICTLY CONFIDENTIAL AND ANONYMOUS with an estimated completion time of 10-15 minutes.

As some items on this survey are of a sensitive nature, please do not proceed if you feel you may be offended. Participation is voluntary and you may withdraw at any time without prejudice.

Participants must be 18 years or older to continue.

During this survey, please click "next" to progress to the following page. Please do not return to past pages to amend your responses.

By clicking "next" below you are consenting to participate in this study.

This survey is part of a postgraduate research project at Trinity College, Dublin, Ireland. The study is being conducted by Caroline Murphy at Trinity College, Dublin, Ireland. For more information, please contact Caroline Murphy by e-mail at cmurphy31@tcd.ie or by telephone at 353-87-287-6760. Alternatively, contact Dr. Howard Smith by e-mail at hsmith@tcd.ie or by telephone at 01-6081990. For written correspondence please write to the above individuals at:

Department of Psychology

Trinity College

Dublin 2

Ireland

---

Country of residence:

- Ireland
- USA
- Other (please specify)

Sex:

- Male
- Female

Sexual orientation:

- Heterosexual
- Homosexual
- Bisexual

How did you receive this survey?

- Work
- College
- Advertisement
- Friend
- Other (please specify)

Age (in years):

---
A heterosexual exclusive romantic relationship is a committed relationship between a man and woman where both individuals should not have romantic or sexual relationships with others. This is typical of a boyfriend/girlfriend or husband/wife relationship.

Using the definition above, are you currently in a heterosexual exclusive romantic relationship?

☐ Yes  ☐ No

Please think of the OPPOSITE-SEX FRIENDS you feel CLOSEST TO who are not in your family and with whom you currently have a non-sexual and non-romantic relationship. (This CANNOT include a current spouse or girlfriend/boyfriend, but may include ex-husband/ex-wife or ex-boyfriend/ex-girlfriend.)

For your own convenience, please write a list of all your opposite-sex friends that apply to the above definition. Please note that you DO NOT submit the identities of these people or yourself at any point in this survey.

If you have more than 5 opposite-sex friends, please include the 5 you feel closest to.

Please number each person from 1 to 5 (in an order of your choosing).

For example:

Person 1: S. R.
Person 2: J. P.
Person 3: L. Y.
Person 4: D. S.
Person 5: C. M.

If you have less than 5 opposite-sex friends, please list these people starting from 'Person 1' as below:

Person 1: R. K.
Person 2: S. M.
Person 3: 
Person 4: 
Person 5: 

PLEASE DO NOT AMEND THIS LIST AFTER THIS POINT - THIS IS IMPORTANT FOR UPCOMING ITEMS.

Please indicate the number of opposite-sex friends you have listed.

☐ 0  ☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5
### Anonymous Interpersonal Relationship Survey

Please respond to the following items regarding the opposite-sex friends you have listed. If you have less than 5 opposite-sex friends, please place an X in the additional space(s).

<table>
<thead>
<tr>
<th>Person</th>
<th>Age</th>
<th>Person</th>
<th>Age</th>
<th>Person</th>
<th>Age</th>
<th>Person</th>
<th>Age</th>
<th>Person</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Person 1</td>
<td></td>
<td>Person 2</td>
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<td>Person 3</td>
<td></td>
<td>Person 4</td>
<td></td>
<td>Person 5</td>
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</tr>
</tbody>
</table>

**How old is each opposite-sex friend? (In years)**

If you are unsure of a friend’s age, please estimate.

**How long have you known each friend? (In years)**

If you have known any person less than 1 year enter ‘< 1’.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Years known</th>
<th>Person 2</th>
<th>Years known</th>
<th>Person 3</th>
<th>Years known</th>
<th>Person 4</th>
<th>Years known</th>
<th>Person 5</th>
<th>Years known</th>
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</tbody>
</table>

Please tick below to indicate the opposite-sex friends who are currently in exclusive romantic relationships. Please tick all that apply.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

### Anonymous Interpersonal Relationship Survey

The following questions refer to the opposite-sex friends you have identified. If you have listed less than 5 people, please ignore the remaining number(s).

You may tick multiple boxes for each question. If a given question does not apply, please leave it blank.

Please respond to each question as YOU FEEL AND ACT - do not consider the willingness or availability of these friends. If you are in an exclusive romantic relationship please respond as you CURRENTLY feel and act - NOT AS YOU WOULD FEEL AND ACT IF YOU WERE SINGLE.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

The following questions concern the personal history of these opposite-sex friendships.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

### Anonymous Interpersonal Relationship Survey

309
With whom have you had an EXCLUSIVE ROMANTIC RELATIONSHIP in the past?  

The following questions concern the possible future of these opposite-sex friendships.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

With whom do you think you may have an EXCLUSIVE ROMANTIC RELATIONSHIP in the future?  

With whom do you think you may have a SEXUAL RELATIONSHIP in the future?  

The following questions concern the circumstances in which you would have sexual intercourse with these opposite-sex friends.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

With whom would you have sexual intercourse, if it would not interfere with your sexual and romantic relationships with others?  

With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?  

With whom would you have sexual intercourse if no one would find out?  

With whom would you have sexual intercourse to get to know better?  

With whom would you have sexual intercourse, if it would not result in an exclusive romantic relationship or interfere with your existing friendship?  

If you are in an exclusive romantic relationship, please answer the following 2 questions. Otherwise please skip to the next page.

<table>
<thead>
<tr>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
</table>

With whom WOULD YOU HAVE sexual intercourse, if you were not in an exclusive romantic relationship?  

With whom HAVE YOU HAD sexual intercourse during your current exclusive romantic relationship?
**Anonymous Interpersonal Relationship Survey**

1. **Of the opposite-sex friends you identified in your list, who do you feel closest to?**
   - Please carefully select one person.
   - If you have listed less than 5 people, please ignore the remaining number(s).

   - Person 1
   - Person 2
   - Person 3
   - Person 4
   - Person 5

   Important: The following items ONLY concern the opposite-sex friend to whom you feel closest (who you specified above). Please respond with ONLY this person in mind.

2. **On a scale of 1-7, with 1 indicating 'Very Close' and 7 indicating 'Not Close at All', how close do you feel to this person?**

3. **For the following items, please tick the box that indicates the extent to which you think this SPECIFIC opposite-sex friend (who you identified above) possesses each quality. Please respond to all items.**

   For example, for the item 'Generous' if you definitely do not find this person to be generous tick Definitely No - please do not consider whether other people find this person generous when selecting your answer.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Definitely Yes</th>
<th>Yes</th>
<th>Somewhat</th>
<th>Neither Yes/No</th>
<th>Somewhat No</th>
<th>No</th>
<th>Definitely No</th>
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<tbody>
<tr>
<td>Youthful</td>
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<tr>
<td>Sexually available to you</td>
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<td>Ambition and industriousness</td>
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<td>Intellectual</td>
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<td>Understanding</td>
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<tr>
<td>Willing to commit to an exclusive romantic relationship</td>
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<td>Honest</td>
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<td>Charitable - no previous sexual intercourse</td>
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<td>Physically strong</td>
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<td>Good health</td>
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<td>Sexually attractive</td>
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<tr>
<td>Capable of commitment in an exclusive romantic relationship</td>
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<td>Good financial prospect</td>
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<td>Athletic</td>
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<td>Protective of those close to her</td>
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<td>Generous</td>
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<td>Wants children</td>
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<td>Good looks</td>
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<td>Physically attractive</td>
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<td>Favorable social status</td>
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<td>Good earning capacity</td>
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<td>Dominant</td>
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Click Next.
## Anonymous interpersonal relationship survey

- People tend to portray favourable aspects of themselves when they are with others - for example, mentioning work promotions in conversation (appearing ambitious) or wearing flattering clothing when meeting someone (appearing physically attractive).

For the following items, please tick the box that indicates the extent to which you ACCENTUATE each of the following qualities of yourself to this SPECIFIC opposite-sex friend (who you identified on the last page). Please respond to all items.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Definitely Yes</th>
<th>Yes</th>
<th>Somewhat</th>
<th>Neither Yes/No</th>
<th>Somewhat No</th>
<th>No</th>
<th>Definitely No</th>
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<td>Youthful</td>
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<tr>
<td>Sexually available to this person</td>
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<td>Good financial prospect</td>
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<td>Favourable social status</td>
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<tr>
<td>Capable of commitment in an exclusive romantic relationship</td>
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<td>Ambition and industriousness</td>
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<td>Physically strong</td>
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<td>Intelligent</td>
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<tr>
<td>Willing to commit to an exclusive romantic relationship</td>
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<td>Cheated - no previous sexual intercourse</td>
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<td>Good health</td>
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<tr>
<td>Protective of those close to you</td>
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<td>Sexually attractive</td>
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<td>Loyal</td>
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<tr>
<td>Wants children</td>
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</tbody>
</table>

**Is the person you identified above currently in a heterosexual exclusive romantic relationship?**

(A heterosexual exclusive romantic relationship is a committed relationship between a man and woman where both individuals should not have romantic or sexual relationships with others. This is typical of a boyfriend/girlfriend or husband/wife relationship.)

- Yes
- No

---

## Anonymous interpersonal relationship survey

Please think of the SAME-SEX FRIENDS you feel CLOSEST TO who are not in your family and with whom you currently have a non-sexual and non-romantic relationship.

For your own convenience, please write a list of all your same-sex friends that apply to the above definition. Please note that you DO NOT submit the identities of these people or yourself at any point in this survey.

If you have more than 5 same-sex friends, please include the 5 you feel closest to.

Please number each person from 1 to 5 (in an order of your choosing).

For example:
- Person 1: I. H.
- Person 2: D. L.
- Person 3: K. W.
- Person 4: C. D.
- Person 5: P. R.

If you have less than 5 same-sex friends, please list these people starting from 'Person 1' as below:
- Person 1: L. P.
- Person 2: R. M.
- Person 3: E. G.
- Person 4: -
- Person 5: -

PLEASE DO NOT AMEND THIS LIST AFTER THIS POINT - THIS IS IMPORTANT FOR UPCOMING ITEMS.

**Please indicate the number of same-sex friends you have listed.**

- 0
- 1
- 2
- 3
- 4
- 5

---

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Anonymous Interpersonal Relationship Survey

Of the same-sex friends you identified in your list, who do you feel closest to? Please carefully select one person.

If you have listed less than 5 people, please ignore the remaining numbers.

Person 1  Person 2  Person 3  Person 4  Person 5

Important: The following items only concern the same-sex friend to whom you feel closest (who you specified above). Please respond with only this person in mind.

On a scale of 1-7, with 1 indicating 'Very Close' and 7 indicating 'Not Close at All', how close do you feel to this person?

1  2  3  4  5  6  7

For the following items, please tick the box that indicates the extent to which you think this specific same-sex friend (who you identified above) possesses each quality. Please respond to all items.

For example, for the item 'Generous' if you definitely do not find this person to be generous tick Definitely No - please do not consider whether other people find this person generous when selecting your answer.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Definitely Yes</th>
<th>Yes</th>
<th>Somewhat</th>
<th>Neither Yes/No</th>
<th>Somewhat No</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>Good financial prospect</td>
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<td>Good health</td>
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<td>Sexually available to you</td>
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<td>Physically strong</td>
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<td>Affection</td>
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<td>Physically attractive</td>
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<td>Favorable social status</td>
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<td>Youthful</td>
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<td>Capable of commitment in an</td>
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<td>Sexually attractive</td>
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<tr>
<td>Protective of those close to him/her</td>
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Anonymous interpersonal relationship survey

People tend to portray favourable aspects of themselves when they are with others - for example, mentioning work promotions in conversation (appearing ambitious) or wearing flattering clothing when meeting someone (appearing physically attractive).

For the following items, please tick the box that indicates the extent to which you ACCENTUATE each of the following qualities of yourself to this SPECIFIC same-sex friend (who you identified on the last page). Please respond to all items.

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<td>Wants children</td>
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</tbody>
</table>

Is the person you identified above currently in a heterosexual exclusive romantic relationship?

(A heterosexual exclusive romantic relationship is a committed relationship between a man and woman where both individuals should not have romantic or sexual relationships with others. This is typical of a boyfriend/girlfriend or husband/wife relationship.)

[ ] Yes
[ ] No

Anonymous interpersonal relationship survey

Thank you for completing this survey.

This survey is part of a research project at Trinity College, Dublin, Ireland, concerning opposite-sex friends as potential mates. If you would like a copy of the completed research please e-mail Caroline Murphy at cmurph3@tcd.ie and this will be e-mailed to you upon completion (anticipated in October, 2004).

For more information about this research please contact Caroline Murphy at cmurph3@tcd.ie.

If you would like to send this survey to others, please send the following link: http://www.surveymonkey.com/s.asp?u=47434521427

If you have any comments please enter them below. Thank you.
Appendix 2:

This e-mail was distributed by contacting numerous educational and employment organisations with following e-mail:

Hello,

I am conducting postgraduate research in the psychology department in Trinity College and was hoping you could assist me. I am interested in sending an e-mail to individuals from your department (please find this e-mail below). This e-mail contains a link to an interpersonal relationship survey which is part of my psychology postgraduate research and has received ethical approval from the Trinity College Psychology Department Ethics Committee.

Your assistance in this would be greatly appreciated. If you have any questions please don't hesitate to contact me.

Thank you,

Caroline Murphy

The following information and link to the survey was given in an e-mail,

I would appreciate your participation in a survey concerning interpersonal relationships - primarily same-sex and opposite-sex friendships. This survey is strictly confidential and anonymous with an estimated completion time of 10-15 minutes.

To complete this survey, please click the link below:

http://www.surveymonkey.com/s.asp?u=4743452427

This survey is part of a postgraduate research project at Trinity College, Dublin conducted by Caroline Murphy.

For more information please contact Caroline Murphy by e-mail at cmurph31@tcd.ie or by telephone at 353-87-287-6760. Alternatively, contact Dr. Howard Smith by e-mail at hsmith@tcd.ie or by telephone at
01-6081990. For written correspondence write to the above individuals at:

Department of Psychology,
Aras an Phiarsaigh,
University of Dublin,
Trinity College,
Dublin 2,
Ireland

Thank you,

Caroline Murphy
Appendix 3:

Several notices were reported on national and regional radio stations to appeal to individuals to participate in this survey. Participants were asked to send a blank e-mail to friendsurvey@yahoo.co.uk which sent an automatic response with the following information:

I would appreciate your participation in a survey concerning interpersonal relationships - primarily same-sex and opposite-sex friendships. This survey is strictly confidential and anonymous with an estimated completion time of 10-15 minutes.

To complete this survey, please click the link below:

http://www.surveymonkey.com/s.asp?u=47434521427

This survey is part of a postgraduate research project at Trinity College, Dublin conducted by Caroline Murphy.

For more information please contact Caroline Murphy by e-mail at cmurph31@tcd.ie or by telephone at 353-87-287-6760. Alternatively, contact Dr. Howard Smith by e-mail at hsmith@tcd.ie or by telephone at 01-6081990. For written correspondence write to the above individuals at:

Department of Psychology,
Áras an Phiarsaigh,
University of Dublin,
Trinity College,
Dublin 2,
Ireland

Thank you,
Caroline Murphy
Appendix 4:

Results. Rotated Component Matrix

<table>
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<tr>
<th>Question</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
<th>Component 5</th>
<th>Component 6</th>
<th>Component 7</th>
<th>Component 8</th>
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</thead>
<tbody>
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<td>With whom would you have sexual intercourse, if it would not interfere with your sexual and romantic relationships with others?</td>
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<td></td>
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<tr>
<td>With whom would you have sexual intercourse, if it would not result in an exclusive romantic relationship or interfere with your existing friendship?</td>
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<tr>
<td>With whom would you have sexual intercourse if no one would find out?</td>
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<td></td>
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<tr>
<td>With whom would you have sexual intercourse to get to know better?</td>
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<td>With whom would you like to have an exclusive romantic relationship?</td>
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<td>With whom would you have sexual intercourse, if it resulted in an exclusive romantic relationship?</td>
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<td></td>
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<td>0.626</td>
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<td>With whom do you think you may have a SEXUAL RELATIONSHIP in the future?</td>
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<td>Whose sexual or romantic relationships with others do you become jealous of?</td>
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<tr>
<td>To whom have you been ROMANTICALLY ATTRACTED for as long as you have known him/her?</td>
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<td></td>
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<td></td>
<td></td>
<td>0.560</td>
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<tr>
<td>Who do you find sexually attractive?</td>
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<td>Who do you think is generally considered sexually attractive by other people?</td>
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<td>Who do you think would be a good sexual partner?</td>
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<td>as long as you have known him/her?</td>
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<td>With whom have you had SEXUAL INTERCOURSE in the past?</td>
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<td>With whom have you had sexual intercourse, while in an exclusive romantic relationship with someone else? (Note: this only refers to PAST exclusive romantic relationships - not any current exclusive romantic relationship you may be involved in.)</td>
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<td>With whom have you had an EXCLUSIVE ROMANTIC RELATIONSHIP in the past?</td>
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a Rotation converged in 8 iterations.
Scree Plot

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320
## Appendix 5:

Current sexual attraction in cross-sex friendship

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Extraction Method: Principal Component Analysis.
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<th>SD</th>
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Appendix 6:

Enduring sexual attraction in cross-sex friendship

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Appendix 7:

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Appendix 8:

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## Appendix 11:

Current romantic attraction in cross-sex friendship

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Appendix 14:

Jealousy in cross-sex friendship
Appendix 15:

Jealousy and romantic attraction in cross-sex friendship

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Appendix 16:

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Appendix 17:

Sexual intent without romantic consequences or friendship interference

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Sexual intent without consequences to third-party relationships

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High-commitment sexual intent

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Anticipation of sexual relationships

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Appendix 22:

Anticipation of exclusive romantic relationships

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Appendix 23:

Anticipation of sexual and exclusive romantic relationships
Termination of cross-sex friendship due to no sexual future

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Appendix 25:

Termination of cross-sex friendship due to no romantic future

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Appendix 26:
Intimacy in cross- and same-sex friendship

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Appendix 27:
Intimacy in cross-sex friendship

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Appendix 28:

Intimacy in same-sex friendship

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336
### Appendix 29:

**Portion of cross-sex friends providing insight into the other sex**

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### Appendix 30:

**Portion of cross-sex friends sought during loneliness**

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337
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USA
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Women  473  35.4  33.3  28.5  316.1

UK
Men  157  36.9  33.3  29.7  238.3  -0.618  >.05
Women  330  38.4  36.7  28.2  246.7

All participants
Men  577  35.9  33.3  29.8  972.1  -0.18  >.05
Women  1373  35.2  33.3  27.2  976.9

Appendix 31:
Age distribution of cross-sex friendship

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Appendix 32:

Age distribution of same-sex friendship

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Appendix 33:

Age distribution of cross- and same-sex friendship

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**Physical attractiveness in cross- and same-sex friendship**

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All participants

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### Appendix 35:

**Physical attractiveness in cross-sex friendship**

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### Appendix 36:

**Good looks in cross- and same-sex friendship**

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341
### Appendix 37:

**Good looks in cross-sex friendship**

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Good earning capacity in cross- and same-sex friendship

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Appendix 39:

Good earning capacity in cross-sex friendship

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## Appendix 40:

**Favourable social status in cross- and same-sex friendship**

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Appendix 42:

Ambition and industriousness in cross- and same-sex friendship

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Appendix 43:

Ambition and industriousness in cross-sex friendship

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Appendix 44:

Good financial prospect in cross- and same-sex friendship

346
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### Appendix 45:

**Good financial prospect in cross-sex friendship**

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