

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

REMNANTS OF ADOPTION: REJECTION SENSITIVITY,
ATTACHMENT AND ADULT INTIMACY ISSUES

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ABSTRACT

Very few studies have investigated long-term consequences of adoption. The purpose of the current study was to investigate long-term consequences of adoption with regard to relationship satisfaction and outcomes. It also aimed to examine the role of rejection sensitivity as a mediator to the association between adoptive status and relationship satisfaction. South-Korean intercountry adoptees ($N=69$) and non-adopted individuals ($N=87$) completed an online questionnaire. The questionnaire examined rejection sensitivity, adult attachment and relationship satisfaction and quantities. Adopted participants also responded to questions regarding their adoption. The results of the study indicated that adoptive status did not predict rejection sensitivity or relationship satisfaction, but that adoptees tended to experience shorter relationships, and were less likely to be in a cohabitating relationship. Further, a trend was evident that suggested that adoptees who have searched for birth family may experience greater levels of rejection sensitivity than those who haven't searched. Results provide limited support to adoption loss literature suggesting that rather than adoption being causal in poor relationship outcomes, that pre-adoption adversity and post-adoption experiences may be the crucial mediating factors.

Keywords: intercountry adoption, rejection sensitivity, relationship satisfaction, long-term consequences, pre-adoption adversity

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Remnants of Adoption: Rejection Sensitivity, Attachment and Adult Intimacy Issues

Although adoption statistics have fluctuated quite dramatically over the past 25 years, Selman (2005) estimated at least 40,000 intercountry adoptions were processed world-wide in 2003 alone, a 100% increase since the late eighties. Intercountry adoption is the most common type of adoption in Australia accounting for over 60% of adoptions in 2008 (Australian Institute of Health and Welfare, 2010). Although the numbers of children adopted from overseas into Australia has fluctuated, intercountry adoptions have increased steadily by 14% since 1984. The United States also contributes significantly to intercountry adoptions with more than 230,000 processed since 1999 (Bureau of Consular Affairs, U.S. Department of State, 2011).

Adoption is defined as the permanent and legal placement of an abandoned, relinquished or orphaned child to another family (van IJzendoorn & Juffer, 2006). In comparison to domestic adoptees who are adopted within the same country, international adoptees are adopted into a foreign country. Often, intercountry adoptions are also trans-racial, involving the placement of a child to parents of different nationality or ethnic origin. Adoption research has primarily focused on domestic adoptees, with more recent research expanding to intercountry adoptee, and a number of studies utilising both domestic and intercountry adoptees. Several studies, such as Borders, Penny and Portnoy (2000) and Kelly and Towner-Thyrum (1998) have been unclear on the type of adoption that has been researched. In addition, few studies have directly compared outcomes of the two populations. Juffer and van IJzendoorn's (2005) meta-analysis indicated that when compared to domestic adoptees, international adoptees showed fewer behavioural problems, and also had lower rates of mental health referral. These outcome differences have been suggested to be possibly due to internationally adopting families being both more financially and socially

stable in order to meet criteria to be eligible to adopt (Hellerstedt et al., 2008), as well as differences in pre-adoption adversity between the populations. The majority of research however suggests similar positive and negative outcomes irrespective of whether the adoptees are domestic or intercountry, and highlight several unique aspects to intercountry adoption that may heighten risks for certain negative consequences. Wierzbicki (1993) suggested environmental risk factors, such as poor prenatal conditions and institutionalisation prior to adoptive placement, may contribute to increased risk for adoptees. It has consequently been suggested that country of adoption could well be important to outcomes of intercountry adoptees due to the varying pre-adoption environment quality (Silverman & Feigelman, 1990).

While adoption is now commonly viewed as a lifelong process rather than a single event, few researchers have investigated the implications of intercountry adoption in adulthood. With a considerable number of intercountry adoptees now reaching adulthood, it is critical to investigate the long-term consequences and outcomes for this population.

1.1 Adoption and Psychological Maladjustment

The first major empirical study on adoption concluded that adoptees were at increased risk for psychological problems (Schechter, 1960). Following this a vast amount of research has been conducted on the consequences of adoption in childhood and adolescence; however no definitive conclusions have yet been reached. Lack of information and statistics from many countries, inappropriate comparison groups, and inconsistent assessment tools are several reasons for why a comparison of adoptees and non-adoptees is difficult to evaluate. In a literature review of adoption research, Brodzinsky (1993) concluded that adoptees are more vulnerable to emotional, behavioural and academic problems than their non-adopted peers. Numerous studies have reported that adoptees are at greater risk for psychological and social problems (e.g. Levy-Shiff, 2001; Verrier, 1993; Wierzbicki, 1993), however others have

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found that adoptees function just as well as non-adoptees of the same age (Tieman, van der Ende & Verhulst, 2006). The majority of evidence claiming adoptees are at greater risk for psychological maladjustment however has come from clinical studies (Brodzinsky, 1993), limiting the external validity of these results. Despite the lack of consensus there continues to be a strong argument that adoption is a risk factor for psychological maladjustment and poor interpersonal relationships (Borders et al., 2000)

Smith, Howard, and Monroe (2000) noted common difficulties for adoptees that arise post-adoption include birth-family fantasies, difficulty with abandonment and rejection, incomplete sense of self, and “genealogical bewilderment” that is, a lack of information adoptees have regarding their birth families. In addition, Schechter and Bertocci (1990) describe several possible issues for adoptees in adulthood: sexual and romantic relationships, body-image issues, and an ongoing resentment in relation to “regular” people.

1.1.1 Findings in children and adolescents. Adopted children have been found to have greater numbers of mental health referrals (Brodzinsky, 2011), with past research generally finding adoptees to be more problem-prone than non-adopted comparisons (Feigelman, 1997). Young adoptees have been shown to display higher levels of externalising and internalising symptoms, learning problems (Keyes, Sharma, Elkins, Iacono, & McGue, 2008), less social skills (Fensbo, 2004; Verhulst, Althaus, Versluis-Den Bieman, 1990), depression and lower self-worth than their peers (Smith & Brodzinsky, 2002). Later age at adoption has also been shown to have a further negative effect on psychological maladjustment (Verhulst, Althaus & Verluis-Den Bieman, 1992) and lead to an increased risk of attachment and behavioural problems (Stams, Juffer, Rispen & Hoksbergen, 2000).

In a meta-analysis of psychological adjustment of young adoptees (Wierzbicki, 1993), it was found that adoptees had significantly higher levels of general maladjustment, however large effect sizes found in studies focused on adoptees already presenting to clinical services.

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When community-based comparison groups were utilised however significant group differences tended to be small-moderate in effect size (Brodzinsky, 2011; Juffer & van IJzendoorn, 2005).

1.1.2 Findings in adults. Due to the vast amount of literature suggesting that child and adolescent adoptees experience greater psychological maladjustment, it would be expected that adult adoptees are also at greater risk than non-adoptees. Levy-Shiff's (2001) longitudinal study suggests that adoptees are at a higher risk for psychological malfunctioning even in adulthood. Their findings show adult adoptees manifest more psychological distress than do non-adoptees, and on average experience a less coherent and positive self-concept. Tieman, van der Ende and Verhulst (2005) also found adult intercountry adoptees were up to almost four times as likely to show serious mental health problems in comparison to non-adoptees of the same age. Borders and colleagues (2000) results found that adoptees had higher levels of depression and reported lower self-esteem, however have indicated that by early adulthood, adoptees were similar to non-adoptees in life satisfaction, purpose in life and intimacy.

Of particular concern for adoptees is intimacy, proposed to be one of several core issues of adoption (Schechter & Bertocci, 1990; Silverstein & Kaplan, 1988). In addition to difficulties in committing to a partner, adoptees appear to also have difficulties in entering and maintaining close relationships (Lindblad, Hjern & Vinnerljung, 2003). Issues of trust and betrayal are also predominant themes for adoptees, which may interfere with the ability to form and maintain relationships (Jones, 1997). It is suggested that adoptees may experience lower relationship satisfaction and higher rates of relationship problems than non-adopted persons mainly due to fears of abandonment (Hochman, Huston, & Prowler, 1994). Although minimal research has been conducted on adult intimate relationships, the existing studies and theories do indicate that adjustment to adoption predicts adoptees' current

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relationships with others (Basow, Lilley, Bookwala, & McGillicuddy-DeLisi, 2008).

Feigelman (1997) reported that female adoptees report significantly lower levels of marital happiness than non-adoptees. Young adult adoptees have also been reported to be less likely to be married than non-adoptees, had a lower frequency of parenthood, and adopted females were more likely to live as single parents than in the case of the general population, possibly suggesting difficulties in maintaining long-term relationships (Lindblad et al., 2003).

Similarly, Tieman and colleagues (2006) found adoptees to be 1.9 times less likely to be married than non-adoptees and that adoptees were less likely to have intimate relationships and live with a partner, suggesting a lack of relationship commitment. Feeney, Passmore, and Peterson (2007) found adoptees experienced significantly higher general risks in intimacy as well as social loneliness than non-adoptees. Once attachment was controlled for however, adoptive status no longer predicted these.

Insecurities and anxiety regarding one's relationship have been linked to relationship distress. Adoptees' anxiety over abandonment contributes to relationship conflict and plays a major role in negative conflict behaviours (Marchand-Reilly, 2009). Helwig and Ruthven (1990) state that almost every adoptee experiences the phenomenon 'testing of love', which may also lead to relationship difficulties. When compared to non-adopted participants, Feeney (2005) found adoptees were more likely to regard relationships as "risky", reported being afraid of getting close to others, and tried to maintain distance to avoid getting hurt. Conversely, and possibly just as damaging, adoptees may also experience an inability to separate from interpersonal relationships (Jones, 1997). Westhues (1997) also found adoptees had poorer peer-relation than their non-adopted siblings, although adoptees were also shown to have slightly better peer relationships on average than the general population (Tieman et al., 2006).

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In contrast to Levy-Shiff's (2001) study, Feigelman's (1997) longitudinal data of adoptees suggested that problems in childhood and adolescence do not persist into adulthood. Several studies of non-clinical adopted adults have found no significant differences in psychological wellbeing between adoptees and non-adoptees (Collishaw, Maughn, & Pickles, 1998). In particular, Tieman et al (2006) reported that once controlling for socio-economic status, adoptees were just as likely to become parents as non-adoptees, opposing results found by Lindblad and colleagues (2003). Juffer and van IJzendoorn (2005, 2007) also argue that the large majority of adoptees are well-adjusted despite being referred to mental health services more often than non-adoptees. A further comparative study has shown both adult adoptee and non-adoptee groups to be functioning well within normal limits (Smyer, Gatz, Simi, & Pedersen, 1998). Despite the relatively positive view of adopted adults, there is a definite need for further studies on adult adoptees due to the ongoing debate that adoption is a risk factor for psychological maladjustment.

Positive romantic relationships have been shown to be extremely important in maintaining mental health in adulthood (Alperin, 2000). Due to the losses associated with adoption, such as abandonment and rejection, it logically follows that adoption-related issues are likely to be relevant to adult attachment and intimate relationships. With adult adoptees hypothesised to already be at greater risk for mental distress, intimate relationships for adoptees play a particularly significant role. Little research however has been done to determine why adoptees may be at an increased risk of psychological distress compared to non-adoptees.

1.2 Possible causes of maladjustment in relationships of adoptees

Adoptees constantly face unique obstacles due to the ongoing influence that their adoptive status has on the way they approach and resolve each normal developmental stage (Borders et al., 2000). Predominant concerns for adoptees include issues of loss,

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abandonment, trust, rejection, and identity (Jones, 1997). Currently, developmental, genetic and loss literature provide three of the major arguments that propose the cause of adoptee maladjustment (Cubito & Brandon, 2000).

Some adoption literature has implicated genetics as a cause for higher rates of adoptee maladjustment (Cubito & Brandon, 2000). Research has shown adoptees are at a significantly higher risk of psychological disorders, such as depression, bipolar disorder and alcohol abuse, due to the increased prevalence of psychopathology among the relinquishing parents (Cadoret, Troughton, Bagford, & Woodworth, 1990). These results however appear to be based on domestic adoption outcomes.

The loss of birthparents for an adoptee is rarely seen as traumatic as the child has often not formed attachments to them, however a sense of loss emerges as the child begins to understand the meaning of adoption (Smith & Brodzinsky, 2002). There are inherent losses associated with being adopted, such as that of birth parents, cultural and genealogical heritage, or of “not belonging”. Over their lifetime this sense of loss that emerges for the adoptee is suggested to increase psychological maladjustment and problem behaviours.

To date, the most common explanation in the psychological literature to understand adoptees’ relationship difficulties is based on attachment theory, proposing that adoption leads to attachment issues that in turn have long-term negative impacts on relationship satisfaction (Edens & Cavell, 1999) and may result in secure attachment becoming more difficult to develop (Brodzinski, 1990; Feeney et al., 2007). Disrupted attachment bonds in early stages of development, such as the removal of child from foster care, may interfere with healthy growth of secure attachment, as well as contribute to an inability to form intimate relationships in adulthood, (Feeney et al., 2007; Jones, 1997). Secure attachment with adoptive parents as a child may also counteract any negative impacts of adoption, positively influencing adoptee’s later social development, implicating the role of attachment in

relationship outcomes (Jaffari-Bimmel, Juffer, van Ijzendoorn, Bakersman-Kranenburg & Mooijaart, 2006).

1.2.1 Attachment theory and relationship satisfaction. The theory of attachment was developed by Bowlby and Ainsworth (1991) who defined attachment as distinct styles or patterns of interacting with others. The theory states that internal working models learned early in life through interactions with one's primary caregivers form the basis for attachment (Bowlby, 1969). They govern an individual's behaviour, thoughts and expectations of self and others in adult romantic relationships (e.g. Fraley & Shaver, 2000; Hazan & Shaver, 1987). Children are said to become securely attached to consistent caregivers who are responsive and sensitive to their needs. The theory was extended in the 1980s to be relevant to adult romantic attachment, an outgrowth of parent-child relationships, with four styles: secure, anxious-preoccupied, dismissive-avoidant and fearful-avoidant (Hazan & Shaver, 1987). Recent research however has begun to focus on the major dimensions of individual differences in attachment which occur along a continuum: attachment-related anxiety and attachment-related avoidance (Brennan, Clark, & Shaver, 1998), as opposed to attachment types or styles. Attachment-related anxiety refers to the extent to which an individual is insecure about their partner's availability and responsiveness. Attachment-related avoidance is the extent to which an individual is uncomfortable with being close and depending on others (Wei, Russell, Mallinckrodt, & Vogel, 2007).

A strong link has been made between relationship satisfaction and attachment (e.g. Brennan et al., 1998; Hazan & Shaver, 1987; Lowyck, Luyten, Demyttenaere, & Corveleyn, 2008). Even after controlling for several relevant variables, Lowyck et al. (2008) found that attachment uniquely explained a significant 18% of the variance in relationship satisfaction.

Secure attachment, defined as being low on anxiety and avoidance dimensions, has been frequently associated with greater well-being and less romantic relationship distress

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(e.g. Feeney & Noller, 1990; Rauer & Volling, 2007). Secure individuals are more trusting in relationships (Levy & Davis, 1998), use more positive conflict management skills in relationships (Creasey, 2002), and are more sexually satisfied with their partners (Butzer & Campbell, 2008). In comparison, insecure individuals are more likely to use negative communication patterns (Mohr, Cook-Lyon, & Kolchakian, 2010), perceive themselves as less attractive (Bogaert & Sadava, 2002), and are less optimistic about relationships (Whitaker, Beach, Etherton, Wakefield, & Anderson, 1999). Individuals who specifically score high on the anxious dimension tend to report higher anxiety over abandonment, as well as expressing greater dependence, jealousy, and obsessive preoccupation with a partner (Mayseless & Scharf, 2007). Highly avoidant individuals desire high levels of independence and deny needs or emotional states. These individuals indicate a sense of worthiness of love, compared to those who are both highly avoidant and anxious who tend to feel unworthy (Bartholomew & Horowitz, 1991).

1.2.2 Attachment findings in children and adolescent adoptees. Although Hazan and Shaver (1987) found no relationship between attachment and general childhood separation from parents, it remains that attachment problems are greatly influenced by childhood separation from caregivers, such as in adoption. In a meta-analysis of ten studies on attachment of adopted children, it was found that adopted children were less secure, scoring higher than non-adoptees on both the anxiety and avoidance attachment dimensions (van IJzendoorn & Juffer, 2006), suggesting a link between attachment and the obvious early separation of child and parent. Further supporting attachment findings and suggestions that early adverse environment contributes to poor outcomes, later age of adoption has been shown to further contribute to an insecure attachment status in childhood (Howe, 2001; van IJzendoorn & Juffer, 2006), disorganised attachment in particular (van London, Juffer, & van

IJzendoorn, 2007). Edens & Cavell (1999) have also proposed that adoptees may have an increased likelihood of negative attachment behaviours (e.g., disliking close contact).

It has been argued that attachment issues are responsible for problems in close relationships (Jones, 1997). In a meta-analysis by Schneider, Atkinson, and Tardif (2001) small-to-moderate effect sizes were found for child attachment and peer relations, with 59% of securely attached children having successful peer relations, compared to 41% of those insecurely attached. Although having used a sample of institutionalised children, Hodges and Tizard (1989) also suggested that a lack of close adolescent friendships may be due to early disrupted attachment relationships, further linking attachment and relationships outcomes. In contrast to these findings however, some studies have found young adoptees to show more social abilities than non-adoptees (Juffer & van IJzendoorn, 2007). It has been proposed that adoptees, having already experienced the loss of a loved one, may strengthen their social abilities to try and avoid future abandonment (Sharma, McGue, & Benson, 1996).

1.2.3 Attachment findings in adult adoptees. Borders et al. (2000) conducted one of the few studies to have explored the link between adoptive status and adult attachment, and found a significant difference in attachment between adoptees and non-adoptees. Forty-two percent of adoptees compared to 74% of the non-adoptees were classified as having a secure attachment style. In particular, a greater proportion of adoptees showed higher levels of attachment-related anxiety. Similar research by Feeney and colleagues (2007) has also reported that secure attachment is less widespread among adult adoptees than non-adoptees, with adoptees scoring significantly higher on both attachment-avoidance and attachment-anxiety dimensions. In addition, through a repeated-measures design, Feeney and colleagues also found that following recent relationship deterioration, adoptees reported significantly higher levels of anxiety and avoidance than Time 1, as opposed to the non-adoptees where

relationship deterioration had no effect on attachment scores. These results suggest that adoptees internal working models may be more sensitive to negative events.

1.2.4 Issues with attachment theories. Although attachment theory has been frequently investigated in understanding adoptees' relationship difficulties, several inconsistencies indicate that further investigation is needed. Results from a study by Feeney and colleagues (2007) found a significant mediating role of attachment in the association between adoptive status and relationship outcomes. Adoptive status however was not a powerful predictor in determining attachment, explaining only 7% of the variance. In addition, adoption status did not predict relationship outcomes once controlling for attachment dimensions. Feeney and colleagues (2007) proposed this may be due to many other factors that are likely to impact on adoptees' relationships, over and above that of attachment. With only small effect sizes being found between adoptive status and attachment (van IJzendoorn, & Juffer, 2006), factors such as the relationship between adoptive parents, relationship between adoptive parent and child, and reunion and search for birth parents are likely to influence this association (e.g. Feeney et al., 2007; Tieman, van der Ende, & Verhulst, 2008).

A further issue with attachment theory in explaining relationship difficulties for adoptees is that internal working models are assumed to develop over repeated encoded experiences with a primary caregiver. Attachment theory appears to therefore be unable to explain the role of adoption, a single experience of abandonment, in influencing internal working models and thus relationship difficulties. Verrier (1993) however suggests that repeated experiences may not be required for development of attachment dimensions instead suggesting that a single experience of abandonment that are ruminated on may influence internal working models and thus relationship difficulties. It was further argued that emotionally intense experiences, such as searching and reuniting with birth family, may

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possibly further shape working models of self and others. Literature also suggests that perceived abandonment may be sufficient to contribute to maladaptive development, and therefore attachment (Findeisen, 1993).

Although Tieman and colleagues (2006) found adoptees on average had better relationships with friends than that of the general population, they suggested that the reported impaired relationships with parents and siblings are not necessarily due to attachment problems. Instead they suggested that non-genetic kinship, differing appearance and traits could possibly contribute to adoptees feeling that they do not really belong in their adoptive family. Due to such small differences being found however, their main conclusion was that young adult intercountry adoptees were not greatly impaired in their social relations.

An alternate potential mediator of the relationship between adoption and relationship satisfaction is self-esteem. Self-esteem is a major corollary to secure attachment (Fraley & Shaver, 2000), and it is expected that if adoptees experience insecure attachment, which leads to poorer relationship satisfaction, they would also experience lower self-esteem than the general population. Several studies have reported that when compared to adult non-adoptees, adoptees have significantly lower levels of self-esteem (Levy-Shiff, 2001), and a significant moderate correlation between adoptive status and self-esteem has also been found (Passmore, Fogarty, Bourke, & Baker-Evans, 2005). Furthermore, within the adoptee group lower levels of self-esteem have been reported specifically in those adoptees that are searching for biological family (Aumend, & Barrett, 1984; Borders et al., 2000). Although individual studies have found effects, Juffer and van IJzendoorn's (2007) meta-analysis across 88 studies of self-esteem in adoptees showed no significant differences between adoptees and comparisons. In addition, comparable effect sizes for self-esteem were found for self-reports and reports by other informants. The lack of significant differences found between adoptees

and non-adoptees on self-esteem further suggest that attachment alone does not explain relationship difficulties.

Overall, the association between adoptive status and relationship satisfaction via attachment is ambiguous. Mixed findings may be accounted for by within-group differences for adoptees, such as those searching for birth family reporting greater perceived risk in intimacy than non-searchers (Feeney, 2005). In addition to evidence such as normal levels of self-esteem reported for adoptees, and the weak association between adoptive status and attachment, differences in relationship satisfaction between adoptees and non-adoptees seem likely to be the result of other mediating factors.

A suggestion for the current mixed results in the adoption literature, suggested by Grotevant (2003) is that researchers have focused on main effects rather than mediating and moderating variables. For example, attachment theory approaches should focus on risk factors such as negative pre-adoption experiences, neglect and abuse, as well as protective factors such as adoptive family quality as mediating or explaining the link between adoption status and outcomes. Smith and colleagues (2000) proposed that a mediating factor could explain the higher risk of psychological malfunctioning of adoptees, including the greater amount of reported difficulties in sexual and romantic relationships. To date, no studies to the author's knowledge have measured the role potential mediating variables, other than attachment, on the association between adoptive status and relationship satisfaction.

1.3 Rejection sensitivity and relationship satisfaction. A common concept that arises within adoption loss literature is the phenomenon of rejection sensitivity (RS), defined as the extent to which individuals expect, readily perceive, and intensely overreact to rejection cues. Although similar to attachment, specifically attachment-related anxiety, Downey and Feldman (1996) reported RS to be conceptually and empirically distinct from attachment. The authors found that even after controlling for interpersonal sensitivity, adult

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attachment, self-esteem, extraversion and neuroticism, Rejection Sensitivity Questionnaire (RSQ) scores predicted the way participants' perceived their romantic partners' behaviour. The effect of the RSQ was small to moderate indicating RS to be unique.

The RS model (Downey & Feldman, 1996) was developed to explain why individuals who experience rejection in important relationships often end up with interpersonal difficulties. It proposes that prior exposure to rejection (from childhood experiences, parents, and/or repeated perceptions of rejection) can lead some individuals to become sensitised to the possibility of future rejection.

Previous research has shown RS to be a central predictor of problematic relationship functioning (Gallagher & Bentley, 2010; Stafford, 2007) and poorer relationship satisfaction (Downey & Feldman, 2004). High RS individuals are more likely to perceive ambiguous behaviour as "intentional rejection" (Downey & Feldman, 1996), and overreact to minor rejections from partners. They also tend to make use of overt and covert behaviours that are destructive to close relationships, reacting to cues of rejection with angry coercion and retaliation (Ayduk, Gyurak, & Luerssen, 2008; Downey & Feldman, 1996). Such individuals are more likely to experience internalising problems, and it has been suggested that these problems may be due to maladaptive coping responses that impair social relationships (Ayduk, Downey, & Kim, 2001).

Downey and Feldman (1996) showed individuals who strongly fear rejection interacted with their romantic partners in ways such as constantly requiring reassurance, which actually lead to dissatisfaction in the relationship for the partner, resulting in a self-fulfilling prophecy (Marston, Hare & Allen, 2010). At the same time as seeking reassurance, individuals high in RS often feel dissatisfied with others' attempts to provide this (Starr & Davila, 2008). Research shows that individuals high in RS report lower levels of perceived social support, possibly making them less capable of coping with stressful events (Langens &

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Shuler, 2005). This is supported by Downey and Feldman (1996) who found higher levels of RS are associated with greater amounts of stress in romantic relationships

High RS individuals may display distancing behaviour and avoid formations of significant relationships. They may also undermine current relationships in attempts to protect oneself from the possibly future rejection (Downey, Freitas, Michaelis, & Khouri, 1998). Rejection sensitive individuals partake in compromising behaviours (Purdie & Downey, 2000) and also have increased vulnerability to rumination, which is associated with excessive relationship concerns, passivity, avoidance and submissiveness (Pearson, Watkins, & Mullen, 2011). RS may therefore further diminish relationship satisfaction indirectly.

1.3.1 Adoption and rejection sensitivity. Although feelings of rejection are universal, it is proposed, and supported by the literature, that adoptees may be especially vulnerable to rejection. It has been suggested that adoptees internal working models may be more malleable, and therefore events in intimate relationships such as rejections and relationship deterioration may have a more powerful effect on adoptees than non-adoptees (Feeney et al., 2007). The sense of loss experienced by many adoptees often manifests in feelings of rejection, abandonment, and betrayal (Smith et al., 2000). Adoption related losses have been suggested to lead to a basic fear of rejection, regardless of anxiety (Feeney et al., 2007; Verrier, 2003), with Feeney (2005) finding support for relationship difficulties stemming from the adoptees' basic fear of rejection. If the adoption is especially salient, these feelings of rejection, and being unlovable and flawed may concern some adoptees throughout life (Grotevant, 2003; Helwig & Ruthven, 1990). Having also lost their cultural and genealogical heritage, intercountry adoptees also may feel rejected from their racial and ethnic groups (Kim, Suyemoto, & Turner, 2010). Transracial adoptees may also feel uncomfortable about their adoptive family's appearance to others, resulting in a sense of not-belonging and perceived rejection from their adoptive country (Jones, 1997; Kim, 1995).

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Unsuccessful or difficult reunions may further exacerbate feelings of rejection from birth parents (Feeney et al., 2007).

To date only one study by Borders and colleagues (2000) has empirically investigated RS in adoptees, of which the participants were aged between 35 and 55 years. Their findings reported no significant differences in sensitivity to rejection between adoptees and their non-adopted friends, as well as no difference between groups in marital satisfaction. However, a major flaw in this study is that intimacy in relationships was measured via the Kansas Marital Satisfaction Scale, which was designed to provide a measure of global satisfaction with one's marriage and spouse. One third of the sample however was unmarried, making this measure inadequate in measuring relationship satisfaction. A second criticism is that it does not specify whether the adoptees were adopted domestically or intercountry, which could possibly have influenced results. An additional limitation is that the control group was created from a non-adopted friend from each of the adoptee participants. Although each adoptee was asked to recruit a friend similar in gender, age, marital status, race/ethnicity and career, the adequacy of the control group is questionable.

No research to date has investigated the potential mediating role that RS may play in adult adoptee relationship outcomes. Without a conclusive explanation for the higher risk of psychological malfunctioning and poorer relationship outcomes of adoptees, it is imperative that this association be further studied. RS has been proposed to be a core issue for adoptees, yet little research has systematically tested the association between adoptive status and RS. Through the strong association of RS and relationship satisfaction, and presumed experiences of rejection that arise with adoption, it provides the current authors reason to believe that RS may predict relationship satisfaction, over and above that of attachment.

1.4 Methodological limitations of past research.

A major limitation of the current adoption research is that the majority of studies to date that have researched the implications of intercountry adoptions have focused only on childhood and adolescent functioning and outcomes (Tieman et al., 2005). Relatively few studies have focused on outcomes related to adult peer relationships, romantic relationships and adult attachment (Feeney, Passmore & Peterson, 2007).

An additional methodological limitation of adoption research is confounding variables. Juffer and van IJzendoorn (2005) found substantial differences in behavioural problems between international adoptees who experienced pre-adoption adversity and those who had stable, quality care prior to adoption. Mixed findings in existing adoption studies may be explained by a lack of accounting of pre-adoption adversities, such as malnutrition, neglect and abuse (Brodzinsky, 2011). Factors such as these are needed to be taken into account in future studies.

A further limitation in current adoption research is the gender imbalance of samples. Although intercountry adoptions do not have an equal gender distribution with approximately 60% of adoptees being female and 40% male in Australia and the United States (Hague Conference on Private International Law Publications, 2012), the majority of existing adoption research has used female only samples. Feeney et al (2007) suggest that gender may have a significant impact on the findings in adoption studies. Existing research has indicated that adopted men may experience greater adjustment difficulties (Collishaw et al., 1998), and greater vulnerability to early negative life experiences such as adoption (Tieman et al., 2006), and that female adoptees report higher levels of psychological distress than males (Juffer & van IJzendoorn, 2005). Although these findings are mixed it highlights the importance of accounting for gender in future adoption studies. Additional limitations in current research

include lack of appropriate comparison groups, as well as many studies using an inadequate sample size.

1.5 Present study

The reviewed literature suggests that adoptees have lower relationship satisfaction and poorer psychological outcomes. This association has often been assumed to be mediated by attachment, however this explanation is questionable. With RS having been strongly associated with relationship satisfaction in non-adoptees and the substantial experiences of rejection that accompany adoption, it is possible that RS could mediate relationship difficulties that adoptees report.

To address previous limitations the study will recruit both male and female participations and be adequately powered. To control for the possible confound that pre-adoption adversity may have, the adoption group will be recruited from intercountry adoptees from South Korea. South Korea has been suggested to be a country with limited pre-adoption adversities (Odenstad et al., 2008). Since the 1970's, the majority of South Korean adoptees have been relinquished due to social prejudices towards un-wed mothers, rather than poverty or mental illness (Kim, 1995), and the majority of children are adopted before the age of 1 (U.S. Department of Homeland Security, 2008). An earlier age of adoption appears to protect against the development of problems, such as restricted peer relationships (Hodges & Tizard, 1989) and attachment insecurity (van London, Juffer, & van IJzendoorn, 2007), mainly due to the decreased risk of experiencing any psychological damage before being adopted (Verhulst & Verluid-den, 1995). Additionally, the welfare system in South Korea is well maintained, providing children with health care, nutrition and support (Kim, 1995). As such, South Korean adoptees are less exposed to many of the risk factors usually involved in adoption, making these adoptees better able to represent the effects of adoption without being contaminated with pre-existing risk factors (Lee, Seol, Sung, & Miller, 2011).

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The present study has two aims. First it aims to investigate the association between relationship satisfaction outcomes and adoptive status, both within the adoptee group and when compared with controls. Specifically it is hypothesised that:

H1: Adoptees will report higher levels of RS than non-adoptees, and further that within the adoptee group adoptees that are searching for birth family will report higher levels of RS than non-searchers.

H2: Adoptees will be less likely to be in a relationship and cohabit with their partner.

H3: Adoptees will report a shorter length of time for their current relationship, as well as a shorter length of time for their longest relationship, controlling for age.

Secondly the study aims to examine the relationship between adoption status and relationship outcomes. It is hypothesised that:

H4: The association between adoptive status and relationship satisfaction is mediated by RS when controlling for attachment. Specifically, higher RS arising from adoption will negatively predict relationship satisfaction.

It is hoped that this study will clarify outcomes for adoptees and potentially identify a mediating factor that may, if proven, provide a point of intervention to improve long term outcomes for adoptees.

2. METHOD

2.1 Participants

To participate in the study, individuals were required to be between 18 and 45 years of age, and to have experienced at least one romantic relationship since the age of 18 years. A total of 156 individuals participated in the study. The final sample comprised 69 intercountry adoptees (44.23%) and 87 non-adoptees (55.77%). Demographics are shown in Table 1.

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Table 1
General Demographics

	Adoptees (n=69)	Non-adoptees (n=87)
Age	M=29.94 SD=6.671 Range=20 – 44	M=28.22 SD=7.132 Range=18 – 45
Gender		
<i>Male</i>	N=18 (26.1%)	N=23 (26.4%)
<i>Female</i>	N=51 (73.9%)	N=64 (73.6%)
Education		
<i>High school or less</i>	N=1 (1.4%)	N=31 (35.6%)
<i>University graduate/postgraduate</i>	N=55 (79.7%)	N=39 (44.8%)
<i>Other</i>	N=13 (18.8%)	N=17 (19.6%)
Country of residence		
<i>Australia</i>	N=21 (30.4%)	N=78 (89.7%)
<i>United States of America</i>	N=42 (62.3%)	N=6 (6.9%)
<i>Other</i>	N=5 (7.2%)	N=2 (3.4%)
Ethnicity		
<i>Oceanian</i>		N=56 (64.4%)
<i>European</i>		N=19 (21.8%)
<i>African and Middle Eastern</i>		N=1 (1.15%)
<i>Asian</i>	N=69 (100%)	N=7 (8.05%)
<i>People of the Americas</i>		N=4 (4.6%)
Divorced parents		
<i>Yes</i>	N=20 (29%)	N=28 (32.2%)
<i>No</i>	N=49 (71%)	N=59 (67.8%)
Children		
<i>Yes</i>	N=23 (33.33%)	N=41 (47.1%)
<i>No</i>	N=46 (66.66%)	N=46 (52.9%)

All individuals in the adoptee-sample were adopted from South Korea. 68.1% had been adopted less than 1 year. 58% had searched for birth family, and 27.5% had been reunited with their birth family.

2.2 Measures

2.2.1 Demographics. Participants were asked their sex, age, level of education, current country of residence, ethnicity, and if they had children. Response options were based on Australian Bureau of Statistics criteria.

2.2.2 Relationship history questions. Participants were asked to report their current relationship status, the length of their current or most recent relationship, longest period ever

in a committed relationship, number of relationships longer than 6 months, the type of relationships experienced (casual, combination of casual and committed, or committed), and number of breakups. The relationship status question was adapted from Feeney et al., (2007), adding in the category of “exclusive dating (not living with partner)”, as well as breaking the “cohabitating” status into “living with partner less than 2 years” and “living with partner greater than 2 years. Other questions were selected from common themes discussed in past relationship research.

2.2.3 Adoption history questions. The adoptee sample was asked an additional 4 questions. These were their country of origin and age of adoption, whether they had searched for birth family, and whether they had reunited with birth family.

2.2.4 Dyadic Adjustment Scale (DAS). The DAS (Spanier, 1976) is a 32 item scale that measures dyadic adjustment and overall romantic relationship quality for married and unmarried cohabitating dyads and divorcees. The DAS includes 4 subscales: dyadic satisfaction, dyadic consensus, dyadic cohesion and affectional expression. The total scale has a theoretical range of 0 to 151, and involves several scoring systems. For one of the sample questions participants are required to indicate the “approximate extent of agreement or disagreement between you and your partner (or most recent partner) for each item on the following list”. Sample items include “household tasks” and “career decisions”, and scoring is on a 6 item likert scale ranging from “always disagree” to “always agree”. Another sample question is “how often would you say the following events occur between you and your mate”. Sample events include “laugh together” and “calmly discuss something”, which is scored on a 6 item likert scale ranging from “never” to “more than often”. A high score on the DAS indicates greater quality of adjustment in the relationship dyad, as indicated by the sum of relationship satisfaction, amount of cohesion and consensus, and affectionate expression. The DAS takes approximately 10 minutes to complete.

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Internal reliability of a sample of married and divorced individuals was originally reported to be high (Cronbach's $\alpha=0.96$), with subscales ranging from 0.73 to 0.94. Graham, Liu & Jeziorski (2006) also reported strong reliability, with a mean reliability of 0.92. Reliability estimates from the DAS have also been shown to not differ by sexual orientation, gender, marital status, or ethnicity (Graham, Liu & Jeziorski, 2006). The DAS has demonstrated high construct validity with the Locke-Wallace Marital Adjustment Scale (1959), a well-accepted marital adjustment scale ($r=0.86$ among married respondents, and $r=0.88$ among divorced respondents). Differences between total scores on the DAS of married individuals and divorced individuals further establish criterion validity for the test (Spanier, 1976). In the present study internal consistency was high (Cronbach's $\alpha=0.85$).

2.2.5 Experiences in Close Relationships – Revised – General Short Form (ECR-R-GSF). The ECR-R-GSF (Wilkinson, 2011) is a 20 item instrument based on the original 36-item ECR scale by Brennan and colleagues (1998). It measures attachment-related anxiety (fear of rejection and abandonment) and attachment-related avoidance (discomfort with closeness and depending on others). The items were selected from the original scale that were suitable for young adults, as well as being amenable to word changes to allow for a measure of more general adult attachment rather than romantic partner attachment.

The ECR-R-GSF is scored on a 5 item likert scale ranging from 1 “strongly agree” to 5 “strongly disagree”. Seven items are required to be reverse scored prior to determining subscale scores. Participants complete the measure for how they generally experience relationships, not just what is happening in a current relationship. Items included, “I prefer not to show others how I feel deep down” and “I feel comfortable depending on other people”. It was estimated to take approximately 5 minutes to complete.

The anxiety score for each person was found by averaging the score for all anxiety subscale items. Higher scores indicate more anxious attachment. The avoidance score was the

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average of all avoidance subscale items, with higher scores indicating more avoidant attachment. Both sub-scales range in scores from 1 to 7, with 7 indicating high attachment anxiety and avoidance.

Mikulincer and Shaver (2007) have reported that the original 36-item ECR has been used in hundreds of studies since 1998, and has shown high reliability with alpha coefficients near or above 0.90. The ECR-R (Fraley, Waller & Brennan, 2000), which was developed to improve the measures sensitivity across the range of possible scores, also shows high internal consistency with coefficients over 0.90 for both scales (Sibley & Liu, 2005).

The presently used 20-item ECR-R-GSF has good internal consistency for both the anxiety subscale (Cronbach's $\alpha = 0.88$) and avoidant subscale (Cronbach's $\alpha = 0.88$). Both subscales were also well associated with the Relationships Questionnaire (Bartholomew & Horowitz, 1991), demonstrating appropriate convergent and discriminant validity. In the current study the internal consistencies for the anxiety and avoidant subscale were Cronbach's $\alpha = 0.90$ and 0.89 respectively.

2.2.6 Adult Rejection Sensitivity Questionnaire (A-RSQ). The A-RSQ is an 18 item measure, adapted from the original Rejection Sensitivity Questionnaire (RSQ) originally designed for adolescent populations (Downey, Berenson, & Kang, 2006). The adaptation used the same number of items, with items adapted to be relevant to adult populations, items removed that were specific to college life, and new items added about potential rejection situations in adulthood.

To complete the A-RSQ, participants are required to imagine themselves in a situation, for example "you ask your supervisor for help with a problem you have been having at work", and then answer the items that follow. The first items in each scenario are dedicated to measuring rejection anxiety, for example "how concerned or anxious would you be over whether or not the person would want to help you". Participants are asked the degree

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of concern or anxiety about the situation outcome on a 6 point likert scale ranging from “very unconcerned” to “very concerned”. The second item measures rejection expectations, such as “I would expect that he/she would want to try to help me out”. Participants are required to indicate their perceived likelihood of other(s) responding in an accepting manner on a 6 point likert scale ranging from “very unlikely” to “very likely”. It was estimated that the A-RSQ would take 10 minutes to complete.

RS for each situation is found by multiplying the score of rejection anxiety (first item for each scenario) by the reverse of the score of rejection expectations (second item for each scenario). Total RS score is the average of the resulting 9 scores. Total score of RS ranges from 1 to 36. Higher scores indicate higher levels of rejection sensitivity.

Satisfactory reliability and validity has been shown with expected correlations (all $p < 0.001$) with related constructs such as neuroticism, social avoidance/distress and interpersonal sensitivity (Berenson et al., 2009) and has adequate internal consistency, with Cronbach's α of 0.74. In the present study, internal reliability was Cronbach's $\alpha = 0.77$.

2.3 Procedure

Ethics approval was obtained from Macquarie University Ethics Approval Committee (#5201200033). The online survey was created using SurveyGizmo and the URL was provided in the study advertisement (Appendix A). The online survey took approximately 20-30 minutes to complete.

Two groups of participants were recruited for the study through advertisements on online forums, email notification, and via 1st year psychology students at Macquarie University (none of the adoptee sample, 19.5% of the non-adopted sample). Snow-ball sampling was also utilized to increase participant numbers to allow for an acceptable statistical power, assuming a small-medium difference between groups. This was achieved

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through the study advertisement which requested participants to pass on the link to others who may be interested or appropriate for the study.

For each organisation and for message boards that were moderated, an email was sent to the organisation director or forum moderator with an explanation of the purpose of the study and a request to forward via email or post on a relevant sub-forum the provided study advertisement. The advertisement included information regarding the purpose of the study, eligibility and the link to the study website.

Participants completed the study anonymously online via SurveyGizmo. By following the link provided in the advertisement, participants were presented with two screening questions (“are you an adoptee or a non-adoptee” and “are you completing this survey for course credit?”) which lead them to the correct consent form. The consent form explained the purpose, importance and confidential nature of the study. Participants were made aware that they were able to withdraw at any time before submission of their survey without any consequences; however submission of a completed survey indicated full consent to use data for analysis. The consent form also instructed participants to contact the researcher directly if they had any queries. Both the consent form and final page of the questionnaire provided information and contacts if they participants experienced any distress due to the study (See Appendix B).

Following the consent form, participants were required to complete the demographics, relationship, and adoption history (if in the adoptee sample) questions. The participants then completed the DAS, A-RSQ and ECR-R-GSF which were presented in a random order to each participant to control for potential order effects (See Appendix C).

At the end of the questionnaire, participants were able to elect whether they wanted feedback on the results of the study and/or to enter the draw to receive an AU\$100 online shopping voucher. To participate in the draw and/or to receive feedback, participants were

redirected to a separate questionnaire link to enter a contact email address. The provided email addresses were stored separately to maintain anonymity of responses. If participants were students completing the study to obtain course credit, they were instead redirected to a separate link to receive credit for their research participation, instead of the opportunity to enter the prize draw.

3. RESULTS

3.1 Preliminary analysis

All analyses were conducted using PASW Statistics 18. Preliminary statistical analysis assessed the means (M), standard deviations (SD), minimum and maximum values, and the skewness and kurtosis for all numeric measures, including the dependent variable (See Table 2).

All assumptions of regression were met, however case-wise diagnostics identified one case that was 3 SD outside their predicted value on the DAS. This case was consequently removed from all analyses. The final sample size obtained (n=156, 69 adoptees and 87 non-adoptees) provided adequate statistical power of 0.08 at the 0.05 level of statistical significance to detect a moderate effect size (Cohen, 1988).

Using One-way Analysis of Variance (ANOVA), no significant differences between adoptees and non-adoptees were found on age ($F(1,154)=2.38, p=.13$). Pearson Chi-Square showed no significant differences in gender ($\chi^2(1)=0.002, p=.96$), but found significant differences in country of residence ($\chi^2(2)=59.98, p<.001$), with most of the adoptees residing in USA (62.3%), and the majority of non-adoptees residing in Australia (89.7%). In addition, Pearson Chi-Square also found significant differences in education between groups ($\chi^2(2)=29.7, p<.001$) with 80% of adoptees completing an under-graduate or post-graduate degree, compared to the 45% of non-adoptees. ANOVA also indicated no significant

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differences between adoptees and non-adoptees in relationship satisfaction, as measured by the DAS ($F(1,154)=.46, p=.50$).

Table 2

Descriptive Statistics and Intercorrelations Among Study Variables

Scale	M	SD	Min	Max	α	1	2	3	4
1. DAS	99.81	13.32	65	131	.850	-	-.436**	-.265**	-.251**
2. A-RS	8.69	3.36	1	22	.774	-	-	.337**	.625**
3. ECR-R-GSF Avoidance	4.19	.77	2.4	6.3	.888	-	-	-	.363**
4. ECR-R-GSF Anxiety	2.8	.84	1.0	4.8	.899	-	-	-	-

Note. N= 157. DAS = Dyadic Adjustment Scale; A-RS = Adult - Rejection Sensitivity Scale; ECR-R-GSF = Experiences in Close Relationships –Revised – General Short Form.

* $p < 0.05$. ** $p < 0.01$.

3.2 Attachment and adoption

ANOVA was utilised to determine whether differences in attachment occurred between adoptees and non-adoptees. There was no significant differences found between groups in attachment-related anxiety ($F(1,154)=0.03, p=.86$) or attachment-related avoidance ($F(1,154)=3.56, p=.06$). Although attachment-related avoidance was shown not to be significant it was strongly trending towards statistical significance, with adoptees on average experiencing higher levels of attachment-related avoidance ($M=4.32, SD=.83$) than non-adoptees ($M=4.09, SD=.77$).

3.3 Rejection sensitivity and adoption

It was hypothesised that adoptees would report higher levels of RS than non-adoptees. ANOVA was performed to test this hypothesis. The model was found to be non-significant ($F(1,154)=0.84, p=.36$). This indicates that level of RS does not differ between adoptees and non-adoptees.

It was further hypothesized that within the adoptee group, adoptees that are searching or have searched for birth family will report higher levels of RS than non-searchers. ANOVA was used to test this hypothesis, with no significant differences found between groups,

$F(1,67)=3.61, p=.06$. Results however were strongly trending towards significant with higher RS reported for adoptees that had searched for birth family ($M=9.09, SD=3.51$), compared to adoptees that had not searched ($M=7.49, SD=3.40$).

3.4 Relationships and adoption

It was hypothesised that adoptees would be less likely to be currently in a cohabitating relationship. Multinomial logistic regression was used to test this hypothesis. Once controlling for age, adoptive status significantly predicted current relationship status ($\chi^2(4)=58.83, p<.001$), indicating that the current model as a whole fit significantly better than a model with no predictors. The overall effect for adoptive status however was only trending towards significant ($p=.064$), with a statistically significant effect of age ($p<.001$).

The odds for adoptees for being single versus being in a cohabitating relationship is 2.384, indicating that adoptees were more likely to be single than in a cohabitating relationship than non-adoptees. This association was trending towards significant ($p=.062$). Adoptees were also found to be 2.747 times more likely than non-adoptees to be in a non-cohabitating relationship compared to a cohabitating relationship ($p=.043$). No difference in odds was found between adoptees and non-adoptees for those that were single versus in a non-cohabitating relationship ($p=.779$). That is, the odds of being single versus in a non-cohabitating relationship were the same for adoptees and non-adoptees.

It was also hypothesised that adoptees in a current relationship would report a shorter length of time in that relationship than non-adoptees, as well as a shorter length of time for their longest relationship since 18 years of age. In the se analyses opportunity for a relationship was controlled by including age as a covariate. As education differed between the target groups and it may be possible that participation in education could delay involvement in a relationship, level of education was also included as a covariate. ANOVA was used to test these hypotheses. For length of current relationship, age as a covariate was

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significant ($F(1,152)=126.29, p<.001$) and education as a covariate was not significant ($F(1,152)=.04, p=.84$). There was a significant effect of adoption status after controlling for both age and education ($F(1,152)=12.81, p<.001$). Mean scores indicate that on average, adoptees current relationship length was significantly shorter than for non-adoptees. Adoptees also reported a significantly shorter length of time in their longest relationship since 18 years old. There was a significant effect of age as a covariate ($F(1,152)=236.07, p<.001$), and a non-significant effect of education as a covariate ($F(1,152)=.69, p=.41$). Adoption status has a significant effect on relationship length controlling for age and education ($F(1,152)=10.03, p=.002$). Due to the non-significant effects of education level, it was not included as a covariate in the other analyses. See Table 3 for all relationship statistics.

Table 3
Relationship Descriptives

	Adoptees (n=69)	Non-adoptees (n=87)
Length of current/most recent relationship (months)	M=56.81 SD=60.008 Range=1 – 278	M=76.7 SD=75.15 Range=1 - 273
Longest period in committed relationship (months)	M=68.99 SD=60.549 Range=0 – 278	M=82.47 SD=74.22 Range=1 - 273
Relationships longer than 6 months	M=2.83 SD=3.22 Range=0 - 25	M=1.97 SD=1.359 Range=0 - 7
Current relationship status	N=16 (26.1%)	N=19 (21.8%)
<i>Single/casual dating</i>	N=16 (23.2%)	N=16 (18.4%)
<i>In a relationship, not cohabitating</i>	N=35 (50.7%)	N=52 (59.8%)
<i>In a relationship</i>		

3.5 Rejection sensitivity as a mediator between adoptive status and relationship satisfaction

It was hypothesised that adoptive status would predict relationship satisfaction, and this would be mediated by RS, over and above attachment. It was specifically hypothesised that adoptees will experience higher RS which will negatively predict relationship

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satisfaction. In order to test this hypothesis a hierarchical regression analysis was conducted with 3 models being entered, holding gender constant at all levels:

Model 1: Adoption status

Model 2: Attachment

Model 3: Rejection sensitivity

In model 1, adoption status did not significantly predict relationship satisfaction ($R^2=.005$, $F(2,153)=.370$, $p=.691$). Adoption status made no difference in relationship satisfaction scores; therefore the requirements for mediation to occur were unmet. A significant R^2 change ($R^2=.109$, $F(2,151)=8.823$, $p<.001$) in Model 2 however indicated that attachment significantly accounted for 10.9% of the variance in relationship satisfaction, accounting for both gender and adoptive status. Higher levels of attachment-related anxiety and avoidance were associated with lower relationship satisfaction. Model 3 also had a significant R^2 change ($R^2=.214$, $F(1,150)=20.014$, $p=<.001$), which indicated that a further 10.5% of variance in relationship satisfaction was explained with the addition of rejection sensitivity, once controlling for attachment, bringing the total explained variance to 21.4%. Table 4 shows the beta weights for the 3 models. Although adoptive status was not associated with relationship satisfaction, the results do indicate a significant negative association between RS and relationship satisfaction, once controlling for attachment and gender.

Table 4

Multiple Regression Analysis Summary for Adoptive Status, Attachment and Rejection Sensitivity Predicting Relationship Satisfaction, Controlling for Gender

	B	SE(B)	β	<i>p</i>
Model 1				
(Constant)	100.959	1.730		.000**
Gender	-1.288	2.432	-.043	.597
Adoption	-1.458	2.155	-.055	.500
Model 2				
(Constant)	125.218	6.246		.000**
Gender	-1.909	2.333	-.063	.415
Adoption	-2.294	2.083	-.086	.272
Avoidance	-3.866	1.453	-.224	.009**
Anxiety	-2.654	1.312	-.168	.045*
Model 3				
(Constant)	124.016	5.892		.000**
Gender	-1.634	2.200	-.054	.459
Adoption	-1.307	1.975	-.049	.509
Avoidance	-2.813	1.389	-.163	.045*
Anxiety	1.171	1.503	.074	.437
Rejection sensitivity	-1.673	.374	-.423	.000**

Note. Avoidance and anxiety represent the two dimensions of attachment as measured by the ECR-R-GSF. * $p < 0.05$. ** $p < 0.01$.

4. DISCUSSION

4.1 Summary of findings

The present study was designed to investigate the association between adoptive status and relationship satisfaction, as well as to examine the role of RS as a mediating variable to this association. The study also aimed to address past limitations of adoption literature in an attempt to clarify long-term outcomes for adoptees.

4.1.1 Rejection sensitivity and adoption. It was hypothesised that adoptees would report higher levels of RS than non-adoptees, and further, that within the adoptee group those adoptees who have searched for birth family will report higher levels of RS than non-searchers. Results did not support Hypothesis 1, with no significant differences in RS between adoptees and non-adoptees. Similarly, no significant differences were also found within the adoptee group; however there was a strong trend towards significance, with adoptees that had searched for birth family reporting higher levels of rejection sensitivity.

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Interestingly, the current study's results indicated a trend that adoptees that have searched for birth family report higher levels of RS compared to those who have not. Previous studies have found that adoptees searching for birth family report greater perceived risk and fear of rejection in intimate relationships than non-searchers (Feeney, 2005). Feeney et al., (2007) suggested that adoptees searching for family may have experienced an unsuccessful or difficult reunion that may exacerbate feelings of rejection.

The finding that adoptive status was not predictive of RS is inconsistent with adoption loss theory, which commonly refers to RS as a major issue for adoptees (Feeney et al., 2007; Smith et al., 2000; Verrier, 2003) and proposes that adoptee's experience of loss often manifests in feelings of rejection and abandonment (Smith et al., 2000). The only other study to date that has empirically investigated RS in adoptees similarly found no significant differences between adoptees and their non-adopted friends (Borders et al., 2000).

The current studies non-significant differences in RS between adoptees and non-adoptees although consistent with Borders and colleagues (2000) study, appears to be inconsistent with adoption loss literature which argues that adoptees will be more sensitive to rejection. Several explanations are possible for the lack of differences in RS between adoptees and non-adoptees. In the current study pre-adoption was controlled by selecting adoptees from South-Korea only. This country has an established and comprehensive child welfare system (Kim, 1995) and children are adopted at a very young age, suggesting that perhaps pre-adoption adversity and age of adoption may be more causal in RS than adoption itself. Moreover, the null findings could be due to the fact that adoptive families rely more heavily upon mental health services (Warren, 1992, as cited in Feigelman, 1997). The majority of intercountry adoptees are placed into families with parents who are well-educated, older and more affluent (Hellerstedt et al., 2007), and therefore are more able to provide resources to ensure healthy development. The enhanced opportunity for counselling

and social services may therefore contribute to reduce the likelihood of encountering later problems in adulthood for adoptees despite their early experiences of loss (Feigelman, 1997).

Due to the trending difference in RS within the adoptee population, and also having been found in past literature, it is suggested that the current non-significant results comparing adoptees and non-adoptees may also be attributed to within group effects. Differences between adoptees who have searched for birth family and those who have not, may be crucial when measuring RS. The need for some adoptees to search for birth family may be possibly due to dissatisfaction with their adoption, which could further contribute to sensitivity to rejection for these adoptees.

The results of the current study indicate that adult intercountry adoptees experience similar levels of RS to non-adoptees, whilst suggesting that “search” status may be a crucial differentiating factor. The study however was not adequately powered to investigate this further. Hence, it is suggested that future research investigate within group differences for adoptees. Due to the limited research in this topic area, further studies are required to elucidate the role RS in adoptees.

4.1.2 Relationships and adoption. The second hypothesis of the study proposed that adoptees would be less likely to be currently in a cohabitating relationship. Once opportunity for having had long-term relationships was controlled for by using age as a covariate, the hypothesis was partially met. The odds of being in a relationship and not cohabiting with a partner versus cohabiting with partner were significantly higher for adoptees compared to non-adoptees, indicating that adoptees are less likely to cohabit with a partner. Difference in odds between adoptees and non-adoptees for being single versus being in a relationship and cohabiting with a partner was also trending towards significant, indicating that adoptees are more likely to be single than in a relationship. No difference in odds between adoptees and adoptees were found for those that were single versus in a non-cohabitating relationship.

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Following from the second hypothesis, it was further hypothesised that adoptees compared to non-adoptees would report both a significantly shorter length of time for their current relationship, as well as a significantly shorter length of time for their longest relationship, controlling for age. As an unexpected difference in education level was apparent between groups, level of education was also included as a covariate. Although plausibly a longer period in education may delay entering into a relationship, education was not a predictor of relationship lengths. As expected adoptees reported a significantly shorter length of time in both their current relationship and longest relationship experienced. With limited research on intimacy in adult adoptees, this study is the first to the author's knowledge that has conducted quantitative research comparing adoptees and non-adoptees relationship lengths. Furthermore, significant differences were found even though the pre-adoption adversity was controlled for by utilising South-Korean adoptees only, and with the majority of adoptees adopted before 1 year of age. This indicates that the impact of the adoption itself has an effect on intimate relationships, even with minimal, if any pre-adoption adversity or if they adoption occurred at a very young age.

These results together are consistent with past research (Jones, 1997; Lindblad et al. 2003; Tieman et al., 2006), which finds adoptees to be significantly less likely to be married than non-adoptees. Tieman et al. (2006) specifically reported that adoptees were 1.9 times less likely to be married than non-adopted comparisons, and fewer adoptees had experienced relationships that had lasted for at least 1 year. Together with current findings, these studies support the idea that adoptees experience more difficulties in maintaining long-term relationships. Further research is required to determine the cause of these differences with focus on potential difficulties in relationship commitment (Tieman et al., 2006), attitudes that relationships are "risky" (Feeney, 2005) or the suggestion from current findings that perhaps

adoptees who “search” for birth family may have different experiences than those who do not being worthwhile avenues of investigation.

The findings of the current study provide evidence towards adoption loss theory which proposes that adoptees have difficulties in maintaining intimate relationships. The current study however extends loss literature by quantifying the possible difficulties adoptees experience in maintaining long-term relationships, measured by the length of their relationships. In addition, it provides evidence for relationship difficulties for adoptees even in situations where pre-adoption adversity is minimal.

4.1.3 Rejection sensitivity mediating between adoption and relationship

satisfaction. The fourth hypothesis of the study proposed that adoptees would experience lower levels of relationship satisfaction than non-adoptees, and this association would be mediated by RS, when controlling for attachment and gender. Although there is sound reasoning to believe that the losses associated with adoption may predispose individuals to relationship difficulties, relationship satisfaction did not differ between adoptees and non-adoptees. Mediation was therefore unable to occur. RS however was a significant predictor of relationship satisfaction in general, specifically as RS increased the level of relationship satisfaction decreased. These findings suggest that although adoptive status did not predict relationship satisfaction or RS, RS does play a significant role in relationship satisfaction.

Current results, indicating that adoptive status does not predict relationship satisfaction, are inconsistent with a majority of adoption loss literature which states that adoptees are a greater risk for psychological and social problems (e.g., Levy-Shiff, 2001; Verrier, 1993), with sexual and romantic relationships a major possible issue for adoptees in adulthood (Schechter & Bertocci, 1990). Several past studies indicate that adoptees experience lower relationship satisfaction and higher rates of relationship problems than non-adopted comparisons (Hochman, Huston, & Prowler, 1994). Feeney et al., (2007) reported adoptive

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status was significantly associated with perceived risk in intimacy and romantic loneliness. For both variables, being adopted was associated with higher scores, and therefore more negative outcomes. They also reported adoptees reacted more negatively to relationship stresses which may lead to lower relationship satisfaction. The results are however consistent with several studies which have argued that adoptees function normally in relationships and may even have slightly better romantic relationships on average than the general population (Borders, 2000; Tieman et al., 2006).

An explanation for the current studies non-significant findings may be due to the use of South-Korean adoptees only. Significant differences in outcomes have been found for adoptees that have experienced pre-adoption adversity (Juffer & van Ijzendoorn, 2005), with Brodzinsky (2011) suggesting that mixed findings in past literature may be due to a lack of accounting of such factors. South Korea has been reported to provide better healthcare and nutrition, and a more stable pre-adoption experience usually with a single carer (Odenstad et al., 2008), with the majority of South Korean adoptees also adopted out before 1 year of age (U.S. Department of Homeland Security, 2008). South Korean adoptees are therefore better able to represent the effects of adoption without pre-existing risk factors confounding results (Lee, Seol, Sung, & Miller, 2011).

In addition, outcome differences could be due to the standards required for intercountry adoption, which results in families that adopt internationally tending to be more financially and socially stable (Hellerstedt et al., 2008). Previous studies that have found relationship difficulties have not controlled for or investigated the role of pre-adoption differences. The current non-significant findings support the proposal by Brodzinsky (2011) that a lack of pre-adoption adversity and early age of adoption are more influential on outcomes in adulthood than adoption itself per se. A further possibility is that the stability and

resources of the adopting family may play a protective role for adoptee adult relationships (Hellerstedt, 2008).

Although adoptive status did not predict relationship satisfaction, it was found that RS was predictive of relationship satisfaction, over and above attachment. This is consistent with the RS model, which explains why individuals who experience higher levels of rejection in relationships often end up with relationship problems. Current results are consistent with past research, which has shown RS to be a central predictor of relationship problems (Gallagher & Bentley, 2010), as well as poorer relationship satisfaction and greater levels of stress in relationships (Downey & Feldman, 2004). The role of RS in relationship satisfaction is suggested to be due possibly to overly sensitive individuals being more likely to overreact to minor reactions from intimate partners, as well as perceive ambiguous events as rejection, with RS scores significantly predicting the way an individual perceives their romantic partners behaviour (Downey & Feldman, 2004; Stafford, 2007).

Previous studies have reported greater variability on measures of psychosocial well-being within the adoptee population (Borders et al., 2000), and due to no differences in relationship satisfaction being found between adoptees and non-adoptees, it is suggested that future research focus on potential differences within the adoptee group, such as whether the adoptee has searched for birth family or not, as a possible variable that may contribute to poorer relationship satisfaction.

4.2 Strengths of the current study

The contribution to the limited research in the area of adoptees adult relationships is a major strength of the current study. While adoption theory has proposed a strong link between poor relationships for adoptees via attachment (e.g. Feeney et al., 2007; Jones, 1997; Tieman et al., 2006), this study is one of few to empirically research intimate relationships for adoptees, and is one of the first to attempt to explain this association via rejection sensitivity.

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Although no association between adoptive status and relationship satisfaction was found, the study does provide further evidence for the role of RS in predicting relationship satisfaction, over and above that of attachment.

An additional strength of the study was the inclusion of both males and females in the sample. The majority of previous studies comparing adoptees and non-adoptees have measured outcomes in females only, even though approximately 40% of Australian and American international adoptees are male (Hague Conference on Private International Law Publications, 2012). With gender differences being found in adoption adjustment and psychological functioning (Collishaw et al., 2008), it is imperative that gender is accounted for in any investigation of adoptees.

A final strength of the study was the use of adoptees from a non-clinical population. Brodzinsky (1993) reported that the majority of past evidence of adoptees has been from clinical studies that may not provide the fairest test of differences in psychological maladjustment. As such, the current study obtained participations from the general population to allow for a more accurate comparison of groups.

4.3 Limitations of the current study and directions for future research

A crucial limitation in this study was the comparison group. As the Australian South-Korean adoptee population is very small, with approximately 2,837 adoptions occurring between 1969 and 2001 (Korean Ministry of Health and Welfare, 2002, as cited in Hubinette, 2004), the study was opened to the U.S. South-Korean adoptee population, resulting in the majority of the adoptees being sourced from the U.S. The non-adoptee comparison group was predominantly from Australia. It is possible that systematic differences such as cultural upbringing, social norms and education may have been evident between the groups. Comparisons of the groups on key demographic variances however did not reveal systematic differences except on education, with the majority of adoptees having completed an

undergraduate or post-graduate degree, and the majority of non-adoptees completing Year 12 or less. This difference on education between adoptees and non-adoptees was evident only in Australian participants. Future research should ensure that non-adoptee participants are sourced from the same country to remove any confounding variables involved.

The current study is also limited due to concerns with the applicability of the DAS in measuring romantic relationship satisfaction in non-cohabitating/non-married populations. There are limited valid and reliable measures available for measuring relationship satisfaction that are irrespective of current relationship status. There is a need for a better measure to be developed for these situations. Future research would benefit from developing a measure that can be used to measure relationship satisfaction for current and past relationships, regardless of current relationship status.

A final limitation is the studies design. Although advantageously enabling access to both an Australian and American sample, using online surveys to gather data causes unavoidable limitations with reduced representativeness of the selected sample, as well as issues of biases and no behavioural observations. In addition, bias may have been introduced due to the method of participant recruitment. The majority of participants were recruited through various types of online communities, and are therefore unlikely to represent the wider population. Future research should aim to recruit participants from a wide range of sources and backgrounds to enable greater external validity.

4.4 Implications of the findings

With only a few studies examining adult adoptees, especially their intimate relationships, this study adds to the existing limited research. The results add quantitative support to theory which suggest adoptees experience issues of trust and intimacy which ultimately interferes with the ability to maintain long-term relationships (Jones & Hall, 1997; Silverstein & Kaplan, 1988), through findings that show differences in relationship length

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and current relationship status between adoptees and non-adoptees. The results of the study add to evidence that RS is a major contributor to relationship satisfaction and that this holds above that of attachment. Although adoption did not add to this prediction, the findings do support the suggestion that pre-adoption adversity is crucial and future investigations would benefit from focusing on search and reunion experiences of adoptees.

Further investigation of these differences may lead to development of preventative interventions focused on facilitating healthy adult relationships with these programs potentially being targeted to certain groups of adoptees. Continued research into adult adoptees may improve the understanding of the long-term outcomes of adoption, and ultimately provide support to adoptees as they reach adulthood.

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Appendix A

Online study advertisement

Adult Relationships in Adoptees and Non-Adoptees

You are invited to participate in a study regarding adult relationships in Korean intercountry adoptees and non-adoptees. Participation in the study involves anonymous completion of online questionnaires regarding your current and past relationship experiences, ways that you interact with people and your social and adoption history. The questionnaires will take approximately 30 minutes to complete.

To be eligible for this project you must be a Korean intercountry adoptee. You must also be between 18 and 45 years of age and be either currently in an intimate relationship or have experienced one since 18 years of age.

If you do decide to participate, you will have the opportunity to enter a draw to win a online voucher worth AU\$100.

Please feel free to pass on the link for this study to others who may be interested or appropriate for this study.

To find further information and to participate in the study, please click on the following link: <https://www.surveymzmo.com/s3/879265/adult-relationships-and-adoption>

Queries about the study can be directed to Eden Robertson, eden.robertson@students.mq.edu.au

Thank you.

Adult Relationships in Adoptees and Non-Adoptees

You are invited to participate in a study regarding adult relationships in Korean intercountry adoptees and non-adoptees. Participation in the study involves anonymous completion of online questionnaires regarding your current and past relationship experiences, ways that you interact with people and your social and adoption history. The questionnaires will take approximately 30 minutes to complete.

To be eligible for this project you must be a non-adoptee. You must also be between 18 and 45 years of age and be either currently in an intimate relationship or have experienced one since 18 years of age.

If you do decide to participate, you will have the opportunity to enter a draw to win a online voucher worth AU\$100.

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Queries about the study can be directed to Eden Robertson, eden.robertson@students.mq.edu.au

Thank you.

Appendix B

Information and consent form

Adoptee Information and Consent Form

Name of Project: "Adult Relationships in Adoptees and Non-Adoptees".

You are invited to participate in a study of adult intimacy and relationship adjustment. The purpose of the study is to investigate the associations between relationship experiences, ways that you interact with people, beliefs about relationships and adoption history.

The study is being conducted by Eden Robertson (Dept. of Psychology, Macquarie University; Phone 0402-020-476; email eden.robertson@students.mq.edu.au) to fulfil the requirements of Honours in psychology under the supervision of Dr. Heidi Lyneham (Dept. of Psychology, Macquarie University; Phone 9850-9433; email heidi.lyneham@mq.edu.au).

To be eligible for this study you must be an intercountry adoptee, be between 18 and 45 years of age and is either currently in an intimate relationship or have experienced one since 18 years of age.

If you decide to participate, you will be asked to complete questionnaires about your intimate relationships, and beliefs and attitudes around these. You will also be asked several basic demographic and adoption-related questions. The total survey should take approximately 30 minutes to complete. Participants will be given the opportunity to go into a draw for a AU\$100 online shopping voucher.

Responses to the questionnaires are provided anonymously. If you provide an email address to enter the voucher draw your email address will be stored separately to the responses to your questionnaires. That is we will have no way of linking your responses and your email address. No individual will be identified in any publication of the results, and only the investigator and supervisor will have access to the raw data. A summary of the results of the data can be made available to you on request via email by ticking the appropriate box following the survey.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time before submission without having to give a reason and without consequence.

It is not anticipated that completing the questions will cause you any distress. However, if you would like to discuss any personal issues raised by the questions, you are encouraged to contact your local community health centre, the Mental Health Information Service for information about your nearest free service (phone: 1300 794 991), the Australian Psychological Society Referral Service (www.psychology.org.au/FindaPsychologist/) or the American Psychological Society (<http://locator.apa.org/>).

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you would like to participate in the study please click next at the bottom of the page. Submission of completed questionnaires will be regarded as consent to use the information for research purposes.

Thank you for your time and participation.

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

Non-adoptee Information and Consent Form

Name of Project: "Adult Relationships in Adoptees and Non-Adoptees".

You are invited to participate in a study of adult intimacy and relationship adjustment. The purpose of the study is to investigate the associations between relationship experiences, ways that you interact with people and beliefs about relationships.

The study is being conducted by Eden Robertson (Dept. of Psychology, Macquarie University; Phone 0402-020-476; email eden.robertson@students.mq.edu.au) to fulfil the requirements of Honours in psychology under the supervision of Dr. Heidi Lyneham (Dept. of Psychology, Macquarie University; Phone 9850-9433; email heidi.lyneham@mq.edu.au).

To be eligible for this study you must be a non-adoptee, be between 18 and 45 years of age and is either currently in an intimate relationship or have experienced one since 18 years of age.

If you decide to participate, you will be asked to complete questionnaires about your intimate relationships, and beliefs and attitudes around these. You will also be asked several basic demographic questions. The total survey should take approximately 30 minutes to complete. Participants will be given the opportunity to go into a draw for a AU\$100 online store voucher.

Responses to the questionnaires are provided anonymously. If you provide an email address to enter the voucher draw your email address will be stored separately to the responses to your questionnaires. That is we will have no way of linking your responses and your email address. No individual will be identified in any publication of the results, and only the investigator and supervisor will have access to the raw data. A summary of the results of the data can be made available to you on request via email by ticking the appropriate box following the survey.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time before submission without having to give a reason and without consequence.

It is not anticipated that completing the questions will cause you any distress. However, if you would like to discuss any personal issues raised by the questions, you are encouraged to contact your local community health centre, the Mental Health Information Service for information about your nearest free service (phone: 1300 794 991), the Australian Psychological Society Referral Service (www.psychology.org.au/FindaPsychologist/) or the American Psychological Society (<http://locator.apa.org/>).

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you would like to participate in the study please click next at the bottom of the page. Submission of completed questionnaires will be regarded as consent to use the information for research purposes.

Thank you for your time and participation.

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

Student non-adoptee Information and Consent Form

Name of Project: "Adult Relationships in Adoptees and Non-Adoptees".

You are invited to participate in a study of adult intimacy and relationship adjustment. The purpose of the study is to investigate the associations between relationship experiences, ways that you interact with people and beliefs about relationships.

The study is being conducted by Eden Robertson (Dept. of Psychology, Macquarie University; Phone 0402-020-476; email eden.robertson@students.mq.edu.au) to fulfil the requirements of Honours in psychology under the supervision of Dr. Heidi Lyneham (Dept. of Psychology, Macquarie University; Phone 9850-9433; email heidi.lyneham@mq.edu.au).

To be eligible for this study you must be a non-adoptee, be between 18 and 45 years of age and is either currently in an intimate relationship or have experienced one since 18 years of age.

If you decide to participate, you will be asked to complete questionnaires about your intimate relationships, and beliefs and attitudes around these. You will also be asked several basic demographic questions. The total survey should take approximately 30 minutes to complete. Participants will receive 1 credit point for PSY104/105 research participation for completing the study.

Responses to the questionnaires are provided anonymously. If you provide an email address to receive feedback, your email address will be stored separately to the responses to your questionnaires. That is we will have no way of linking your responses and your email address. No individual will be identified in any publication of the results, and only the investigator and supervisor will have access to the raw data.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time before submission without having to give a reason and without consequence.

It is not anticipated that completing the questions will cause you any distress. However, if you would like to discuss any personal issues raised by the questions, you are encouraged to contact your local community health centre, the Mental Health Information Service for information about your nearest free service (phone: 1300 794 991), the Australian Psychological Society Referral Service (www.psychology.org.au/FindaPsychologist/) or the American Psychological Society (<http://locator.apa.org/>).

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

If you would like to participate in the study please click next at the bottom of the page. Submission of completed questionnaires will be regarded as consent to use the information for research purposes.

Thank you for your time and participation.

Appendix C

Online questionnaire package

Demographics

1. What is your age in years?
2. What is your gender?
 - Male
 - female
3. What is your highest level of education?
 - Primary School
 - Year 10 or equivalent
 - Year 12 or equivalent
 - Tafe/Apprenticeship
 - Certificate/Diploma
 - Undergraduate
 - Postgraduate
4. In what country do you currently reside?
5. What is your ethnicity?
 - Oceanian (e.g. Australian, New Zealand peoples)
 - North-West European (e.g. British, Irish, German)
 - Southern and Eastern European (e.g. Italian, Greek, Russian)
 - North African and Middle Eastern (e.g. Arab, Jewish, Sudanese)
 - South-East Asian (e.g. Thai, Vietnamese, Malay)
 - North-East Asian (e.g. Korean, Chinese, Japanese)
 - Southern and Central Asian (e.g. Indian, Sri Lankan)
 - Peoples of the Americas (e.g. Canadian, American, South American, Mexican)
 - Sub-Saharan African (e.g. Nigerian, Kenyan)
6. Are your parents divorced?
 - Yes
 - No
7. Do you have children?
 - Yes
 - No

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

Relationship demographics

1. What is your current relationship status
 - Single/casual dating
 - Exclusive dating (not living with partner)
 - Living with partner less than 2 year
 - Living with partner greater than 2 year
 - Married
 - Separated/Divorced
 - Widowed
2. How long is your current or most recent relationship?
3. What is the longest period in a committed relationship you have had since 18 years of age?
4. How many relationships longer than 6 months have you had since the age of 18?
5. Since the age of 18 have your relationships been:
 - All casual
 - Combination of casual and committed
 - All committed
6. For relationship breakups, have many since 18 years of age have been:
 - Your choice
 - Your partners choice
 - Mutual decision

Adoption demographics

1. What country were you adopted from?
2. How old were you at the time of your adoption?
 - Less than 1 year
 - 1-2 years
 - Over 2 years
3. Have you searched for your birth family?
 - Yes
 - No
4. Have you had a reunion with your birth family?
 - Yes
 - No

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

DAS

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner (or most recent partner) for each item on the following list

	Always agree	Almost always agree	Occasionally disagree	Frequently disagree	Almost always disagree	Always disagree
Handling family finances *	<input type="radio"/>	<input type="radio"/>				
Matters of recreation *	<input type="radio"/>	<input type="radio"/>				
Religion matters *	<input type="radio"/>	<input type="radio"/>				
Demonstrations of affection *	<input type="radio"/>	<input type="radio"/>				
Friends *	<input type="radio"/>	<input type="radio"/>				
Sex relations *	<input type="radio"/>	<input type="radio"/>				
Conventionality (correct or proper behaviour) *	<input type="radio"/>	<input type="radio"/>				
Philosophy of life *	<input type="radio"/>	<input type="radio"/>				
Ways of dealing with parents or in-laws *	<input type="radio"/>	<input type="radio"/>				
Aims, goals, and things believed important *	<input type="radio"/>	<input type="radio"/>				
Amount of time spent together *	<input type="radio"/>	<input type="radio"/>				
Making major decisions *	<input type="radio"/>	<input type="radio"/>				
Household tasks *	<input type="radio"/>	<input type="radio"/>				
Leisure time interests and activities *	<input type="radio"/>	<input type="radio"/>				
Career decisions *	<input type="radio"/>	<input type="radio"/>				

	All of the time	Most of the time	More often than not	Occasionally	Rarely	Never
How often do you discuss or have considered divorce, separation, or terminating your relationship?	<input type="radio"/>					
How often do you or your mate leave the house after a fight?	<input type="radio"/>					
In general, how often do you think that things between you and your partner are going well?	<input type="radio"/>					
Do you confide in your mate?	<input type="radio"/>					
Do you ever regret that you married (or lived together)?	<input type="radio"/>					
How often do you and your partner quarrel?	<input type="radio"/>					
How often do you and your mate "get on each other's nerves"?	<input type="radio"/>					

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

18. Do you kiss your mate? *

Every day Almost every day Occasionally Rarely Never

Do you and your mate engage in outside interests together? *

All of them Most of them Some of them Very few of them None of them

How often would you say the following events occur between you and your mate? *

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
Have a stimulating exchange of ideas *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laugh together *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calmly discuss something *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work together on a project *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks *

	Yes	No
Being too tired for sex *	<input type="radio"/>	<input type="radio"/>
Not showing love. *	<input type="radio"/>	<input type="radio"/>

The circles on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please fill in the circle which best describes the degree of happiness, all things considered, of your relationship. *

Extremely unhappy Fairly unhappy A little happy Happy Very happy Extremely happy Perfect

Which of the following statements best describes how you feel about the future of your relationship? *

- I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- I want very much for my relationship to succeed, and will do all I can to see that it does.
- I want very much for my relationship to succeed, and will do my fair share to see that it does
- It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed
- It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going
- My relationship can never succeed, and there is no more that I can do to keep the relationship going.

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

A-RS

The items below describe situations in which people sometimes ask things of others. For each item, imagine that you are in the situation, and then answer the questions that follow it.

You ask your parents or another family member for a loan to help you through a difficult financial time.

23. How concerned or anxious would you be over whether or not your family would want to help you? *

Very unconcerned Unconcerned Somewhat unconcerned Somewhat concerned Concerned Very concerned

24. I would expect that they would agree to help as much as they can. *

Very unlikely Unlikely Somewhat unlikely Somewhat likely Likely Very likely

You approach a close friend to talk after doing or saying something that seriously upset him/her.

25. How concerned or anxious would you be over whether or not your friend would want to talk with you? *

Very unconcerned Unconcerned Somewhat unconcerned Somewhat concerned Concerned Very concerned

26. I would expect that he/she would want to talk with me to try to work things out *

Very unlikely Unlikely Somewhat unlikely Somewhat likely Likely Very likely

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

You bring up the issue of sexual protection with your significant other and tell him/her how important you think it is.

27. How concerned or anxious would you be over his/her reaction? *

Very unconcerned	Unconcerned	Somewhat unconcerned	Somewhat concerned	Concerned	Very concerned
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. I would expect that he/she would be willing to discuss our possible options without getting defensive. *

Very unlikely	Unlikely	Somewhat unlikely	Somewhat likely	Likely	Very likely
<input type="radio"/>					

You ask your supervisor for help with a problem you have been having at work.

29. How concerned or anxious would you be over whether or not the person would want to help you? *

Very unconcerned	Unconcerned	Somewhat unconcerned	Somewhat concerned	Concerned	Very concerned
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. I would expect that he/she would want to try to help me out *

Very unlikely	Unlikely	Somewhat unlikely	Somewhat likely	Likely	Very likely
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

After a bitter argument, you call or approach your significant other because you want to make up.

31. How concerned or anxious would you be over whether or not your significant other would want to make up with you? *

Very unconcerned	Unconcerned	Somewhat unconcerned	Somewhat concerned	Concerned	Very concerned
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. I would expect that he/she would be at least as eager to make up as I would be. *

Very unlikely	Unlikely	Somewhat unlikely	Somewhat likely	Likely	Very likely
<input type="radio"/>					

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

You ask your parents or other family members to come to an occasion important to you.

33. How concerned or anxious would you be over whether or not they would want to come? *

Very
unconcerned Unconcerned Somewhat
unconcerned Somewhat
concerned Concerned Very concerned

34. I would expect that they would want to come. *

Very unlikely Unlikely Somewhat
unlikely Somewhat likely Likely Very likely

At a party, you notice someone on the other side of the room that you'd like to get to know, and you approach him or her to try to start a conversation.

35. How concerned or anxious would you be over whether or not the person would want to talk with you? *

Very
unconcerned Unconcerned Somewhat
unconcerned Somewhat
concerned Concerned Very concerned

36. I would expect that he/she would want to talk with me. *

Very unlikely Unlikely Somewhat
unlikely Somewhat likely Likely Very likely

Lately you've been noticing some distance between yourself and your significant other, and you ask him/her if there is something wrong.

37. How concerned or anxious would you be over whether or not he/she still loves you and wants to be with you? *

Very
unconcerned Unconcerned Somewhat
unconcerned Somewhat
concerned Concerned Very concerned

38. I would expect that he/she will show sincere love and commitment to our relationship no matter what else may be going on *

Very unlikely Unlikely Somewhat
unlikely Somewhat likely Likely Very likely

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

You call a friend when there is something on your mind that you feel you really need to talk about.

39. How concerned or anxious would you be over whether or not your friend would want to listen? *

Very
unconcerned Unconcerned Somewhat
unconcerned Somewhat
concerned Concerned Very concerned

40. I would expect that he/she would listen and support me. *

Very unlikely Unlikely Somewhat
unlikely Somewhat likely Likely Very likely

REJECTION SENSITIVITY, ATTACHMENT AND ADULT INTIMACY

ECR-R-GSF

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by clicking a circle to indicate how much you agree or disagree with the statement.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I prefer not to show others how I feel deep down. *	<input type="radio"/>				
I often worry that other people close to me don't really love me. *	<input type="radio"/>				
I find it difficult to allow myself to depend on other people. *	<input type="radio"/>				
I often worry that other people don't care as much about me as I care about them. *	<input type="radio"/>				
I am very comfortable being close to other people. *	<input type="radio"/>				
Sometimes people change their feelings about me for no apparent reason. *	<input type="radio"/>				
It is usually easy for me to discuss my problems and concerns with other people. *	<input type="radio"/>				
My desire to be close sometimes scares people away *	<input type="radio"/>				
It helps to turn to others for support in times of need. *	<input type="radio"/>				
My relationships with people make me doubt myself. *	<input type="radio"/>				
I am nervous when people get too emotionally close to me. *	<input type="radio"/>				
When I show my feelings to people I care about, I'm afraid that they will not feel the same about me. *	<input type="radio"/>				
I find it easy to depend on other people. *	<input type="radio"/>				
I am afraid that once somebody gets to know me, he or she won't like who I am. *	<input type="radio"/>				
It is easy for me to be affectionate with other people. *	<input type="radio"/>				
It makes me mad that I don't get the affection and support I need from other people. *	<input type="radio"/>				
I feel comfortable sharing private thoughts and feelings with other people. *	<input type="radio"/>				
I worry a lot about my relationships. *	<input type="radio"/>				
I feel comfortable depending on other people. *	<input type="radio"/>				
I find that other people don't want to be as close as I would like. *	<input type="radio"/>				