Forgiveness and the Mediating Effect of Rumination on Psychological Wellbeing: Does Perceived Intent Matter?

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Abstract

Although the benefits of forgiveness are well-established, the process by which forgiving can contribute to positive outcomes is far less understood. Rumination has been shown to relate to forgiveness, as well a number of psychological outcomes, such as depression and anxiety. On this basis, theoretical models have proposed that rumination may explain the relation between forgiveness and wellbeing (Worthington, Berry, & Parrott, 2001). However, empirical evidence in this area is sparse. As such, the present study aimed to systematically test the proposed mediation model. In addition, it is suggested that a number of factors are likely to influence the mediation relationship, and one which is relevant in this context is perceived transgressor intent, as it has one of the strongest associations with forgiveness. Therefore, a further aim of the study was to explore the extent to which intent moderated the relationship between forgiveness and psychological outcomes through rumination. A cross-sectional design was employed. Participants (N = 171) completed an online survey responding to measures of forgiveness, rumination, intent and the outcome variables of depression, anxiety, stress, state anger and self-esteem. The results indicated that forgiveness was related to positive psychological outcomes because it reduced rumination. These findings provide empirical support for the theoretical mediation model. Further, the study found that forgiving was related to positive outcomes at both low and high intent. Therefore, forgiving appeared to be beneficial for victims irrespective of perceived transgressor intent. Such findings have important implications for understanding the boundaries of when forgiveness may be beneficial.

Declaration

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CHAPTER 1: INTRODUCTION

1.1 Background

Close interpersonal relationships can provide some of life's most fulfilling experiences, satisfying our need for belonging and security (Baumeister & Leary, 1995). However, while relationships are often harmonious in nature, they can also be marred by interpersonal offenses. Individuals in relationships at times may criticise, betray, fail to support one another, or, in more extreme circumstances, perpetrate physical or psychological abuse against each other. Such transgressions can have devastating effects, leaving victims feeling hurt, distressed and humiliated (Leary, Springer, Negel, Ansell, & Evans, 1998).

It has been proposed that the ways in which we respond to interpersonal transgressions can significantly affect our health (McCullough & Worthington, 1994). Unforgiving responses, such as replaying a hurt or harbouring a grudge, are believed to erode physical and mental health (Griffin, Worthington, Lavelock, Wade, & Hoyt, 2015). Conversely, forgiveness has been shown to be an effective response to hurt and related to positive psychological outcomes (Fincham, Hall, & Beach, 2006; van Oyen Witvliet, Van Tongeren, & Luna, 2015). However, in order to forgive, victims must make themselves vulnerable to the very person who hurt them. As such, forgiving is not without risks, and can conjure up feelings of worthlessness, a sense of a loss of power and make victims vulnerable to reoffending by transgressors (Strelan, McKee, & Feather, 2016). Consequently, forgiving under certain circumstances has been shown to negatively impact victim wellbeing, reducing self-respect and relationship satisfaction (Luchies, Finkel, McNulty, & Kumashiro, 2010; McNulty, 2011; Strelan et al., 2016). Therefore, in making the decision to forgive, individuals must weigh up the benefits of forgiving with the potential risks.

A number of theoretical models have sought to explain the process by which forgiveness contributes to psychological health. One such theory suggests that forgiveness

may promote positive psychological outcomes through a reduction in rumination (Worthington, Berry, & Parrott, 2001). Specifically, rumination has been found to be related to poor psychological outcomes (Harrington & Blankenship, 2002), and in turn is negatively related to forgiveness (Barber, Maltby, & Macaskill, 2005). Although forgiveness is typically inversely associated with rumination, this relationship is likely to be influenced by a number of factors. Based on empirical evidence, which implicates intent as one of the strongest influences on forgiveness (for a meta-analysis, see Fehr, Gelfand, & Nag, 2010), it is suggested that one such factor may be perceived transgressor intent. Therefore, the present study aimed to examine the extent to which rumination explains the relationship between forgiveness and psychological outcomes, with consideration to the moderating effect of intent.

1.2 Understanding Forgiveness

There are a number of ways in which we can respond when someone has hurt us. Generally, people are motivated, at some level, to retaliate or seek vengeance against their offender (McCullough & Witvliet, 2002), both of which can be destructive, perpetuating a vicious cycle of revenge (Baumeister, Exline, & Sommer, 1998). An alternative response is forgiveness. Although a single definition of forgiveness remains elusive, there appears to be agreement within the literature that it is not excusing, exonerating, justifying or condoning (Worthington, Witvliet, Pietrini, & Miller, 2007). Rather, forgiveness is a complex multidimensional construct (Enright & Fitzgibbons, 2000), incorporating affective, behavioural, motivational and interpersonal aspects (Enright, Freedman, & Rique, 1998; McCullough et al., 1998).

It has been proposed that our ability to forgive evolved to facilitate the cooperation necessary for maintaining valued relationships (McCullough, 2008). Within this context, forgiving one's transgressor is understood as a prosocial change, whereby motivations for

avoidance and revenge are replaced by benevolence (McCullough, Worthington, & Rachal, 1997). Forgiveness can therefore soothe interpersonal tensions by helping individuals to re-establish feelings of closeness and commitment, and in turn help to preserve and restore close relational bonds (Tucker, Bitman, Wade, & Cornish, 2015). Thus, at the interpersonal level, forgiveness is typically relationship-focused and communicated through displays of goodwill and efforts to inhibit avoidant behaviours (McCullough et al., 1998). Researchers have further defined forgiveness from an intrapersonal perspective. Definitions of intrapersonal forgiveness encompass aspects of decisional and emotional forgiveness. Decisional forgiveness involves a behavioural intention (e.g. a conscious choice) to forgive a transgressor (Davis et al., 2015). On the other hand, emotional forgiveness is the replacement of negative affect and unforgiving emotions with more positive ones (Worthington & Scherer, 2004). While interpersonal forgiveness often involves motivations for relational repair, at an intrapersonal level, forgiveness can occur purely within oneself (Hook et al., 2012).

In summary, when people forgive, their responses, or what they think about, and how they feel and behave toward the people who have hurt them become less negative and more positive (McCullough, 2000).

1.3 The Relationship Between Forgiveness and Psychological Wellbeing

Forgiveness has been associated with a range of positive psychological outcomes, including a reduction in depressive symptoms, anxiety and stress (Toussaint & Webb, 2005). Specifically, it has been found that individuals with a dispositional propensity to forgive their transgressors, or those demonstrating higher trait forgiveness, also report fewer symptoms related to psychological disorders (Brown, 2003). These findings have been replicated across a number of studies. Utilising a large sample of older adults (N = 1,316), Krause and Ellison (2003) demonstrated that trait forgiveness was inversely related to depressive affect and anxiety, and positively related to life satisfaction. In addition, findings from Lawler and

colleagues (2005) that trait forgiveness was associated with lower levels stress and negative affect ($N = 81$), provide further support for the benefits of trait forgiveness on mental wellbeing.

In addition to trait forgiveness, forgiving specific transgressions or within particular situations, otherwise known as state forgiveness, has also been shown to be positively related to psychological wellbeing (McCullough, 2000). In a correlational study ($N = 242$), both trait and state forgiveness were found to be related to lower levels of depressive symptoms, anxiety and stress (Messay, Dixon, & Rye, 2012). While Messay, Dixon and Rye (2012) conducted their study within a religious orientation context, such findings on the positive effects of state forgiveness appear to be supported. In particular, studies focusing on forgiveness therapy indicate that state forgiveness may be effective in promoting positive mental health outcomes. Although forgiveness therapy can be delivered in a number of different forms, interventions are typically designed to encourage victims to reframe their emotional and cognitive responses toward a specific offense, with the aim of facilitating more forgiving responses toward their transgressor (Akhtar & Barlow, 2018). In a meta-analysis examining the efficacy of forgiveness interventions, higher levels of state forgiveness were observed within groups receiving forgiveness therapy compared to control groups (Akhtar & Barlow, 2018). Interestingly, intervention groups also reported lower levels of depression, anxiety and anger. Such findings add to the body of literature on the benefits of trait forgiveness and suggest that forgiving specific transgressions, or state forgiveness, may also be associated with positive mental health outcomes.

The effect of forgiveness on psychological wellbeing can be understood in terms of unforgiveness, which is thought to promote rumination, resentment, hostility and anger (Toussaint & Webb, 2005; Worthington, Witvliet, Pietrini, & Miller, 2007). Failure to resolve these negative emotions can result in significant mental health issues (Toussaint & Webb,

2005). Accordingly, unforgiveness has been linked to higher levels of adverse psychological outcomes, including greater levels of self-reported depression and anxiety (Stackhouse, Ross, & Boon, 2016). One way in which unforgiveness can be addressed is through forgiveness, which involves replacing negative emotions with strong, positive ones (Toussaint & Webb, 2005). By reducing unforgiveness, forgiveness has the power to promote positive psychological outcomes by unburdening victims from the negative emotions of anger, resentment and rumination (Harris & Thoresen, 2003).

1.3.1 The mediating effect of rumination. It has been theorised that the relationship between forgiveness and psychological wellbeing is mediated by rumination (Worthington, Berry, & Parrott, 2001). Rumination is the experience of repetitive, intrusive and negative cognitions (Siegle, Moore, & Thase, 2004). When an individual ruminates, they are repeatedly exposed to the original stressor (Harrington & Blankenship, 2002). As such, rumination is generally regarded as an ineffective response to stressful experiences, and has been associated with a number of psychological disturbances (Nolen-Hoeksema, McBride, & Larson, 1997). Examining the relationship between rumination and psychological health in a non-clinical sample ($N = 300$), Harrington and Blankenship (2002) found that rumination was significantly correlated with depressive symptoms and anxiety. Such findings suggest that ruminative thought may create conditions which encourage the development and maintenance of depressive and anxious moods (Harrington & Blankenship, 2002).

Forgiveness involves letting go of resentment and hostility, while adopting more positive cognitions, and has been shown to be negatively associated with rumination. Consistent with this, Barber, Maltby and Macaskill (2005) found that forgiveness was inversely related to rumination in a sample of 200 undergraduate students. Similarly, Berry, Worthington, O'Connor, Parrott and Wade (2005) found that individuals who were more forgiving, engaged in less vengeful rumination following an offense. Additionally, Berry and

colleagues (2005) provided evidence that vengeful rumination may play a mediating role in the relationship between an individual's propensity to forgive and experiences of negative psychological outcomes, specifically trait anger. Supporting this, Ysseldyk, Matheson and Anisman (2007) found that the association between trait forgiveness and depressive and anxious symptoms was partially mediated by an individual's tendency to engage in ruminative thinking. These findings suggest that negative ruminative thoughts may play a role in understanding the connection between forgiveness and psychological health.

While these findings provide preliminary support for rumination as a mediator, few studies have tested this idea. Further, studies have only sought to understand this process within the context of trait forgiveness. However, forgiveness also occurs within situational contexts (e.g. forgiving a specific transgression). Despite this, no studies have empirically tested the process by which forgiveness may positively impact psychological outcomes through rumination, with respect to situational or transgression specific forgiveness. This study therefore hoped to address this gap in the literature.

1.4 When Forgiving is Detrimental to Wellbeing

A large accumulation of the literature has emphasised the benefits of forgiveness. However, forgiving has also been shown to put psychological wellbeing at risk. This proposition was investigated by McNulty (2011) in a longitudinal study of newlywed couples ($N = 72$). The study evaluated the link between spouses' tendencies to forgive their partners with changes in psychological and physical aggression. Each spouse reported their propensity to forgive one another, as well as the extent to which they committed acts of psychological and physical aggression against the other. The results indicated that the spouses of individuals who were more forgiving, also reported a greater propensity to commit acts of psychological and physical aggression, and this pattern remained stable over four years. Contrary to this, spousal reports of psychological and physical aggression declined across the four years for

individuals who were less forgiving of their partners. Such findings are consistent with theories of operant conditioning, which proposes that people are less inclined to repeat patterns of behaviour when they are met with unwanted consequences (Skinner, 1969). In line with this, the research indicates that negative responses such as anger, rejection and criticism act as motivators for partners to adjust their behaviour (McNulty & Russell, 2010). Therefore, a tendency to forgive may remove these negative consequences and invite recidivism, which can result in further psychological distress for victims.

Additionally, a willingness to forgive in certain interpersonal situations has been shown to negatively impact psychological wellbeing. In a series of experiments, Luchies, Finkle, McNulty and Kumashiro (2010) demonstrated that where a transgressor fails to signal to their victim that they are safe and valued within the relationship, forgiveness negatively affected victim self-respect and self-concept clarity. The authors further employed a longitudinal design. This required participants to report, on a weekly basis, the betrayals committed by their partner, reparative efforts made by their partner and their level of self-respect and self-concept clarity, over a six-month period. Supporting the experimental findings, the association of forgiveness with self-respect and self-concept clarity depended on partner signals of safety and value. In situations where this did not occur, forgiving was found to diminish victim self-respect and self-concept clarity.

The extant literature on forgiveness has largely focused on its positive effect on psychological wellbeing. However, a small body of research is emerging, which suggests that forgiving may not be universally related to better mental health and wellbeing.

1.5 Forgiveness and the Moderating Effect of Intent

An important factor which has been shown to influence a victim's decision to forgive is perceived offender motives (Crossley, 2009; Fincham, 2000). In making judgements of offender motives, inferences of an offender's intent are taken into account (Boon & Sulsky,

1997). Unintentional acts lack goal-directed purpose (Reeder, Vonk, Ronk, Ham, & Lawrence, 2004), while intentional offenses entail a disregard for victim wellbeing or even malice (Fehr, Gelfand, & Nag, 2010; Gollwitzer, 1999). When victims perceive that their transgressor did not intend to hurt them, the cause is often attributed to external situational determinants and, in some instances, can lead victims to feel empathy for their transgressor (Zechmeister & Romero, 2002). Additionally, transgressions are likely to be perceived as subjectively less severe and distressful, and unlikely to be repeated (Fincham, Jackson, & Beach, 2005). As such, when victims perceive that their transgressor did not intend to commit a hurt, they typically judge the transgression as more forgivable (Malle & Knobe, 1997) and therefore, may find it easier to move beyond the negative emotions and cognitions connected with their transgressor's actions.

In contrast, when an act is intentional, transgressors have committed themselves to a willful act of harm against their victims (Gollwitzer, 1999). As such, intentional offenses, relative to unintentional offenses, have been associated with higher levels of anger (Hill, Exline, & Cohen, 2005) and harsher punishments (Darley & Huff, 1990). Intentional acts can lead victims to make negative dispositional inferences about their transgressor, and engage in avoidant and protective strategies, or seek revenge (Boon & Sulsky, 1997; Struthers, Eaton, Santelli, Uchiyama, & Shirvani, 2008). Unsurprisingly then, victims find it more difficult to forgive when they perceive that their transgressor intended to hurt them (Fehr et al., 2010). There are occasions however, where individuals will forgive a transgressor who has committed an intentional hurt, such as a friend who embarrasses them or a spouse who utters hurtful things in an argument. While forgiving in some instances can be a marker of unhealthy relationships (e.g. an abusive spouse), forgiving a transgressor who meant to cause hurt can also occur within seemingly healthy relationships. From a motivational perspective, victims may grant forgiveness to those who intended to hurt them so that they can continue to

receive the psychological benefits associated with valued relational bonds (Luchies et al., 2010), insofar that forgiveness may be granted automatically within committed relationships (Karremans & Aarts, 2007). Additionally, forgiveness may be granted compassionately, as a display of love and empathy for a transgressor (McCullough et al., 1997). Lastly, forgiving may act as a coping mechanism for victims, in which case, forgiveness can be granted purely for the sake of the self (Strelan, McKee, Calic, Cook, & Shaw, 2013).

A number of reasons may motivate an individual to forgive a transgressor who has hurt them intentionally. However, it is less clear what effect forgiving would have on victims under these conditions. One study which addressed this question, found that forgiving an exploitative partner – which bears resemblance to high intentionality – was associated with greater distress and negative affect (Gabriels & Strelan, 2018). As such, in forgiving a transgressor who intended to cause hurt, victims may feel that they have let their transgressor get away with what they did, which can lead to lingering feelings of distress and encourage victims to replay the transgression over. Doing so can intensify ruminative thinking and lead victims to experience the associated negative psychological consequences. However, it is also possible that forgiveness may reflect a victim's refusal to be emotionally weighed down by their transgressor's actions. Therefore, in forgiving, victims feel that they have been able to rise above their transgressor and the transgression itself (Enright, 1991; North, 1987). In line with this reasoning, forgiving under conditions of high intent has the power to unburden victims from the weight of resentment, which in turn, can help victims to overcome past hurts and experience better psychological outcomes.

In summary, the discussions above highlight that while victims may be willing to forgive their transgressor under varying conditions of intent, studies have rarely addressed the outcomes of doing so.

1.6 The Present Study

The extant literature has emphasised the positive effects of forgiveness on psychological wellbeing. In particular, forgiving has been linked to lower levels of depression, anxiety, stress, anger and higher self-esteem (Toussaint & Webb, 2005). Researchers and theorists have further sought to understand the process by which forgiveness can lead to better outcomes. Specifically, theoretical models have suggested that forgiveness is associated with more positive psychological outcomes because it reduces rumination (Worthington et al., 2001). However, empirical evidence supporting such a theory remain sparse. Therefore, the present study aimed to systematically test the process by which forgiving is related to psychological outcomes. Following from this, it was hypothesised that the relationship between forgiveness and psychological outcomes would be mediated by rumination (see Figure 1). More specifically, it was hypothesised that higher levels of forgiveness would be associated with lower levels of rumination, and, consequently, lower levels of depression, anxiety, stress, state anger and higher levels of self-esteem.

Additionally, it is proposed that this relationship is potentially influenced by perceived transgressor intent. Perceptions of transgressor intent play an important role in understanding victims' willingness to forgive. In particular, intent has been shown to negatively predict forgiveness, suggesting that victims are more likely to forgive their transgressors when they did not mean to hurt them (Fehr et al., 2010). However, as discussed above, there are many occasions where victims forgive a transgressor who intended to hurt them, suggesting that forgiveness can occur at both low and high levels of perceived transgressor intent. As such, the present study sought to investigate the outcomes of forgiving under varying conditions of intent. In doing so, it is hoped that the nuances of the relationship between forgiveness and psychological outcomes and, in particular, the influence of intent on this relation can be better understood. Therefore, a secondary aim of the present study was to

examine the moderating effect of intent on the relationship between forgiveness and psychological outcomes through rumination (see Figure 1). However, based on the lack of existing literature in this area and the discussions above, the analyses with regard to intent were exploratory in nature.

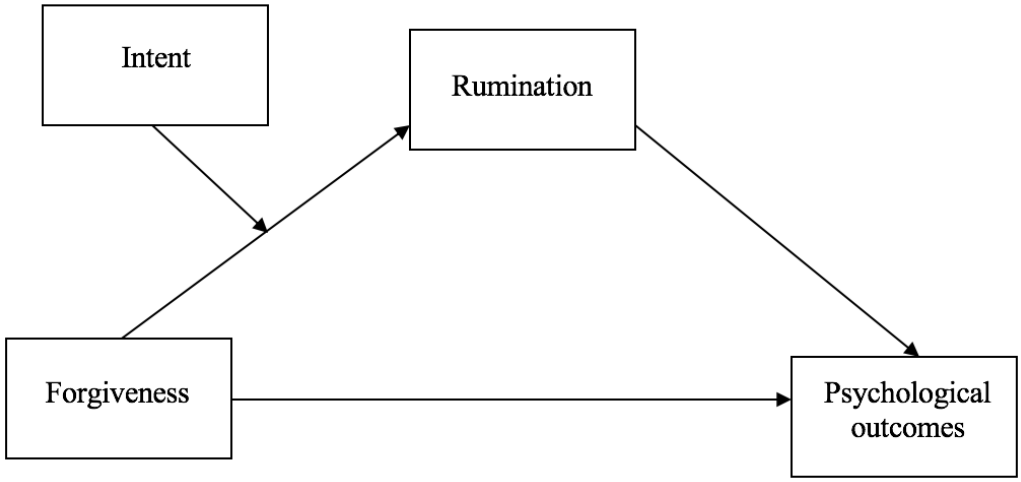

Figure 1. The proposed moderated mediation model.

CHAPTER 2: METHOD

2.1 Participants

An a priori power analysis was conducted using G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). For a regression analysis of up to 6 predictors (including covariates) based on an alpha of .05, a small to medium effect size and power of .80, a sample size of 177 was determined to be sufficient for the study. Given that an online survey methodology is prone to some frivolous responding, it was anticipated that some data would not be valid. Therefore, the stopping point for data collection was determined to be at the end of semester one, with the aim of reaching a minimum of 177 participants.

First year Psychology students signed up for the study via the University of Adelaide Research Participation System and received course credit for their participation. Additionally, members from the general population were recruited via email and snowball sampling. A total of 221 responses were collected. Of this, 47 participants exited the survey before completing any of the measures and two participants did not complete the outcome measures. These participants were excluded from the study. Additionally, one participant was excluded due to rote and frivolous responding. Thus, the final sample comprised of 171 participants (118 females, 50 males, one transgender, two undisclosed). Within this, 102 were first year Psychology students from the University of Adelaide and 69 were members from the general population[1]. Participants ranged in age from 18 – 64 years (M = 26.57, SD = 10.51). The majority of participants were from Australia (N = 116), with remaining participants from Asia (N = 28), Europe (N = 12) and other (N = 13). Two participants did not disclose their nationality.

2.2 Procedure

The study was conducted online via SurveyMonkey. Prior to commencing the survey participants read an information sheet and were asked to provide informed consent. As a way

of personalising the survey, participants wrote the first name of the person who hurt them in a text box and this person's name would appear thereafter, where applicable. It was specified that this person was required to be someone with whom the participant was still in contact with. Next, participants described an instance where this person hurt them quite significantly and how it made them feel. They were further asked to characterise the nature of their relationship (e.g., romantic partner) and provide an approximation of how long ago the hurtful event occurred. Following this, participants responded to questions on intent, forgiveness, rumination and outcome and background measures. At the end of the survey, participants were asked for demographic information. The survey took approximately 15 minutes to complete.

2.3 Materials

2.3.1 Predictor variables. *Interpersonal forgiveness* was measured using the 18-item Transgression Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998). The TRIM is a self-report measure, consisting of three subscales including revenge (e.g., "I'll make him/her pay"), avoidance (e.g., "I keep as much distance between us as possible") and benevolence (e.g., "Despite what he/she did, I want us to have a positive relationship again"). Items were rated on a 5-point Likert-type scale (where 1 = strongly disagree and 5 = strongly agree). The revenge and avoidance items were reverse-scored. The present study conceptualised forgiveness as the process of reducing one's negative motivations (e.g. revenge and avoidance) and restoring one's positive, benevolent motivations toward a transgressor. As such, the three subscales were combined to form a single measure of forgiveness in line with McCullough and colleagues (2010). Additionally, each subscale was equally weighted to avoid giving undue influence to those with a greater number of items. A total mean score was calculated, with higher scores corresponding to higher levels of interpersonal forgiveness. The TRIM is a widely used measure of forgiveness and has strong

and consistent evidence supporting its construct validity (Worthington et al., 2015). Internal reliability was high (α = .93).

Intrapersonal forgiveness was measured by combining the six-item Decision to Forgive Scale (DFS; Davis et al., 2015) and the eight-item Emotional Forgiveness Scale (EFS; Worthington, Hook, Utsey, Williams, & Neill, 2007). The DFS included items such as "I have made up my mind to forgive him/her", and the EFS included items such as "I no longer feel upset when I think of him/her". Items were rated on a 5-point Likert-style scale (1 = strongly disagree, 5 = strongly agree). The following items on the EFS were reverse-scored: "I'm bitter about what he/she did to me", "I'm mad about what happened" and "I resent what he/she did to me". Scores were averaged, with higher scores representing greater intrapersonal forgiveness (α = .89). The DFS and EFS have demonstrated reliability and construct validity (Davis et al., 2015).

Intent was measured using nine items (Strelan, Gollwitzer, & Van Proojien, in press), rated on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree; α = .92). Items included "I think that his/her behaviour was deliberate" and "I think that he/she meant to hurt me". To score, the mean of all items was taken, with higher scores indicating greater intent.

2.3.2 Mediator variable. *Rumination* was measured using seven items evaluating intrusive thoughts from the Impact of Events Scale (IES; Blascovich & Tomaka, 1991). Items included "I have waves of strong feelings about it" and "pictures of it pop into my mind". Additionally, the following item was included, "I find myself playing the offense over and over in my mind", based on McCullough, Bono and Root (2007). Items were rated on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). A mean was taken of ratings, with higher scores indicating greater levels of rumination. Although the IES is typically used in predicting trauma related symptoms, it has also been linked to indices of

rumination (Smith & Alloy, 2009), suggesting that it is appropriate measure for the present study. Internal validity was high ($\alpha = .95$).

2.3.3 Outcome variables. *Depression*, *anxiety* and *stress* were measured using the Depression Anxiety Stress Scales (DASS-21; Lovibond & Lovibond, 1995; $\alpha = .94$). The measure consisted of three subscales, each containing seven items measuring depressive symptoms (e.g., "I am unable to feel enthusiastic about anything"; $\alpha = .89$), anxiety (e.g., "I am close to panic"; $\alpha = .84$) and stress (e.g., "I find myself getting agitated"; $\alpha = .84$). The instructions for the DASS-21 were slightly modified, with participants asked to think about what their transgressor did to them before responding on the frequency with which they experienced each item (where 1 = not at all and 4 = most of the time). Means were calculated for each subscale, with higher scores indicating greater levels of depression, anxiety and stress. The subscales of the DASS-21 have demonstrated construct and concurrent validity (Antony, Bieling, Cox, Enns, & Swinson, 1998; Henry & Crawford, 2005).

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1989; $\alpha = .90$). The items were rated on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The following items were reverse-scored: "at times I think I am no good at all", "I feel I do not have much to be proud of", "I feel useless at times", "I wish I could have more respect for myself" and "all in all, I am inclined to feel that I am a failure". Ratings were averaged, with higher scores corresponding to higher levels of self-esteem. The RSES is the most widely used measure of self-esteem, with good test-retest reliability and convergent and discriminant validity (Blascovich & Tomaka, 1991).

State anger was measured using nine items from the state anger subscale of the State Trait Anger Expression Inventory (Spielberger, Sydeman, Owen, & Marsh, 1999; $\alpha = .95$). Items included "I feel mad" and "I feel like yelling at someone". Participants rated the extent to which they had experienced each of the items on a 7-point Likert-type scale (1 = strongly

agree, 7 = strongly disagree). The mean was calculated across all items, with higher scores representing higher levels of state anger.

2.3.4 Background variables. Consistent with previous studies of forgiveness, which have employed a recall design (e.g. McCullough et al., 1998), additional information relating to the transgression itself was collected, primarily for descriptive purposes, but also to control for their potential influence on relations under investigation. Specifically, relationship quality, transgression severity and reparative effort have all been shown to significantly influence the relation between forgiveness and wellbeing (Fehr et al., 2010; Lawler et al., 2005; Strelan et al., 2016).

Relationship quality was measured with items from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998; $\alpha = .93$). An example item included "our relationship makes me happy". All items were rated using a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The following items were reverse-scored: "I would not feel very upset if our relationship were to end", "I prefer to spend time with other people", "If I didn't see him/her, I would do fine" and "My needs could easily be fulfilled by someone else". Mean scores were calculated, with higher scores denoting greater relationship quality.

Transgression severity was measured using three items ("what he/she did to me was hurtful", "the event is still painful to me" and "compared to other hurtful events in my life, this was the most hurtful"; $\alpha = .55$) on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree).

Reparative effort was measured with three items: "he/she was remorseful", "he/she made amends" and "he/she apologised for what he/she did" ($\alpha = .80$). Participants rated these items on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree).

2.4 Ethical Considerations

Ethics approval was obtained through the University of Adelaide's Human Research Ethics Subcommittee. Participants were reassured that responses provided would remain anonymous and confidential. Researcher identification numbers were used to grant course credit to first year Psychology students, thus ensuring anonymity of student identities. Given the nature of the study, details of Lifeline and advice to seek medical assistance were provided at the end of the survey, in the event that participants experienced any distress as a result of their participation in the study.

CHAPTER 3: RESULTS

3.1 Descriptive Statistics of Transgressions Recalled

Participants recalled transgressions committed by romantic partners (36%), friends (31%), family members (25%), work colleagues (5%) and "other" (3%). Transgressions described involved abuse (physical, psychological and verbal), infidelity, dishonesty, rejection and ostracism. On average transgressions occurred 2.61 years earlier (SD = 4.39) and were highly painful compared to other hurtful events (M = 5.09, SD = 1.22). Participants indicated that, generally, their transgressors did not make reparative efforts (M = 3.24, SD = 1.79). Relationship quality was typically rated as below average (M = 3.63, SD = 1.42).

Means and standard deviations are reported in Table 1 for variables analysed. One sample t-tests indicated that participants' ratings of interpersonal and intrapersonal forgiveness were significantly higher than the midpoint of their respective scales, as were ratings for transgression severity and self-esteem (all with $ps < .001$). Ratings for rumination ($p < .001$), state anger ($p < .001$), relationship quality ($p = .001$) and reparative effort ($p < .001$) were significantly lower than the midpoint of their respective scales. Participants tended to rate their symptoms of depression, anxiety and stress as having occurred at least more than "not at all" ($p < .001$). Ratings of intent did not differ significantly from the scale's midpoint ($p = .108$).

Table 1

Means and standard deviations of main variables analysed

	M	*SD*
1. Interpersonal forgiveness	3.59	0.81
2. Intrapersonal forgiveness	3.23	0.78
3. Intent	4.19	1.54
4. Rumination	3.49	1.60
5. Depression	1.59	0.64
6. Anxiety	1.44	0.53
7. Stress	1.77	0.68
8. State anger	2.90	1.63
9. Self-esteem	4.83	1.38
10. Relationship quality	3.63	1.42
11. Transgression severity	5.09	1.22
12. Reparative effort	3.24	1.79

Note. $N = 171$; *M* = mean; *SD* = standard deviation.

3.2 Bivariate Relations Between Variables

The bivariate correlations between predictor, mediator, outcome and background variables are summarised in Table 2. First, interpersonal and intrapersonal forgiveness were both negatively related to rumination, depression, anxiety, stress and state anger. Intrapersonal forgiveness was also positively associated with self-esteem. Second, intent was negatively associated with both interpersonal and intrapersonal forgiveness, and positively associated with state anger. Third, rumination was positively associated with the outcome variables of depression, anxiety, stress and state anger, and negatively associated with self-esteem.

Table 2 also includes bivariate correlations between the background variables and the predictor and mediator variables. Relationship quality was positively associated with interpersonal and intrapersonal forgiveness, as well as intent. Transgression severity was negatively associated with interpersonal and intrapersonal forgiveness, and positively related to intent, rumination, depression, anxiety, stress and state anger. Reparative effort was positively associated with the two forgiveness variables and negatively associated with intent.

3.3 Testing of the Moderated Mediation Models

In the present study it was hypothesised that the relationship between forgiveness and psychological outcomes would be mediated by rumination. Additionally, the study also aimed to explore the moderating effect of intent on this relationship. To examine this moderated mediation relationship, Hayes' (2013) PROCESS macro (version 2.16.2; model 7; 5000 iterations; bias corrected; interaction variables mean-centered) was employed, with the predictor variable being one of interpersonal forgiveness or intrapersonal forgiveness, rumination as the mediator, and intent as the moderator. For each of the predictors, the model was run five times, once for each of the outcome variables (depression, anxiety, stress, state anger and self-esteem). The background variables were included as covariates to control for their potential influence on key relations, along with gender to account for the disparity between the number of males and females who completed the survey[2].

In the analyses below, the results for the moderation component of each analysis will be reported first, followed by the results of the moderated mediation relationship.

Table 2

Correlations between forgiveness, intent, rumination, and outcome and background variables

	1	2	3	4	5	6	7	8	9	10	11
1. Interpersonal forgiveness	1										
2. Intrapersonal forgiveness	.82***	1									
3. Intent	-.40***	-.37***	1								
4. Rumination	-.25**	-.26**	.04	1							
5. Depression	-.16*	-.15*	.06	.56***	1						
6. Anxiety	-.21**	-.18*	.10	.50**	.76***	1					
7. Stress	-.19*	-.19*	.07	.55***	.76***	.78***	1				
8. State anger	-.44***	-.51***	.21**	.53***	.41***	.42***	.47***	1			
9. Self-esteem	.14	.15*	.01	-.36***	-.60***	-.46***	-.43***	-.27***	1		
10. Relationship quality	.67***	.57**	-.33***	.09	.11	.10	.04	-.07	-.08	1	
11. Transgression severity	-.21**	-.21**	.23**	.39***	.23**	.15*	.17*	.17*	-.03	-.10	1
12. Reparative effort	.41***	.44***	-.40***	-.02	-.04	-.09	-.06	-.15	.09	.44***	-.13

Note. $N = 171$; *** $p < .001$; ** $p < .01$; * $p < .05$

3.4 The Effects of Interpersonal Forgiveness on Psychological Outcomes via Rumination

The interaction of interpersonal forgiveness and intent on rumination. In relation to the direct effects, interpersonal forgiveness was associated with rumination (B = -1.090, p < .001, $CI_{95\%}$ = [-1.458, -0.721]). Intent was not associated with rumination (B = -0.119, p = .128, $CI_{95\%}$ = [-0.272, 0.344]). The interaction effect of interpersonal forgiveness x intent was significant[3] (B = 0.185, p = .037, $CI_{95\%}$ = [0.011, 0.359]; see Figure 2). Simple slopes analysis indicated that the association between interpersonal forgiveness and rumination was stronger at low intent, that is, 1 SD below the mean (β = -0.693, p < .001), compared to high intent, that is, 1 SD above the mean (β = -0.406, p < .001). The effect of intent on rumination was significant when interpersonal forgiveness was low (β = -0.257, p = .015) but not when it was high (β = 0.028, p = .774), indicating that those who responded with low levels of interpersonal forgiveness, despite perceiving that their transgressor did not intend to hurt them, experienced greater rumination.

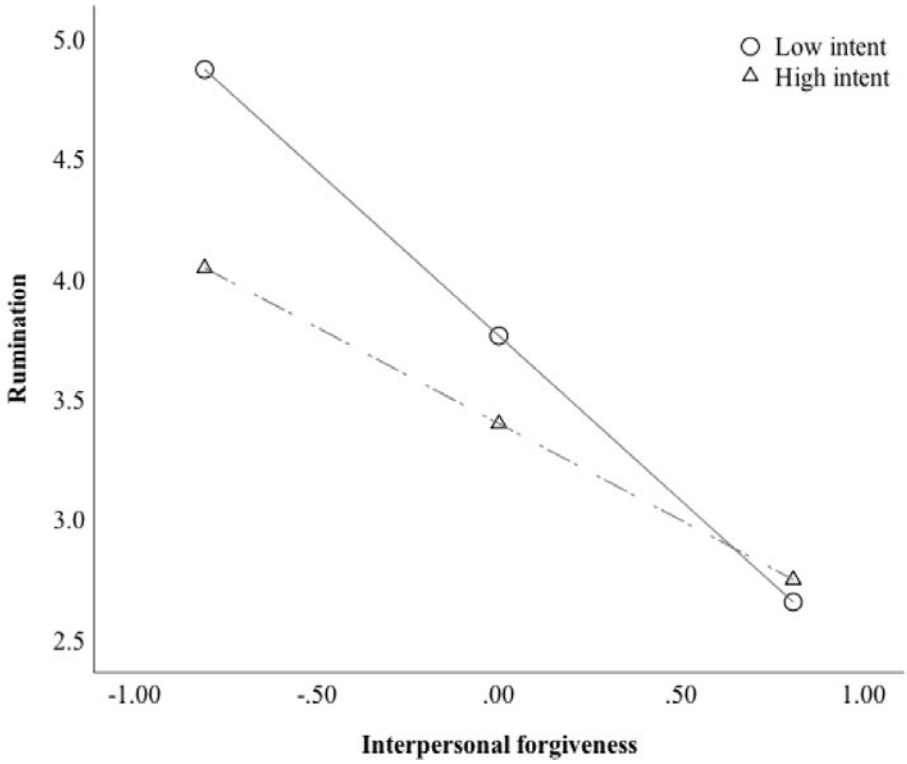

Figure 2. Interaction between interpersonal forgiveness and rumination for low and high intent.

The results of the moderated mediation analyses (summarised in Table 3) will now be reported.

Depression. As shown in Table 3 the direct effect of interpersonal forgiveness on depression was not significant. Rumination was positively associated with depression. With regard to the conditional indirect effects, the extent to which interpersonal forgiveness exerted an indirect effect on depression through rumination occurred at levels of low and high intent. The direction of the relation was negative, suggesting that interpersonal forgiveness reduced rumination, which, subsequently, reduced depression. The index of moderated mediation – an indicator of the extent to which indirect effects are equivalent at different levels of the moderator (in this case, intent) – confirmed that these effects were significantly different (i.e. the confidence intervals for the index does not include zero).

Anxiety. Table 3 shows that the direct effect of interpersonal forgiveness on anxiety was negative and significant. Rumination was positively associated with anxiety. In relation to conditional indirect effects, interpersonal forgiveness exerted an indirect effect on anxiety through rumination at levels of low and high intent. This indirect effect was negative, suggesting that interpersonal forgiveness reduced rumination, which, subsequently, reduced anxiety. The index of moderated mediation was significant.

Stress. Table 3 shows that the direct effect of interpersonal forgiveness on stress was non-significant. Rumination was positively associated with stress. For the conditional indirect effects, once again, interpersonal forgiveness exerted an indirect negative effect through rumination at both low and high intent. However, the index of moderated mediation was not significant, indicating that subsequent relations between interpersonal forgiveness and stress through rumination occurred irrespective of low or high intent.

State anger. As shown in Table 3 the direct effect of interpersonal forgiveness on state anger was negative and significant. Rumination was positively related to state anger. Conditional indirect effects indicated that interpersonal forgiveness exerted an indirect negative effect through rumination at both low and high intent. Accordingly, the index of moderated mediation was significant.

Self-esteem. Finally, Table 3 shows that the direct effect of interpersonal forgiveness on self-esteem was non-significant. Rumination was negatively associated with self-esteem. Examining the conditional indirect effect, the extent to which interpersonal forgiveness exerted a positive indirect effect through rumination occurred at levels of low and high intent. The direction of this relationship suggested that interpersonal forgiveness reduced rumination, which, subsequently, increased self-esteem. The index of moderated mediation was significant.

Summary of results for interpersonal forgiveness. The results indicated that, to the extent that interpersonal forgiveness reduced rumination, individuals who forgave interpersonally experienced less depression, anxiety, stress, state anger, and increased self-esteem. This relationship was moderated by perceived transgressor intent and was stronger at low levels of intent, compared to high levels of intent. In addition, this effect occurred when interpersonal forgiveness was low but not when it was high, indicating that at low levels of interpersonal forgiveness, the more that victims perceived that their offender did not intend to cause harm, the more they ruminated, and, subsequently, the higher their levels of depression, anxiety, anger, and the lower their self-esteem.

Table 3

Summary of moderated mediation models for interpersonal forgiveness

	Depression	Anxiety	Stress	State anger	Self-esteem
	B	*B*	*B*	*B*	*B*
	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]
Direct effects of interpersonal forgiveness on dependent variables					
Interp. forg.	-0.0941 [-0.246, 0.058]	-0.173** [-0.300, -0.045]	-0.078 [-0.239, 0.082]	-1.002*** [-1.363, -0.642]	0.289 [-0.073, 0.650]
Effect of rumination on dependent variables					
Rumination	0.200*** [0.140, 0.260]	0.141*** [0.090, 0.192]	0.227*** [0.163, 0.291]	0.419*** [0.275, 0.562]	-0.302*** [-0.446, -0.158]
Conditional indirect effects of victim response through rumination by levels of intent					
Low intent	-0.275 [-0.426, -0.152]	-0.194 [-0.312, -0.101]	-0.312 [-0.475, -0.178]	-0.576 [-0.891, -0.305]	0.415 [0.207, 0.674]
High intent	-0.161 [-0.288, -0.084]	-0.113 [-0.210, -0.056]	-0.183 [-0.314, -0.101]	-0.337 [-0.564, -0.183]	0.243 [0.115, 0.446]
Index of moderated mediation					
Rumination	0.037 [.001, 0.080]	0.026 [0.002, 0.058]	0.042 [-0.001, 0.087]	0.078 [0.002, 0.175]	-0.056 [-0.125, -0.005]

**$p < .01$; ***$p < .001$

3.5 The Effects of Intrapersonal Forgiveness on Psychological Outcomes via Rumination

The interaction of intrapersonal forgiveness and intent on rumination. In terms of direct effects, intrapersonal forgiveness was significantly negatively related to rumination (B = -0.890, $p < .001$, $CI_{95\%}$ = [-1.249, -0.530]). The effect of intent on rumination was non-significant (B = -0.082, p = .299, $CI_{95\%}$ = [-0.238, 0.074]). Notably there was no interaction effect (B = 0.124, p = .169, $CI_{95\%}$ = [-0.053, 0.301]). Thus, there was no possibility of finding moderated mediation effects, confirmed by the non-significant indices of moderated mediation for depression (B = 0.026, $CI_{95\%}$ = [-0.014, 0.067]), anxiety (B = 0.020, $CI_{95\%}$ = [-0.010, 0.054]), stress (B = 0.029, $CI_{95\%}$ = [-0.015, 0.075]), state anger (B = 0.051, $CI_{95\%}$ = [-0.023, 0.136]) and self-esteem (B = -0.039, $CI_{95\%}$ = [-0.105, 0.020]).

As intent did not influence the relation between intrapersonal forgiveness and psychological outcomes through rumination, a straight mediation analysis (model 4 in PROCESS; 5000 iterations; bias corrected; controlling for intent) was conducted to test the direct and indirect effects of intrapersonal forgiveness on each of the outcome variables. These results are reported below (summarised in Table 4).

Depression. The relation between intrapersonal forgiveness and depression was non-significant. Rumination was positively associated with depression. There was a significant indirect effect of intrapersonal forgiveness on depression through rumination in a negative direction. This negative indirect effect suggests that intrapersonal forgiveness decreased rumination, which, subsequently, decreased depression.

Anxiety. Intrapersonal forgiveness was unrelated to anxiety. Rumination was positively related to anxiety. The indirect effect of intrapersonal forgiveness on anxiety through rumination was negative and significant.

Stress. Similar to the above, intrapersonal forgiveness was not related to stress. Rumination was positively related to stress. There was a negative indirect effect of intrapersonal forgiveness on stress through rumination.

State anger. Intrapersonal forgiveness negatively associated with state anger, while rumination positively associated with state anger. The indirect effect of intrapersonal forgiveness on state anger through rumination was significant and negative.

Self-esteem. The association between intrapersonal forgiveness and self-esteem was non-significant. Rumination was negatively associated with self-esteem. Finally, there was a positive indirect effect of intrapersonal forgiveness on self-esteem through rumination.

Summary of results for intrapersonal forgiveness. Although intrapersonal forgiveness was not directly related to any of the outcome variables, with the exception of state anger, there was an indirect effect through rumination. This indicated that the more victims forgave, the less they ruminated, and, subsequently, the lower their levels of depression, anxiety, stress, state anger and the higher their self-esteem. There was no evidence of moderated mediation, that is, relations between intrapersonal forgiveness and psychological outcomes via rumination did not differ significantly across levels of low and high intent.

Table 4

Summary of mediation models for intrapersonal forgiveness

	Depression	Anxiety	Stress	State anger	Self-esteem
	B	*B*	*B*	*B*	*B*
	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]	[$CI_{95\%}$ LL/UL]
Direct effects of intrapersonal forgiveness on dependent variables					
Intra. forg.	-0.027 [-0.173, 0.119]	-0.057 [-0.181, 0.068]	-0.028 [-0.182, 0.126]	-1.084*** [-1.414, -0.754]	0.233 [-0.114, 0.581]
Effect of rumination on dependent variables					
Ruminat.	0.210*** [0.150, 0.269]	0.160*** [0.109, 0.211]	0.235*** [0.172, 0.299]	0.422*** [0.286, 0.558]	-0.312*** [-0.455, -0.170]
Indirect effect of intrapersonal forgiveness through rumination					
	-0.176*** [-0.303, -0.087]	-0.134*** [-0.230, -0.063]	-0.197** [-0.326, -0.099]	-0.353*** [-0.599, -0.182]	0.261** [0.125, 0.462]
	TE = -0.203	*TE* = -0.190	*TE* = -0.225	*TE* = -1.437	*TE* = 0.494

** $p < .01$; *** $p < .001$; *TE* = Total Effect

CHAPTER 4: DISCUSSION

4.1 Summary of Findings

The purpose of the present study was to examine – for the first time – the extent to which rumination explains the process by which forgiving is related to positive or negative psychological outcomes. The findings provided evidence that the relationship between forgiveness and psychological outcomes was mediated by rumination. More specifically, when victims forgave, they ruminated less, and, consequently, experienced better psychological outcomes – in terms of lower reported levels depression, anxiety, stress, state anger, and higher self-esteem.

The study further aimed to explore the moderating effect of perceived transgressor intent on the relation between forgiveness and psychological outcomes through rumination. With respect to this, intent did not appear to significantly affect the psychological outcomes experienced by individuals who displayed forgiving responses. This was observed for both interpersonal and intrapersonal forgiveness. Interestingly however, there was a moderated mediation effect observed at low levels of interpersonal forgiveness. With respect to this, the findings suggested that, compared to conditions of high intent, when victims perceived that their transgressor did not intend to hurt them, less forgiving responses were related with greater rumination, and, subsequently, higher levels of depression, anxiety, state anger and reduced self-esteem.

Overall, the findings suggested that irrespective of whether victims perceived their transgressor as meaning to hurt them or not, forgiving appeared to reduce rumination and promote better psychological health.

4.2 The Effects of Forgiving on Psychological Wellbeing

Overwhelmingly, researchers have suggested that forgiveness is strongly associated with positive psychological outcomes. Consistent with this literature (e.g. Akhtar & Barlow,

2018), the current study found that forgiving was associated with reduced anxiety and state anger. However, contrary to the existing literature espousing the benefits of forgiveness (e.g. McCullough, 2000; Messay et al., 2012), forgiving was not related to depression, stress or self-esteem. Such findings provide evidence that the forgiveness-health connection is likely highly nuanced. In particular, the links between forgiveness and psychological wellbeing may function through a variety of mechanisms, which, in combination, work to promote positive psychological outcomes (Griffin et al., 2015).

4.2.1 How forgiveness benefits victims. Theoretical models have proposed that rumination mediates the relationship between forgiveness and psychological wellbeing (Worthington et al., 2001). In support of this, researchers have cited the inverse relation between forgiveness and rumination, and likewise, the positive association between rumination and a number of psychological disturbances (Nolen-Hoeksema et al., 1997). Consistent with previous findings, the current study found that forgiving was negatively associated with rumination, and additionally, rumination was positively related with depression, anxiety, stress, state anger, and negatively related to self-esteem.

Further, the present study extends on previous research and is the first to provide empirical evidence supporting the mediating role of rumination in the context of situational forgiveness. The findings were consistent with the few studies investigating this proposition with respect to trait forgiveness (Berry et al., 2005; Ysseldyk et al., 2007), suggesting that beyond personal traits, forgiving within specific situations or transgressions can also significantly reduce rumination and promote better psychological outcomes. Prior research has found that rumination can activate a network of negative emotions and cognitions, enhancing the probability of exacerbating and maintaining depressed moods (Harrington & Blankenship, 2002). Forgiveness on the other hand involves letting go of the negative feelings of resentment and bitterness, and replacing these with strong, positive ones

(Worthington & Scherer, 2004). As such, it has been suggested that forgiving may promote psychological health through its ability to reduce ruminative tendencies (Ysseldyk et al., 2007). The findings of the present study support this, suggesting that, to the extent that forgiving enabled victims to overcome the negative emotions associated with rumination, forgiving was related to better psychological outcomes.

4.3 Does Perceived Transgressor Intent Matter?

The research examining intent and forgiveness has largely focused on the role of intent in predicting forgiveness. However, the present study proposed that intent may also influence the outcomes of forgiving. Although the literature in this area is sparse, one study has alluded to the proposition that forgiving under conditions of high intent is related to adverse psychological outcomes for victims (Gabriels & Strelan, 2018). Specifically, the study found that victims who forgave an exploitative partner experienced greater distress and negative affective outcomes. While the study did not address intentionality directly, forgiving within an exploitative situation is akin to a condition of high intent. Similarly, the literature on the potential deleterious consequences of forgiving has suggested that when transgressors fail to signal to victims that they are safe and valued – as is the case when a hurt is intentionally committed – forgiving can negatively impact a victim's sense of self-respect and self-concept (Luchies et al., 2010). Contrary to the findings in these studies, the present study did not find evidence that victims who forgave a transgressor who intended to hurt them experienced negative psychological outcomes. Rather, it was found that irrespective of perceived intent, when victims forgave, they experienced less rumination, and, consequently, reported lower levels of depression, anxiety, stress, state anger and higher self-esteem.

It has been suggested that when victims forgive, they positively reframe their cognitive and emotional responses toward the transgression and their transgressor (Akhtar & Barlow, 2018; McCullough et al., 1997). However, it is stressed that while forgiveness can

encourage compassion and empathy, it is distinct from condoning, and as such, does not neglect the injustice of an offense. Therefore, forgivers remain attuned to the injustices committed against them, however, by forgiving, they are able to release themselves from accountability for the actions of their wrongdoer (Enright & Fitzgibbons, 2000). That is, whether or not their transgressor feels guilt or shame for their actions, no longer has a bearing on the victim. As such, in forgiving, victims are able to regain control and restore their sense of self-respect (Worthington, 2001). The present study – which found that even when victims perceived that their transgressors intended to hurt them, forgiving was related to positive psychological outcomes – provides support for this line of reasoning. The findings suggest that irrespective of their transgressor's intentions, forgiveness can unburden victims from the corrosive emotions attached to a transgression and their transgressor, leading to improved emotional regulation and thus, better psychological outcomes.

An additional finding from the present study indicated that, compared to conditions of high intent, when victims perceived that their transgressor did not mean to hurt them but were less willing to forgive interpersonally, they tended to ruminate more and this adversely affected their psychological wellbeing. Interpersonal forgiveness is understood to consist of components of revenge, avoidance and benevolence. As such, less forgiving responses are synonymous with higher motivations toward revenge and avoidance, and lower motivations toward benevolence. Analysis conducted within the present study indicated that it was higher motivations toward revenge, which appeared to account for the increase in rumination and corresponding negative psychological outcomes observed at low levels of forgiveness. These results are consistent with previous research, which has found that vengeance is typically associated with increased rumination and poor psychological outcomes (McCullough, Bellah, Kilpatrick, & Johnson, 2001). Further, motivations for revenge are also conceptually relevant to definitions of unforgiveness (Worthington et al., 2015). Taken from this perspective, the

findings of the present study are consistent with research showing that unforgiveness is positively related to rumination and psychological disturbances, such as depression and anxiety (Stackhouse et al., 2016; Worthington et al., 2007). Therefore, insofar that it may share characteristics with unforgiveness and vengeance, less forgiving responses can arouse feelings of guilt and shame, which can trigger rumination and lead to negative psychological outcomes.

Overall, perceived transgressor intent appeared to only have an effect on the psychological outcomes of individuals who exhibited low levels of forgiveness. On the other hand, individuals who were highly forgiving experienced the psychological benefits of forgiving regardless of whether they perceived their transgressor as meaning to hurt them or not, suggesting that the effect of intent on psychological outcomes was not significant with respect to forgiving responses.

4.4 Strengths

The design of the present study sought to maximise ecological validity. As participants were asked to recall actual transgressions, the study was able to draw on actual responses and experiences, thus, strengthening the applicability of the findings to real-world settings. Although recall designs can lend themselves to being influenced by extraneous variables, a further strength of the study was that those known to significantly influence the key relations under investigation were controlled for. In addition, while most studies within the literature on forgiveness have focused on the direct correlational relationships linking it to psychological outcomes, the present study systematically tested the underlying process by which forgiveness is related to better psychological outcomes. Therefore, the study was able to provide empirical evidence to answer the question of how forgiving can lead to positive mental health outcomes.

4.5 Limitations

Despite its strengths, the present study was not without limitations. First, self-report measures are prone to social desirability and other biases. In particular, withholding forgiveness is generally viewed negatively within society (Jones Ross, Boon, & Stackhouse, 2018). Consequently, social norms may have encouraged participants to report elevated levels of forgiveness, believing that it is the socially appropriate and ideal response to a transgression. In addition, as participants were asked to recall a transgression committed by someone with whom they were still in contact with, it is possible that they responded in a way which justified their decision to maintain a relationship with their transgressor. For example, participants may have rationalised that their transgressor did not mean to hurt them, or that they weren't emotionally affected by the event. Responding in this manner can be explained by the phenomenon of motivated remembering, which suggests that people are motivated to remember, or misremember, past events in a way that preserves their self-esteem (Marsh & Roediger, 2013). Accordingly, the use of self-report measures may have limited the validity of data due to social desirability and motivated remembering.

Second, the correlational nature of the study does not allow one to establish the extent to which forgiveness and perceived offender intent caused the outcomes reported. Further, correlational studies do not enable the direction of the interactions to be determined. For example, while forgiving may have led victims to experience better psychological outcomes, it is also possible that psychological wellbeing preceded participants' decisions to forgive their transgressor.

4.6 Practical Implications

Although there were limitations in the present study, the findings provided support for the well-established benefits of forgiveness. In addition, the present study went one step further to understand the underlying process of how forgiving may be related to better

psychological outcomes. Knowing how forgiveness contributes to psychological wellbeing can help to guide victims, and practitioners alike, to instigate forgiving responses which focus on the underlying emotional components and in particular, those which affect rumination. In doing so, victims can be better equipped to experience the benefits of forgiveness.

Additionally, recognising the circumstances under which forgiving may likely be associated with personal benefits, with those which may be deleterious, also has significant implications for victims. By exploring the potential moderating effect of perceived transgressor intent on the forgiveness and psychological health relation, the present study provided data important to understanding questions of when forgiving can be considered a safe response. The findings suggested that perceived transgressor intent did not affect the outcomes of forgiving. As such, forgiving may be one way in which victims can overcome past emotional hurts, even when they believe their transgressor intended to hurt them.

For those who are reluctant to forgive however, it appeared that under certain circumstances, doing so can detrimentally affect one's own psychological wellbeing. Findings from the present study suggested that when victims were less forgiving, they were more prone to rumination and reported poorer psychological outcomes, especially when they perceived that their transgressor did not mean to cause harm. For victims, understanding when withholding forgiveness may elicit negative psychological outcomes, in addition to the boundary conditions under which forgiveness may be beneficial, can help to subside some of the uncertainties surrounding the decision to forgive or not.

4.7 Future Research Directions

To address the limitations of the present study, future studies may wish to incorporate experimental and longitudinal designs. In particular, an experimental design which employs a hypothetical scenario would enable transgression-related variables to be standardised across participants, thus limiting the influence of extraneous variables on observed relations.

Additionally, such a design would limit any bias attributable to motivated remembering, typically present with a recall-type design. Lastly, an experimental design would allow for variables (e.g. intent) to be manipulated, therefore enabling inferences of causation to be made. In addition to experimental designs, future studies may also wish to employ longitudinal designs to further confirm causation. Such designs would enable researchers to establish that forgiveness and perceived transgressor intent at one time point causes the psychological outcomes experienced at a second time point.

The finding in the present study that intent did not significantly affect the psychological outcomes experienced by individuals who forgave, suggests that some other mechanism may better explain why forgiving can have both positive and negative effects on psychological wellbeing. With regard to this, the degree of severity of a transgression and the extent to which a transgressor indicates that they have made reparative effort following a transgression can also potentially affect victims' emotional experiences. Therefore, future research may wish to explore these, or other potential moderators, in understanding the boundary conditions of when forgiving may be beneficial to victims.

4.8 Conclusions

The findings from the present study make important contributions to the understanding of forgiveness by providing empirical evidence to support the process by which forgiving can contribute to psychological outcomes, and is a valuable starting point in answering the question of when forgiving can lead to positive or negative psychological outcomes. The main finding of the study indicated that rumination mediated the relation between forgiveness and psychological wellbeing, suggesting that forgiving benefits victims because it reduces rumination. Further, the study found that those who displayed highly forgiving responses appeared to experience the benefits of forgiveness irrespective of perceived transgressor intent, suggesting that even at high levels of intent, the process of

forgiving was positive for victims. However, individuals who were less willing to forgive, especially after judging that their transgressor did not mean to hurt them, experienced poor psychological outcomes. These findings have meaningful implications for those seeking clarity to the questions of how and when forgiveness may be beneficial to victim wellbeing. However, it has also been shown that there are limits to when forgiveness may positively impact victims. As such, understanding the variables influencing the outcomes of forgiving has important practical applications. Future research should therefore seek to explore other potential moderators in order to better understand these limits.

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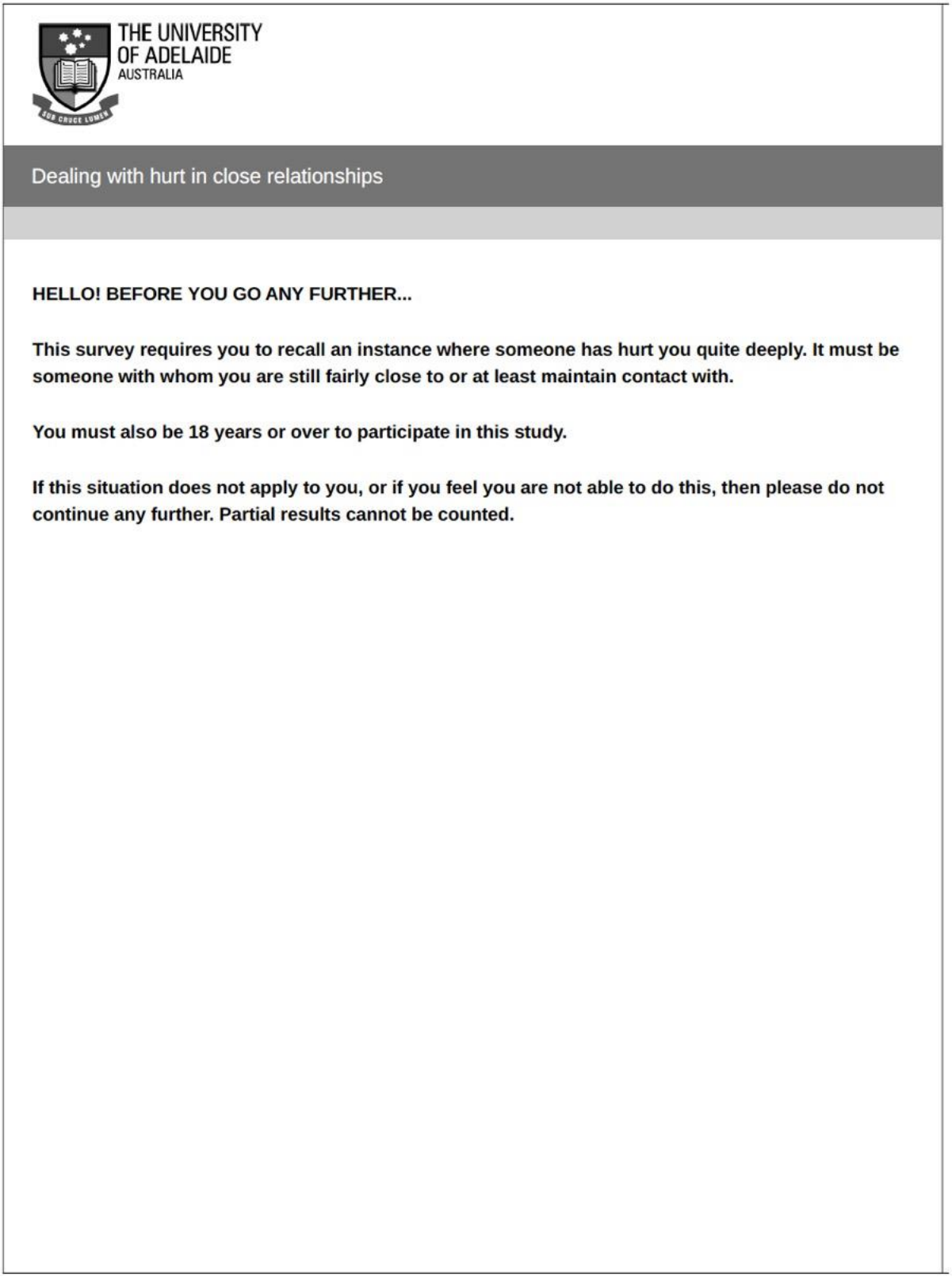
Footnotes

[1] Psychology students and participants from the general population were additionally analysed separately. Consistent with the overall results, both samples provided evidence that rumination mediated the relationship between forgiveness and psychological outcomes. This was observed for both forgiveness measures with respect to all of the outcome measures. However, moderated mediation was not observed for interpersonal or intrapersonal forgiveness across any of the outcome measures in the sample of Psychology students. In relation to participants sampled from the general population, no interaction effect was found, however, moderated mediation was observed for interpersonal forgiveness for the outcome measures of anxiety and self-esteem.

[2] When covariates were not included in analyses, a non-significant interaction effect (forgiveness x intent) was observed, and, consequently, there was no moderated mediation effect.

[3] Separate analysis of the revenge, avoidance and benevolence subscales indicated that the significant interaction effect of forgiveness x intent on rumination was driven primarily by the revenge subscale. That is, the interaction effect of revenge subscale x intent was significant ($B = 0.313$, $p = .002$, $CI_{95\%} = [0.122, 0.504]$). However, the interaction effect was non-significant for the avoidance ($B = 0.065$, $p = .330$, $CI_{95\%} = [-0.066, 0.196]$) and benevolence ($B = 0.075$, $p = .337$, $CI_{95\%} = [-0.076, 0.226]$) subscales. Following from this, there was no moderated mediation effect when the avoidance and benevolence subscales were analysed separately. The moderated mediation effect for the revenge subscale with relation to depression, anxiety, state anger and self-esteem were consistent with the overall results. Moderated mediation was further significant for the outcome measure of stress ($B = 0.066$, $CI_{95\%} = [0.029, 0.118]$). The results for the conditional indirect effects of forgiveness on outcome measures through rumination were consistent with the overall findings.

Appendix A: Survey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Dealing with hurt in close relationships

HELLO! BEFORE YOU GO ANY FURTHER...

This survey requires you to recall an instance where someone has hurt you quite deeply. It must be someone with whom you are still fairly close to or at least maintain contact with.

You must also be 18 years or over to participate in this study.

If this situation does not apply to you, or if you feel you are not able to do this, then please do not continue any further. Partial results cannot be counted.

Dealing with hurt in close relationships

Welcome! You have been invited to participate in a study about how people deal with being hurt. This study is part of a project run at the University of Adelaide by Van Le, under the supervision of Dr Peter Strelan. It has been approved by the Human Research Ethics Sub-Committee of the University of Adelaide's School of Psychology.

Please note, this survey requires you to recall an instance where someone has hurt you significantly. You'll be asked about your perceptions of the hurtful event, your feelings toward the person who hurt you and questions about your relationship with that person. We'll also ask you for some basic demographic information and give you the opportunity to give us feedback at the end.

The study will take around 15 minutes to complete. Please complete the survey in one go.

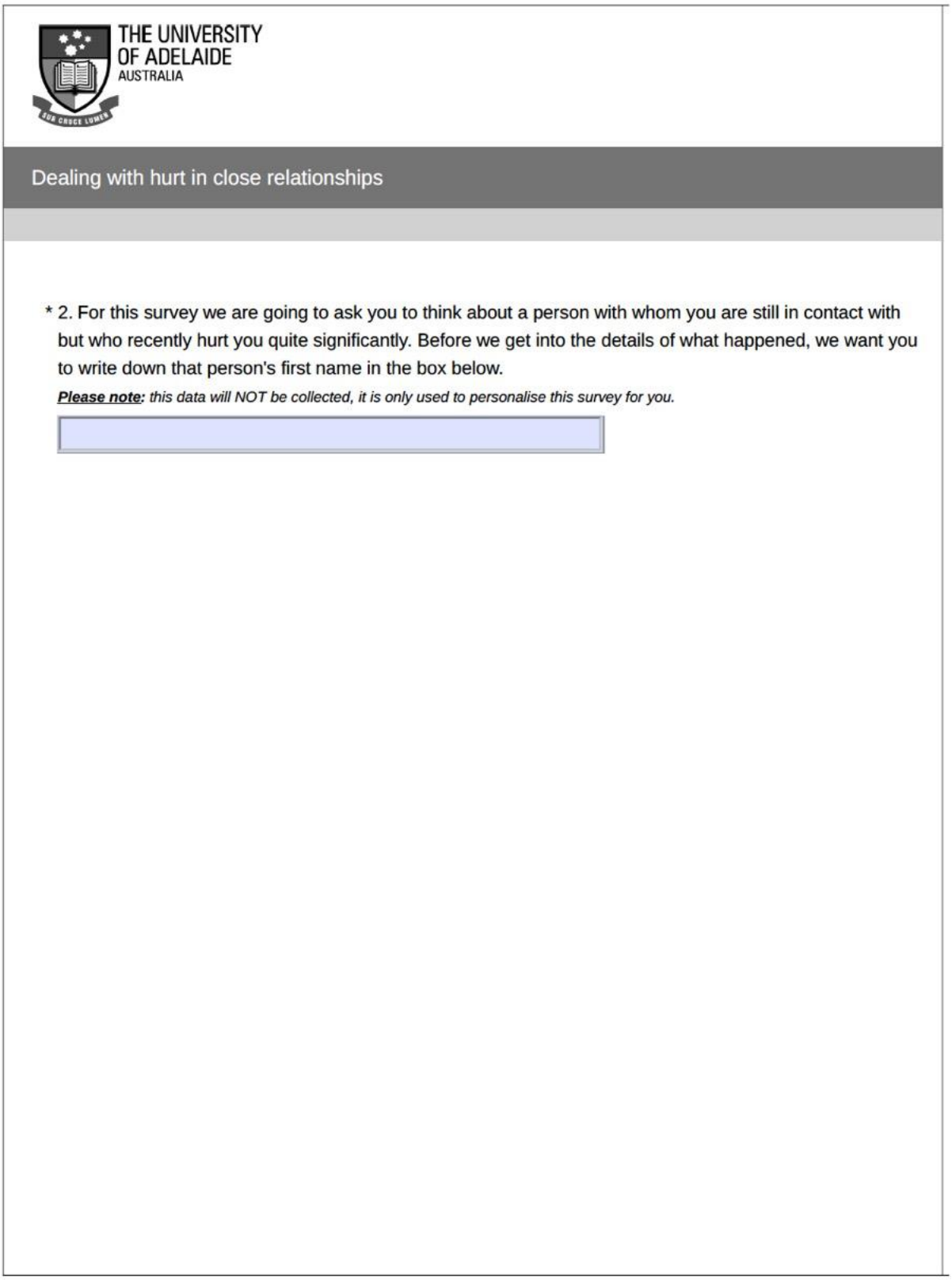
All contents of the study are fully anonymous and your answers are strictly confidential.

By understanding people's experiences after being hurt, we can improve current clinical practices and intervention methods. For this study to contribute to that, it is important that the data obtained is valid. The validity of this data depends on the truthfulness of your answers; any intentional omissions would jeopardise the research at hand. We ask that you please answer the questions as accurately and honestly as possible.

Participation in this study is completely voluntary. You are free to withdraw from the survey at any time.

* 1. Informed Consent - please tick this box before proceeding, if you agree:

☐ I consent to participate in this study.



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Dealing with hurt in close relationships

* 2. For this survey we are going to ask you to think about a person with whom you are still in contact with but who recently hurt you quite significantly. Before we get into the details of what happened, we want you to write down that person's first name in the box below.

Please note: *this data will NOT be collected, it is only used to personalise this survey for you.*

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Dealing with hurt in close relationships

Now, please recall a situation from the recent past in which [Q2] did something that hurt or upset you. Please try to recall the situation as vividly as possible.

Please be open and honest in your responses - the survey is totally anonymous.

* 3. What did [Q2] do to hurt you? How did it make you feel?

* 4. How would you characterise your relationship when this event occurred?

- ○ romantic partner
- ○ friend
- ○ family member
- ○ work colleague
- ○ acquaintance
- ○ other

* 5. How long ago did the hurtful event take place? Please add the amount of time that has passed. You only need to choose ONE box....we're just after an approximation.

Years	
Months	
Days	

Dealing with hurt in close relationships

* 6. In this section, we would like you to think about [Q2] and what he/she did to you.

	Strongly disagree			Neutral			Strongly agree
I think that [Q2]'s behaviour was intentional	○	○	○	○	○	○	○
I think that [Q2]'s behaviour was deliberate	○	○	○	○	○	○	○
I think that [Q2]'s behaviour was wilful	○	○	○	○	○	○	○
I think that [Q2] knew exactly what he/she was doing when he/she did this to me	○	○	○	○	○	○	○
I think that [Q2] acted on purpose	○	○	○	○	○	○	○
I think that [Q2] meant to hurt me	○	○	○	○	○	○	○
I think that [Q2]'s actions were premeditated	○	○	○	○	○	○	○
I think that [Q2] planned to upset me	○	○	○	○	○	○	○
I think that [Q2] made a calculated attempt to upset me	○	○	○	○	○	○	○
[Q2] was remorseful	○	○	○	○	○	○	○
[Q2] made amends	○	○	○	○	○	○	○
[Q2] apologised for what he/she did	○	○	○	○	○	○	○
What [Q2] did was hurtful	○	○	○	○	○	○	○
The event is still painful to me	○	○	○	○	○	○	○
Compared to other hurtful events in my life, this was the most hurtful.	○	○	○	○	○	○	○

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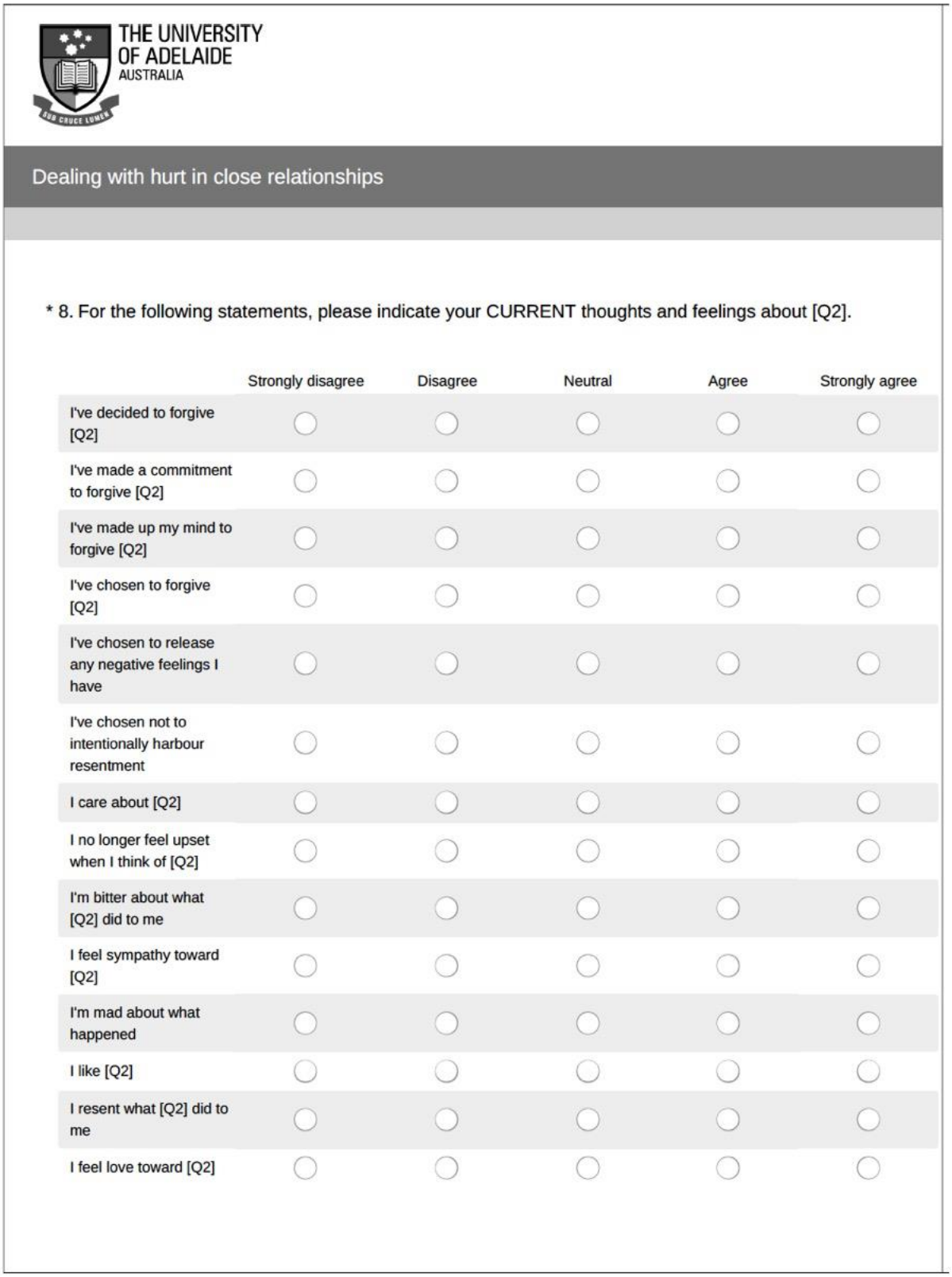
Dealing with hurt in close relationships

* 7. Thinking about what [Q2] did to you, please indicate your CURRENT thoughts and feelings about [Q2].

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I'll make [Q2] pay	○	○	○	○	○
I wish that something bad would happen to [Q2]	○	○	○	○	○
I want [Q2] to get what he/she deserves	○	○	○	○	○
I'm going to get even	○	○	○	○	○
I want to see [Q2] hurt and miserable	○	○	○	○	○
I'm trying to keep as much distance between us as possible	○	○	○	○	○
I'm living as if [Q2] doesn't exist, like he/she isn't around.	○	○	○	○	○
I don't trust [Q2]	○	○	○	○	○
I'm finding it difficult to act warmly toward [Q2]	○	○	○	○	○
I'm avoiding [Q2]	○	○	○	○	○
I cut off the relationship with [Q2]	○	○	○	○	○
I withdraw from [Q2]	○	○	○	○	○
Even though [Q2]'s actions hurt me, I have goodwill for him/her.	○	○	○	○	○
I want us to bury the hatchet and move forward with our relationship	○	○	○	○	○
Despite what [Q2] did, I want us to have a positive relationship again.	○	○	○	○	○
Although [Q2] hurt me, I put the hurt aside so we could resume our relationship.	○	○	○	○	○
I have released my anger so I can work on restoring the health of our relationship	○	○	○	○	○
I forgive [Q2] for what he/she did to me	○	○	○	○	○



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Dealing with hurt in close relationships

* 8. For the following statements, please indicate your CURRENT thoughts and feelings about [Q2].

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I've decided to forgive [Q2]	○	○	○	○	○
I've made a commitment to forgive [Q2]	○	○	○	○	○
I've made up my mind to forgive [Q2]	○	○	○	○	○
I've chosen to forgive [Q2]	○	○	○	○	○
I've chosen to release any negative feelings I have	○	○	○	○	○
I've chosen not to intentionally harbour resentment	○	○	○	○	○
I care about [Q2]	○	○	○	○	○
I no longer feel upset when I think of [Q2]	○	○	○	○	○
I'm bitter about what [Q2] did to me	○	○	○	○	○
I feel sympathy toward [Q2]	○	○	○	○	○
I'm mad about what happened	○	○	○	○	○
I like [Q2]	○	○	○	○	○
I resent what [Q2] did to me	○	○	○	○	○
I feel love toward [Q2]	○	○	○	○	○

Dealing with hurt in close relationships

These items ask how you feel about what [Q2] did.

* 9. .

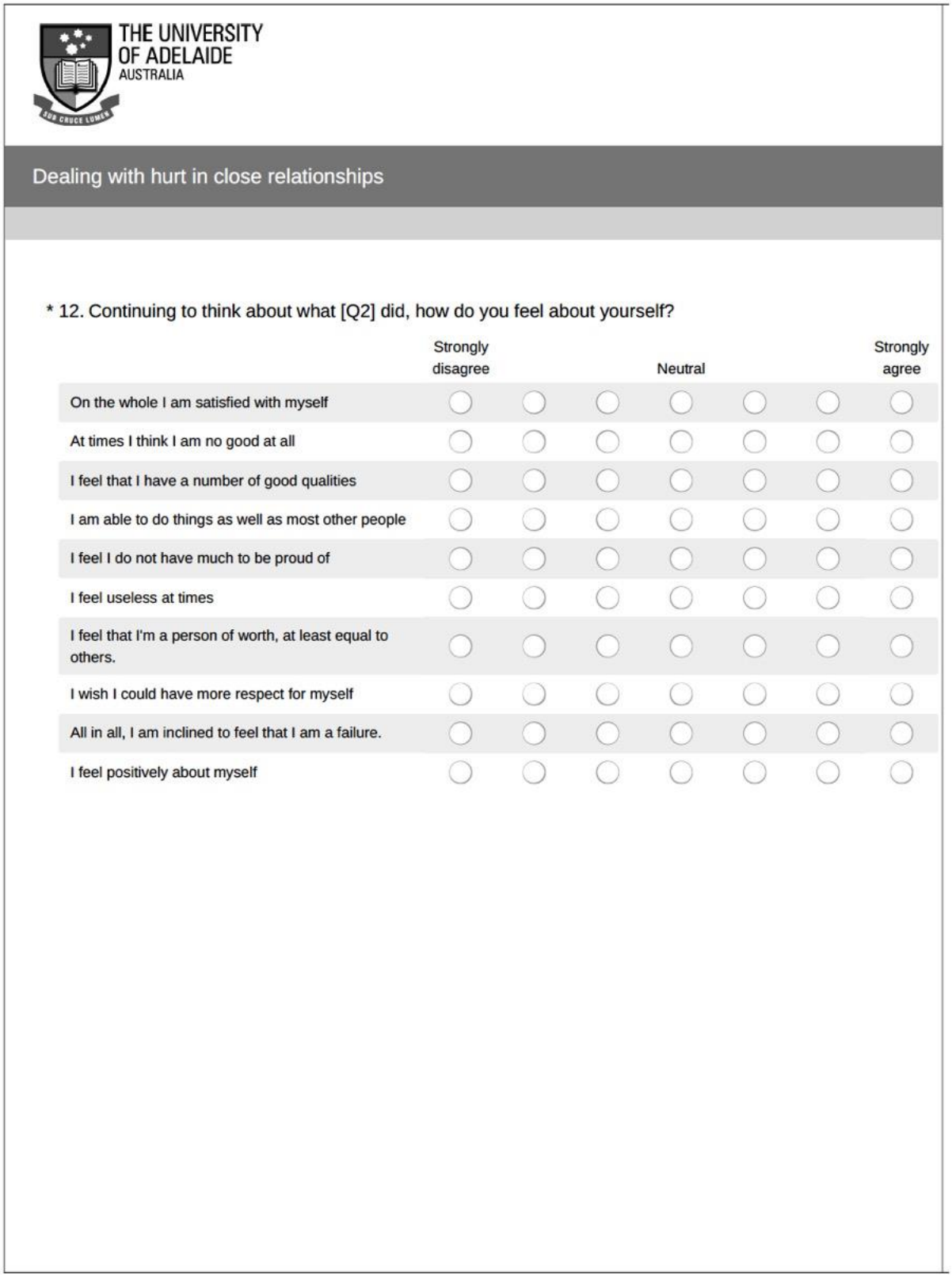
	Strongly disagree			Neutral			Strongly agree
I have waves of strong feelings about it	○	○	○	○	○	○	○
Other things keep making me think about it	○	○	○	○	○	○	○
I think about it when I don't mean to	○	○	○	○	○	○	○
Pictures of it pop into my mind	○	○	○	○	○	○	○
Any reminder brings back feelings about it	○	○	○	○	○	○	○
I have trouble sleeping, because of pictures or thoughts about it that come into my mind.	○	○	○	○	○	○	○
I have dreams about it	○	○	○	○	○	○	○
I find myself playing the offense over and over in my mind	○	○	○	○	○	○	○

* 10. .

	Strongly disagree			Neutral			Strongly agree
I feel mad	○	○	○	○	○	○	○
I feel angry	○	○	○	○	○	○	○
I feel irritated	○	○	○	○	○	○	○
I feel like swearing	○	○	○	○	○	○	○
I feel burned up	○	○	○	○	○	○	○
I feel like yelling at somebody	○	○	○	○	○	○	○
I feel furious	○	○	○	○	○	○	○
I feel like hitting someone	○	○	○	○	○	○	○
I feel like breaking something	○	○	○	○	○	○	○

* 11. When you think about what [Q2] did, how does it make you feel?

	Not at all	Some of the time	A good part of the time	Most of the time
I find that I am rather touchy	○	○	○	○
I am unable to feel enthusiastic about anything	○	○	○	○
I am intolerant of anything that keeps me from getting on with what I was doing	○	○	○	○
I feel down-hearted and blue	○	○	○	○
I am close to panic	○	○	○	○
I feel scared without any good reason	○	○	○	○
I find it hard to wind down	○	○	○	○
I feel I am using a lot of nervous energy	○	○	○	○
I find myself getting agitated	○	○	○	○
I experience breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	○	○	○	○
I find it difficult to work up the initiative to do things	○	○	○	○
I am aware of dryness of my mouth	○	○	○	○
I am worried about situations in which I might panic and make a fool of myself	○	○	○	○
I am aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increases, heart missing a beat)	○	○	○	○
I can't seem to experience any positive feelings at all	○	○	○	○
I feel I am not worth much as a person	○	○	○	○
I experience trembling (e.g. in the hands)	○	○	○	○
I feel I have nothing to look forward to	○	○	○	○
I tend to over-react to situations	○	○	○	○
I feel life is meaningless	○	○	○	○



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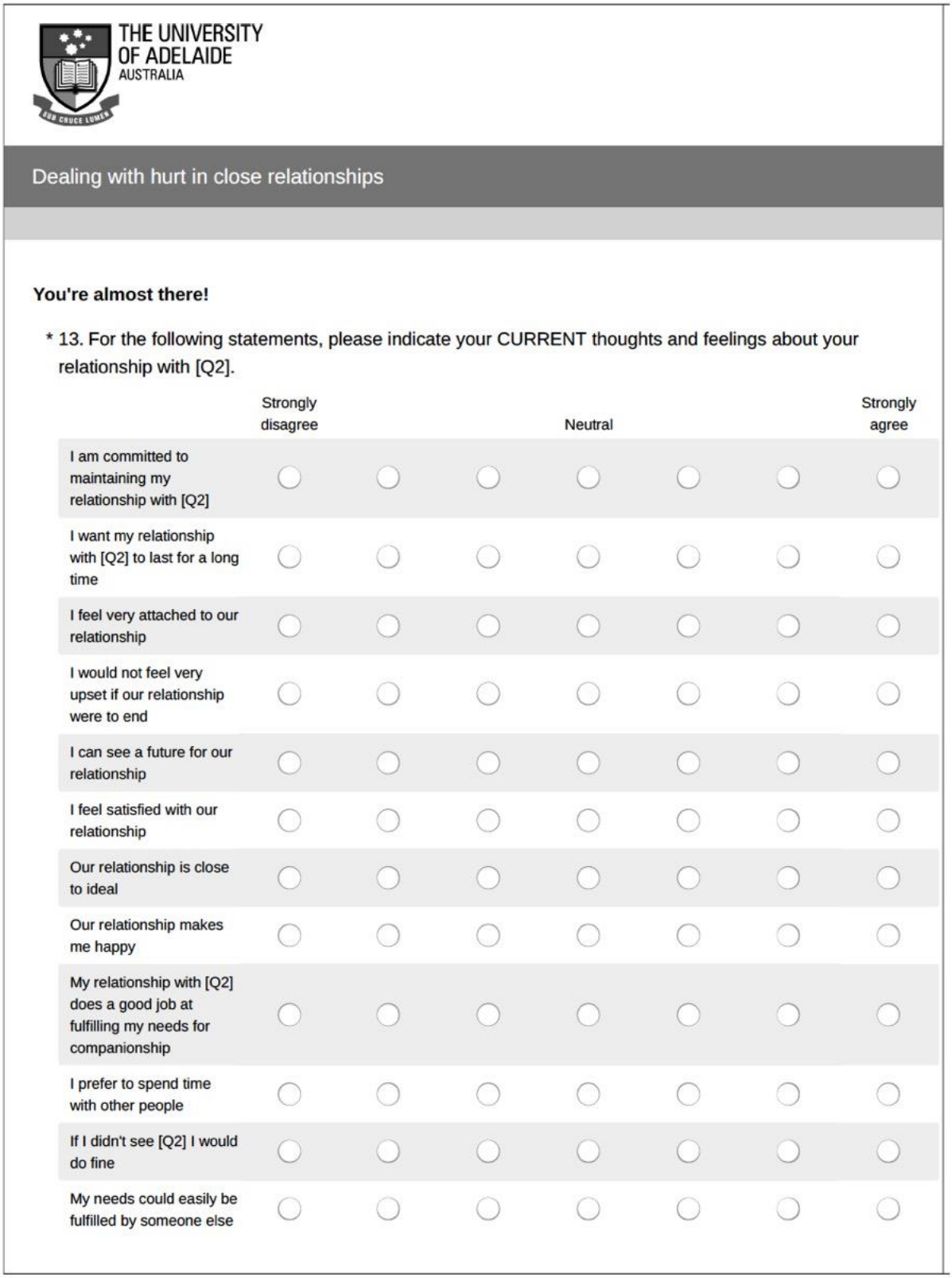
* 12. Continuing to think about what [Q2] did, how do you feel about yourself?

	Strongly disagree			Neutral			Strongly agree
On the whole I am satisfied with myself	○	○	○	○	○	○	○
At times I think I am no good at all	○	○	○	○	○	○	○
I feel that I have a number of good qualities	○	○	○	○	○	○	○
I am able to do things as well as most other people	○	○	○	○	○	○	○
I feel I do not have much to be proud of	○	○	○	○	○	○	○
I feel useless at times	○	○	○	○	○	○	○
I feel that I'm a person of worth, at least equal to others.	○	○	○	○	○	○	○
I wish I could have more respect for myself	○	○	○	○	○	○	○
All in all, I am inclined to feel that I am a failure.	○	○	○	○	○	○	○
I feel positively about myself	○	○	○	○	○	○	○



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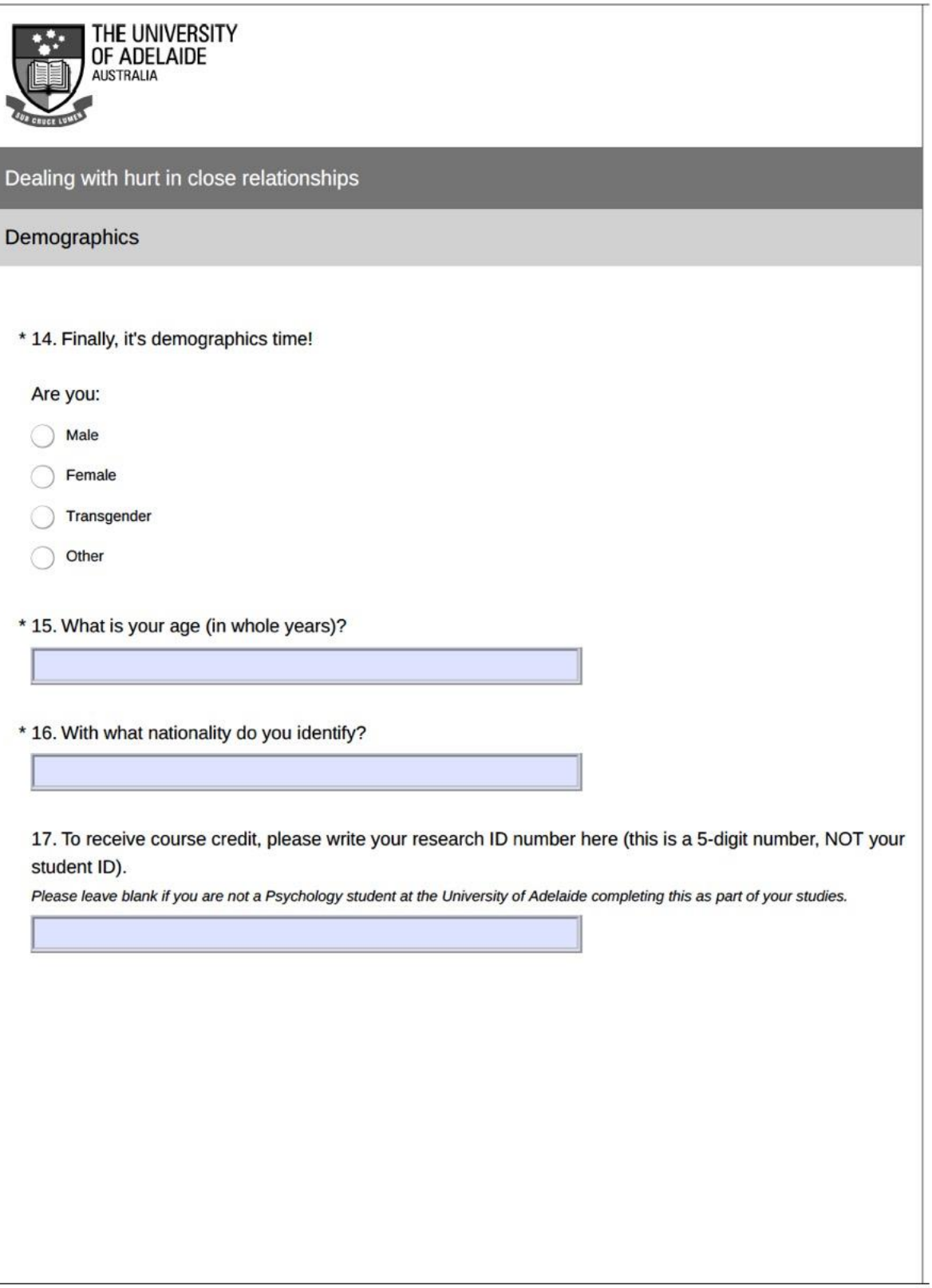
You're almost there!

* 13. For the following statements, please indicate your CURRENT thoughts and feelings about your relationship with [Q2].

	Strongly disagree			Neutral			Strongly agree
I am committed to maintaining my relationship with [Q2]	○	○	○	○	○	○	○
I want my relationship with [Q2] to last for a long time	○	○	○	○	○	○	○
I feel very attached to our relationship	○	○	○	○	○	○	○
I would not feel very upset if our relationship were to end	○	○	○	○	○	○	○
I can see a future for our relationship	○	○	○	○	○	○	○
I feel satisfied with our relationship	○	○	○	○	○	○	○
Our relationship is close to ideal	○	○	○	○	○	○	○
Our relationship makes me happy	○	○	○	○	○	○	○
My relationship with [Q2] does a good job at fulfilling my needs for companionship	○	○	○	○	○	○	○
I prefer to spend time with other people	○	○	○	○	○	○	○
If I didn't see [Q2] I would do fine	○	○	○	○	○	○	○
My needs could easily be fulfilled by someone else	○	○	○	○	○	○	○

	Strongly disagree			Neutral			Strongly agree
I have put a great deal into our relationship that I would lose	○	○	○	○	○	○	○
Many aspects of my life are linked to my relationship with [Q2]	○	○	○	○	○	○	○
My relationships with friends etc would be complicated if I ceased my relationship with [Q2]	○	○	○	○	○	○	○
Compared to other people I know, I have invested a great deal in my relationship with [Q2].	○	○	○	○	○	○	○
I am still very close to [Q2] now	○	○	○	○	○	○	○



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Demographics

* 14. Finally, it's demographics time!

Are you:

- ○ Male
- ○ Female
- ○ Transgender
- ○ Other

* 15. What is your age (in whole years)?

* 16. With what nationality do you identify?

17. To receive course credit, please write your research ID number here (this is a 5-digit number, NOT your student ID).

Please leave blank if you are not a Psychology student at the University of Adelaide completing this as part of your studies.

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What was THAT all about?

Thanks so much for being a part of this study! Here's a little more information about what we are trying to investigate.

Holding onto hurt, anger and resentment can be harmful not only to our mental health but also our physical health. As such, we generally believe that forgiving those who have hurt us will make us feel better, as it frees us from these burdens. However, is this true for every situation? In this study, we wanted to test the idea that maybe, it isn't always a good idea to forgive. We are especially interested in whether forgiving someone who hurt us intentionally, actually makes us feel bad, and the impact this may have on our relationship quality.

In order to preserve anonymity, it is not possible to provide individualised feedback. However, if you would like to obtain a copy of a summary of the results, please feel free to email me at van.le@student.adelaide.edu.au.

If you have found any part of this study upsetting, we recommend that you contact your GP or counsellor to discuss this. Alternatively, you can contact Lifeline Crisis Support services on 131 114.

If you have any complaints or questions concerning the ethics of this study, please contact the convener of the Sub-committee, Dr. Paul Delfabbro, on the contact details below. Should you have any questions regarding the study or your responses, please contact myself (Van) per the details below.

Thanks again and have a fantastic day!