Anger, negative affect, PTSD and transgressionrelated characteristics among sexual assault victimsurvivors: The moderating role of forgiveness and value of forgiveness.

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.



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Overview

This thesis explores forgiveness and value of forgiveness as potential moderators in the relationship between anger, negative affect, transgression-related characteristics and post-traumatic stress disorder (PTSD) with those who have experienced a sexual assault (SA).

Part One is a conceptual introduction. It presents a summary of the literature exploring the forgiveness-PTSD relationship and suggests other factors which may be important to this dyad, such as the relationship with the perpetrator, religion, and value of forgiveness. Gaps in the research are identified, before presenting the clinical implications of the research.

Part Two is the empirical paper which presents the moderating role of forgiveness and value of forgiveness in the relationship between anger, negative affect, transgression-related characteristics and PTSD among SA victim-survivors. The results established some bivariate relationships between, negative affect, anger, PTSD symptoms, and forgiveness, yet a moderation relationship between these variables was not found. Contrary to expectation, a moderating relationship between trait forgiveness, value of forgiveness and PTSD symptoms was not found. However, it was found that the more severe the transgression, the greater PTSD symptoms, and that this association is moderated by forgiveness. Finally, it was found that forgiveness moderated the relationship between the familiarity of the perpetrator and PTSD symptoms. This empirical research was part of a joint research project (Rankin, 2019).

Part Three is the critical appraisal, which considers: the motivation for the research, certain methodological issues, personal influences on the study's design, and the adaption of forgiveness within traditional therapeutic models. It concludes with personal reflections of the research area and conducting research.

Impact statement

This thesis presents a conceptual introduction and empirical paper which both have the potential to impact the academic field of forgiveness and beyond.

The conceptual introduction explored the concepts of forgiveness and post-traumatic stress disorder and the research exploring their relationship. The findings emphasised the number of factors which may influence the development of trauma symptoms and also the limited populations with whom the forgiveness-PTSD relationship has been studied in. With regards to the impact of this within academia, it is hoped that this research will highlight the need for further work exploring this relationship with other at-risk populations, such as women who have been sexually assaulted, as well as the impact of forgiveness on other transgression-related characteristics.

The empirical paper, within this thesis, explored forgiveness and value of forgiveness as potential moderators in the relationship between anger, negative affect, transgression-related characteristics, and PTSD symptoms. Being the first study to explore and find that forgiveness was found to be a significant moderator between, the severity of the transgression, relationship with the perpetrator and PTSD symptoms, it is hoped that this will inspire further research within this field with this population. This thesis will be accessible to other researchers through UCL Discovery and a further aim is to publish the findings in a peer-reviewed journal, to reach a wider academic audience.

With increased interest within the western world into "third wave" CBT approaches, it is hoped that, with further research within the field, forgiveness interventions, where appropriate, may be more widely accepted and integrated into existing PTSD treatments. Based on this thesis specifically, this would be particularly true for women who had a particularly severe sexual assault and did not have a close relationship with the perpetrator. From what the academic world already understands about forgiveness, it is hoped that this could be integrated into

clinical practise, and that this has the potential to help women make sense of, and process, the distressing transgressions they were subjected to. This thesis has also highlighted the contrast between the definition of forgiveness within academia, compared to the media and general population. It is hoped that with further research and wider dissemination that these two concepts may eventually share more characteristics and the processes behind forgiveness become more transparent.

This study also found that Christians, who were found to significantly value forgiveness more than other participants, had significantly higher PTSD symptoms than those identifying as having no religion. This may have an impact on how we understand forgiveness within the context of religion, as the research suggests that if a person highly values forgiveness, but perhaps does not act in agreement with those beliefs, this may be a potential risk factor to developing traumatic symptoms. This has implications for how forgiveness is discussed clinically, especially those who may be spiritual/religious.

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Chapter 1: Conceptual Introduction

What does the research evidence say about the relationship between forgiveness and post-traumatic stress disorder?

Abstract

A considerable amount of research has been completed to improve our understanding of Post-Traumatic Stress Disorder (PTSD). It has been established that emotions such as negative affect and anger have a role in the development and maintenance of PTSD (Brewin, Andrews, & Rose, 2000; Grey, Holmes, & Brewin, 2001; Holmes, Grey, & Young, 2005). However, over the last 20 years researchers have become increasingly interested in forgiveness theory and research, and more lately its involvement in the PTSD literature (Snyder & Heinze, 2005). This conceptual introduction presents a summary of the literature exploring the relationship between forgiveness and PTSD. The literature was collected from a number of sources including, a PsychINFO search, empirical and theoretical research articles, and scholarly journals which contained information on forgiveness, PTSD and sexual assault. This introduction identifies other factors which may be important in the relationship between forgiveness and PTSD, such as the relationship with the perpetrator, religion, and someone's value of forgiveness. In addition, gaps in research are identified, for example, research with those who have been sexually assaulted. The paper concludes with the clinical implications of the research.

Introduction

The following empirical paper investigated the complex relationship between forgiveness and Post-Traumatic Stress Disorder (PTSD) for females who have experienced sexual assault (SA). Although there are several published reviews investigating the relationship between forgiveness and mental health, there has yet to be a study investigating the relationship between forgiveness and PTSD for victim-survivors of SA. The empirical paper takes steps towards filling this gap in knowledge by completing a quantitative, cross-sectional study which examines the moderating role of forgiveness and personal value of forgiveness in the relationship between anger, negative affect, transgression-related characteristics and PTSD among SA victim-survivors. These factors were chosen as they were identified as pertinent in the relationship between PTSD symptoms and forgiveness in an interesting study with Turkish veterans (Karairmak & Güloğlu, 2014) and recent systematic review by Cerci and Colucci (2017). An online questionnaire which asked female victim-survivors of SA to complete standardised measures for trauma symptoms (Impact of Event Scale –Revised, IES-R) (Weiss, 2007), forgiveness (Heartland Forgiveness Scale, HFS) (Thompson et al., 2005), mood (Positive and Negative Affect Schedule, PANAS) (Watson, Clark, & Tellegen, 1988) and anger (Mahan and DiTomasso Anger Scale, MAD-AS) (Mahan & DiTomasso, 1998) was used. Measures on state forgiveness, state anger and value of forgiveness were also completed. This work is intended to inform the further development of research into forgiveness and the use of facilitating the forgiveness process within therapeutic models. The following review will consider the essential research and theoretical background motivating this study, including justification of the methodological choices made.

There is a debate whether the term victim or survivor should be used, especially in relation to SA. The term "victim" will be used throughout the report as shorthand to victim-survivor.

Method of Literature Review

Post-Traumatic Stress Disorder

An extensive amount of research has been completed to improve our understanding of PTSD. Diagnostic criteria define PTSD as: a) developing after exposure to an event which involves actual or threatened death, or serious injury, or a threatened sexual violation, to oneself, or witnessed occurring to another; b) that you have intrusive symptoms; c) experience changes to your thoughts, moods and arousal and as a result avoid reminders associated with the event (American Psychiatric Association, 2013). Research suggests that approximately 30% of people exposed to trauma will develop PTSD within three months of the incident (e.g., Blanchard et al., 1996; Koren, Arnon, & Klein, 1999; Orcutt et al., 2005; Shalev et al., 1998). Although this is a sizeable proportion of individuals, it raises questions about the factors that protect certain others from the development of PTSD and why some individuals appear resilient to the transgression. It has been

suggested that emotions, such as shame, guilt and anger, have a role in the development and maintenance of PTSD (Brewin, Andrews, & Rose, 2000; Grey, Holmes, & Brewin, 2001; Holmes, Grey, & Young, 2005).

Post-Traumatic Stress Disorder and Mental Health

There is insufficient space within this review to go into detail of the theories of the development of PTSD, but an article by Brewin and Holmes (2003) outlines and evaluates the three key trauma theories: the emotional processing theory (Foa & Rothbaum, 1998), the dual representation theory (Brewin, Dalgleish, & Joseph, 1996), and the cognitive theory (Ehlers & Clark, 2000). These well researched and influential theories, and others will be considered in respect to other emotional difficulties that appear to be important in the development and maintenance of PTSD.

With the development of the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) (American Psychiatric Association, 2013), PTSD was no longer classified as an anxiety disorder due to the amount of research that demonstrated the range of emotions involved in the development and maintenance of PTSD, outside of fear and anxiety (e.g., Friedman et al., 2011; Resick & Miller, 2009). This could be seen in a study by Brewin, Andrews, and Rose (2000) who found that some of their participants had developed PTSD symptoms without an experience of fear, helplessness or horror at the time of the events and instead reported feelings of anger and shame and that these had an independent effect on PTSD.

Negative affect: Negative affect is a broad term that incorporates a variety of negative emotions that are common in PTSD such as anxiety, sadness, fear, guilt, shame and irritability (Stringer, 2013). Watson, Clark, and Tellegen (1988), the authors of the Positive and Negative Affect Schedule (PANAS), summarise it as a feeling of emotional distress. Although the emotions play distinct roles in the development and maintenance of PTSD, due to space within this review, they will

be discussed as a broader construct, and then key emotions will be discussed in further detail due to their relevance to the forgiveness research.

These negative emotions have been shown to play a dominant role in PTSD (e.g. Chemtob, Novaco, Hamada, Gross, & Smith, 1997; Crowson, Frueh, & Snyder, 2001; Kubany & Watson, 2002), and a number of theories have been proposed to understand this relationship. Firstly, the emotional processing theory of PTSD proposes that fear structures constructed within PTSD include excessive stimulus and pathological meaning nodes (Foa & Rothbaum, 1998). They believe that the maintenance of re-experiencing and hyperarousal symptoms involved in PTSD are due to an individual avoiding internal and external triggers of the trauma, meaning that the fear and anxiety structures remain active. This model has been evidenced in a study by Monson, Price, Rodriguez, Ripley, and Warner (2004), who investigated the relationship between emotional content and trauma symptoms in a sample of veterans. The researchers found that negative affect was the most consistent predictor of PTSD and that those veterans who engaged in "experiential avoidance" had more PTSD symptoms. This is supported by other researchers who have found that experiential avoidance is a key construct in PTSD (Boeschen, Koss, Figueredo, & Coan, 2001; Orcutt et al., 2005).

Secondly, Ehlers and Clark (2000) suggested a cognitive theory of PTSD. This theory has been well researched and as a result, is recommended by NICE guidance and frequently used within PTSD treatment. This model proposes that PTSD develops due to the nature of the trauma memories and the negative appraisal of trauma. Matching triggers to the trauma can prompt a range of emotions, for example, fear, guilt and shame, which lead to the sense of ongoing threat for the victim. Based on their model, Ehlers and Clark state that modifying the unhelpful appraisals of the trauma and/or its consequences, which may be being maintained by negative affect, is a key intervention for treatment of PTSD.

Anger: A large effect size between anger and PTSD symptoms has been found (Orth & Wieland, 2006), which has been replicated with a number of populations including victims of crime (Orth, Cahill, Foa, & Maercker, 2008), interpersonal violence (Galovski, Elwood, Blain, & Resick, 2014) and combat veterans (Chemtob et al., 1997; Jakupcak et al., 2007). In terms of the direction of this relationship; due to the cross-sectional nature of most of the research, causality is unclear. However there is evidence that anger predicts and maintains PTSD symptoms (Andrews, Brewin, Rose, & Kirk, 2000; Orth & Maercker, 2009), but also that anger appears to also increase as a result of PTSD symptoms (Meffert et al., 2008).

A number of theories have suggested explanations for the complex relationship between anger and PTSD. One theory, the Survivor Mode Theory (Bezo & Maggi, 2015; Chemtob et al., 1997; Novaco & Chemtob, 2002), believes that anger is an adaptive emotion. This theory states that victims of trauma enter into a biologically predisposed survival mode of functioning due to the perceived expectancy of threatening situations (Chemtob et al., 1997). This has been compared to the fight or flight reaction (Berkowitz, 1989), which demonstrates how an aggressive reaction may be activated. This theory highlights how anger symptoms may increase as a result of a trauma.

In contrast, the emotional processing theory (Foa & Rothbaum, 1998) states that to achieve psychological adjustment, distressing feelings need to be processed; this would typically be achieved by the fear structure being activated. However, Andrews et al. (2000), suggest that anger obstructs this process, and therefore successful adjustment to the trauma and a consequent reduction in PSTD symptoms cannot be achieved. This theory shows how an increase in anger symptoms may maintain PTSD symptoms.

In addition, social information processing models (Holtzworth-Munroe, 1992; Taft, Creech, & Murphy, 2017) suggest that we process information and generate

biases based on our social world. When someone has a traumatic experience, they may generate negative biases (e.g. hostile attributional bias), which may mean their social world is interpreted in a threatening way, which could motivate anger and aggressive behaviour. This theory shows how PTSD symptoms may increase anger symptoms.

Finally, the Fear-Avoidance Theory suggests that anger might be used to avoid more painful emotions (Foa, Riggs, Massie, & Yarczower, 1995). In populations such as war veterans, other emotions (e.g. shame) may be less comfortable or socially accepted compared to anger. This theory again, explains how anger symptoms may increase as a result of a trauma.

Depression: It is estimated that approximately half of people with PTSD also have a diagnosis of major depressive disorder (MDD) (Flory & Yehuda, 2015).

Some used to argue that this comorbidity could be due to similarities in symptoms or imprecision in symptom classification (Shalev et al., 1998). However, more recently it is proposed that this co-occurrence reflects a trauma-related phenotype (Flory & Yehuda, 2015) which is supported by neuroimaging studies such as, Kennis, Rademaker, van Rooij, Kahn and Geuze (2013). For those with both PTSD and MDD, it has also been found that they report higher distress (Blanchard, Buckley, Hickling, & Taylor, 1998), and are at a greater risk for suicide (Ramsawh et al., 2014) than those with PTSD only.

Ehlers and Clark's (2000) cognitive theory of PTSD indicates that due to someone's sense of current threat they may use coping strategies to avoid reminders of the traumas. For example, following a trauma someone may avoid certain situations and so may withdraw from social support or activities. The model also suggests negative appraisals of the trauma and its symptoms may be held, causing an increase in ruminative thoughts which are common with depression. With this model in mind, it is evident how MDD may co-occur with PTSD.

With emotional difficulties, such as anxiety, it has been suggested that processes such as avoidance maintain the PTSD. However, with depression it has been suggested that the person becomes numb to the trauma, described as "emotional analgesia" (Foa, Zinbarg, & Rothbaum, 1992). This numbing is a consequence of being subjected to uncontrollable or inescapable stimuli (Foa, Zinbarg, & Rothbaum, 1992). Monson, Price, Rodriguez, Ripley, and Warner (2004), explain that this process can be seen in their study, which found that depression was associated with emotional numbing in veterans with PTSD. This emotional analgesia means that it is more difficult to recognise, discriminate and regulate emotions, again maintaining the PTSD symptoms (Monson et al., 2004).

Finally, using incest victims as an example, Finkelhor and Browne, (1985) suggest that a victim of trauma may experience low mood because a trusted person has betrayed and manipulated them, rather than protecting or loving them.

Freedman and Enright (1996), suggest that this process can lead to feelings of distance and isolation, which can trigger symptoms of low mood.

Forgiveness

A proposed way of overcoming the above emotions is through forgiveness (Thompson et al., 2005). This has triggered recent research into whether forgiveness functions as a protective factor for the development of PTSD symptoms and if so, what are the characteristics of this relationship (Orcutt et al., 2005). Consequently, the aim of this chapter is to answer the question: what does the research evidence say about the relationship between PTSD and forgiveness? To understand this, we first need to understand forgiveness as a construct and the role forgiveness may play within PTSD.

Cerci and Colucci (2017), state that throughout the years, political theorists, philosophers, and religious leaders have described forgiveness as an "integral part of moving on in a society after individuals or groups suffer an injustice" (p.47). It is a

known concept across numerous cultures, common to the leading religions across the world (Webb, Toussaint, & Conway-Williams, 2012) and advocated by many philosophers as an important virtue or strength (Exline et al., 2003; Holmgren, 1993; Morris, 1988).

Although forgiveness is an ancient concept, researchers have become increasingly interested in forgiveness over the last 20 years (Scobie & Scobie, 1998). During this period, a number of difficulties have arisen regarding the operationalisation of interpersonal forgiveness (Orcutt et al., 2005). Enright, one of the early researchers into forgiveness, defines forgiveness as "wilful giving up of resentment in the face of another's considerable injustice and responding with beneficence to the offender even though the offender has no right to the forgiver's moral goodness" (Baskin & Enright, 2004, p. 80). He advocates that forgiveness is differentiated from concepts such as condoning, reconciling, and excusing, and that although forgiveness involves someone's choice to abandon resentment, they can still view the action as wrong (Baskin & Enright, 2004). Snyder and Heinze (2005), state that other people or circumstances can be wrong, but that forgiveness "enables the victimised person to negotiate this reality so that it does not permanently undermine the protagonist's positive working model of selfhood" (p.416). Despite the lack of consensus on what forgiveness is, most researchers agree with Enright that forgiveness is different from reconciliation: the process of restoring trust and possibly a relationship following a transgression (Cerci & Colucci, 2017; Fow, 1996). For reconciliation to occur, the perpetrator has to be forgiven by the victim (Kira et al., 2009).

Other researchers, however, consider that an important element of forgiveness is the perpetrator's role (McCullough, Worthington, & Rachal, 1997) and that forgiveness is when one can incorporate feelings of compassion and love toward the perpetrator (Cosgrove & Konstam, 2008). McCullough (2001), went on to advocate that when someone forgives, they experience a return of benevolent,

constructive motivations concerning the perpetrator rather than holding views of the perpetrator that stimulate motivations of avoidance and revenge. McCullough concludes that forgiveness is a complex prosocial alteration in the forgiver's motivations. This is supported by fellow researchers who deem that in forgiveness there is a decrease in angry and vengeful thoughts, feelings, and intentions, whilst simultaneously there is an increase in positive thoughts, feelings, and intentions towards the transgressor (Wade, Hoyt, Kidwell, & Worthington, 2014, Cerci & Colucci, 2017).

Kearns and Fincham (2004), conducted several studies to identify how the public's definition of forgiveness differs from that of researchers within the field.

Using an undergraduate population, the authors found that the similarities in the definition included reduced negative thoughts towards the perpetrator and agreement of the multidimensional aspects of forgiveness. However, in terms of the differences, the students indicated that they felt condoning, forgetting and reconciliation were all central features of forgiveness. The differences highlighted by the above research emphasise the difficulties researchers have had with defining forgiveness.

Two models of forgiveness that appear to have held over time are that by Enright (2001) and Worthington (2001). Enright's model comprises of four phases. In the first phase, the victim will experience the negative feelings and injustice related to the transgression. Throughout the second phase, the individual contemplates forgiveness and realises that if they continue to ruminate over the transgression and perpetrator, their distress may only continue. This realisation prompts the victim to deliberate forgiving the perpetrator and eventually a decision to forgive is made (Orcutt et al., 2005). The victim then begins the forgiveness work and as a result, they start to abandon the negative thoughts, feelings and motivations towards the perpetrator. It is in the third phase that the process of forgiveness takes place. This could include the victim revising their perception of the

perpetrator, perhaps by considering the factors that led to them committing the transgression. Placing the transgression in context allows the victim to separate the person from the act, meaning that they may be able to empathise with the perpetrator (Van Dyke & Elias, 2007). In the final phase, the victim consequently experiences the positive emotional benefits of forgiving. They may also perhaps find meaning in the suffering and negative emotions that they felt.

The second model by Worthington (2001), is complimentary to Enright's (2001). His pyramid model consists of five steps and spells out the acronym REACH. The first step is to "recall the hurt" as objectively as possible, this could be difficult for people who have a lot of emotions associated with the transgression. The next step is to "empathise with the one who hurt you", perhaps attempting to understand the perpetrator's context. As with Enright's model, this is known to be the hardest step to emotional forgiveness. Step three is to give the "altruistic gift of forgiveness", by recalling to the occasions that you have caused others pain, and the gratefulness that you have felt when others have forgiven you. The final steps are to "commit to the forgiveness" and to "hold onto forgiveness" when it is tested (Orcutt et al., 2005).

It is important to note that though the two models are different, there is some significant resemblance between them. For example, the importance of engaging with the negative emotions of the transgression and understanding the perpetrator's context (Orcutt et al., 2005).

In terms of treatment studies with forgiveness, Al-Mabuk, Enright and Cardis (1995) were one of the first researchers to investigate the effectiveness of forgiveness interventions. They found that those who completed a six-day forgiveness workshop reported more hope, less anxiety and more forgiveness compared to the control group. A more recent study investigated the effects of a six-week forgiveness group for university women. They found that again, compared to the controls, those who completed the intervention scored higher on measures of

forgiveness and existential well-being compared to their controls (Rye & Pargament, 2002). These positive effects have also been found in other studies (Coyle & Enright, 1997; Freedman & Enright, 1996), however more recent investigations are needed.

Forgiveness concepts

Most researchers now agree that there are three potential targets for forgiveness: the self, the transgressor, or the situation (e.g. an illness or force of nature). However, previously there has been debate about the concept of situational-forgiveness as some believed that forgiveness cannot be offered towards an uncontrollable situation, as they believe forgiveness is purely an interpersonal concept (Enright, Freedman, & Rigue, 1998).

These three targets can be seen in an example of SA by Snyder and Heinze (2005). A victim of childhood abuse may feel that they did something that they consider wrong. For example, they may believe that their behaviour triggered or instigated the abuse and so their negative thoughts or anger may be directed towards themselves. The second target of negative motivations could be towards the perpetrator of the abuse or perhaps the person(s) who permitted it to arise.

Lastly, the victim may have hostile feelings towards the situation or conditions where the abuse took place. Consequently, a victim may need to forgive themselves, the perpetrator and the situation (Snyder & Heinze, 2005).

Another way to conceptualise forgiveness is to discuss the difference between state- and trait-forgiveness. State- or offense-specific forgiveness is amenable to change, typically shown by a reduction in harmful or avoidant feelings towards the perpetrator, and is related to a single identifiable transgression (McCullough, 2000). Trait- or dispositional-forgiveness, however, is more inclusive and defined as a disposition to be a more forgiving person. It is understood that trait forgiveness is a more stable attribute which crosses situation and time (Cerci & Colucci, 2017).

Studies detailing this have found that forgivers' scores on measures of traitforgiveness are more related to measures of mental health and wellbeing, whereas this same relationship cannot be seen with state-forgiveness measures (Thompson et al., 2005).

The development of forgiveness measures

With the rising popularity of positive psychology, research on forgiveness has thrived and as a result, valid and reliable measures of forgiveness have been developed for research purposes (Worthington et al., 2014). Given the complexity of conceptualising forgiveness, these measures have had to be designed to reflect the multidimensional aspects of forgiveness (Worthington et al., 2014). The most commonly use measures include the Enright Forgiveness Inventory (EFI; (Enright & Rique, 2004) and the Heartland Forgiveness Scale (HFS; (Thompson et al., 2005) The EFI was one of the first forgiveness measures to be developed and has good reported internal consistency (Cronbach α = 0.95) (Enright & Rique, 2004). The EFI is a standardised measure of state-forgiveness, whereas the HFS was developed to allow multiple aspects of forgiveness to be measured, including trait-forgiveness of self, other(s), and situations. The internal consistency of this measure is adequate (Cronbach α = 0.72-0.87), along with test-retest reliability and convergent validity (Thompson et al., 2005).

Forgiveness and Mental Health

The development of measures has allowed further research to take place and theories to be offered. A number have proposed an explanation of the effect of forgiveness on mental health difficulties.

The process of forgiveness requires a victim to acknowledge that a transgression took place and be willing to reframe the transgression. This can be seen in the first step of Worthington's (2001) model, where the hurt needs to be

recalled and worked through as objectively as possible. In this model, as well as Enright's (2001), true forgiveness cannot occur until this has been completed (Orcutt et al., 2005). It is suggested that this process allows the victim to make a positive association with their rumination and the associated negative emotions such as, depression, anger, and fear (Hirsch et al., 2012; Worthington, 2001). As stated above, this does not mean that they condone or excuse the perpetrator. Instead, they are able to make a "new narrative" of the transgression, perpetrator, and potentially themselves (Thompson et al., 2005). This is a similar process involved in trauma-focused cognitive behaviour therapy (CBT) techniques, such as re-scripting and cognitive restructuring, where clients are encouraged to re-write the narrative and contextualise the trauma memories. These techniques are based on the cognitive model of PTSD (Ehlers & Clark, 2000) and knowledge of the memory systems based on the dual representation theory (Brewin, Dalgleish, & Joseph, 1996). Toussaint and Webb (2005), also present a model (Figure 1), developing the ideas of Worthington (2001), to explain the effect of forgiveness on mental health both directly and indirectly. It is suggested that if a victim is "unforgiving", they may spend time ruminating over the transgression and feel emotions such as hatred, anger and fear. If these are not attended to, this could trigger significant mental health difficulties. This has been described as the direct effect of unforgiveness on mental health. In terms of the indirect effect, Toussaint and Webb state that if a victim is unforgiving they may not have processed the transgression, may withdraw from social support and avoid seeking help. This could have an indirect effect on the victim's mental health, whereas if someone forgives, this is likely to have a positive indirect effect on their mental health, due to factors such as social support and better interpersonal functioning (Temoshok & Chandra, 2000; Worthington Jr. et al., 2005). However, Worthington and colleagues (2005), later suggested that forgiveness could also have a negative impact on mental health as people who

frequently forgive may be "taken advantage of" (p.170), or may forgive when it might be unwise or dangerous to.

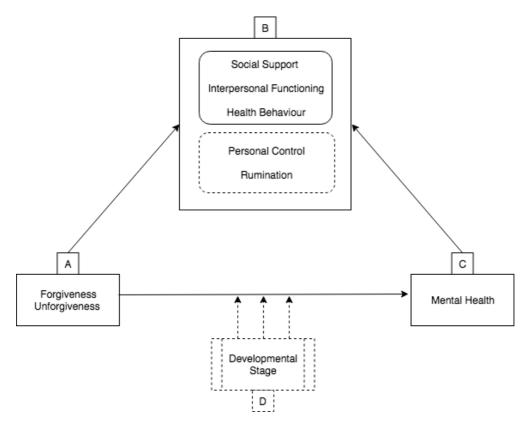


Figure 1. The effect of forgiveness on mental health. Adapted from: Theoretical and Empirical Connections Between Forgiveness, Mental Health and Well-Being (p.351), by L. Toussaint and J.R. Webb, 2005, New York, NY: Brunner-Routledge.

In the early stages of defining forgiveness, encouraging results were found for its effect on both physical and mental health (Cerci & Colucci, 2017; Enright & North, 1998; Worthington Jr, 2006). Fitzgibbons (1986), recognised that forgiveness was useful for reducing anger and that it allowed people to abandon guilt by expressing anger in healthier ways. Since then, there has been clear empirical evidence that there is a relationship between forgiveness and lower levels of depression, anger and anxiety (Brown, 2003; Exline, Yali, & Lobel, 1999; Hui, 2017; McCullough, Bellah, Kilpatrick, & Johnson, 2001; Seybold, Hill, Neumann, & Chi, 2001; Toussaint, Williams, Musick, & Everson, 2001; Witvliet, Phipps, Feldman, & Beckham, 2004). For example, two studies using large American national surveys found a significant relationship between readiness to forgive and lower levels of

depression, anxiety and hostility symptoms (Krause & Ellison, 2003; Toussaint et al., 2001). In another study, self-forgiveness was found to significantly moderate the relationship between anger and suicidal behaviour (Hirsch et al., 2012). A review by Toussaint and Webb (2005), however, has highlighted that few of these studies addressed addiction, complex presentation and that many of the studies used student samples and not those with psychiatric disorders (Worthington Jr. et al., 2005).

Forgiveness and PTSD

As Freedman and Enright (2017) note, it is important that when discussing forgiveness in relation to traumatic experiences, we are clear what is meant by forgiveness. As suggested previously, forgiveness is a complex prosocial alteration in the forgiver's motivations (McCullough, 2001), however importantly forgiveness does not mean that the perpetrator is denied or excused of any wrongdoing and that feelings of pain should be ignored (Freedman & Enright, 2017).

The recommended treatment for PTSD, based on Ehlers and Clark's model, suggests that behavioural and cognitive strategies that prevent memory elaboration, for example, engaging in experiential avoidance, need to be stopped. This is because when victims utilise experiential avoidance response styles, they may be unwilling to experience or emotionally process the thoughts, feeling and memories associated with the transgression, including the interpersonal betrayal that took place (Orcutt et al., 2005). Orcutt, Scott, and Pope, proposed that those with a higher level of forgiveness may be less likely to engage in these behavioural and cognitive avoidance strategies meaning individuals are more likely to be able to process the interpersonal transgression and more able to engage in the forgiveness process. The researchers tested these two different coping styles and their interaction effects with undergraduate students. Using structural equation modeling it was found that both response styles partially mediated the relationship between

interpersonal trauma exposure and trauma symptoms. However, students who scored higher in experiential avoidance, but lower in forgiveness, reported higher trauma symptoms than those scoring lower in experiential avoidance and higher in forgiveness (Orcutt et al. 2005).

There is a growing literature investigating the association between forgiveness and PTSD, although the relationship between the two variables has been understood within society for many years. Following the end of racial apartheid in South Africa, a Truth and Reconciliation Commission (TRC) was set up to bear witness to the traumatic experiences that victims had gone through. The TRC was organised to promote recovery and forgiveness, as it was believed that forgiveness was a critical component to post-war rehabilitation (Chapman, 2007). One of the first studies researching PTSD and forgiveness explored how participation in the TRC related to victim's forgiveness and mental health difficulties (Kaminer, Stein, Mbanga, & Zungu-Dirwayi, 2001). It was found that victims with lower forgiveness scores had significantly higher depression, anxiety and, most importantly, PTSD symptoms when compared to those with higher forgiveness. The authors suggest that there is an increased risk of mental health difficulties by being less forgiving. The same relationship has been found in many other studies exploring different trauma victim populations, for example, with child abuse victims (Snyder & Heinze, 2005) and war veterans (Currier, Drescher, Holland, Lisman, & Foy, 2016; Currier, Holland, & Drescher, 2015; Karairmak & Güloğlu, 2014; Nateghian, Dastgiri, & Mullet, 2015; Witvliet et al., 2004), including across two eras of war veterans, when compared to matched controls (Currier, Drescher, & Harris, 2014).

Despite many studies highlighting the relationship between PTSD and forgiveness, this association has not been found with victims of the September 11th terror attacks (Friedberg, Adonis, Von Bergen, & Suchday, 2005), or the civil war in Sierra Leona (Doran, Kalayjian, Toussaint, & DeMucci, 2012). In addition, Orcutt, Scott, and Pope (2008), replicated the earlier study by Orcutt et al. (2005), and

similarly found that forgiveness was related to PTSD, but once gender and offense severity were factored into the analysis, this relationship was reduced to a marginal effect. As highlighted in Cerci and Colucci's (2017) systematic review, although many studies have started to highlight a clear relationship between forgiveness and PTSD, other factors appear to have an important role.

The relationship between forgiveness, PTSD and general mental health

As discussed, there is a clear relationship between PTSD, negative affect and anger. There is also a relationship between emotions such as anger, depression, hostility, anxiety, and forgiveness, but there is a question of how the variables all relate to one and another. Orcutt et al. (2008), state that when a traumatic experience takes place, emotions such as fear, hurt, and anger are exacerbated by a secondary process of rumination, as seen in Figure 1 by Toussaint and Webb (2005). This can trigger "delayed emotions, involving resentment, bitterness, residual anger, residual fear, hatred, hostility, and stress" (Worthington, 2001, p.26), perhaps maintaining any PTSD symptoms that a person may have. It has previously been suggested that the forgiveness process minimises these negative emotions. Thus, forgiveness can help reduce these residual feelings, such as hostility and anger, which means the underlying PTSD is more responsive to modification in therapy (Worthington Jr et al., 2005).

Progressing from case studies showing this relationship (Cotroneo, 1982; Kaufman, 1984), there has been a number of more recent studies investigating the relationship between forgiveness, anger, negative affect, and PTSD (Kaplan, 1992; Karairmak & Güloğlu, 2014; Konstam, Chernoff, & Deveney, 2001; Seybold et al., 2001; Snyder & Heinze, 2005; Witvliet et al., 2004). Using a measure of traitforgiveness, Witvliet, Phipps, Feldman and Beckham (2004), investigated PTSD and mood symptoms in U.S. war veterans who attended an outpatient PTSD clinic.

Whilst controlling for age, socioeconomic status, ethnicity, combat exposure, and hostility, the researchers found that low self-forgiveness was significantly associated with depression and anxiety for veterans with PTSD symptoms. Interestingly, it was also found that, although difficulty forgiving others was again significantly related to depression, it was not related to anxiety.

Weinberg, Gil, and Gilbar (2014), were also interested if there was a difference in forgiveness of self, others, and situations, for terror attack victims with PTSD. It was found that when the victim does not have a personal connection with the perpetrator, situational-forgiveness is more important to PTSD symptomology, compared to self- or other-forgiveness. The researchers discuss the clinical implication of this finding, explaining that if a group transgression occurs and a specific perpetrator cannot be identified, situational-forgiveness should be addressed (Weinberg et al., 2014). This is supported by Thompson et al. (2005), who propose that in this circumstance, forgiveness of self and situation is more significant to psychological well-being than other-forgiveness. This same relationship has been found with those involved in interpersonal transgressions, such as sexual abuse in childhood (Snyder & Heinze, 2005). In addition to the different targets of forgiveness, Weinberg et al. (2014) explored different coping strategies. It was found that a tendency to forgive and problem-focused coping had a better effect on PTSD symptoms compared to emotion-focused coping and avoidance. This is similar to the findings of Orcutt et al. (2005). A hypothesised theory can therefore be suggested: a tendency to forgive may buffer the residual emotional difficulties, meaning that more adaptive problem-focused strategies can be utilised, thus reducing trauma symptomology.

Although the majority of veteran studies investigating forgiveness were completed in the U.S., Karairmak and Güloğlu (2014) explored this theory among Turkish veterans. Based on theory, the authors suggested that veterans typically

experience negative emotions, and forgiveness may buffer those negative emotions, therefore, preventing the development of psychiatric difficulties such as PTSD. This was based on the previous research that showed no direct association between forgiveness and PTSD symptomology (Doran et al., 2012; Friedberg et al., 2005). However, a path-analysis found that the relationship between forgiveness, and both PTSD and depression co-morbid to PTSD, was fully mediated by anger and negative affect. The researchers concluded that if veterans are able to communicate their negative feelings, this may help them to forgive, and reduce their traumatic symptoms, frequently triggered by reminders of war. Despite this mediation relationship being found, the authors suggest that forgiveness may play a buffering role and propose that complex associations regarding forgiveness, PTSD and mediators exist. They state that further exploration with these factors are needed, which is what this empirical paper aims to do.

This further investigation is necessary due to research being conducted which fails to find any relationship between trauma and forgiveness. A study by Friedberg et al. (2005), investigated whether it was possible to predict trauma and stress reaction based on someone's forgiveness traits and ruminative tendencies. The authors found that for staff and students of a graduate school in New York during the September 11th terror attacks, there was no relationship between trauma and forgiveness. However, the study did find that forgiveness was negatively associated with reported stress levels. In line with the previous findings, the authors propose that forgiveness serves as a buffer, but in this case against stress reactions in those with low levels of rumination. Friedberg et al. suggest that perhaps trauma is an extreme form of stress. In line with the above research, Thompson et al. (2005) and Weinberg, Gil, and Gilbar (2014), suggest that if a group transgression occurs and a specific perpetrator cannot be identified, situational-forgiveness may be the important variable to measure. This could be a reason that a negative association

between forgiveness and PTSD was found. In addition, only a measure of traitforgiveness was used rather than both trait-and state-forgiveness.

Relationship with the perpetrator

As suggested by the above literature, the context of the transgression is important, for example, whether it was a group transgression and whether the perpetrator could be identified.

Until now, the theories presented have mostly been attributed to interpersonal traumas. Kira et al. explains that for collective traumas, theories such as the selfcategorisation theory (Turner, 2010; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and the inter-group emotions theory (E. R Smith, 1999; Eliot R Smith, 1993) aid understanding. They suggest that when collective identity is important to someone and an intergroup trauma takes place, group members' emotions, including the development of traumatic symptoms, are dependent on the successes or failures of the in-group which they identify with (Kira et al. 2009). Kira et al., also state that forgiveness in trauma may have a different outcome if it takes place in a close relationship, if no relationship or affiliation exists, or if a confrontational relationship already exists, which is typical of most group conflicts such as war. Previous research within intergroup transgressions, such as war, have found a positive effect of forgiveness on PTSD symptoms (Currier et al., 2014, 2016, 2015; Karairmak & Güloğlu, 2014; Nateghian et al., 2015; Witvliet et al., 2004), however, Kira et al. found contrasting results. In line with other findings, it was found that unforgiveness of "collaborators" in a war increased their PTSD symptoms. However, contradictory to previous findings, unforgiveness of the participants "dictator" had positive health and mental health effects. The authors conclude that the effects of forgiveness and unforgiveness on physical and mental health can depend on the specific situation and relationship with the perpetrator. This is supported by

Karremans, Van Lange, Ouwerkerk, and Kluwer (2003), who state that unforgiveness in a close relationship could be different to unforgiveness in an oppressive relationship or intergroup transgression, perhaps due to the other dynamics such as power, conflict, and resistance.

In their systematic review, Cerci and Colucci (2017), suggest a number of factors related to the victim's relationship with the perpetrator that may be important when exploring interpersonal trauma and the PTSD-forgiveness relationship in manmade traumas. These are the level of proximity to the perpetrator, having an ongoing relationship with perpetrator as opposed to being permanently separated, and whether the perpetrator is known or not known to the victim. It has been suggested that the closer a victim is to the perpetrator, the more negative emotional responses are anticipated, as the transgression betrays their autonomy (Kira, 2001).

When looking at examples of interpersonal trauma, a clear relationship between forgiveness and PTSD is seen (Bae et al., 2014; Orcutt et al., 2005, 2008; Snyder & Heinze, 2005). In a fairly recent study, the relationship between forgiveness symptoms and wellbeing in "intimate partner stalking" was explored (Baldry, 2017). It was found that forgiveness did not have an impact on women's mental health; however, they did find that unforgiveness was related to higher levels of PTSD symptomology. The researchers comment that forgiveness of the perpetrator may only be able to occur once the stalking has stopped, supporting Cerci and Colucci's (2017) comments made in their review, that an ongoing relationship with the perpetrator may be an important factor in the association between PTSD and forgiveness. The researchers also found that an increased severity of stalking (e.g. an increase in frequency), was associated with PTSD, however, they did not compare how this impacted the ability to forgive; studies looking at this relationship have taken place though (Bae et al., 2014; Doran et al., 2012; Orcutt et al., 2008). Bae et al. (2014) investigated this relationship in adults involved in road traffic accidents. It was found that the severity of the injury was

directly associated with their perceived threat, and that this was negatively related with forgiveness. In line with previous studies, the lower the victim's forgiveness score was, the more symptoms of PTSD were present. Forgiveness appears to allow a person to reframe the transgression, reducing the perceived threat to their worldview, allowing them to feel more in control (Snyder & Heinze, 2005).

Important factors in the relationship between PTSD and forgiveness

In their systematic review, Cerci and Colucci (2017), identify a number of factors which are likely to be relevant to the PTSD-forgiveness relationship. They suggest that these range from 'demographic factors' to 'justice-based factors'.

Amongst their 'forgiveness-related factors', they identify that someone's motive to forgive, including one's religion, may impact the relationship between PTSD and forgiveness. In addition to this review, a past thesis investigated the relationships between forgiveness, PTSD, anger and guilt during therapy (Bacon, 2012) and also identified that subsequent research may benefit from investigating the effect that the value someone places on forgiveness has on PTSD symptoms and suggests that religion is an important factor to investigate. As a result, in addition to the above factors, this thesis will also investigate the impact that religion and value of forgiveness has on the forgiveness-PTSD relationship.

Religion

Forgiveness as a concept is embedded in culture and religion. For Christians, forgiveness is seen as "the central cornerstone of the religion" (Marty, 1998, as cited in Worthington, Berry, & Parrott, 2001, p. 124), while within Judaism it is seen as a duty to forgive a perpetrator (McCullough & Worthington, 1999; Orcutt et al., 2008). In addition, a meta-analysis by Davis et al. (2013), found a medium-sized correlation between religion and dispositional forgiveness. A victim's

relationship with religion will, therefore, undoubtedly impact how they relate to forgiveness (Orcutt et al., 2005).

Researchers have commented that those to whom religion is more important, are more inclined to forgive their perpetrators (Escher, 2013; Nyarko, 2017; Schieman, 2011), perhaps because they feel that they should forgive unconditionally, as God does (Krause & Ellison, 2003). While forgiving others unconditionally might be tempting as a concept, researchers have questioned whether it is truly possible or whether this leads to "pseudo-forgiveness" (Baumeister, Exline, & Sommer, 1998; Enright et al., 1998). This is an attempt to offer forgiveness to the perpetrator, but perhaps this is used to gain control over someone or through obligation, and so the inner conflict is not actually resolved (Krause & Ellison, 2003; Toussaint et al., 2001). One study looking at the physical effects of forgiveness has demonstrated this, showing that those who had forgiven due to religious obligation showed higher elevation in blood pressure compared to those who forgave out of care for the perpetrator (Huang & Enright, 2000). In contrast, a study by Witvliet et al. (2004), found that positive religious coping (e.g. spiritual support, positive religious appraisal of the problem) was associated with lower trauma symptom severity and that negative religious coping was associated with higher PTSD scores, depression and both trait- and state-anxiety. This suggests that it is possible religious coping can aid victims to work through the anxiety and emotion-related difficulties, which may reduce the PTSD symptoms. This is supported by a qualitative study where participants suggested the various religious motivations and strategies that had helped them to forgive (Kidwell, Wade, & Blaedel, 2012). These included unconditional responses such as "forgive others because God forgives us"; however, strategies also included "consulting a religious leader" and "looked to my relationship with God for strength" (p.128). These suggest that someone's religion may be an important factor in the forgivenessPTSD relationship, as their religion offers helpful strategies and social support to enable forgiveness.

However, in terms of self-forgiveness, there is evidence that religion may not always promote forgiveness, particularly in sexual or physical abuse cases. For example, although forgiveness is explicitly promoted by Islam (McCullough, Pargament, & Thoresen, 2000), Shalhoub-Kevorkian (2016), state that Muslim families may hide the occurrence of rape as they believe that this is necessary to preserve virginity, family dignity and honour. The researchers conclude that this will understandably lead to re-victimisation, the opposite of promoting self-forgiveness. This is supported by a study which held a focus group for Muslim women who had been sexually assaulted (Begum & Rahman, 2016). The authors state that "along with bearing the trauma and consequences of rape, a woman also encounters further issues like isolation, being considered unsuitable for marriage, worthlessness or banishment." (p.10). Further evidence of the complex relationship between religion, and forgiveness, particularly forgiveness of self and situation is demonstrated by this extract within Shalhoub-Kevorkian (2006) research, where a participant stated: "They (her family) knew what happened from the moment they looked at him and at me. They both started beating me, and I thought they were going to kill me. They kept repeating "In-shallah tmuti" [it is best for you to die]... I keep blaming myself...All they kept asking is what did you wear, why did you open the door, why didn't you defend yourself?"(p. 162). This example highlights the possibility that religion can also raise feelings of blame or unforgiveness which contrasts to the above literature which suggested that religious motivations may help people to forgive (Kidwell et al., 2012). This contrasting evidence demonstrates the importance of investigating the role of religion within the PTSD-forgiveness relationship.

Value of forgiveness

Although different faiths may appraise different elements of forgiveness, DiBlasio (2000) and Kanz (2000) believe that forgiveness may be valued by some individuals more than others. Kanz, argues that individuals who believe forgiveness can cause emotional problems are usually less willing to forgive. It is hypothesised that these characters may support Nietzsche's (1887) philosophical view, that it is unhealthy to forgive and those who do are "weaklings". Supporters of Nietzsche's view may also believe that some people may forgive because of a fear of confrontation and their own anger (Haaken, 2002), or to feel at ease or comforted, rather than enduring the pain of the transgression in order to seek justice or maintain self-respect (Exline, Worthington Jr, Hill, & McCullough, 2003; Murphy, 2002; Neu, 2002).

Forgiveness is unusual as a psychological concept due to its roots in religion, spirituality, and culture. A meta-analysis, by Hanke and Fischer (2013), reviewed forgiveness in 13 countries and found that those societies which were focused on post-materialistic values, for example, community, morality and altruism, had higher forgiveness than those societies who valued the economy and safety. Therefore, someone's culture will undoubtedly affect their relationship with forgiveness, along with their relationship with religion and spirituality. Orcutt and colleagues (2008), state that it might be helpful to assess for spiritual/religious beliefs, given the religious roots of forgiveness as a construct. They hypothesise that those who value forgiveness highly, but do not act in agreement with those beliefs may be at the highest risk of developing PTSD symptoms and, therefore, the value placed on forgiveness might moderate the relationship between forgiveness and PTSD. This is supported by studies with victims of trauma, which have found that underlying spiritual discontent and struggles with oneself, other and their religion, predicts PTSD (Gerber, Boals, & Schuettler, 2011; Leaman & Gee, 2012). As suggested by

Orcutt et al. (2008), further specifying someone's value of forgiveness would be an interesting direction for prospective research.

McCullough and Worthington (1994), reviewed the forgiveness literature and also suggested that different groups vary from each other based on how they value forgiveness, for example, "marijuana users and non-users, individuals high and low in Machiavellianism, and females aspiring to traditional and non-traditional occupations" (p. 6). With reference to personality traits, it has been suggested that different traits assign priority to different virtues (Exline et al., 2003). Worthington, Berry, and Parrott (2001), state that some individuals place high value on virtues such as compassion, empathy, and altruism ("warm-based" virtues), whereas other individuals value more "conscientious-based" virtues, such as, honesty, accountability, and duty (Exline et al., 2003). It could be suggested that if a transgression was to take place, those with warm-based virtues may prioritise unconditional forgiveness, whereas those who value more conscientious-based virtues may pursue acts of contrition from their perpetrator.

Sexual Assault and PTSD

Victim support UK (2017), define SA as: "if someone intentionally grabs or touches you in a sexual way that you don't like, or you're forced to kiss someone or do something else sexual against your will. This includes sexual touching of any part of someone's body, and it makes no difference whether you are clothed or not" (para. 5). According to the Office for National Statistics (2018), 20% of women and 4% of men have experienced some type of SA, this is equivalent to an estimated 3.4 million female victims. However, it should be noted that this is likely to be higher, as due to issues such as stigma and fears of not being believed, there remains a high level of underreporting SA.

Compared to the general population, those who have been sexually assaulted are at a higher risk to a number of mental health issues including anxiety,

depression, poor self-esteem, eating disorders, substance abuse and suicidal ideation (Campbell, Dworkin, & Cabral, 2009; Freedman & Enright, 1996). In addition, research claims that almost 30% of people exposed to trauma will develop PTSD within three months of the transgression (e.g., Blanchard et al., 1996; Koren, Arnon, & Klein, 1999; Orcutt et al., 2005; Shalev et al., 1998), however, it has been suggested that for those who have been raped, 49% go on to develop PTSD (Breslau, Kessler, Chilcoat, & Schultz, 1998). This is the second largest population to develop PTSD, with the first being those who have been tortured. For those who have been sexually assaulted the rate is 23.7% (Breslau et al., 1998). The effects of SA can be long-lasting and secondary effects of the trauma, such as shame and social withdrawal, can act as a barrier to victims seeking help. This could potentially be a reason why it was found that 16.5% of victims met the clinical criteria for PTSD 17 years after their last incident of rape (Kilpatrick et al., 1989). One of the few papers which has researched women who have experienced an interpersonal trauma, such as SA, found that both negative affect and rumination were significant predictors of PTSD symptoms (Brown, Hetzel-Riggin, Mitchell, & Bruce, 2018), however, the role of forgiveness was not investigated.

Forgiveness, PTSD and sexual assault

Professionals supporting those who have suffered a SA may question whether forgiveness should be granted in relation to such a transgression. Some support Nietzsche's (1887) philosophical view, stated previously that viewing forgiveness as part of a moral system should be rejected and that forgiveness may make the harmed person vulnerable to victimisation (Bass & Davis, 1994; Lamb, 2002). This view does not account for the benefit that forgiveness of self and situation can have for the victim following the trauma. It is essential to highlight that forgiveness does not mean that the perpetrator is excused of any wrongdoing and that any feelings of pain should be ignored (Freedman & Enright, 2017). Snyder and

Heinze (2005), state that in SA, it might be more beneficial for the victim to forgive the situation and self. This is supported by Thompson et al. (2005), who state that in these circumstances, self- and situation-forgiveness may be more significant to psychological well-being than other-forgiveness.

Most studies have researched the relationship between PTSD and forgiveness in specific trauma victim populations, for example, in war veterans (Currier et al., 2014, 2016, 2015; Karairmak & Güloğlu, 2014; Nateghian et al., 2015; Witvliet et al., 2004) or refugees (Hamama-Raz, Solomon, Cohen, & Laufer, 2008). Others have researched the constructs within university student samples (Orcutt et al., 2005), however, very few have examined forgiveness related to one explicit transgression, and to our knowledge no papers have specifically researched this relationship for those who have experienced SA. To date, most of the research investigating SA has predominately focused on childhood sexual abuse (Freedman & Enright, 1996; Holeman & Myers, 1998; Snyder & Heinze, 2005). Snyder and Heinze (2005), investigated adult childhood abuse survivors and found that forgiveness mediated the relationship between PTSD and hostility, and that selfand situation-forgiveness were stronger mediators than forgiveness of other(s). The effects of forgiveness of perpetrators for victims of sexual abuse has also been studied by Holeman and Myers (1998). They found that the frequency of abuse, use of force and being threatened accounted for some of the variation with forgiveness and that perceived victimisation was significantly associated with forgiveness (Holeman & Myers, 1998). This is supported by Cerci and Colucci (2017), who suggest that trauma-related factors involved in the relationship between forgiveness and PTSD could be whether it was a single violation or multiple, and if it was a minor transgression compared to severe. The relationship between more transgressions and its relationship with PTSD has been explored by Davidson, Lozano, Cole, and Gervais (2013). This is one of the few studies which explored SA in adulthood. The researchers found that more experiences of SA was associated

with higher levels of revenge and avoidance and importantly less self-, other- and situational-forgiveness. It has been suggested that control and power are lost when someone is sexually assaulted, and so the feeling of revenge could be a way for victims to restore a sense of control (Baumeister et al., 1998). However, contradictory studies show that the feelings of revenge could maintain harmful feelings of anger, which has previously been argued as a way that PTSD symptoms are maintained (Worthington, 2001).

Conclusion

Based on the above literature, it can be suggested that a complex relationship between forgiveness and PTSD exists. Notably, it appears that the role of emotions such as anger and negative affect as well as someone's personal value of forgiveness could be important to the relationship, among other variables such as severity of the transgression and relationship with the perpetrator. As suggested by the literature, this relationship has been found in specific trauma victim populations, for example in war veterans (Currier et al., 2014, 2016, 2015; Karairmak & Güloğlu, 2014; Nateghian et al., 2015; Witvliet et al., 2004), however, very few have examined forgiveness related to one explicit transgression, and as far as this study is aware, no papers have specifically researched this relationship for those who have experienced SA. With 49% of people who have been raped developing PTSD, (Breslau et al., 1998), this appears an area worthy of further investigation.

Clinical Implications

The clinical implications of the proposed relationship between PTSD and forgiveness will be considered in depth in the next chapter; however, the key concepts of the literature are as follows. Forgiveness, an unusual psychological concept due to its roots in religion, spirituality, and culture, may also be a useful pathway in reducing PTSD symptoms and improving quality of life (Currier et al.,

2016). As highlighted in Cerci and Colucci's (2017) systematic review, many studies have started to highlight a relationship between forgiveness and PTSD, though other variables appear to have an influence. It may be helpful for clinician to encourage victims to share individual narratives of the transgression, for example, their relationship with the perpetrator, and any transgression-related factors. In addition, factors such as the importance of spirituality and forgiveness for the victim could be useful information to draw upon to aid the recovery process.

As Kearns and Fincham (2004) showed, the public's definition of forgiveness differs from that of researchers within the field. Therefore, as a clinician, it might be important to check the victims understanding of forgiveness and if necessary stress that forgiveness does not deny any wrongdoing of the perpetrator and does not mean that feelings of pain should be ignored (Freedman & Enright, 2017). Furthermore, it might be helpful to distinguish other-, self- and situational-forgiveness and share with the victim that forgiveness of self and situations is more significant to psychological well-being than other-forgiveness (Thompson et al., 2005). In conclusion, this conceptual introduction has proposed that forgiveness and associated factors may have a positive therapeutic effect on PTSD.

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Chapter 2: Empirical Paper

Anger, negative affect, PTSD and transgressionrelated characteristics among sexual assault victimsurvivors: The moderating role of forgiveness and value of forgiveness.

Abstract

Aims

The study explored forgiveness and value of forgiveness as potential moderators in the relationship between anger, negative affect, transgression-related characteristics and Post-Traumatic Stress Disorder (PTSD) symptoms. A cross-sectional design was used to investigate five suggested moderation models.

Method

An online questionnaire was completed by 122 females reporting an unwanted sexual experience. The questionnaire included a measure of PTSD symptoms, forgiveness (trait and state), anger (trait and state), negative affect and value of forgiveness. Questions regarding the assault, such as the severity of the transgression and their relationship with the perpetrator were also asked.

Results

As hypothesised, it was found that the more severe the transgression, the greater PTSD symptoms and that forgiveness significantly moderated this relationship.

Additionally, it was found that if the perpetrator was well known, the victim had more PTSD symptoms, and that again, forgiveness moderated this relationship. No other moderation relationships were found to be significant, however, at the bivariate level, forgiveness, PTSD, anger and negative affect were all significantly correlated.

Conclusions

This is the first study to show forgiveness as a moderator in the relationships between transgression-related characteristics and PTSD symptoms with women who have been sexually assaulted, suggesting that forgiveness may be a promising component to PTSD treatment for this population. These results should be viewed as preliminary.

Introduction

A considerable amount of research has been completed to improve our understanding of Post-Traumatic Stress Disorder (PTSD). Diagnostic criteria define PTSD as: developing after exposure to an event which involves serious injury, actual or threatened death, or sexual violation, either to oneself, or witnessed occurring to another; intrusive symptoms; changes to your thoughts, moods and arousal and avoidance of any reminders associated with the event (American Psychiatric Association, 2013). Approximately 30% of people will develop PTSD within three months of their incident (Blanchard et al., 1996; Koren, Arnon, & Klein, 1999; Orcutt et al., 2005; Shalev et al., 1998), which raises questions about why some individuals appear resilient or vulnerable to developing PTSD.

Over the last two decades, researchers have become increasingly interested in understanding and investigating forgiveness as a concept (Snyder & Heinze, 2005), and more lately its relationship with PTSD. In chapter one, the three key theories of PTSD were detailed, including Ehlers and Clark's (2000) cognitive model. According to this model, a trauma memory is characterised by being poorly elaborated and contextualised, as it has not been given a temporal context. It is for this reason that clients receiving cognitive behaviour therapy (CBT) for their PTSD are encouraged to re-write the narrative and contextualise the trauma memories, using evidence-based techniques such as re-scripting and cognitive restructuring. It has been suggested that for forgiveness to take place, a similar process of evaluating and reinterpreting the transgression is necessary, and so forgiveness may serve as a buffer against developing trauma symptoms (Bae et al., 2014; Karairmak & Güloğlu, 2014; Orcutt et al., 2005).

There is growing literature investigating forgiveness and PTSD specifically.

One of the first studies that found self-forgiveness was positively associated with depression, anxiety, and PTSD symptom severity was with veterans (Witvliet et al.,

2004), which has been replicated more recently (Currier, Drescher, & Harris, 2014; Currier, Drescher, Holland, Lisman, & Foy, 2016; Currier, Holland, & Drescher, 2015; Karairmak & Güloğlu, 2014; Nateghian, Dastgiri, & Mullet, 2015). Further studies have demonstrated the same relationship with other trauma populations such as, child abuse victims (Snyder & Heinze, 2005).

Although a number of studies have shown a relationship between forgiveness and traumatic symptoms, no association was found with terror attack victims (Friedberg et al., 2005), or victims of the civil war in Sierra Leona (Doran et al., 2012). In addition, when studies have been replicated, once gender and transgression severity are factored into the analysis, this relationship is reduced to a marginal effect (Orcutt, Scott, and Brooke, 2008). As suggested in a fairly recent systematic review, although many studies have started to highlight a clear association between forgiveness and PTSD, additional factors within the relationship should be considered (Cerci & Colucci, 2017). This empirical paper aims to explore some of the factors.

Amongst these other important factors is transgression severity. A number of studies have shown that severity substantially effects victim forgiveness (e.g., Brown, 2003; Holeman & Myers, 1998; McCullough et al., 1998; McCullough & Hoyt, 2002), however, the research on its effect on PTSD is conflicting (e.g., Blanchard et al., 1995; Bryant & Harvey, 1995; Coronas, García-Parés, Viladrich, Santos, & Menchón, 2008; Ehlers, Mayou, & Bryant, 1998; Taylor & Koch, 1995). In terms of the impact severity has on the forgiveness-PTSD relationship, it has been found to be associated with victim's perceived threat, which has been shown to be negatively correlated with forgiveness and positively correlated with more PTSD symptoms (Bae et al., 2014). It has also been shown that higher levels of reported transgression severity were associated with both lower levels of forgiveness and higher trauma symptoms (Orcutt et al., 2008). Finally, it is understood that there are three targets for forgiveness: the self, the perpetrator(s), and the situation. It has

been suggested that situational-forgiveness may be more significant in more severe transgressions (Cerci & Colucci, 2017), however, the role that severity plays within the forgiveness-PTSD relationship remains unclear (Orcutt et al. 2008).

Another factor that has been suggested to be important to the forgiveness-PTSD dyad, is the victim's relationship with the perpetrator. As described in chapter one, the closer a victim is to the perpetrator, the more negative emotional responses are anticipated (Kira, 2001). This appears to be an interesting area to research, as it has been proposed that forgiveness in a close relationship may differ to forgiveness in an oppressive relationship or intergroup transgression due to dynamics such as power, conflict, and resistance (Karremans et al., 2003). As far as this paper is aware, there has not been any research explicitly examining how the victim's relationship with the perpetrator effects the relationship between forgiveness and PTSD. However, it has been hypothesised that if there is no relationship between the victim and perpetrator, situational-forgiveness, rather than self- and otherforgiveness, may be the most important factor in PTSD symptomology (Weinberg et al., 2014; Cerci & Colucci, 2017). In addition, having a close relationship with the perpetrator, compared to no relationship, may have a bigger impact on your forgiveness (Cerci & Colucci, 2017).

As described in chapter one, there appears to be an emerging relationship between forgiveness, PTSD, negative affect and anger, amongst other emotions such as depression, hostility and anxiety. In terms of a model that brings all of this together, it is proposed that forgiveness may help reduce residual feelings, such as guilt, hostility, and anger, meaning that more adaptive problem-focused strategies can be utilised, thus preventing the development of, or reducing, trauma symptomology. A relationship between anger, negative affect, forgiveness and PTSD is emerging within the literature (Kaplan, 1992; Karairmak & Güloğlu, 2014; Konstam et al., 2001; Seybold et al., 2001; Snyder & Heinze, 2005; Witvliet et al., 2004), with the most recent study suggesting that both anger and negative affect

mediate the PTSD-forgiveness relationship specifically (Karairmak & Güloğlu, 2014). Although this research highlighted a mediation relationship between these factors, when planning the analysis for this empirical paper, it was felt that a moderation relationship may be more likely. This is because the role of forgiveness or value of forgiveness appears to be as an amplifier or buffer between the already established relationship between anger, negative affect and PTSD symptoms (Bae et al., 2014; Orcutt et al., 2005), rather than explaining the relationship between these variables.

Forgiveness research has also proposed that an individual's value of forgiveness may moderate the forgiveness-PTSD relationship (Orcutt et al., 2008). It is suggested that forgiveness may be valued by some individuals more than others (DiBlasio, 2000; Kanz, 2000), for example, those who consider themselves to be religious. Kanz (2000), argues that individuals who are less willing to forgive are typically those who view forgiveness as a factor in causing emotional problems.

Therefore, it might be helpful to assess for spiritual/religious beliefs, especially given the religious roots of forgiveness as a construct (Orcutt et al., 2008). It is hypothesised that those who highly value forgiveness but do not act in agreement with those beliefs may be at the highest risk of developing PTSD symptoms (Orcutt et al., 2008). Previous papers have suggested that this appears to be an interesting area of research (Bacon, 2012; Karairmak & Güloğlu, 2014), therefore this factor has been included in this study's variables.

To date, most research into the PTSD-forgiveness relationship has been with specific trauma victim populations, for example, in war veterans (Currier et al., 2014, 2016, 2015; Karairmak & Güloğlu, 2014; Nateghian et al., 2015; Witvliet et al., 2004), refugees (Hamama-Raz et al., 2008) and university students (Orcutt et al., 2005). Very few have examined forgiveness related to one explicit transgression, and to the knowledge of this paper no research has specifically investigated this relationship for those who have experienced sexual assault (SA). Compared to the

general population, individuals who have experienced SA are more likely to develop a number of mental health difficulties, including depression, poor self-esteem, anxiety, eating disorders, suicidal ideation and substance abuse (Campbell et al., 2009; Freedman & Enright, 1996). Additionally, those who have been raped are the second most likely group to develop PTSD, compared to other traumas (Breslau et al., 1998). Furthermore, we are aware that with SA victims, there might be independent relationships with the differing concepts of forgiveness. For example, it might be more beneficial for a SA victim to forgive the situation and themselves, rather than the transgressor (Snyder & Heinze, 2005). As the research into the forgiveness-PTSD relationship starts to grow, it is important that this population and their idiosyncratic experiences are examined. Finally, none of the studies researching the forgiveness-PTSD relationship have included measures of the value of forgiveness or explicitly examined transgression-related factors, despite these constructs being conceptually important to one another.

The aim of the current study is to use a cross-sectional design to explore forgiveness and value of forgiveness as potential moderators in the relationship between anger, negative affect, transgression-related characteristics and PTSD, with those who have experienced SA. Based on the limited research that has been done within this field, it is predicted that the following associations will exist (Table 1).

Table 1. The study's proposed hypothesis.

	Predictor	Outcome	Moderator	Proposed relationship
H ₁	Anger (Trait and state)	Impact of Event	Forgiveness (Trait and State)	High anger = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.
H ₂	Negative affect	Impact of Event	Forgiveness (Trait and State)	High negative affect = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.

H ₃	Forgiveness (Trait and State)	Impact of Event	Value of forgiveness	Low forgiveness = greater PTSD symptoms. Value of forgiveness will moderate this relationship so that the strength of that association will be weaker where the value of forgiveness is low.
H ₄	Severity of the assault	Impact of Event	Forgiveness (Trait and State)	High severity of assault = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.
H ₅	Relationship with perpetrator	Impact of Event	Forgiveness (Trait and State)	If the perpetrator is well known = greater PTSD symptoms Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.

Methodology

Collaboration

Recruitment and data collection for this empirical paper was undertaken as part of a joint project (Rankin, 2019). See Appendix G for further details of this collaboration.

Participants

If a female was over the age of 18 and defined themselves as having experienced a SA, they were invited to participate in the study. Following many discussions of what SA means, we agreed to use the Victim Support UK (2017) definition as it was the most extensive explanation and it resonated with the researchers understanding. They describe SA as "if someone intentionally grabs or touches you in a sexual way that you don't like, or you're forced to kiss someone or do something else sexual against your will. This includes sexual touching of any part of someone's body, and it makes no difference whether you are clothed or not" (para. 5). By this definition, we agreed that for our study the participants had to be involved in a physical transgression, rather than other forms of SA e.g. "flashing" or "catcalling". This decision is further discussed in chapter three. Participants were

also required to not be receiving active psychological treatment (because their treatment could potentially impact their PTSD and related negative symptoms), they needed to be living in the UK (the fellow researcher was investigating feminist values specific to UK society), and needed a sufficient level of English language and computer literacy to complete the study.

Recruitment was restricted to "females only" for a number of reasons. Firstly, according to the data from the Office for National Statistics (2017), women are more likely to be a victim of SA (M= 0.8%, F= 3.1% in the last year). Secondly, it is difficult to do an inclusive study that represents the experiences of SA for females and males. Lastly, on a more practical level, as said above, this was a joint project where the fellow researcher was investigating feminist values of SA victims and was only recruiting females.

Participants were recruited through advertising using university databases (Sona Systems), word of mouth, adverts in public community buildings, online platforms (SA support forums) and social media platforms (Facebook and Twitter).

A total of 122 females, meeting the inclusion criteria, completed the questionnaire. Participants ages ranged from 18-66 (*M*= 28.55, *Mdn*= 28, *SD*= 6.69). Of the participants, 83.6% (102) were "White", while 7.4% (9) identified themselves as "Mixed/multiple ethnic groups", 4.1% (5) were "Asian/Asian British", 3.3% (4) were "Black/African/Caribbean/Black British" and 1.6% (2) identified themselves as "Other". The majority, 68% (83), identified themselves as not having a religion, 26% (32) were "Christian (including Church of England, Catholic, Protestant, and all other Christian dominations)", .8% (1) were "Buddhist", .8% (1) were "Jewish", .8% (1) were "Muslim" and 3.3% (4) selected "Other".

As seen in Figure 1, 284 participants entered the study. It was stated in the consent form that any incomplete questionnaires would be interpreted as the participant exercising their right to withdraw their data, therefore, any incomplete measures were deleted (n= 148). Data sets were also deleted if there was any

missing data, their assault did not meet our definition of SA, or whether the SA took place when the participant was under the age of 16.

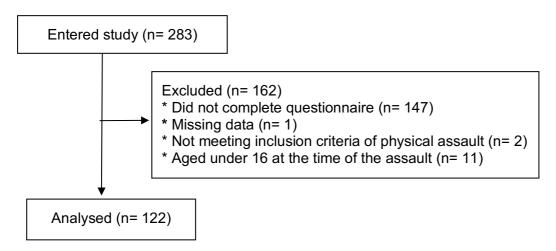


Figure 1. A flow chart of the study's recruitment.

Ethical considerations

Ethical approval for the study was granted by University College London (UCL) Research Ethics Committee: Project ID number: 12709/001 (Appendix A). All participants were provided with an information sheet about the study (Appendix D), which clearly stated the potential risks in completing the research. Participants were given the opportunity to call the researchers and ask questions, before being asked to indicate informed consent online (Appendix E). They were also made aware that they have the right to withdraw from the study at any time without giving a reason and that incomplete data sets would be disregarded.

As sensitive information was being asked, it was of utmost importance that participants data was appropriately managed and that they could contact the researchers if they became distressed. Participants data was stored on Qualtrics, a secure online questionnaire program. The data was downloaded to the UCL network and kept on an encrypted USB stick. Participants email addresses were collected so that we could contact them regarding the prize draw, but this information was stored on a separate questionnaire which was linked to the questions, ensuring that they could not be identified. This was only accessed on one occasion to select the

winners of the Amazon vouchers and was then deleted. The rest of the data was anonymised. In the information (Appendix D) and debrief (Appendix F) sheets participants were given thorough signposting information. Participants were also given an opportunity to request a wellbeing follow-up call from one of the researchers within two weeks. Finally, the researchers study phone number was provided so that participants could contact the researchers directly. A previous dissertation asked similar sensitive questions online (Copeland, 2007). They explained that they also put similar ethical considerations into place and did not have anyone contact them regarding unpleasant feelings or undue distress. We had one participant request a follow-up call, but she explained that she had entered her number in error and was not experiencing any distress as a result of completing the questionnaire.

Public/Service user involvement

Given the sensitive nature of this topic, we held a preliminary focus group to troubleshoot the proposed survey prior to its formal release on the internet. As previously mentioned, a prior dissertation looking at sexual trauma, forgiveness, and health asked similar questions online and found a preliminarily pilot focus group was of great use (Copeland, 2007). Participants for the focus group were recruited via the university's subject databases (Sona Systems). To incentivise participants to the focus group, they were paid for their time. An information sheet was given at the beginning of the focus group (Appendix B) and informed consent was collected (Appendix C). Ethical considerations were discussed in the focus group, and it was fed back that sufficient considerations were being offered to our participants.

Procedure

Using online advertisement, females over the age of 18 with experiences of unwanted sexual experiences were invited to participate in the study. Recruitment

was open between August 2018 and December 2018. Participants were invited to read an information sheet and consent form online before giving consent to begin the study. Following this, they were asked to complete the following battery of measures which mapped onto each hypothesis (Table 2). It was noted that they should answer the questions based on the SA experience that they found most distressing if there had been multiple. At the end, participants were thanked for their time and the debrief information was provided. They were also guided to a separate questionnaire which offered the opportunity to provide their personal details if they would like a wellbeing follow-up phone call from one of the researchers and to enter the prize draw.

All questionnaire data was stored electronically using anonymised codes and according to ethical guidelines and data protection laws.

Table 2. Variables and measures used in each of the hypotheses.

Hypothesis	1. Predictor	2. Outcome	3. Moderator	Proposed relationship	Measure
H ₁	Anger (Trait and state)	Impact of Event	Forgiveness (Trait and State)	High anger = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.	1. Trait: MAD-AS (F) State: State anger questions (F) 2. IES-R (C) 3. Trait: HFS (D) State: State forgivenes s questions (E)
H ₂	Negative affect	Impact of Event	Forgiveness (Trait and State)	High negative affect = greater PTSD symptoms. Forgiveness will moderate this relationship so that the	1.PANAS (G) 2.IES-R (C)
					3.Trait: HFS (D) State: State forgiveness questions (E)

				strength of that association will be weaker where forgiveness is high.	
H ₃	Forgiveness (Trait and State)	Impact of Event	Value of forgiveness	Low forgiveness = greater PTSD symptoms. Value of forgiveness will moderate this relationship so that the strength of that association will be weaker where the value of forgiveness is low.	1.Trait: HFS (D) State: State forgiveness questions (E) 2.IES-R (C) 3. Value of forgiveness (H)
H ₄	Severity of the assault	Impact of Event	Forgiveness (Trait and State)	High severity of assault = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.	1.Severity (A) 2.IES-R (C) 3.Trait: HFS (D) State: State forgiveness questions(E)
H ₅	Relationshi p with perpetrator	Impact of Event	Forgiveness (Trait and State)	If the perpetrator is well known = greater PTSD symptoms. Forgiveness will moderate this relationship so that the strength of that association will be weaker where forgiveness is high.	1.Relationshi p with perpetrator question (A) 2.IES-R (C) 3.Trait: HFS (D) State: State forgiveness questions (E)

Note: The letter in brackets corresponds with the explanation below.

Measures

A. Demographic details

Participants were asked questions relating to the following demographics: age, ethnicity and religion/faith group. They were also asked questions regarding the assault. Due to constraints, this was not an exhaustive list, but were based on previous literature. These questions were: their age at the time of the assault, how well they knew the perpetrator (1= "not known at all/complete stranger" to 5= "extremely well"), whether they would define their experience as SA or rape (1= "definitely not" to 10= "definitely yes") and how severe they believed that experience to be (0= "not at all severe" to 10= "extremely severe").

B. Sexual experiences questionnaire

Participants were also asked how they would define their most distressing unwanted sexual experience and any exposure to previous assaults. The categories used for this question were based on the sexual experiences survey (Koss et al., 2006). Participants were required to respond whether they had experienced the assault listed, and if so, was this in the last two years or over two years ago.

C. Impact of Event Scale-Revised (IES-R)

The IES-R (Weiss, 2007), is one of the most widely-used trauma measures (Joseph, 2000). It is a 22-item self-report questionnaire that asked participants how distressing different trauma-related symptoms have been for them over the past seven days. Participants respond by using a scale from 0 ("not at all") to 4 ("extremely") to rate their distress. The measure consists of three subscales which reflect intrusion, avoidance, and hyperarousal. The reported internal consistency of this measure is high for the three subscales (Intrusion: Cronbach's alpha = .87 – .94, Avoidance: Cronbach's alpha = .84 – .87, Hyperarousal: Cronbach's alpha =

.79 – .91, (Creamer, Bell, & Failla, 2003; Weiss & Marmar, 1997), along with test-retest reliability (Cohen's Kappa= .89 - .94) (Weiss & Marmar, 1997).

D. Heartland Forgiveness Scale (HFS)

The HFS was developed by Thompson et al. (2005) to allow multiple aspects of forgiveness to be measured in research. This is an 18-item self-report questionnaire measuring: trait forgiveness of self, others, and situations. Participants respond by using a 7-point Likert scale ranging from 1 ("almost always false of me") to 7 ("almost always true of me"). The reported internal consistency of this measure is adequate (Cronbach α = 0.72-0.87), along with test-retest reliability and convergent validity (Thompson et al., 2005). The HFS scale will be used to explore trait forgiveness.

E. State forgiveness

For interest purposes both state- and trait- forgiveness measures were used to see if there are any moderation differences. As suggested by Welton, Hill, and Seybold, (2008), using different measures of forgiveness helps to triangulate the construct for future investigation. The Enright Forgiveness Inventory (Subkoviak et al., 1995), is a standardised measure of state forgiveness. However, due to the length of the scale and copyrighting expense, state forgiveness was assessed using two items developed for this study. They were "to what extent have you **tried** to forgive the perpetrator/s of the incident that you previously discussed?" and "to what extent **do you think you have** forgiven the perpetrator/s of the incident that you previously discussed?" These were scored on separate five-point Likert scales (1= "not tried at all/not at all forgiven", and 5= "tried very hard/completely forgiven"). These questions are based on items used in a previous dissertation which looked at forgiveness and anger (Bacon, 2012).

F. Mahan and DiTomasso Anger Scale (MAD-AS)

The Mahan and DiTomasso Anger Scale (Mahan & DiTomasso, 1998), is an anger assessment tool with six subscales: Behavioural Dyscontrol, Anger Resolution, Aggression, Physiological Arousal, Externalization and Verbal Expression. The six-items that measure externalization were used as they are the best measure of trait-anger. Trait-anger is presumed to be stable, so the measure asks respondents to select the most appropriate option for how they are currently feeling. The reported internal consistency of the entire scale is good (Cronbach α = 0.94). For the externalization scale, internal consistency was acceptable (Cronbach α= 0.78) (Beardmore, 2003). The test-retest coefficients for the MAD-AS total score was .93 and for the externalization factor, it was .87 (Beardmore, 2003). For interest purposes, both state- and trait- anger measures were used. State-anger was assessed using two items developed for this study. These were "how angry do you currently feel with other people, including the perpetrator/s of the incident that you experienced?" and "how angry do you currently feel towards yourself?" Participants rated these on separate five-point Likert scales from 1 ("not at all angry") to 5 ("very angry"). These questions are based on items used in previous studies (Andrews et al., 2000; Bacon, 2012).

G. Positive and Negative Affect Schedule (PANAS)

Watson, Clark, & Tellegen (1988) developed the 20-item PANAS to measure how often participants experience positive and negative emotions over the past week. Participants respond using a Likert scale ranging from 1 ("never") to 5 ("always"). A higher score indicates higher affect. The internal consistencies of the PANAS NA scales is .85 (95% CI= .84–.87) and 89. (95% CI= .88-.90) for the PA scale (Crawford & Henry, 2004).

H. Value of forgiveness

Due to there being no measure for the value of forgiveness, this was assembled using questions based on "The Conceptual Forgiveness Questions" (Kanz, 2000). Clients were asked to rate statements such as, "I feel guilty if I do not forgive someone" and "Forgiveness is important to me". Participants rated their answers on separate five-point Likert scales from 1 ("strongly disagree") to 5 ("strongly agree").

Data Analysis

Data was analysed using the Statistical Package for Social Science (version 25.0; 2017). The study's power analysis was informed by the work of Karairmak and Güloğlu (2014), whose correlations were all statistically significant with small to medium effect sizes. A power calculation was undertaken using G Power (Faul, Erdfelder, Lang, & Buchner, 2007). It was estimated that a sample size of 95 participants would provide 80% power with an alpha level of 0.05 for a correlational design, to detect a small to medium effect size. We agreed that although this was the aim for recruitment, ideally, we wanted a larger sample to give us more scope to investigate explorative hypothesis that we did not have a sense of the effect size we might expect. Thus, we planned to keep the online recruitment process open for as long as possible.

After pre-analysis checks, it was evident that there may be one potential outlier which will be discussed in the results. Preliminary correlational analyses were completed to explore the impact of the different subtypes of forgiveness on transgression-related characteristics. The impact that religious beliefs have on someone's value of forgiveness and forgiveness scores was then explored by comparing the group differences. This data was not normally distributed and attempts to remediate non-normality of this data was unsuccessful and so non-parametric tests were used.

Next, prior to testing the hypothesised models, means, standard deviations, and bivariate correlations were computed for the study variables (Table 3 and Table 4). As a number of correlations were being calculated, to reduce the likelihood of committing a type one error, a Bonferroni correction was used. This was calculated by dividing the alpha value (p= 0.05) by the number of correlations completed at once. For hypothesis one to four, this was 66 (p=0.000), and for hypothesis five this was 6 (p=0.008). There is some controversy around using a Bonferroni correction and so the results are given both with and without the correction to allow the reader to draw their own conclusions. Forgiveness and value of forgiveness were then investigated as possible moderators as suggested in the hypotheses (Table 1). Using the PROCESS syntax module for SPSS (Hayes, 2018), the predictor and moderator variables were centred before moderation was tested. For the graphs, the high and low positions for the moderator variables were calculated using cut-offs of one standard deviation above or below the mean. This approach is a similar that used by Hirsch et al. (2012).

Results

There was a query regarding one case being too influential, but on inspection, it did not appear to be an outlier. Analysis was conducted both with and without the case to clearly represent the data. Results will be presented with the case included unless the case being removed made a significant difference to the findings. Reference to this is made where necessary below.

Preliminary analyses

Preliminary analyses were completed to investigate the different subtypes of forgiveness and the role of religious beliefs. In terms of the differences found between the subtypes of forgiveness, at the bivariate level, self- and situational-forgiveness were significantly negatively correlated with PTSD symptoms (self: r= -.243, p= .007, situational: r= -.226, p= .012), however, post hoc tests using the

Bonferroni correction rendered these results to be non-significant (Table 4). Other-forgiveness was not found to be correlated with PTSD symptoms (r= -.167, p= .067). Surprisingly, it was found that other-forgiveness was the only forgiveness subtype to be correlated with severity of the transgression (r= -.205, p= .023), value of forgiveness (r= .240, p= .008), and state-forgiveness (r= -.245, p= .007), however again, a Bonferroni correction rendered these significant results non-significant. Finally, self-forgiveness was the only forgiveness subtype with was correlated with the relationship with the perpetrator (r= -2.70, p= .003), however again, a Bonferroni correction found that this was non-significant.

Religious beliefs were split into three groups: "non-religious", "Christian" and "other". It was found that there was a statistically significant difference between the value of forgiveness scores, and PTSD symptoms for the different religious groups (value of forgiveness: H(2)= 6.00, p= .050, IES-R: H(2)= 6.06, p= .048). For both value of forgiveness and PTSD symptoms, it was found that Christians responses were significantly different to those identifying as having no religion, with the Christians scoring higher on both measures (value of forgiveness: Christian: M= 22.00, Mdn= 23.00, SD= 4.12, No religion: M= 19.95, Mdn= 21, SD= 4.30, p= .028) (IES-R: Christian: M= 29.47, Mdn= 14.00, SD= 20.27, No religion: M= 19.06, Mdn= 14.00, SD= 20.27 p= .033). No other groups were significantly different. Although it was not a significant difference, it was found that the Christians had a lower overall trait forgiveness score than the "no religion" group (Christian: M= 76.31, Mdn= 73.50, SD= 15.15, No religion: M= 81.31, Mdn= 81.00, SD= 17.19).

Relationship between anger, forgiveness and PTSD symptoms

Association between variables

At the bivariate level, trait- forgiveness was significantly negatively associated with anger (trait-anger: r= -.561, p<.001, state-anger: r= -.513, p<.001). and PTSD symptoms (r= -.271, p= .002). Though, a Bonferroni correction rendered

the correlation with PTSD symptoms to be non-significant. A significant positive association was also found between anger and PTSD symptoms (trait-anger: r= .252, p= .005, state-anger: r= .463, p<.001) and the association with state-anger sustained following a Bonferroni correction. The other relationships were not found to be significant (Table 4).

Moderation results

When exploring moderation, forgiveness was not found to be a significant moderator of either trait-anger and increased PTSD symptoms (trait-forgiveness: F(1, 118)= .48, p=.49, $R^2=.003$, state-forgiveness: F(1,118)=3.28, p=.07, $R^2=.025$) or state-anger and PTSD symptoms (trait-forgiveness: F(1,118)=.04, p=.84, $R^2=.000$, state-forgiveness: F(1,118)=.1.73, p=.19, $R^2=.011$) (Table 5). As no moderation was found to be significant, hypothesis one was not supported.

Relationship between negative affect, forgiveness and PTSD symptoms Association between variables

As expected, trait-forgiveness was significantly negatively associated with PTSD symptoms (r=-.271, p=.002) and negative affect was significantly positively associated with PTSD symptoms (r=.301, p=.001), though a Bonferroni correction rendered these significant results to be non-significant. In addition, state-forgiveness were not found to be significantly associated with PTSD symptoms (r=-.039, p=.668). Unexpectedly, negative affect was not significantly associated with trait-forgiveness (r=-.087, p=.339) or state-forgiveness (r=.176, p=-.052). *Moderation results*

Forgiveness was not found to be a significant moderator between negative affect and increased PTSD symptoms (trait: F(1,118)= .890, p= .347, R^2 = .006, state: (F(1,118)= .357 p= .552, R^2 = .003) (Table 5). As no moderation was found to be significant, hypothesis two was also not supported.

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Relationship between forgiveness, value of forgiveness and PTSD symptoms

Association between variables

As stated above, trait-forgiveness was significantly negatively associated with PTSD symptoms (r=-.271, p=.002), however, Bonferroni correction rendered these significant results to be non-significant and value of forgiveness were not found to be significantly associated with PTSD symptoms (r=.057, p=.531). Stateforgiveness was significantly positively associated with value of forgiveness (r=.387, p<.001), but surprisingly trait-forgiveness was not (r=.006, p=.951).

Moderation results

Neither trait- nor state-forgiveness were found to be a significant moderator of value of forgiveness and PTSD symptoms (state: F(1,118)= .113 p= .738, R^2 = .000, trait: F(1,118)= 1.851, p= .1763, R^2 = .014). As no moderation was found to be significant, hypothesis three was also not supported.

Relationship between the severity of the transgression, forgiveness and PTSD symptoms

Association between variables

Post hoc tests using a Bonferroni correction revealed that a significant positive correlation was found between the severity of the transgression and PTSD symptoms (r= .495, p<.001). Trait-forgiveness was significantly negatively correlated with PTSD symptoms (r= -.271, p= .002), but not with severity of transgression (r= -.065, p= .478) and the relationship with PTSD symptoms did not sustain following a Bonferroni correction. A significant negative association was found between state-forgiveness and severity of transgression (r= -.241, p= .007), however again, a Bonferroni correction rendered these significant results non-significant. No relationship between state forgiveness and PTSD symptoms was found (r= -.039, p= .668).

Moderation results

Trait-forgiveness was found to be a significant moderator of the relationship between severity and PTSD symptoms (F(1, 118) = 5.34, p = .023, $R^2 = .030$). For those high in trait-forgiveness, there is a smaller effect of severity of the transgression on PTSD symptoms. However, interestingly, individuals with low levels of trait-forgiveness are at increased risk for PTSD symptoms when a severe transgression took place (Figure 2). This significant moderation relationship supports hypothesis four.

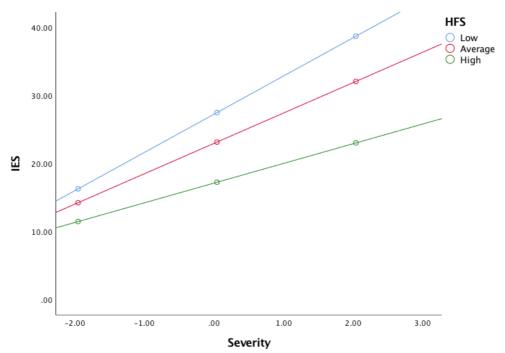


Figure 2. Interaction of trait forgiveness as a moderator of association between the severity of the transgression and PTSD symptoms.

Relationship between the relationship with the perpetrator, forgiveness and PTSD symptoms - "Outlier" excluded

Association between variables

Post hoc tests using a Bonferroni correction revealed that a significant positive correlation was found between whether the perpetrator in the transgression was known and PTSD symptoms (r= .265, p= .003). Trait-forgiveness was

significantly negatively correlated with PTSD symptoms (r= -.205, p= .024), though a Bonferroni test rendered these significant results non-significant. Trait-forgiveness was not significantly associated with whether the perpetrator was known (r= -.161, p= .078). Post hoc tests using a Bonferroni correction revealed that whether the perpetrator was known was also significantly positively correlated with state-forgiveness (r= .462, p<.001) (Table 3).

Table 3. Means, standard deviations, and correlations for the relationship with the perpetrator, forgiveness and PTSD symptoms

N=121	1	2	3	4	Mean (SD)
1. PTSD	-	205*	011	.265*∇	22.28 (21.52)
2. Trait Forgiveness		-	.045	161	80.09 (15.72)
3. State Forgiveness			-	.462**∇	4.92 (2.42)
Relationship with perpetrator				-	2.54 (1.54)

Note: PTSD= Impact of Event Scale-Revised total score, Trait forgiveness= Heartland

Forgiveness Scale total score, State anger= Mahan and Di Tomasso Anger Scale total score,

Negative affect= Positive and Negative Affect Schedule total score. *p<.05 **p<.001 V Significant

with Bonferroni

Moderation results

It was found that state-forgiveness significantly moderated the relationship between whether the perpetrator was known and PTSD symptoms (F(1, 117)= 4.41, p= .04 R2= .033). Individuals who did not have a close relationship with the perpetrator may be at less risk for PTSD symptoms if they have high state-forgiveness, however, if they had a very close relationship with the perpetrator, they may be at more risk of PTSD symptoms if they have high state-forgiveness (Figure 3). This significant moderation relationship supports hypothesis five.

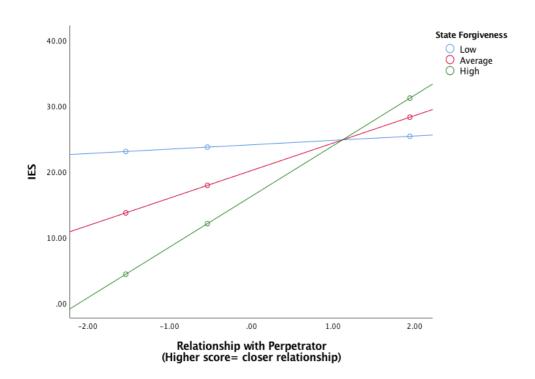


Figure 3. Interaction of state forgiveness as a moderator of the association between the victim's relationship with the perpetrator and PTSD symptoms.

Table 4. Means, standard deviations, and correlations for the study variables.

Mean (SD)	22.82 (22.24)	79.62 (16.48)	4.89	(2.43) 7.18	(2.39)	5.01	20.45	(4.25)	25.52 (6.16)	2.55	4.96 (2.39)	25.14	(7.32)	27.56	(6.54)	26.93	(7.09)	
12	226*	∆**678.	**628.	1	.452**∇	-			092	085	600	.649**∇		.405**∇		1		įC
	167	.664**∇	.245**	1	$\Delta^{**}805$.	- *************************************	.240**		023	056	205*	.208*		1				Mahan and L
10	243**	∆**908.	097	1	.372**∇	- - -	.432 v 147		087	270**	.029							State anger=
o	.495** V	065	241**	.124		.208*	.041		009	.215*	ı							otal score, s
∞	.277**	179*	.448**	ν .076		.158	.092		.177	ı								ess Scale to score.
7	.301*	087	.176	.216*		.174	.102		1									' Forgivene dule total s
9	.057	900.	.387**	√ 064		142												Heartland Vfect Sche
Ŋ	.463**∇	- .513**⊽	140	404**		ı												forgiveness= Heartland Forgiveness Scale total score, State anger= Mahan and Di nd Negative Affect Schedule total score.
4	.252**	- .561**∇	130	ı														score, Trait = Positive ar
က	039	.077	ı															vised total tive affect
7	.271**	ı																Scale-Resorter, Nega
_	ı																	f Event total sc
N=122	1. PTSD	2. Trait Forgiveness	3. State	Forgiveness 4. Trait Anger)	5. State Anger	6. Value of	forgiveness	7. Negative Affect	8. Relationship with perpetrator	9. Severity	10. Self-	forgiveness	11. Other-	forgiveness	12. Situational-	forgiveness	Note: PTSD= Impact of Event Scale-Revised total score, Trait Tomasso Anger Scale total score, Negative affect= Positive ar

12	226*	.806**∇ .664**∇ .879** ¹
	167	.664**
9 10	.463**∇ .057 .301* .277** .495**243**167 *	∆**908.
თ	.495* ∨	065
∞	.277**	087179*065
7	.301	087
9	.057	900
5	.463**⊽	561**∇ 513**∇
ection ₄	039 .252**	- 561**∇
erronj correction	039	.077
ignificant with Bonfe		•
* R<-05 *** o< 001 V Significant with Bonferro	1. PTSD	2. Trait Forgiveness

Mean (SD) 22.82 (22.24) 79.62

Table 5. Forgiveness as a moderator of the studies variables both with and without the potential influential case.

		N=	: 122	N= 121				
Constant	β	SE	t	р	β	SE	t	р
Hypothesis State	1 5.077	1.110	4.572	.000**	5.326	1.089	4.890	.000**
anger HFS State anger x HFS	062 011	.128 .057	482 197	.631 .844	.041 .059	.131 .061	.313 .970	.755 .334
Trait anger HFS	1.028 258	1.090 .143	.944 -1.801	.347 .074	1.440 190	1.095 .144	1.315 - 1.324	.191 .188
Trait Anger x HFS	026	.037	691	.491	.078	.059	1.320	.190
State anger	5.234	.961	5.444	.000**	4.976	.949	5.245	.000**
State forgiveness	.193	.750	.257	.798	.380	.738	.514	.000**
State anger x State forgiveness	532	.405	-1.315	.191	386	.400	926	.338
Trait anger State forgiveness	2.228 147	.826 .813	2.696 181	.008* .857	1.723 .003	.884 .811	1.948 .004	.054 .997
Trait anger x State forgiveness	572	.316	-1.812	.073	335	.346	- 1.020	.310
Hypothesis	2							
Negative affect	.924	.319	2.896	.005*	.870	.328	2.650	.009*
HFS	312	.117	-2.670	.009*	289	.121	- 2.393	.018*
Negative affect x HFS	011	.014	943	.347	.003	.027	.122	.903
Negative affect	1.113	.325	3.423	.001**	.907	.345	2.627	.001*
State forgiveness	805	.819	982	.328	604	.824	733	.465
Negative affect x State forgiveness	076	.128	592	.552	.065	.138	.112	.911

Value of forgiveness HFS -392 .120 -3.269 .001* -307 .127017* .2.422 Value of congiveness HFS -392 .120 -3.269 .001* -307 .127017* .2.422 Value of congiveness X HFS -392 .120 -3.269 .001* -307 .127017* .2.422 Value of congiveness X HFS -310 .102 .712 .478 -294 .893 -329 .743 Severity A .356 .7030 .6.196 .000** .203 .027 .082 .935 Hypothesis 4 Severity A .356 .7030 .6.196 .000** .208 .203 .000** .2786 Severity X083 .036 .2.310 .023* .079 .044000** .2786 Severity X083 .036 .2.310 .023* .079 .044071 HFS -310 .102 .3.040 .000* .301 .108000** .2786 Severity X083 .036 .2.310 .023* .079 .044071 HFS -752 .753 .1.011 .314 .900 .741 .1.214 .227 forgiveness Severity X116 .297 .3.89 .705 .044 .300 .146 .884 State forgiveness Known 4.848 1.421 3.412 .001** 4.079 .1.399 .2.916 .003* .003* .003* .003* .203*	Hypothesis	3							
HFS	Value of		.463	.838	.404	.296	.459	.645	.520
Value of forgiveness X HFS 036 .027 -1.360 .176 023 .027 862 .391 Value of forgiveness State 649 .911 712 .478 294 .893 329 .743 forgiveness Value of forgiveness X State forgiveness 070 .208 336 .738 076 .203 082 .935 Hypothesis 4 Severity April Severity 310 .102 -3.040 .000** 301 .108 - .000** Severity X HFS 083 .036 -2.310 .003* 001 .000** HFS 310 .102 -3.040 .000** 301 .108 - .000** Severity X HFS 083 .036 -2.310 .023* 079 .044 .000** Severity X State .762 .753 1.011 .314 .900 .741	•	392	.120	-3.269	.001*	307	.127	- 2 422	.017*
Value of forgiveness State .415 .529 .784 .435 .283 .516 .549 .584 State forgiveness State 649 .911 712 .478 294 .893 329 .743 forgiveness Value of forgiveness X State forgiveness 070 .208 336 .738 076 .203 082 .935 Hypothesis 4 Severity 4 4.356 .7030 6.196 .000** 4.299 .717 6.001 .000** Severity 7 310 .102 -3.040 .000* -301 .108 - .000** Severity 8 083 .036 -2.310 .023* 079 .044 - .071 .000** HFS 4.824 .766 6.295 .000** 4.489 .767 5.814 .000** Severity x 5tate .762 .753 1.011 .314 .900 .741 .1214 .227 Known 6 4.848 1.42	forgiveness	036	.027	-1.360	.176	023	.027		.391
State forgiveness Value of forgiveness Value of forgiveness Value of forgiveness X State forgiveness X State forgiveness 070 .208 336 .738 076 .203 082 .935 Hypothesis 4 Severity 4.356 .7030 6.196 .000*** 4.299 .717 6.001 .000*** HFS 310 .102 -3.040 .000** 301 .108 - .000*** Severity X 083 .036 -2.310 .023* 079 .044 - .071 .1820 Severity X 4.824 .766 6.295 .000*** 4.489 .767 5.814 .000*** State rorgiveness Severity X 116 .297 389 .705 .044 .300 .146 .884 Hypothesis 5 Known 4.848 1.421 3.412 .001*** 4.079 1.399 2.916 .003** Hypothesis 5 Known .852 .565 1.509 .134 1.170 .557 </td <td>Value of</td> <td>.415</td> <td>.529</td> <td>.784</td> <td>.435</td> <td>.283</td> <td>.516</td> <td>.549</td> <td>.584</td>	Value of	.415	.529	.784	.435	.283	.516	.549	.584
Value of forgiveness X State forgiveness X State forgiveness 070 .208 336 .738 076 .203 082 .935 Hypothesis 4 Severity 4.356 .7030 6.196 .000** 4.299 .717 6.001 .000** HFS 310 .102 -3.040 .000* -301 .108 - .000** Severity x 083 .036 -2.310 .023* 079 .044 - .071 HFS .762 .753 1.011 .314 .900 .741 1.214 .227 forgiveness Severity x 116 .297 389 .705 .044 .300 .146 .884 State forgiveness 5 Known 4.848 1.421 3.412 .001*** 4.079 1.399 2.916 .003* Forgiveness 1.766 1.308 1.504 1.504 1.504 1.504 1.504 1.504 1.504 1.504 <td>State</td> <td>649</td> <td>.911</td> <td>712</td> <td>.478</td> <td>294</td> <td>.893</td> <td>329</td> <td>.743</td>	State	649	.911	712	.478	294	.893	329	.743
Severity HFS 4.356 .7030 6.196 .000** 4.299 .717 6.001 .000** HFS -310 .102 -3.040 .000** -301 .108 - .000*** Severity X HFS 083 .036 -2.310 .023** 079 .044 - .071 HFS .762 .753 1.011 .314 .900 .741 1.214 .227 Severity x Severity x Severity x State 116 .297 389 .705 .044 .300 .146 .884 Hypothesis 5 Known perpetrator State - .884 -1.998 .048* - .870 - .135 forgiveness 1.766 1.308 1.504 1	Value of forgiveness X State	070	.208	336	.738	076	.203	082	.935
Severity HFS 4.356 .7030 6.196 .000** 4.299 .717 6.001 .000** HFS -310 .102 -3.040 .000** -301 .108 - .000*** Severity X HFS 083 .036 -2.310 .023** 079 .044 - .071 HFS .762 .753 1.011 .314 .900 .741 1.214 .227 Severity x Severity x Severity x State 116 .297 389 .705 .044 .300 .146 .884 Hypothesis 5 Known perpetrator State - .884 -1.998 .048* - .870 - .135 forgiveness 1.766 1.308 1.504 1	Hypothesis	4							
Severity x HFS 083 .036 -2.310 .023* 079 .044 - .071 Severity State 4.824 .766 6.295 .000** 4.489 .767 5.814 .000** State .762 .753 1.011 .314 .900 .741 1.214 .227 forgiveness severity x 116 .297 389 .705 .044 .300 .146 .884 State forgiveness state - .884 1.421 3.412 .001** 4.079 1.399 2.916 .003* state - .884 -1.998 .048* - .870 - .135 forgiveness 1.766 1.509 .134 1.170 .557 2.100 .038* perpetrator x State forgiveness Known perpetrator 314 .118 -2.659 .009* 228 .121 - .062 Known perpetrator .041 .076<	Severity	4.356						-	
Severity 4.824 .766 6.295 .000** 4.489 .767 5.814 .000** State .762 .753 1.011 .314 .900 .741 1.214 .227 forgiveness .297 389 .705 .044 .300 .146 .884 Hypothesis 5 Known 4.848 1.421 3.412 .001*** 4.079 1.399 2.916 .003* perpetrator .544 -1.998 .048* - .870 - .135 forgiveness 1.766 .565 1.509 .134 1.170 .557 2.100 .038* Known .852 .565 1.509 .134 1.170 .557 2.100 .038* perpetrator x State .3451 1.932 11.904 .000** 3.448 1.238 2.785 .006* HFS 314 .118 -2.659 .009* 228 .121 -	,	083	.036	-2.310	.023*	079	.044	-	.071
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Hypothesis 5 Known perpetrator State 4.848 1.421 3.412 .001** 4.079 1.399 2.916 .003* State - .884 -1.998 .048* - .870 - .135 forgiveness 1.766 - 1.308 1.504 1.504 Known perpetrator x State forgiveness - - 1.34 1.170 .557 2.100 .038* Known perpetrator 3.451 1.932 11.904 .000** 3.448 1.238 2.785 .006* HFS 314 .118 -2.659 .009* 228 .121 - .062 Known perpetrator .041 .076 .536 .593 .090 .077 1.167 .246	Severity x State	116	.297	389	.705	.044	.300	.146	.884
Known perpetrator 4.848 1.421 3.412 .001** 4.079 1.399 2.916 .003* State - .884 -1.998 .048* - .870 - .135 forgiveness 1.766 1.509 .134 1.170 .557 2.100 .038* Known perpetrator x State forgiveness 1.932 11.904 .000** 3.448 1.238 2.785 .006* HFS 314 .118 -2.659 .009* 228 .121 - .062 Known .041 .076 .536 .593 .090 .077 1.167 .246	Torgiverioss								
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Known .041 .076 .536 .593 .090 .077 1.167 .246 perpetrator	•	314	.118	-2.659	.009*	228	.121	-	.062
	perpetrator	.041	.076	.536	.593	.090	.077		.246

Note: *p<.05 **p<.001.

Discussion

The current study is the first exploration of forgiveness and value of forgiveness, as potential moderators in the relationship between anger, negative

affect, transgression-related characteristics and PTSD with women who have been sexually assaulted. Firstly, the results suggest that forgiveness does not moderate the relationship between, negative affect, anger, and PTSD symptoms. Secondly, contradictory to the hypothesis it was found that there was not a moderation relationship between, trait-forgiveness, value of forgiveness and PTSD symptoms. As hypothesised, it was found that the more severe the transgression, the greater PTSD symptoms and that this is moderated by forgiveness, so that those with low levels of trait-forgiveness are at an increased risk of PTSD symptoms when a more severe transgression took place. Finally, it was found that if the perpetrator was well known, the victim had more PTSD symptoms, and that forgiveness moderated this relationship. These results will now be discussed in relation to the hypotheses, research, and theory.

Relationship between anger, negative affect, forgiveness and PTSD symptoms

It has been widely suggested based on the emotional processing theory, that to achieve psychological adjustment, distressing feelings need to be processed and updated (Foa & Rothbaum, 1998). This would usually be achieved by activating the fear or meaning structures which develop within the memory network after a traumatic experience. Typically, individuals with PTSD usually engage in avoidance behaviours and so they are unable to disconfirm the beliefs held within the fear structure. However, processes such as re-scripting, and habituation mean that the individual is exposed to new information which differs to what is stored within the fear network, this allows the new information to be encoded. Andrews et al. (2000), suggest that the activation of anger or negative affect obstruct this process, and therefore successful adjustment to the trauma and a consequent reduction in PSTD symptoms cannot be achieved.

In terms of the expected moderation role of forgiveness, it was hypothesised that forgiveness could help reduce negative feelings, such as guilt, hostility, and

anger, meaning that the fear structure can be activated more easily and more adaptive problem-focused strategies can be utilised, thus reducing trauma symptomology. In addition, it was hypothesised that the suggested phases of forgiveness (Enright, 2001; Worthington, 2001), would help the victim process a "new narrative" of the transgression, which in itself would help reduce PTSD symptoms. This is because these phases require the victim to recall the hurt (which activates the fear structure), and then update the transgression, by adding context. A similar process is used in PTSD treatments, which are based on the cognitive model of PTSD (Ehlers & Clark, 2000) and dual representation theory (Brewin, Dalgleish, & Joseph, 1996).

One explanation for why no moderation effect was found could be that the process of forgiveness does not actually have an impact on the PTSD symptoms directly, and that actually forgiveness could be a resilience factor, meaning that those victims with high forgiveness will likely have lower negative emotions, resulting in less severe or no PTSD. This is supported by Karairmak and Güloğlu (2014), who found that anger and negative affect mediate the relationship between PTSD and forgiveness; however, due to a lack of longitudinal data, this causation cannot be established. This current empirical paper explored the moderation role of forgiveness compared to the mediation role in Karairmak and Güloğlu's (2014) paper as when the analysis, it was felt that relationship was more likely. Based on the negative results found between these variables, future mediation analysis might be plausible.

It could also be that the small amount of research that has explored these factors has focused on the experience of male veterans (Karairmak & Güloğlu, 2014; Monson et al., 2004). Karairmak and Güloğlu, recognise that veterans may be more altruistic than the typical population, as they are willing to risk their life for the sake of their country. It could be suggested that these veterans may possibly expect these transgressions as part of their role, and necessary for the greater good of their

country. As a result, they may have a very different relationship to their traumatic experiences and forgiveness compared to women who have been sexually assaulted. Accordingly, some veterans might possibly find the prospect of forgiveness easier, which, if it is a resilience factor, may mean they have lower negative emotions, meaning that trauma symptomology is reduced or can be treated more easily. This could be one possibility why there is a lower prevalence of PTSD in war veterans (11-30%) (National Center for PTSD, 2019), compared to rape victims (49%) (Breslau et al., 1998).

In addition, traditional masculinity ideology may have a strong effect on men's relationship with forgiveness (Karairmak & Güloğlu, 2014). This may be impacting the results found, although in which way it is not known. In Orcutt, Scott, and Brooke's (2008) study, they suggest that subsequent to a transgression, males are possibly more forgiving than females and believe that gender is an important factor in forgiveness. This is based on their results which found that forgiveness was related to PTSD, but that this reduced to a marginal affect once gender was factored into the analysis. This current study was unable to account for both genders, therefore research examining the effect that gender and altruistic personality has on forgiveness and PTSD symptoms could be useful.

Relationship between forgiveness, value of forgiveness and PTSD symptoms

As an area of research, value of forgiveness is still underdeveloped, and theory is mainly based on conceptual ideas. For example, it has been suggested that forgiveness may be valued by some individuals more than others (DiBlasio, 2000; Kanz, 2000), and that this may have an effect on the PTSD-forgiveness relationship (Cerci & Colucci, 2017). Past literature has suggested that this may be an interesting relationship to explore, and although no moderation effect was found, some interesting results were found with value of forgiveness as a factor.

The results showed that other-forgiveness correlated with value of forgiveness, but self- and situational-forgiveness did not. Although, this significant result should be interpreted with caution as a Bonferroni correction rendered this non-significant, it might still be helpful to understand why this relationship was found. One possible explanation is that definitions of forgiveness appear to emphasise other-forgiveness (Baskin & Enright, 2004; Enright, 1991; Kearns & Fincham, 2004). It could be suggested that those who highly value forgiveness associate this with forgiving the other, and so they make a conscious effort to forgive the perpetrator, but perhaps neglect the other areas of forgiveness. It has also been suggested that self-and situational-forgiveness tend to overlap as concepts (Strelan, 2007). Strelan proposes, not only that the victim may not necessarily perceive these concepts differently, but also the fact that most of the statements measuring situational-forgiveness on the HFS (Thompson et al., 2005) use "I" statements, may mean it is actually measuring self-forgiveness, rather than situational. This may be the reason that similar patterns were found for both selfand situational-forgiveness.

Additionally, it was found that there was a statistically significant difference between the scores of value of forgiveness and PTSD symptoms for the different religions. For both value of forgiveness and PTSD symptoms, it was found that Christians scored significantly higher compared to those identifying as having no religion. This suggests that those who identify as Christian may, as the research has suggested, value forgiveness more than those who do not identify with a religion. The fact that Christians, who were found to value forgiveness more, had significantly higher PTSD symptoms than those identifying as having no religion could be explained by the theory that those who do not act in agreement with their forgiveness beliefs, but highly value forgiveness, may be at the highest risk of developing PTSD symptoms (Orcutt et al., 2008). This theory is further supported by

the fact the Christian group were found to have lower trait-forgiveness scores than the no religion group, although it should be noted that this difference was not significant. Therefore, it may be that the Christians valued forgiveness more, but for whatever reason were unable to forgive and that this discrepancy increased their risk of developing PTSD. Alternatively, it could be that either low levels of forgiveness or high levels of trauma symptoms means that the individual to increase their value of, or wish for, forgiveness. Finally, based on Enright's four-phase model of forgiveness (2001), for a victim to be able to forgive, as instructed in prolonged exposure therapy or reliving, they have to fully experience the negative emotions and pain associated with the transgression. It could be suggested that those who value forgiveness highly, may forgive for the "sake" of their religion, but do not go through the emotional engagement necessary for true forgiveness, as defined by the research. This could mean that their forgiveness and subsequent PTSD scores remain high. Due to the cross-sectional design of this study, further research is necessary to disentangle this relationship over time. Finally, it should be noted that these relationships were not found with the other religious group, but this is likely due to the small sample size.

Relationship between the severity of the transgression, forgiveness and PTSD symptoms

The significant correlations found between severity of the assault, state-forgiveness and PTSD symptoms are consistent with research (e.g., Orcutt et al., 2008; Brown, 2003; Holeman & Myers, 1998; McCullough et al., 1998; McCullough & Hoyt, 2002); however, this was the first study to find that forgiveness significantly moderated this relationship so that the association between high severity of the assault and PTSD symptoms was weaker when forgiveness was high. Various models have been suggested to explain the relationship between these three factors. Orcutt et al. (2008), found a relationship between forgiveness and PTSD,

but once transgression severity was added to the association the relationship fell to a marginal significance. They suggest a number of explanations for this: a) when a victim has higher levels of perceived severity, this results in lower levels of forgiveness, which consequently increases PTSD symptoms; b) high levels of trauma symptoms or low levels of forgiveness may mean that the victim perceives the transgression as more severe; c) those with higher levels of trauma have less emotional and cognitive skills available for the forgiveness process. This study offers some clarity to these proposed relationships, highlighting the apparent buffering role of forgiveness in reducing PTSD symptoms for those with severe transgressions; however, due to the cross-sectional nature of this study, causations cannot be identified.

The final point to make about the severity of the transgression is that it has been suggested that situational-forgiveness may be more important in more severe transgressions (Cerci & Colucci, 2017), yet there was no research exploring this. Based on this current study's findings, it was found that other-forgiveness was the only forgiveness subtype to be correlated with severity of the transgression. This is possibly because, in a SA, the severity is appraised more to the actions of the perpetrator rather than the situation.

Relationship between the relationship with the perpetrator, forgiveness and PTSD symptoms

The finding that PTSD risk increases as the relationship with the perpetrator increases, is in line with the research which suggests the closer a victim is to the perpetrator, the more negative emotional responses are anticipated for the victim, as the transgression betrays their autonomy (Kira, 2001). In addition, this is the first study, to our knowledge, to find that state-forgiveness significantly moderated the relationship between whether the perpetrator was known and PTSD symptoms. It was expected, and found, that if the perpetrator is well known there would be a

greater impact of the assault. However, interestingly, it was expected that forgiveness would moderate this relationship so that the strength of that association would be weaker where forgiveness is high, but the opposite was found. It was found that individuals who did not have a close relationship with the perpetrator, appear to be less at risk of developing PTSD symptoms, if they have high state-forgiveness. Although, if they had a very close relationship with the perpetrator, having high forgiveness does not appear to buffer against developing PTSD symptoms, and it actually appears to increase PTSD symptoms, compared to those with low forgiveness.

This interesting interaction could be explained by the fact the process of forgiveness requires a victim to acknowledge that a transgression took place and be willing to reframe the transgression. This can be seen in the first step of Worthington's (2001) model, where the hurt needs to be recalled and worked through as objectively as possible. This does not mean that they condone or excuse the perpetrator, instead, they are able to make a "new narrative" of the transgression, perpetrator, and potentially themselves (Thompson et al., 2005). This is a similar process involved in trauma-focused CBT techniques, where clients are encouraged to re-write the narrative and contextualise the trauma memories. It could be suggested that reframing the transgression is easier when there is not the complexity of a close relationship with the perpetrator, and so again the underlying PTSD is more responsive to modification. This is supported by Karremans, Van Lange, Ouwerkerk, and Kluwer (2003), who state that unforgiveness in a close relationship could be different to unforgiveness in an oppressive relationship or intergroup transgression perhaps due to dynamics such as power, conflict, and resistance.

It should be noted that this explanation does not account for the fact that when there is a very close relationship with the perpetrator, high forgiveness appeared to increase PTSD symptoms compared to those with low forgiveness. These results appear to be the opposite to former research by Baldry (2017), who found that in intimate partner stalking, by a former partner, it was unforgiveness which was related to higher levels of PTSD symptomology. However, the researchers also found that forgiveness did not have an impact on women's mental health, supporting the idea that perhaps there is a point at which high forgiveness can no longer have an impact on trauma symptomology and that in a very close relationship, the trauma is less able to be mitigated by forgiveness.

Limitations

Firstly, the cross-sectional design used means that causal relationships cannot be identified. This study took an explorative stance examining forgiveness and value of forgiveness as potential moderators; however, longitudinal studies using model-led experimental designs are necessary to identify any causal relationships. This would help map the trajectory of the factors which would help understanding of queries such as, whether forgiveness and PTSD levels influence the perceived severity of the transgression or whether a severe transgression and high PTSD symptoms affects one's ability to move through the stages of forgiveness.

Secondly, the selection of measures was carefully considered to ensure that the aims of the research were met but the battery was sufficiently engaging to complete. Although most of the measures were standardised and psychometric properties were known, some of the measures were designed for the purpose of the study, based either on items used in a previous thesis or on just single items. Additionally, the factors are based on retrospective self-reports which are influenced by bias, such as the victim's perception of, and time and events since, the transgression. These above factors will have an impact on the reliability and validity of the findings.

Thirdly, a large number (n= 147) of surveys were not completed and it is important to hypothesise explanations for this. As this was a joint project, the aims of the corresponding study had to be considered. My fellow researcher was looking at how women interpret any form of unwanted sexual experience, and so this was how the study was advertised. Feedback received from one participant was that they did not finish the questionnaire because they did not feel that their experience "was severe enough" to answer some of the questions. They could have possibly felt this because we were asking very specific and clinical questions related to the assault, for example, the IES-R, which asks individuals to indicate how often they had experiences such as: "I felt as if it hadn't happened or wasn't real" or "I found myself acting or feeling like I was back at that time". This also highlights that the results found are based on a non-clinical sample and so may not be representative of those diagnosed with PTSD. Additionally, it could also be hypothesised that some of the questionnaires were re-triggering for the participants, which meant that some were unable to complete the questionnaire. However, it should be noted that no participants requested a wellbeing call from the researchers and, although we had a large number of uncompleted questionnaires, we were able to recruit fairly promptly.

Finally, some women reported multiple traumas and so their PTSD symptom scores may be an accumulation of multiple traumas, but they only discussed these in relation to one incident. Again, this may affect the validity of some of the results.

Implications for research

Although the results should be interpreted and generalised with caution (due to cross-sectional data, a non-clinical sample and some unstandardised measures), they do appear to warrant further exploration in to the forgiveness-PTSD relationship. This is the first study to explore forgiveness as a moderator between PTSD symptoms, the severity of the transgression and relationship with the perpetrator. In Cerci and Colucci's (2017) systematic review, they suggest that these

may be important areas of research and the results from this study support this. It would be interesting to see if the same moderation relationships are found with a clinical sample of women who have been sexually assaulted in addition to other interpersonal traumas. Additionally, as stated above, longitudinal studies using model-led experimental designs would be helpful in exploring previously raised questions about causation. This would help clinicians know if including forgiveness as a component in treatment for those with severe transgressions would be an effective use of resources.

Though no moderation relationship was found with value of forgiveness, forgiveness and PTSD symptoms, it was found that Christians had higher value of forgiveness and PTSD scores, but lower trait-forgiveness compared to those identifying as having no religion. With Christianity being the largest religion in the world (Pew Research Center, 2015), it may be useful to conduct further research within this area to see if there is support for the theory: that those who highly value forgiveness, but do not proceed in agreement with those beliefs (e.g. unable to forgive), may be at the highest risk of developing PTSD symptoms. Possibly for this population, exploration about their understanding of forgiveness, and the process involved in forgiving, may also be valuable. Unfortunately, the number of participants in other religious groups were marginal and so further research exploring this relationship within other beliefs would also be useful.

Although correlations were found in the predicted direction for both anger and negative affect in the forgiveness-PTSD relationship, it was surprising that no moderation relationship was found. As stated above, this could be a result of population differences such as gender or the nature of the perpetrator.

Unfortunately, this study did not capture the experience of men who have been sexually assaulted, but it is expected that they may experience an increase in negative emotions that are common not only in PTSD but also as a result of stigma,

such as anxiety, sadness, fear, guilt, shame, and irritability. A comparison study exploring these factors with a male clinical sample could be an interesting area of exploration.

As stated above, a number of women in this study reported experiencing multiple unwanted sexual experiences; however, this was hard to disentangle due to the design of the study. Research indicates that if a victim reports a high level of trauma, they would typically report a lower level of forgiveness, possibility due to processes such as "bitterness" (Orcutt et al., 2005). It could also be suggested that those who have experienced multiple transgressions may be more likely to support Nietzsche's (1887) previously stated philosophical view that it is unhealthy to forgive. Future research may investigate women who have had multiple SA transgressions and how this impacts the forgiveness-PTSD relationship.

Finally, most empirical forgiveness research has used populations such as veterans or university students. Forgiveness is a very complex issue and can be studied in a range of transgressions varying from relationship betrayals to crimes against society. These transgressions will likely generate different personal and moral responses and so it seems appropriate that these are researched in different capacities. This study attempted to expand the transgressions researched, being the first study to research this paradigm with SA victims and has found some interesting results; however, with 49% of those who have been raped developing PTSD (Breslau et al., 1998), more research is necessary.

Implications for clinical practice

Forgiveness interventions for PTSD cannot be recommended based on this study alone. However, a relationship between the two variables has been found consistently in the research, and so it might be beneficial for clinicians to promote forgiveness as a construct when working with PTSD symptoms. Based on this study's findings, this may be particularly true if the transgression is reported as

severe, or the victim did not have a close relationship with the perpetrator. The challenges of clinicians working with forgiveness are discussed in chapter three.

A beneficial impact of group forgiveness interventions for a number of mental health difficulties has been found (Day, Howells, Mohr, Schall, & Gerace, 2008; Harris et al., 2006), but, for PTSD specifically, this was completed many years ago (Freedman & Enright, 1996). Orcutt et al. (2005), suggest that some individuals appear to be hesitant in researching or using forgiveness-based interventions because of its association with religion. Notably, within mental health treatment, there has been a recent move to "third wave" CBT approaches (e.g. Mindfulness Based Cognitive Therapy, (Segal, Williams, & Teasdale, 2002), Acceptance and Commitment Therapy (Hayes, Luoma, Bond, Masuda, & Lillis, 2006), Dialectal Behavioural Therapy (Linehan, 1993)), many of which include mindfulness techniques (Kabat-Zinn et al., 1992). Similarly to forgiveness, mindfulness has a similar historical religious foundation and so it is hoped that with further research within the field, forgiveness interventions, where appropriate, may be more widely accepted and be able to be integrated into existing PTSD treatments. In addition, although some individuals may have concerns about forgiveness' foundation in religion, for many clients, religion is an important part of their identity. Research shows that many clients have a preference for discussing religious issues in therapy (Rose, Westefeld, & Ansely, 2001), but that it is usually the client who initiates the discussion (Knox, Catlin, Casper, & Schlosser, 2005). This current study's findings suggest that specifically for clients who identify as religious or spiritual, if they are experiencing PTSD symptoms, forgiveness may be an important subject to include in therapy. Forgiveness may also offer clinicians a way of opening up the discussion about the clients religious and spiritual preference.

Conclusion

This is the first study to show forgiveness as a moderator in the relationships between PTSD and transgression-related characteristics with women who have been sexually assaulted suggesting that forgiveness may be a promising component to PTSD treatment for this population. This is particularly true for women who had a distressing SA and did not have a close relationship with the perpetrator. However, due to the limitations of the study, and absence of extensive research within this field and population, these conclusions should be viewed as preliminary. It is hoped that these results will inspire further research on this topic.

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Chapter 3: Critical Appraisal

Critical Appraisal

Introduction

In this critical appraisal I will consider: my motivation for the research, certain design and methodological issues, my personal influences on the study's design, and the adaption of forgiveness within traditional therapeutic models. I will then offer some personal reflections about the research area, before concluding with my experiences of conducting this thesis.

The motivation for the project

As a young female, I am greatly aware of the effect that unwanted sexual experiences have on women and the difficulty that victims have in making sense out of, what many see as, senseless transgressions. I knew from quite an early stage in the doctorate that, as a female researcher, I would like to conduct my thesis within an area that I was passionate about and I was fortunate that my supervisor offered me a space to discuss feasible research with this population. I became increasingly interested in forgiveness following this conversation with my supervisor and reading a past thesis which investigated the relationships between forgiveness, PTSD, anger and guilt during therapy (Bacon, 2012). Unfortunately, this thesis did not quite achieve what it had set out to do, but it did stimulate my interest in forgiveness as a scientific construct. As I read about forgiveness, I was taken back to watching a TED talk where a sexual assault (SA) victim confronted her perpetrator and with time chose to forgive him, which appeared to have a positive effect on her wellbeing (Elva & Stranger, 2016). I also recalled hearing news stories such as, the "Charleston church shooting" (Corasaniti, Pérez-Peña, & Alvarez, 2015) or "Amish shooting" (Goldenberg & Pilkington, 2006), where forgiveness was offered to the perpetrator, in some cases immediately. This made me think of forgiveness as a construct both inside and outside of religion, the process of being able to forgive, and the long-term effect that forgiveness may have on a person's processing of the

trauma and consequent trauma symptoms. On a personal level, it caused me to reflect on my personal experiences of forgiveness, the processes involved in forgiving and the varying types of forgiveness. I also recognised that the forgiveness I was reading about within scientific journals differed to that displayed in the media.

Using my interest and passion for both SA and forgiveness, I undertook my own investigation in this developing area of research: the PTSD-forgiveness relationship. When reading around the topic, despite the fact that rape is one of the highest triggers for PTSD (Breslau et al., 1998), I was struck by the absence of research with this population within this field. In addition, despite efforts to highlight violence against women, victims of SA continue to blame themselves for their transgressions due to prejudicial, stereotyped and discriminatory beliefs, known as "rape myths" (Burt, 1980). Evidence shows that, despite the fact these rape myths are typically inaccurate (Myhill & Allen, 2002), they are commonly held within many areas of society, including mental health and criminal justice systems (Burrowes, 2013; Kelly, 2002; Temkin & Krahé, 2008). A societal belief of rape myths may suggest that the victims then internalise harmful victim-blaming attitudes about their self and situation (Miller, Markman, & Handley, 2007). To me, this highlighted how helpful exploring forgiveness as a construct might be for SA victims.

Design and methodological issues

Reflecting upon this thesis, I am mindful that several of the methodological limitations I noted in the conceptual introduction, also apply to my empirical paper. These include the difficulty in defining variables, the use of non-standardised measures, correlations not offering causal effects, non-generalisable findings and possible confounding variables. Conducting the research myself, from developing my own research question through to implementing the data collection, I can now recognise the difficulty in conducting a well-designed research study and appreciate the challenges that fellow researchers face.

Defining key constructs

Forgiveness: As mentioned previously, once I started researching forgiveness, I realised that the concept of forgiveness I was reading about within journals appeared to differ to that displayed in the media or society. Within my conceptual introduction, I attempted to outline the debate around defining and operationalising forgiveness, and I hoped that using a standardised measure of forgiveness (HFS; Thompson et al., 2005) meant that I captured a consistent construct of forgiveness. Nevertheless, the question remains whether those women who completed the measures, interpreted the word "forgiveness" in a similar way to the research. Evidence shows, that this perhaps was not the case, as when undergraduates were asked to define forgiveness, they felt that condoning, forgetting and reconciliation were all central features of forgiveness (Kearns & Fincham, 2004), something that the research does not agree with. The fact that the public view these concepts as interchangeable is of interest, and perhaps suggests that further work needs to be done in defining forgiveness before it can be regarded as a separate and valid construct.

Unwanted sexual experience: Following a lot of discussions about the definition of SA, we decided upon the Victim Support UK (2017) definition: "if someone intentionally grabs or touches you in a sexual way that you don't like, or you're forced to kiss someone or do something else sexual against your will. This includes sexual touching of any part of someone's body, and it makes no difference whether you are clothed or not" (para. 5). We decided upon this definition as it was the most extensive explanation and felt that it was appropriate to ask women with these above experiences about their PTSD symptoms. Using this definition, we agreed that, for our study, the participants had to be involved in a physical transgression, rather than other forms of SA (e.g. non-contact transgressions, such as exhibitionism "flashing" or "catcalling"). We did not wish to exclude some women

with this definition, but we felt that if we widened the criteria to include non-contact experiences it would be difficult to group or define these. We were also mindful that we were replicating research using clinical populations in a non-clinical setting and felt aware that we would be using clinical measures and so some of the questions may not relate to all women's experiences. After familiarising ourselves with the data, we noticed that a few of our participants had put down examples of noncontact SA. For example, one participant wrote, "a group of men followed me down a street and shouted sexually charged things at me until I ran into a nearby store". In line with our agreed definition, we decided to not include the data from these participants. However, we reflected upon the fact we could have widened our criteria, as we may have disregarded some women's experiences of what they define as an unwanted sexual experience, which we did not set out to do. We did try and account for this by discussing the definition in our focus group, and it was agreed that our definition fitted for most women's experiences and the participants agreed that it felt appropriate. This highlights the difficulty in operationalising real life experiences.

Cross-sectional data

Similarly to a lot of research, I encountered the dilemma of which conclusions can be drawn when collecting cross-sectional data. Though, it was felt that my research question was explorative enough to justify a cross-sectional design and that it would be unethical to collect measures before a SA takes place. As mentioned previously, this research was based on a previous thesis which tried to conduct longitudinal research to explore how forgiveness develops during therapy, but due to a number of reasons, including the tight timeframe, the previous thesis was unable to collect the data necessary for appropriate analysis. Not only did I also have the same tight timeframe, but I was actually more interested in firstly, whether forgiveness effects the PTSD symptoms based on personal factors, such as value

of forgiveness, and so this would be more difficult to measure in a longitudinal way. Despite this, it can be argued that using cross-sectional methods to infer moderation effects is inappropriate (Roe, 2012). Therefore, with more time, future studies would benefit from measuring this study's variables soon after the transgression takes place, evaluating whether the victim's forgiveness changes over time, and how this relates to the selected variables.

Regarding the time at which the measures should be taken, we had a number of discussions about our inclusion criteria, as we found it hard to quantify someone's journey with forgiveness into a time frame. We did agree that if someone were to have PTSD symptoms, these symptoms would be evident within the first two years of the experience and this felt like an appropriate time to discuss forgiveness as a variable. Therefore, we asked clients about their experiences within the last two years, but decided to give them the option to complete it regarding another more distressing experience which may have been over two years ago, as we know from evidence that some women who have been sexually assaulted have symptoms for over 15 years (Kilpatrick et al., 1989). We also made a conscious effort to phrase the questions in a sensitive, non-judgemental way. However, on reflection, I would make it clearer that those who have experienced a SA within the first month should not complete the questionnaire. This is because the National Institute for Health and Care Excellence (NICE) guidelines recommend that a period of one-month watchful waiting should be considered before diagnosing PTSD (NICE, 2018).

In addition, it could be suggested that it is unethical to ask women about forgiveness just one month after their transgression. It is known that forgiveness comprises of a number of phases meaning it occurs over time, and so asking about it soon after the transgression could have possibly unfairly communicated a responsibility that the victim should have forgiven themselves, the situation, or perpetrator. This could have potentially reinforced any sense of shame or blame,

that the victim might possibly feel. This was not a point that was raised within the focus group, by the ethics board, or by any participants, and we ensured these questions were raised sensitively. Nevertheless, on a personal reflection, I would have adapted the time frame to prevent any possible implied judgement.

Ethics

The sensitive nature of this topic meant that a lot of thought was put into the ethics of the study. The researchers were aware that participants who completed the survey were at risk of experiencing unpleasant feelings whilst recalling traumatic events and tried to account for this in the best way possible. Prior to recruitment, my fellow researcher, our supervisor, and I, developed a risk protocol of what to do if the measures re-triggered distressing thoughts or symptoms for our clients. As explained, participants were given an opportunity to request a wellbeing follow-up call from one of the researchers within two weeks, and the researchers phone numbers were also provided so that participants could contact them directly. We only had one participant request a follow-up call during recruitment, which she later explained was in error. Despite this, when contacting this client, I was mindful that managing risk during research is potentially more difficult compared to working in a clinical setting where information can be shared, and local services are well known. For our study, anyone residing in the UK could complete it meaning that the responsibility falls on the client to contact their local services themselves. Again, we tried to reduce this threat by discussing this in our focus group and they reported that questionnaires and risk protocol was sufficient, though I appreciate that a small focus group will not always account for everyone's experience.

Personal influences on the study's design

I believe that my previous experiences and theoretical orientation had a number of influences on the design of the study. These include using technology as

a facilitator, the female experience of unwanted sexual experiences, using a quantitative study design, and an interest in positive psychology.

All of our data was collected via the internet and most of our participants were recruited via website advertising. As someone who has spent their entire adult life using the internet, I felt that this was the best way to recruit and reflected that this is the only mode that I have previously used to complete fellow researcher's studies. Although, I appreciate that there is merit in using alternative measures that we did not perhaps explore. Despite efforts to avoid sample bias by also advertising using posters around the university and local libraries and hairdressers, the sample's age and ethnicity profile limits the generalisation of the findings. Perhaps we could have done more to broaden the sample's diversity, such as advertised in local newspapers or leisure centres. It was also interesting to think about how unwanted sexual experiences may have changed over time, for example, with the introduction of the internet. I was contacted by a few older women who wanted to know whether exhibitionism fell under our definition and in comparison, we had younger women who reported being sent explicit pictures on their phones. As explained previously, we reflected that we could have broadened the criteria to capture different experiences and generational differences within our definition of SA. In retrospect, I would have invested more time in broadening the advertising methods and trying to encourage older women to attend the focus group as this was mainly made up of university students who are typically younger in age.

The fact recruitment was restricted to just females, fitted with my identity and my experience of unwanted sexual experiences. In addition, as mentioned in chapter two, this was due to practical reasons: my fellow researcher was investigating feminist's values of SA victims and was only recruiting females.

Despite this, during my sexual health placement on clinical doctorate, I was made more aware of the gender bias within research exploring experiences of SA.

Although data from the Office for National Statistics (2017) suggested that women

are more likely to be a victim of SA (M= 0.7%, F= 3.2%), there are a number of males who experience SA. Until now, feminist research, in particular, has played a vital role in explaining and emphasising the nature of male violence against women, but male rape victims have been largely excluded (Javaid, 2016). I believe that because of this, it is difficult to conduct an inclusive study that represents the experiences of SA for females and males, though I strongly believe that male unwanted sexual experiences should be discussed in wider society and research with this population should be introduced.

I chose to conduct this research using the quantitative method as this fitted more with my previous research experience and I was aware of how many women have experienced unwanted sexual experiences and wanted to conduct research which tried to capture this range of experiences. As the first study to research this paradigm with SA victims, it may have been helpful to have used a mixed-methods design to gather more understanding of the processes of forgiveness and the victim's understanding of its effect on PTSD symptoms. I did have initial apprehensions that it might be a challenge to conduct quantitative research with this population, due to evidence of under-reporting of sexual violence (Office for National Statistics, 2017), and the shame connected with SA (Andrews et al., 2000; DeCou, Cole, Lynch, Wong, & Matthews, 2017). Despite these concerns, this research was conducted at a similar time to the "Me Too movement" and I believe that this aided speedy recruitment and it felt like the right time to be expanding the research with this population.

Finally, completing research into forgiveness fitted with my clinical interest in "positive psychology" (Seligman & Csikszentmihalyi, 2014). After studying psychology for many years, I have noticed that more often than not, psychology, rightly or wrongly, emphasises pathology. I am increasingly interested in how positive traits or features of wellbeing can prevent the development of mental health difficulties. I reflected upon these several years centred on pathology during the

focus group, when I was questioned about why I had only selected measures asking about negative emotions. This had been a result of replicating previous studies exploring the forgiveness-PTSD relationship (Karairmak & Güloğlu, 2014), though following the focus group I decided to also add the positive items of the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988). Although no noteworthy relationships were found with the positive items, I believe that this was an important modification to the questionnaire, as it hopefully reduced the focus on pathology for victims completing the measure.

Forgiveness within traditional therapeutic models

I understand that the present research alone may not have far-reaching implications, nevertheless the reflections below suggest what further investigation within this field could possibly achieve clinically.

Forgiveness, once branded as a religious or spiritual concept only, may be a valuable therapeutic factor for those who have been psychologically affected by SA, yet, regrettably, numerous clinicians dismiss forgiveness as a concept, as a result of holding "simplistic and inadequate definitions of forgiveness" (Holeman & Myers, 1998, p.186). As Holeman and Myers suggest, perhaps educational efforts need to be developed to clearly highlight the psychological concept and processes of forgiveness, or how currently used therapeutic models could facilitate forgiveness for victims.

In terms of forgiveness' relationship with other therapies, parallels have been drawn between forgiveness therapy and Compassion Focused Therapy (CFT) (Gilbert, 2005). This is because forgiveness requires the person to reduce one's anger towards the perpetrator, which has been suggested to require compassion: "an ability to tolerate unpleasant emotions, the capacity for empathic understanding, and non-judging or condemning" (Gilbert, McEwan, Matos, & Rivis, 2011, p. 240). Repairing and resolving relationship difficulties is one of the primary reasons why

people seek therapy (Legaree, Turner, & Lollis, 2007), and it could be said that both forgiveness and compassion account for the dynamics within relationships, as well as both being prosocial variables (Gilbert, 2005). A final similarity between compassion and forgiveness is the different targets of positive emotions. For example, the three targets for forgiveness: the self, the transgressor(s) or the situation, can be compared to the development of compassion for the self, for others, or received from others (Gilbert & Procter, 2006). Some clients might particularly struggle with developing compassion for one specific target, and so the therapeutic work should focus on this. This is similar to forgiveness, where one target, for example, the situation, may be particularly important to the trauma work. This is supported by research which shows that when the victim does not have a personal connection with the perpetrator, situational forgiveness is more important to PTSD symptomology compared to self and other forgiveness (Weinberg et al., 2014). The increasing popularity in CFT, especially those who have experienced trauma, may suggest the landscape's readiness for other positive psychology interventions, such as forgiveness. Or possibly, with more research, CFT could focus more on how compassion can facilitate forgiveness and the positive impact that this could have for clients.

As mentioned in chapter two, within mental health treatment, there has been a recent move to "third wave" Cognitive Behavioural Therapy (CBT) approaches (e.g. Mindfulness-Based Cognitive Therapy, (Segal et al., 2002), Acceptance and Commitment Therapy (Hayes, Luoma, Bond, Masuda, & Lillis, 2006), Dialectal Behavioural Therapy (Linehan, 1993)). Forgiveness interventions appear to be compatible with these approaches, especially more acceptance-based therapies. For example, Enright (2001), proposes that the first step of forgiveness is to uncover the negative emotions related to the transgression. This ability to be present with the pain of the transgression is a key factor in acceptance-based interventions (Orcutt, 2006). In addition, acceptance and mindfulness-based approaches are known as

"approach-based interventions". This type of intervention requires the client to be in contact with the negative symptoms and not try and alter or judge them, just be present with them. This differs from more traditional "control-based approaches" which try to help clients to control and replace their negative symptoms by giving them strategies (Orcutt, 2006). It could be argued that forgiveness interventions which involve "engaging in one's experience without judgement" (Orcutt, Scott, & Pope, 2005 p.87) share a similar focus to the approach based interventions which are becoming ever more popular within the clinical field.

It appears that forgiveness interventions fit well with the current landscape of psychotherapy interventions and that these current interventions could be adapted to facilitate the forgiveness process. However, it should be noted that forgivenessbased interventions should be introduced with caution. Therapists need to acknowledge and curiously question their client's attitude toward forgiveness before introducing it as an intervention (Worthington Jr et al., 2005), as without doing so, it could possibly threaten the therapeutic alliance, due to a fear of judgement from the therapist. In addition, although a client may value forgiveness generally, it is important that the therapist formulates whether discussing forgiveness within therapy could lead the client to become too focused on their morals and as a result, the client may engage in self-destructive behaviour (Worthington Jr et al., 2005). When applying forgiveness to women who have been sexually assaulted, it is important that the client is supported in exploring feelings of forgiveness of self, situation and other(s), and the benefits of adapting their current coping strategies, (e.g. avoidance, hatred or wish for revenge) (Davidson, Lozano, Cole, & Gervais, 2013). This may allow victims to experience post-traumatic growth, and discover strength and resilience, that they have developed as a result of being involved in such transgressions (Davidson, Lozano, Cole, & Gervais; Magyar-Moe, 2009; Tedeschi & Calhoun, 2004). Forgiveness also allows a victim to work through the

transgression, as opposed to minimising, avoiding or denying the negative impact that the transgression may have had on them.

One of the only studies researching PTSD symptoms using forgiveness interventions with women who have been sexually assaulted was completed a number of years ago by Freedman and Enright (1996). Post-therapy measures found that those who completed the forgiveness intervention reported better wellbeing, including greater self-esteem, more hope, less anxiety and depression, and more forgiveness, compared to the control group. These gains were also maintained at the one-year follow-up.

As discussed previously, professionals supporting those who have experienced a SA may question whether forgiveness interventions are appropriate to such an offense. Some support Nietzsche's (1887) philosophical view, that forgiveness is not a genuine virtue and that it is detrimental to forgive. Some researchers and philosophers also believe that selected victims may forgive because they fear confrontation and that forgiveness is sometimes motivated by a wish for personal comfort (Murphy, 2002; Neu, 2002). However, this view does not account for the benefit that forgiveness could have for the victim following the trauma. It neglects the fact that, like trauma-focused CBT techniques, such as rescripting and cognitive restructuring, forgiveness offers a framework for clients to rewrite the narrative of their transgression and that doing so, potentially allows for a reduction in trauma symptomology. This is supported by Freedman and Enright (1996), who conclude their study stating that forgiveness interventions offered victims an alternative to the negative feelings that used to dominate their lives.

Finally, as Holeman and Myers state, "the extreme evil of sexual abuse magnifies the difficulty survivors have in making sense out of these totally senseless acts. For many adult survivors forgiving perpetrators seems unconscionable" (1998, p.186). Of course, each individual experience of forgiveness is unique to their specific situation and as with any therapy modality, the pros and cons and evidence

should be discussed with the client in a sensitive manner. It would be unethical for a therapist to place an expectation of the victim to forgive, though it may be helpful for the clinician to tentatively and curiously open up the conversation around forgiveness. This is because, PSTD can have devastating effects which, for those who have been raped can last for many years (Kilpatrick et al., 1989), and forgiveness-based interventions may have some beneficial use for this population.

Final personal reflections

Based on my own observations as a woman in society, I had anticipated that there would be a lot of women who had been affected by unwanted sexual experiences, nevertheless, I was still a little startled at the level of interest in the study and the reasonable ease to recruit participants. In terms of recruitment, I also reflected on gender and generational differences in advertising the study. This was highlighted by the fact our male supervisor appeared to be more apprehensive than us about recruiting online, in case we were "trolled": "intentionally disruptive behaviour that occurs (a) in the context of Internet discourse and (b) among users having no existing relationship in real life" (Buckels, Trapnell, Andjelovic, & Paulhus, 2018, p.329). It was interesting to see that both myself and my fellow researcher were not too concerned about this, and actually replied: "we are used to it; we will just ignore it". Despite these concerns, we did not receive any negative comments online, but it is intriguing, when completing a study about women's unwanted sexual experiences, to think about the societal experiences a woman may view as "typical" or "normal", whereas the same behaviour to a male may appear novel and unnerving. I think that this response perhaps also represents a generational difference, where both myself and my fellow researcher have grown up with the internet. As a result of increasing access to the internet, the pleasure gained from writing distressing comments, and a lack of repercussions (Buckels et al., 2018), it is clear to some extent why trolls behave the way that they do, and perhaps why

myself and my fellow researcher are so "used to it". This may be especially true, as we are two women who spend time consuming feminist content online and so, unfortunately, commonly come in contact with trolling.

Throughout my training, I have become more mindful of my privilege as a clinical psychologist, but this research has particularly highlighted the power we have in choosing which area we research and the research bias for some fields. Whilst researching the PTSD-forgiveness relationship, I was struck by the amount of research with veterans and lack of research for those most affected by PTSD (Breslau et al., 1998). I knew that I wanted to use my position of power to extend this research to women who have been through such distressing experiences, yet I was nervous about investigating forgiveness with this population and whether my position as a clinical psychologist may set an expectation to these women that they should forgive their transgression, perpetrator, and self. This was something that we discussed in detail in the focus group and it was agreed that the number of variables I was researching, and the wording of the questionnaire did not imply any judgement. I also tried to make it clear, throughout the write up, what I meant by the definition of forgiveness and that, as a clinician and researcher, the choice of using any intervention should be formulated and curiously approached. Whilst collecting my data, I was fortunate enough to attend a talk by the Havens (specialist centres in London for people who have suffered a SA) where I discussed my research with one of the speakers. It was reassuring to hear that she had witnessed clients who reported wanting to forgive, for religious or spiritual beliefs, but that they had been unable to and that this was something they struggled with throughout therapy. She stated that she thought my research was interesting and worthwhile, which offered me further reassurance and motivation for this research project.

Finally, it should be noted that researching forgiveness with this population was motivated by my wish to support individuals experiencing mental health difficulties as a result of being sexually assaulted. I am not suggesting forgiveness

should be used by society as a solution for unwanted sexual experiences in the first place. This is reinforced with a quote from author Fortune: "forgiveness by the community requires a clear confrontation and acknowledgement that one within it has been wronged by another and the offender has to take steps to rectify that wrong...Justice requires that the community deal with these acts with appropriate seriousness" (2005, p.117).

Conclusion

As I reflect upon completing this thesis, I realise that the experience of developing my own project has helped me gain a substantial amount of knowledge and skills in conducting research. Thanks to my supportive supervisor, I was very lucky to be able to see the research through from creating and developing a research question, to analysing and discussing the research in terms of psychological theory and future avenues. I believe that this emulates the research I will conduct as a qualified clinical psychologist, as I had a sense of ownership and responsibility for the research; I am grateful for such a thorough experience. I have also endured some of the challenges in conducting a well-designed study and believe that this will not only prepare me with the skills to conduct further research in the future, but also allow me to objectively evaluate future studies.

Finally, I believe that the findings from this thesis offer a unique contribution to the small literature investigating the relationship between forgiveness and PTSD, with this being the first study to explore this with women who have experienced SA. Through this experience, I have reflected how I would conduct the research differently if I were to do it again, and I hope that these findings will inspire future research within this field, with this population.

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APPENDIX A Ethical approval letter

UCL RESEARCH ETHICS COMMITTEE OFFICE FOR THE VICE PROVOST RESEARCH



4th July 2018

Dr John King Clinical, Educational and Health Psychology UCL

Dear Dr King

Notification of Ethics Approval with Provisos

Project ID/Title: 12709/001: Investigating the relationship between feminist values, forgiveness, victim status and PTSD symptomology

Further to your satisfactory responses to the Committee's comments, I am pleased to confirm in my capacity as Interim Support Chair of the UCL Research Ethics Committee (REC) that your study has been ethically approved by the UCL REC until 4th July 2019.

Ethical approval is subject to the following conditions:

Notification of Amendments to the Research

You must seek Chair's approval for proposed amendments (to include extensions to the duration of the project) to the research for which this approval has been given. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing an 'Amendment Approval Request Form' http://ethics.grad.ucl.ac.uk/responsibilities.php

Adverse Event Reporting – Serious and Non-Serious

It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Joint Chairs will decide whether the study should be terminated pending the opinion of an independent expert. For non-serious adverse events the Joint Chairs of the Ethics Committee should again be notified via the Ethics Committee Administrator within ten days of the incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Joint Chairs will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Final Report

At the end of the data collection element of your research we ask that you submit a very brief report (1-2 paragraphs will suffice) which includes in particular issues relating to the ethical implications of the research i.e. issues obtaining consent, participants withdrawing from the research, confidentiality, protection of participants from physical and mental harm etc.

In addition, please:

- ensure that you follow all relevant guidance as laid out in UCL's Code of Conduct for Research: http://www.ucl.ac.uk/srs/governance-and-committees/resgov/code-of-conduct-research
- note that you are required to adhere to all research data/records management and storage procedures agreed as part of your application. This will be expected even after completion of the study.

With best wishes for the research.

Yours sincerely,



Professor Sara Randall
Interim Support UCL Research Ethics Committee Chair

Cc: Felicity Saunders & Harriet Rankin

APPENDIX B Participant Information Sheet- Focus Group

Participant Information Sheet for Adult Females

UCL Research Ethics Committee Approval ID Number: 12709/001

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study:

Women's attitudes towards unwanted sexual experiences

Department: Clinical Psychology

Name and Contact Details of the Researcher(s):
Felicity Saunders and Harriet Rankin

Name and Contact Details of the Principal Researcher: Dr John King,

1. Invitation

We would like to invite you to take part in a focus group to advise on research into unwanted sexual experiences as part of our doctoral research project. We are two Trainee Clinical Psychologists studying at University College London (UCL). Participation is entirely voluntary and before you decide whether to take part, it is important for you to understand why the research us being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please do not hesitate to get in contact with us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

2. What is the project's purpose?

Our project aims to explore women's thoughts, feeling and attitudes towards unwanted or unpleasant sexual experiences. For example, any time someone has intentionally grabbed or touched them in a sexual way that they don't like, or they're forced to kiss someone or do something else sexual without their explicit consent. We would also like to understand how women make sense of these experiences and what effect they have had on them. We would like to investigate the relationship between how they perceive and understand these events and their views on other things such as gender and spirituality.

3. What is the focus group's purpose?

We would like to consult with a group of women about the materials in the study. This includes materials participants will receive when agreeing to take part (advert, information sheet and consent form), questionnaires participants will fill out as part of the study, and a debrief form at the end of the study. We are interested in your views on how these materials are worded, whether they are easy to understand, and whether they communicate the information in a sensitive and appropriate way. You will not be asked to disclose any personal experiences during the focus group.

We estimate that the focus group will take approximately 1 hour.

4. Why have I been chosen?

We would like you to take part if you meet the following criteria:

- a) Have had an unwanted sexual experience within the last two years. For example, someone grabbing or touching a part of your body when you did not want them to, or engaging in a sexual act when you did not give your explicit consent.
- b) Female
- c) Aged 18 and above
- d) Able to communicate in written English

We are aiming to recruit 8-10 participants for the focus group.

5. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to sign a consent form. You can withdraw at any time without giving a reason.

6. What will happen to me if I take part?

After reading this information sheet, you will need to sign a consent form confirming you understand and would like to take part in the study. You will then take part in a one hour focus group where you will be asked to read the materials and test the questionnaires, then comment and advise on any changes during a group discussion. We will take into consideration the suggested changes and edit our materials for the research project accordingly. Your questionnaires responses will be permanently deleted and will not be included in the write up of our thesis.

7. What are the possible disadvantages and risks of taking part?

Due to the sensitive nature of this topic, you may find some of the questions distressing. As this is a trial run of our questionnaire, you do not have to answer these questions in relation to your own experiences. However, we understand that you may find yourself thinking about experiences that are uncomfortable or think about these experiences in a way in which you have not considered before. Some of the questions ask about specific sexual acts and body parts. We encourage you to contact us if you would like to talk about this or would like some information about support available.

If you would like to access treatment or support regarding issues raised in this research, we would advise you to contact your GP in the first instance. If you are in crisis or feel unable to keep yourself safe, please visit your local A&E.

A debrief sheet will be included at the end of the focus group with details of further support available. You will also have the opportunity to opt in to a follow up phone call if you would like us to check how you are doing after taking part.

8. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the focus group, your participation will enable us to ensure we are approaching this project with the sensitivity that it needs. It is hoped that this research will inform our understanding of women who have had unwanted sexual experiences. This in turn will help in the development of psychological treatment of people who are distressed by such experiences.

At the end of the focus group, you will receive £8 as a thank you for your time.

9. What if something goes wrong?

We hope that if you fully read this information sheet you will understand what will happen during the focus group and that this will make it unlikely for something to go wrong. However, if you would like to make a complaint about any aspect of the research, please contact the Principal Researcher in the first instance: Dr John King,

If, following this, you feel your complaint has not been handled satisfactorily, please contact the Chair of the UCL Research Ethics Committee at

10. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications.

11. Confidentiality

All information disclosed during the focus group will be kept strictly confidential.

Confidentiality will be maintained as far as it is possible in any communication following the focus group, including any follow up phone calls made upon your request. However, if during our conversation we hear anything which makes us worried that someone might be in danger of harm, we might have to inform relevant agencies of this. Wherever possible, we would discuss this with you first.

12. What will happen to the results of the research project?

The research project will be written up as two doctorate theses, submitted to UCL in June 2019. If you would like a copy of the results, please email us after participating.

The project(s) may be published in a research journal following submission to UCL. You will not be identified in any publication.

13. Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data, and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk.

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be the provision of your consent and the submission of your questionnaire. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent.

Your personal data will be processed so long as it is required for the research project. We are anticipating that this will be September 2019. All your data will be kept anonymous. If an email address is provided for the

amazon draw or a number for the follow-up phone call, they will be stored securely and separately from the rest of the questionnaire.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/

Detail any intended recipients of personal data if not explained elsewhere, and also advise if any personal data will be transferred outside the EEA, and if so to where.

14. Who is organising and funding the research?

This research is funded by the Department of Clinical Psychology, University College London (UCL).

15. Contact for further information

If you would like any further information about this study, please contact us by email:

Harriet Rankin:	
Felicity Saunders	

If you would like a copy of this information sheet, please request via email.

Thank you for reading this information sheet and for considering taking part in this research study.

APPENDIX C Participant Consent Form- Focus Group

CONSENT FORM FOR ADULT FEMALE PARTICIPANTS

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study:

Exploring women's attitudes towards unwanted sexual experiences

Department:

Clinical Psychology

Name and Contact Details of the Researcher(s): Felicity Saunders and Harriet Rankin	
Name and Contact Details of the Principal Researcher: Dr John King,	
Name and Contact Details of the UCL Data Protection Officer: Lee Shailer,	

This study has been approved by the UCL Research Ethics Committee:

Project ID number: 12709/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. If you would like a copy of this Consent Form to keep and refer to, please email us using the addresses above

I confirm that I understand that by ticking each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
1.	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I understand that I will review materials about sexual experiences. I have also had the opportunity to ask questions which have been answered to my satisfaction	
2.	*I understand that I will be able to withdraw from the study at any time.	
3.	*I consent to the processing of my personal information (including demographic details, political and spiritual views) for the purposes explained to me. I understand that such information will be handled in accordance with all applicable data protection legislation.	

4.	Use of the information for this project only
	*I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified.
	I understand that my data gathered in this study will be stored anonymously and securely. It will not be possible to identify me in any publications.
5.	*I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.
6.	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason, I understand that if I decide to withdraw, any personal data I have provided up to that point will be deleted.
7.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.
8.	I understand the direct/indirect benefits of participating.
9.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.
10.	
11.	I understand that the information I have submitted will be published as a report.
12.	
13.	I am aware of who I should contact if I wish to lodge a complaint.
14.	I voluntarily agree to take part in this study.

APPENDIX D Participant Information Sheet

Participant Information Sheet for Adult Females

UCL Research Ethics Committee Approval ID Number: 12709/001

Title of Study: Women's attitudes towards unwanted sexual experiences-UK

females only

Department: Clinical Psychology

Name and Contact Details of the Researcher(s): Felicity Saunders and Harriet

Rankin

Name and Contact Details of the Principal Researcher: Dr John King,

1. Invitation

We would like to invite you to take part in an online questionnaire about unwanted sexual experiences as part of our doctoral research project. We are two Trainee Clinical Psychologists studying at University College London (UCL). Participation is entirely voluntary and before you decide whether to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please do not hesitate to get in contact with us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

2. What is the project's purpose?

Our project aims to explore women's thoughts, feeling and attitudes towards unwanted or unpleasant sexual experiences. For example, any time someone has intentionally grabbed or touched you in a sexual way that you don't like, or you're forced to kiss someone or do something else sexual without your explicit consent. We would also like to understand how you make sense of these experiences and what effect they have had on you. We would like to investigate the relationship between how you perceive and understand these events and your views on other things such as gender and spirituality. We estimate the online questionnaire will take 15-25 minutes to complete.

3. Why have I been chosen?

We would like you to take part if you meet the following criteria: a) Have had an unwanted sexual experience within the last two years. For example, someone grabbing or touching a part of your body when you did not want them to, or engaging in a sexual act when you did not give your explicit consent. b) Female c) Aged 18 and above d) Live in the UK e) Able to communicate sufficiently in written English f) Not currently receiving psychological therapy We are aiming to recruit 100-150 participants.

4. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to sign a consent form. You can withdraw at any time without giving a reason. If you do not complete the full questionnaire, we will take this as a sign of your withdrawal and your data will be deleted. However, please note that once you have submitted a full questionnaire, we will not be able to delete your response, as it will be anonymous and unidentifiable.

5. What will happen to me if I take part?

After reading this information sheet, you will need to sign a consent form confirming you understand and would like to take part in the study. You will then be asked to complete an online questionnaire which will take approximately 15-25 minutes. The research project will be recruiting until the target number of participants has been

reached. The data will be analysed, and results written up as two theses papers, which will be submitted in June 2019.

6. What are the possible disadvantages and risks of taking part?

Due to the sensitive nature of this topic, you may find some of the questions distressing. You may find yourself thinking about experiences that are uncomfortable or think about these experiences in a way in which you have not considered before. Some of the questions ask about specific sexual acts and body parts. We encourage you to contact us if you would like to talk about this or would like some information about support available. If you would like to access treatment or support regarding issues raised in this research, we would advise you to contact your GP in the first instance. If you are in crisis or feel unable to keep yourself safe, please visit your local A&E. A debrief sheet will be included at the end of this study with details of further support available. You will also have the opportunity to leave your phone number at the end of the survey if you would like us to call you and

7. What are the possible benefits of taking part?

check how you are doing after taking part.

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this research will inform our understanding of women who have had unwanted sexual experiences. This in turn will help in the development of psychological treatment of people who are distressed by such experiences. At the end of the questionnaire, you will be asked whether you would like to enter a prize draw to win Amazon vouchers (1 x £100, 2 x £50, 3 x £20) as a thank you for your time.

8. What if something goes wrong?

We hope that if you fully read this information sheet you will understand what will happen during the research and that this will make it unlikely for something to go wrong. However, if you would like to make a complaint about any aspect of the research, please contact the Principal Researcher in the first instance: Dr John King, If, following this, you feel your complaint has not been handled satisfactorily, please contact the Chair of the UCL Research Ethics Committee at

9. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications. If you decide you would like to be entered into the Amazon voucher prize draw, we will ask you to provide your email address, so we are able to contact you. However, this will be stored separately from the rest of your questionnaire so that your data is not identifiable.

10. Confidentiality

All information disclosed on these questionnaires will be kept strictly confidential. As these are filled in anonymously, we are not able to link responses with any particular person. Confidentiality will be maintained as far as it is possible in any communication following your completion of the questionnaire, including any follow up phone calls made upon your request. However, if during our conversation we hear anything which makes us worried that someone might be in danger of harm, we might have to inform relevant agencies of this. Wherever possible, we would discuss this with you first.

11. What will happen to the results of the research project?

The research project will be written up as two doctorate theses, submitted to UCL in

June 2019. If you would like a copy of the results, please email us after participating. The project(s) may be published in a research journal following submission to UCL. You will not be identified in any publication.

12. Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. UCL's Data Protection Officer can also be contacted at data-protection@ucl.ac.uk. Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be the provision of your consent and the submission of your questionnaire. The legal basis used to process special category personal data will be for scientific and historical research or statistical purposes/explicit consent. Your personal data will be processed so long as it is required for the research project. We are anticipating that this will be September 2019. All your data will be kept anonymous. If an email address is provided for the Amazon draw or a number for the follow-up phone call, they will be stored securely and separately from the rest of the questionnaire. If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: https://ico.org.uk/for-organisations/data-protection-reform/overview-of-thegdpr/individuals-rights/

13. Who is organising and funding the research?

This research is funded by the Department of Clinical Psychology, University College London (UCL).

14. Contact for further information

If you would like any further information about this study, please contact us by email: Harriet Rankin: Felicity Saunders: If you would like a copy of this information sheet, please request via email.

Thank you for reading this information sheet and for considering taking part in this research study.

APPENDIX E Participant Consent Form

CONSENT FORM FOR ADULT FEMALE PARTICIPANTS UCL Research Ethics Committee Approval ID Number: 12709/001

Exploring women's attitudes towards unwanted sexual experiences
Department: Clinical Psychology
Name and Contact Details of the Researcher(s): Felicity Saunders and Harriet Rankin
Name and Contact Details of the Principal Researcher: Dr John King,
Name and Contact Details of the UCL Data Protection Officer: Lee Shailer,

Thank you for considering taking part in this research. It is important that you understand what participation means, as explained in the information sheet (previous screen). If you still have questions, please do not continue, but contact us (using the addresses above) to ask for clarification. If you would like a copy of this Consent Form to keep and refer to, please email us using the addresses above.

I confirm that I understand that by ticking each box below I am consenting to this element of the study. I understand that it will be assumed that unticked boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

	Tick box
I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I understand that I will be asked direct questions about sexual experiences. I have also had the opportunity to ask questions which have been answered to my satisfaction	0
I understand that I will be able to withdraw from the study at any time up until the point of submitting the questionnaire.	0
3. I consent to the processing of my personal information (including demographic details, political and spiritual views) for the purposes explained to me. I understand that such information will be handled in accordance with all applicable data protection legislation.	0
4. Use of the information for this project only. I understand that all personal information will remain confidential and that all efforts will be made to ensure I cannot be identified. I understand that my data gathered in this study will be stored anonymously and securely. It will not be possible to identify me in any publications.	0

 I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes. 	0
6. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that if I decide to withdraw, any personal data I have provided up to that point will be deleted.	0
7. I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.	0
8. I understand the direct/indirect benefits of participating.	0
 I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study. 	0
10. I understand that I will not benefit financially from this study or from any possible outcome it may result in the future.	0
11. I understand that the information I have submitted will be published as a report.	0
12. I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	0
13. I am aware of who I should contact if I wish to lodge a complaint.	0
14. I voluntarily agree to take part in this study.	0
I consent, begin the study	

APPENDIX F Debrief form

Women's attitudes towards unwanted sexual experiences-UK females only <u>Debrief form</u>

Thank you for participating in this study. Below is some information about the research and details of some organisations should you need any support.

Please follow the hyperlink at the end of page if you wish to enter into the Amazon voucher prize draw. There is also the opportunity to enter your phone number if you would like one of the researchers to check in with how you are doing after taking part in this research.

This study is designed to examine the thoughts, feelings and attitudes of women who have encountered an unwanted sexual experience. We are interested in factors that affect the longer-terms effects of such experiences, including forgiveness, perceived severity of the experience, anger and low mood.

Research into forgiveness has previously shown that levels of forgiveness have an indirect effect on the impact of traumatic experiences, as a result of its relationship with anger and mood. These effects have been found in war veterans and those involved in road traffic accidents, but until now there has yet to be a study investigating the relationship between forgiveness and traumatic experiences for those who experienced unwanted sexual experiences.

In addition, previous research has shown that acknowledging an unwanted sexual experience as sexual assault or rape is an important part of processing the event, and that feminist attitudes have an effect on this. There is also research suggesting a link between feminist values and acknowledgement of an assault and the psychological effects of an assault. Therefore, we are also interested in what makes women define their experiences as sexual assault or not, whether this is influenced by feminist values, and whether this in turn has an effect on long-term psychological outcomes

We believe this is an important area of research. It is hoped that your participation in this research project will contribute to our understanding of how best to help women who are distressed by unwanted sexual experiences.

Please again be reminded that your responses will be completely anonymous and unidentifiable. If you enter our Amazon voucher prize draw or request a follow up phone call, your contact details will be stored separately to the rest of the data.

We understand that you may find some of the questions asked in this research distressing. If you would like to access treatment or support regarding issues raised in this research, we would advise you to contact your GP in the first instance. If you are in crisis or feel unable to keep yourself safe, please visit your local A&E. Details of specialist support organisations are listed below:

Victim Support UK – an independent charity providing free and confidential support to help those affected by crime In England and Wales, regardless of whether the crime has been reported or how long ago it happened. www.victimsupport.org.uk

The Survivor's Trust - a UK-wide national umbrella agency for 130 specialist organisations for support for the impact of rape, sexual violence and childhood sexual abuse throughout the UK and Ireland. http://thesurvivorstrust.org

Rape Crisis England & Wales - the national umbrella body for a network of autonomous member Rape Crisis Centres across England and Wales. They also raise awareness and understanding of sexual violence in the wider community and with local, regional and national government. https://rapecrisis.org.uk

The Havens – specialist centres in London for people who have been raped or sexually assaulted. https://www.thehavens.org.uk, tel: 020 3299 6900

Samaritans – an independent charity providing emotional support 24 hours a day to those who are struggling to cope, including those who have had thoughts of suicide. https://www.samaritans.org/, tel: 116 123

We would also encourage you to contact us if you have any questions or concerns about the research.

Researchers:

Harriet Rankin: ucjuhra@ucl.ac.uk, 07 Felicity Saunders: ucjufsa@ucl.ac.uk,

Principal Researcher and Supervisor: Dr John King, john.king@ucl.ac.uk

Please <u>click here</u> to enter the Amazon prize draw or request a follow-up phone call.

APPENDIX G Details of Collaboration in Joint Project

Collaboration in Joint Project

Part Two of this thesis, the empirical research, was undertaken as part of joint project with Harriet Rankin, another trainee completing her doctorate in clinical psychology at UCL. Her part of the project studied the same group of participants but was interested in how feminist values influence the way sexual assault is acknowledged, and the impact this has on a post-traumatic symptoms. The details of this part of the project are outlined in her thesis submission: Rankin, H. (2019). Acknowledging sexual assault: the influence of feminism and impact on post-traumatic symptoms. *Clinical Psychology Doctorate Thesis*.

Aspects of research undertaken independently:

- Selecting research topic
- Review of the literature
- Research proposal
- · Selection of measures
- Study design for this part of the project
- Data analysis
- Write up of the empirical paper

Aspects of research undertaken jointly:

- Agreeing overall study protocol
- Research governance tasks (application for ethical approval, funding, risk assessment, data protection)
- Defining constructs
- Organising and running the focus group
- Recruitment of participants
- Data collection and processing
- Designing online procedure
- Correspondence with participants