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An Investigation into Interpersonal Forgiveness and its Effects on a Variety of Psychological Wellbeing Outcomes: A Mixed Methods Study

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"Not to forgive is to be imprisoned by the past, by old grievances that do not permit life to proceed with new business. Not to forgive is to yield oneself to another's control...to be locked into a sequence of act and response, of outrage and revenge, tit for tat, escalating always. The present is endlessly overwhelmed and devoured by the past. Forgiveness frees the forgiver. It extracts the forgiver from someone else's nightmare."

Carol Luebering

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	10
LIST OF TABLES.	11
LIST OF DIAGRAMS	13
ABSTRACT	14
CHAPTER 1: INTRODUCTION	16
CHAPTER 2: LITERATURE REVIEW	26
Introduction	26
Forgiveness: Definitions & Measurement	26
Quantitative Forgiveness Measures	34
Enright Forgiveness Inventory	34
Transgression-Related Interpersonal Motivations Scale	35
Heartland Forgiveness Scale	36
Mullet Forgiveness Questionnaire	36
Mental Wellbeing: Definitions & Measurement	39
Mental Illness	40
Subjective Wellbeing	45
Eudaimonic Wellbeing	46
Empirical Links Between Forgiveness & Mental Wellbeing	52
Correlational Studies	52
Forgiveness Intervention Effects: Experimental Studies	54
Qualitative Studies	59
Factors Facilitating & Obstructing Forgiveness	60
Conclusions: Gaps in the Literature	64
CHAPTER 3: METHODOLOGY	66
Introduction	66
Philosophical Considerations.	
The Paradigm Wars	67
New Positions.	71

Summary	73
Methodological Approach	74
Qualitative Interview Study	77
Method	78
Participants	78
Procedure	79
Data Collection Method	86
Data Analysis Method	89
Ethical Considerations	92
Quantitative Survey Study	94
Hypotheses	94
Methods	96
Participants	96
Sample Size	99
Procedure	101
Data Collection Method	102
Instrumentation & Variable Coding	103
Demographics	103
Religious/Spiritual Understanding of Life	104
Spiritual Connection	105
Meditation & Prayer	
Eudaimonic Wellbeing	106
Positive Affect	107
Forgiveness	
Data Analysis Method	
Ethical Considerations	110
Systematic Review Study	111
Introduction	111
Methods	112
Inclusion Criteria	112
Types of Studies	112
Types of Participants	112
Types of Interventions	
Types of Outcome Measures	113

Mental Health Outcomes	114
Wellbeing Outcomes	114
Search Methods for Identification of Studies	115
Electronic Searches	115
Searching Other Sources	116
Data Collection & Analysis	116
Selection of Studies	116
Data Extraction & Management	116
Assessment of Risk of Bias in Included Studies	116
Measures of Treatment Effect	117
Unit of Analysis Issues	118
Dealing with Missing Data	118
Assessment of Heterogeneity	118
Data Synthesis	119
Chapter Summary	120
CHAPTER 4: QUALITATIVE STUDY RESULTS	121
Introduction	121
Aims of the Qualitative Study	121
Descriptions of Interpersonal Hurt.	121
Definitions of Forgiveness.	125
State Forgiveness Experiences	126
Barriers to Forgiveness.	130
Blaming	131
Lack of Acknowledgement	133
Powerlessness	134
Ruminating Over Offence	135
Desire for Revenge	136
Ongoing Transgressions	137
Physical Proximity	138
Perceived Effects of Unforgiveness	139
Negative Effect on Mental Health/Affect	140
Negative Effect on Mental Health/Cognitive	142

Barriers to Psychological Growth & Social Wellbeing	143
Factors Facilitating Forgiveness.	144
Connectedness	146
Focusing on Positive Qualities	147
Accepting Responsibility	148
Belief in Karma	149
Helping Others	151
Meditation	152
Self-Observation	153
Prayer	155
Empathy	156
Persistent Effort to Repair Situation	157
Talking & Support	158
Perceived Effects of Forgiveness.	159
Reductions in Negative Affect.	160
Positive Affect.	160
Positive Relationships	162
Spiritual Growth	163
Sense of Empowerment.	165
Differences & Similarities in Factors Facilitating & Outcomes of Forgiveness	166
Summary of Qualitative Findings	169
CHAPTER 5: QUANTITATIVE SURVEY STUDY RESULTS	171
Introduction	
Research Questions & Hypotheses	
Descriptions of Interpersonal Hurt	
Group Differences	
Chi-Squared Test	
Independent T Test	
Correlations	
Preliminary Analysis: Assumptions of Multiple Regression	
Sample Size	
Normality	180

Reliability Analysis	180
Linearity	181
Homoscedasticity	182
Multicollinearity	183
Outliers	183
Hierarchical Multiple Regression	185
Predicting Mental Wellbeing	
Tests of Moderation: Meditation & Connectedness	
Tests of Mediation: Meditation & Connectedness	
Summary of Main Findings	
CHAPTER 6: SYSTEMATIC REVIEW STUDY RESULTS	194
Introduction	194
Methods	195
Results of the Search	195
Excluded Studies.	196
Included Studies	197
Design	197
Treatment & Control Groups	197
Sample Sizes	198
Location	199
Setting	199
Delivery of intervention	199
Participants	199
Interventions	201
Outcomes	201
Primary Outcomes	202
Time Points	206
Risk of Bias in Included Studies	206
Random Sequence Generation	206
Allocation	207
Blinding	207
Performance Bias	207
Incomplete Outcome Data	208
Selective Reporting	209

Other Potential Sources of Bias	209
Effects of Interventions.	213
Meta-Analyses: Forgiveness versus Control.	213
Meta-Analyses: Negative Affect Outcomes.	215
Analysis 1: Depression	215
Analysis 2: Anxiety	216
Analysis 3: Anger & Hostility	217
Analysis 4: Stress & Distress	218
Analysis 5: Positive Affect	219
Analysis 6: Levels of state Forgiveness	220
Analysis 7: Levels of trait Forgiveness	221
Sub Group Analysis	222
Analysis 8: Effects of Enright Model	222
Analysis 9: Effects of REACH Model	223
Analysis 10: Effects of Number of Sessions (2 to 8)	224
Analysis 11: Effects of Number of Sessions (12 or more)	225
Analysis 12: Individual Treatment Effects	226
Analysis 13: Group Intervention Effects	
Individual Study Results	
Analysis 1: Self-Esteem	
Analysis 2: Religious/Spiritual Wellbeing	
Analysis 3: Hope	
Analysis 4: Relationships with others	
Analysis 5: Gratitude; Negative Mood; Stress; depression; Life Satisfaction	230
Analysis 6: Trait Forgiveness	230
Summary of Systematic Review Findings	230
CHAPTER 7: DISCUSSION	233
Phase 1: Summary & Discussion of Qualitative Findings	234
Definitions & Experiences of Forgiveness	235
Barriers to Forgiveness	237
Effects of Unforgiveness	239
Factors Facilitating Forgiveness	240
Effects of Forgiveness	
Differences & Similarities in Influencing Factors & Outcomes of	
Forgiveness	246

Phase 2: Summary & Discussion of Survey Findings	248
Hierarchical Prediction of Mental Wellbeing	249
Moderator & Mediator Effects	251
Differences Between Religious/Spiritual & non-Religious/Spiritual Groups	253
Phase 3: Summary & Discussion of Systematic Review Findings	257
Agreements & Disagreements With Other Studies	261
Quality of the Evidence	262
Integration of Research Findings.	266
Implications	269
Strengths & Limitations	274
Suggestions for Future Research.	278
Conclusion.	281
REFERENCES	285
APPENDIX A: Interviews (Study 1)	304
APPENDIX B: Survey (Study 2)	319

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LIST OF TABLES

Table 1. l	Demographic Characteristics (Interview Study)	79
Table 2. 1	Demographic Characteristics (Survey study)	98
Table 3. S	Summary of Religious/Spiritual Affiliation & Practice Variables of	
	Participants	98
Table 4.	Barriers to State Forgiveness13	31
Table 5. 1	Perceived Effects of Unforgiveness on Mental Well-Being 14	40
Table 6. 1	Religious & Secular Strategies to Forgive14	45
Table 7. 1	Effects of State Forgiveness on Mental Well-Being1	59
Table 8.	Chi-Squared Analysis: Differences in Demographics For	
	Religious/Spiritual & Non-Religious/Spiritual Groups1	74
Table 9. 1	Independent T-Test of Group Differences in Wellbeing & Forgiveness:	
	Unbalanced Samples1	76
Table 10.	Independent T-Test of Group Differences in Wellbeing & Forgiveness	; :
	Balanced Samples1	78
Table 11.	Point Biserial Correlations For Mental Wellbeing, Forgiveness &	
	Demographics for Entire Sample17	79
Table 12.	Percentiles Output For Detecting Outliers in Wellbeing	
	Outcomes	34
Table 13.	Extreme Values Output For Detecting Outliers in Wellbeing	
	Outcomes	34
Table 14.	Hierarchical Regression Analysis for Wellbeing Increase on Age,	
	Employment, Meditation, Connectedness & Forgiveness18	39
Table 15.	Moderator Effects: Meditation & Connectedness19	92
Table 16.	Effects of Forgiveness Treatment on Levels of Depression	16
Table 17.	Effects of Forgiveness Treatment on Levels of Anxiety	17
Table 18.	Effects of Forgiveness Treatment on Levels of Anger & Hostility2	18
Table 19.	Effects of Forgiveness Treatment on Levels of Stress & Distress2	19
Table 20.	Effects of Forgiveness Treatment on Levels of Positive Affect22	20
Table 21.	Effects of Forgiveness Treatment on Levels of State Forgiveness22	21
Table 22.	Effects of Forgiveness Treatment on Levels of Trait Forgiveness22	22

Table 23.	Effects of Enright Model on State Forgiveness	223
Table 24.	Effects of REACH model on State Forgiveness	224
Table 25.	Effects of 2 to 8 Sessions on Levels of State Forgiveness	225
Table 26.	Effects of 12 or More Sessions on Levels of State Forgiveness	.226
Table 27.	Effects of Individual Treatment on Levels of State Forgiveness	227
Table 28.	Effects of Group Treatment on Levels of State Forgiveness	228

LIST OF DIAGRAMS

Diagram 1.	Different Phases of Research7	7
Diagram 2.	Histogram of Distribution for Wellbeing18	1
Diagram 3.	Scatterplot of Residuals for Wellbeing18	2
Diagram 4.	Boxplot Detecting Outliers For Wellbeing18	5
Diagram 5.	Graphical Representation of Variables Included in Each Step of th	e
Regression l	Model18	8
Diagram 6.	Consort Flow Chart19	6
Diagram 7.	Risk of Bias Graph: Review Authors Judgements About Each Risk of	of
Bias Item Pr	resented Across all Included Studies21	1
Diagram 8.	Risk of Bias Summary: Review Authors' Judgements About Each Ris	k
of Bias Item	For Each Included Study212	2

ABSTRACT

Background:

Understanding about factors that can improve psychological wellbeing is important because such wellbeing is linked to the prevention of mental and physical illness, improved learning and educational attainment, and greater work productivity. Whilst there is a growing body of research highlighting the role of forgiveness in improving some aspects of mental health, few studies have examined its relationship to a variety of psychological health outcomes. Even fewer studies have explored the *process* of state forgiveness, particularly among under-studied religious/spiritual and non-religious/spiritual samples outside of a US context.

Methods:

To address these gaps, a mixed methods study was undertaken and applied in three phases. In phase one, I conducted qualitative interviews to explore how participants practiced interpersonal forgiveness, the mechanisms that facilitated and obstructed this process, and perceptions about the effects of choosing to forgive in response to being hurt. In phase two, I tested the qualitative study results by conducting an internet survey study of under-studied samples within a UK context to explore links between state (real life) forgiveness and wider dimensions of wellbeing as well as testing for any moderator effects. In phase three, I conducted a systematic review of the effectiveness of forgiveness-based interventions. RCT studies were retrieved using electronic databases and reference sections of previous reviews; each study was assessed for risk of bias. Standardized mean differences and confidence intervals were used to assess treatment effects.

Results:

The results of the qualitative study indicated that factors that assisted forgiveness entailed accepting responsibility, meditation, prayer, a focus on positive qualities, beliefs in being spiritually connected with others, talking, as well as the offender making amends. Key barriers to forgiveness were blame, not feeling understood or acknowledged, powerlessness, constantly thinking about the hurt, wanting revenge, ongoing transgressions and a need for physical distance. All interview participants described experiencing a variety of benefits as a result of forgiving such as reductions in negative affect, increases in event-specific and general positive emotions, a sense of meaning and purpose in life, positive relations, empowerment as well as spiritual development. The qualitative results also suggested that forgiveness entailed a shift from negative resentment based emotions, thoughts and behaviours towards an experience of positive regard for the offender. Differences were also identified in relation to conditional and unconditional forms of forgiveness. The survey data was analysed using hierarchical multiple regression analysis. The results of the survey suggested that forgiveness significantly predicts some components of mental wellbeing (i.e. eudaimonic) over and above the level of variance accounted by other important variables such as age, employment, meditation and connectedness. The survey results did not indicate that connectedness and meditation moderate (or mediate) the association between forgiveness and wellbeing. Results of the review showed that forgiveness interventions reduce depression, stress and distress as well as promote general positive affect. The results also indicated a low to moderate quality of evidence.

Conclusion:

In conclusion, the results of this research project suggest that forgiving a variety of real life interpersonal offenses can facilitate the reduction of a range of mental health problems, promote general positive emotions and increase eudaimonic wellbeing. This study also suggests that a range of mechanisms can act to assist or hinder state forgiveness and indicated important differences in how forgiveness is practiced, and the influence this can have on psychological functioning. Further research is, however, needed.

CHAPTER 1

INTRODUCTION

Minor or major interpersonal hurts occur frequently, within a variety of contexts and due to a multitude of reasons. One reason people experience feeling hurt is because of overt forms of violence as seen in conflicts within the Middle East (i.e. Palestine-Israel) and the Bosnian war. Far more common, however, are everyday acts of violence such as child abuse, intimate partner violence, elder abuse and bullying (Krug et al., 2002). Even within otherwise healthy relationships, violations of norms or rules often occur and these can be due to individuals feeling unacknowledged or as a result of rejection (Diblasio, 1998). Hurt people can subsequently develop a variety of other emotions such as chronic anger and hostility, which may then lead them into a cycle of violence by taking revenge. Research has shown that harbouring chronic anger and hostility can lead to physical and mental health problems (Goldman and Wade, 2012; Chida and Steptoe, 2009) and the public health costs of continuing violence also include fatal and non-fatal injuries, suicide and increased health service use (Krug et al., 2002). Choosing to remain chronically angry, hostile or wanting to take revenge is, however, only one of a number of possible responses. Another response to being hurt is forgiveness, which is defined as the decision to let go of negative resentment based emotions, cognitions and behaviours and to develop some form of positive regard for an offender, be it compassion, sympathy or even pity (Enright and Fitzgibbons, 2000; Wade and Worthington, 2005). Philosophical and religious interest in the concept of forgiveness spans many centuries and references to forgiveness have been noted in many ancient religious texts such as the Quran, Bible as well as the Hindu text of Mahabharata (Enright [no date]; Hunter, 2007). Hindu and Buddhist teachings encourage letting go of resentment and developing

compassion for wrongdoers as a means of alleviating the suffering experienced by the victim and promoting a greater sense of peace and harmony for self and community (Hunter, 2007; Buck and Lukoff, [no date]). A central focus of counselling and therapy is to help clients overcome the negative consequences of experiencing interpersonal hurts (Macaskill, 2005) and over the last twenty years or so, clinicians and researchers in the West have also become increasingly interested in the health benefits of forgiveness, largely because of its potential for reducing negative thoughts and emotions stemming from interpersonal hurts (Wade et al., 2013). A key focus of this thesis is therefore to contribute towards the developing evidence base concerning the process entailed in forgiving a range of real life interpersonal hurts and the impact this has on a multitude of psychological health outcomes; an evidence base that would be of relevance to health care workers, researchers, policy makers and the general public.

Globally, an estimated 450 million people experience mental health problems whilst in the UK one in four adults suffer from mood disorders in any one year (Halliwell et al., 2007). Data from the US also suggests that eleven per cent of adults experience a state of 'languishing' that is not a diagnosable mental disorder but is thought to be associated with diminished wellbeing and an increased risk of depression (Keyes, 2002a; Keyes, 2002b). Mental health problems are linked to a variety of negative outcomes such as unemployment, poor education and physical illness (Royal College of Psychiatrists, 2010). However, in addition to the benefits of reducing mood disorders, attention is now being given to the promotion of mental wellbeing, which includes not only the absence of negative affect but also the presence of subjective wellbeing (i.e. happiness, life satisfaction, positive affect) and eudaimonic

components such as self-acceptance, a sense of control, autonomy, purpose in life, and positive relations. In addition, improving general population wellbeing is a key policy goal (Department of Health, 2011) because it is known to be linked to the prevention of mental health problems, reduced health risk behaviours such as smoking and excessive drinking, improved learning and educational attainment, greater work productivity as well as improved physical health (Royal College of Psychiatrists, 2010; Huppert, 2009).

Understanding what promotes mental wellbeing is therefore vitally important and it is argued that interventions that facilitate positive actions and attitudes have a key role to play in enhancing wellbeing (Huppert, 2009). One such intervention is the practice of forgiveness. Over the last 20 years a growing body of experimental research has shown that forgiveness therapy can reduce common mental health problems such as depression and anxiety (Lundahl et al., 2008). A limited number of experimental studies have also indicated that forgiveness can increase hope, gratitude and happiness (Rye et al., 2012; Rye and Paragament, 2002; Allemand et al., 2013). Correlational studies have produced mixed results with some indicating links between forgiveness/unforgiveness and increased positive affect (Maltby et al., 2005; Toussaint and Friedman, 2009) whilst others have found trait (i.e. dispositional) forgiveness to be weakly associated with single measures of life satisfaction (Sastre et al., 2003). Empirical research assessing the effects of forgiveness on different domains of psychological health is growing but the evidence to date suggests a need to further investigate the relationship between forgiveness of real life offenses and mental wellbeing. In particular, there is a need to: 1) critically appraise the quality of prior research so that we can develop a clearer understanding of the true effects of forgiveness interventions; 2) assess the effects of forgiveness of real life offenses in relation to a variety of psychological health outcomes, including eudaimonic components; 3) examine people's everyday experiences of forgiveness, not just the effects of manualized forgiveness treatment protocols; and 4) assess these effects among wider samples from different (i.e. non US) cultural contexts and diverse religious backgrounds.

In addition to investigating the relationship between state forgiveness and mental wellbeing, further gaps in the literature that are addressed by this study concern the process of interpersonal forgiveness. One such gap concerns barriers to and factors facilitating forgiveness. The vast majority of prior research has focused on factors promoting forgiveness with previous results indicating a variety of secular mechanisms such as apology, offense severity, relationship commitment and personality as being associated with trait forgivingness or unforgiveness (McCullough et al, 1998; Boon and Sulsky, 1997; McCullough and Hoyt, 2002; Exline, et al, 2004). A few studies have also found associations between religiosity and dispositional forgiveness (McCullough and Worthington, 1999). However, on the whole, the measures used in these studies are dispositional scales of either interpersonal hurts or forgiveness, and generally little is known about mechanisms that may hinder or promote forgiveness of real life offenses. Thus, the first phase of this study will qualitatively investigate unique and under-studied mechanisms that may act to hinder or assist state forgiveness followed by quantitatively testing these patterns in the second phase survey using a larger sample size.

Another concern relates to conceptualisations of forgiveness. Clinicians and researchers have over the previous few years reached a consensus as to what forgiveness is and is not (Wade and Worthington, 2005). However, some studies have indicated cross-cultural variation in lay understandings (Mullet et al., 2004; Kadima et al., 2007). This research has largely focussed on meanings of trait forgiveness with relatively few studies investigating experiential understandings; that is, what are lay people's real life experiences of forgiveness and the extent to which these correspond with previous research regarding lay definitions of trait forgiveness. Some key areas of disagreement in relation to how forgiveness is defined concerns whether it entails a change of heart, whether it necessarily results in reconciliation and whether restitution on the part of the offender (i.e. conditional forgiveness) is implicit to a definition of forgiveness for some people. One previous study has indicated that the type of forgiveness practiced (i.e. conditional or unconditional) can positively or negatively impact a variety of psychological health outcomes (Krause and Ellison, 2003). Thus, more needs to be known about: 1) how lay religious/spiritual and nonreligious/spiritual people define and experience forgiveness; and 2) whether practicing different forms of forgiveness may result in differential mental wellbeing outcomes. Given the clinical implications (i.e. improvements in mental health) it is important for clinicians, researchers and policy makers with an interest in promoting forgiveness to better understand differences in conceptualisations or practice of forgiveness and its effects, so that they are able to identify the best methods of working to promote forgiveness with individual clients, and tailor interventions accordingly.

Study design

To address these gaps in the literature, a mixed methods study was conducted in which both qualitative and quantitative techniques were applied so that both process and outcomes could be examined. The central objectives of this study were: a) to provide a comprehensive understanding into the process of state forgiveness; b) to investigate the relationship between state forgiveness experiences and a variety of mental wellbeing outcomes among diverse religious/spiritual and non-religious/spiritual samples and c) to critically appraise and meta-analyse prior forgiveness intervention studies for the purpose of assessing effects of process-based interventions on psychological health.

The mixed methods approach consisted of utilising a number of tools that were applied in three phases. In phase one, qualitative interviews were conducted to develop insight into the dynamics of the process of forgiving others as well as to identify themes and patterns in the data. Participants who had experienced interpersonal hurts were interviewed and asked to provide a detailed description of their experiences. The following themes were covered in the interviews:

- 1. How interpersonal forgiveness was practiced
- 2. Factors obstructing/facilitating forgiveness
- 3. Relationships between forgiveness/unforgiveness and a variety of positive and negative psychological health outcomes.
- 4. Similarities and differences between groups both in terms of process and outcomes of forgiveness.
- 5. Meanings of forgiveness

The qualitative study involved conducting in-depth, semi-structured interviews via video call (Skype) and face-to-face, using diverse religious/spiritual samples and a secular/atheist participant. The results were then systematically analysed by applying grounded theory methods.

The phase one study also informed the design of the second, quantitative (survey) study by assisting in the selection of measures and moderator variables. The survey aimed to examine broad relationships between state forgiveness and mental wellbeing outcomes as well as to test the effects of moderator variables using religious/spiritual and non-religious/spiritual samples from the UK. The central hypotheses addressed by the survey were as follows:

- Interpersonal forgiveness would lead to greater levels of mental wellbeing over and above the level of variance accounted for by demographics, meditation and connectedness.
- 2. Meditation or connectedness with others would moderate the relationship between forgiveness and mental wellbeing.

The secondary hypotheses addressed in the survey were as follows:

- 3. Religious/spiritual people would experience greater levels of forgiveness than non-religious/spiritual people.
- 4. Religious/spiritual people would experience greater levels of mental wellbeing than non-religious/spiritual people.

The survey comprised of a web-based cross-sectional survey design. Statistical analysis consisted of an independent samples t-test to explore differences between diverse religious/spiritual and secular/atheist groups, bivariate analysis to explore associations between variables followed by hierarchical regression analysis, to test the degree to which forgiveness variables were associated with mental wellbeing, over and above other important variables.

A systematic review was conducted in the third phase of the study, with a view to increasing knowledge concerning the evidence base regarding the effects of forgiveness therapy. The aims of the review were to: a) critically evaluate the methodological quality of forgiveness intervention studies that had used robust study designs such as RCTs; and b) meta-analyse appraised studies with a view to assessing the true effects of these interventions on different components of mental wellbeing.

Quantitative studies evaluating process-based forgiveness interventions vs a notreatment/wait-list control group were analysed. Studies using different process-based forgiveness models, and modes of treatment including variation in duration of delivery, were assessed, and the review only included studies that had used standardized and validated measures to assess outcomes. A variety of electronic databases such as MEDLINE, PsychInfo, ERIC and Behavioural Sciences collection as well reference sections of previous published papers were used to retrieve articles. Data were meta-analysed using a random or fixed-effects model (depending on levels of heterogeneity), and subgroup analysis addressed the impact of different models and duration of intervention.

Summary

Factors inhibiting mental health and wellbeing are a key public health concern because poor mental health is known to hinder functioning across all areas of life. Very little research has examined whether state forgiveness promotes mental wellbeing, particularly in terms of general positive emotions and eudaimonic aspects of wellbeing. Beyond the benefit of reducing mental health problems, a variety of positive outcomes can also result from increased levels of mental wellbeing such as the prevention of mental illness, improved physical health as well as improved work and educational outcomes. Thus, understanding what enhances wellbeing is vital, and the current thesis addresses the gap in the literature concerning relationships between state forgiveness and a variety of psychological health outcomes. It also examines the process of state forgiveness, about which there is a dearth of research, particularly among diverse religious/spiritual and secular/atheist groups outside of a US context. By combining empirical methodologies it was possible to capitalize on the strengths of each method, thereby making an overall contribution to knowledge by providing a comprehensive understanding into an under-studied research topic.

Structure of the thesis

This thesis is structured as follows. Chapter two discusses historical and contemporary conceptualisations of forgiveness and mental wellbeing, and provides an overview of the literature addressing the empirical links between these two concepts as well as factors influencing forgiveness. Chapter three discusses how the gaps in the existing literature are addressed by utilising a mixed methods research design and also discusses various philosophical issues that underpin mixed methods research. Chapter four presents the qualitative analysis of interviews, chapter five

presents the quantitative research results, and chapter six presents the results of the systematic review. Chapter seven presents a discussion of the findings, including the study implications, strengths, limitations, suggestions for future research, and conclusions.

CHAPTER 2

LITERATURE REVIEW

In what follows, I first discuss historical and contemporary conceptualisations of forgiveness and outline the ways in which this concept has been measured. I also address key areas of similarity and difference in terms of understandings of forgiveness among investigators and lay people, as well as highlighting the gaps in the literature that require further investigation. Second, I discuss historical and contemporary conceptualisations and measurements of mental wellbeing, with a particular emphasis on its various dimensions such as the absence of mental illness. the presence of subjective wellbeing (i.e. positive affect) as well as eudaimonic components including environmental mastery, autonomy, personal growth, meaning, and positive relations. In the last part of the chapter I draw on correlational, experimental and qualitative research to review the empirical links between forgiveness and various dimensions of wellbeing followed by a review of research about the barriers to and factors facilitating forgiveness. I conclude by summarising key areas warranting further inquiry.

Forgiveness: Definitions & Measurement

Philosophical and religious interest in forgiveness dates back many centuries with the earliest references to this concept being made in ancient religious texts such as the Bible, Quran as well as the Hindu text of Mahabharata (Enright [no date]; Hunter, 2007). Hindu and Buddhist teachings of forgiveness generally define it as comprising of the absence of anger and the prevalence of positive affect such as compassion (Rye et al., 2000). Drawing on western secular and theological (Judaeo-Christian) frameworks, however, philosophers have historically understood forgiveness to be a personal response to wrongdoing, which involves the relinquishing of anger, hatred or contempt and the reconciliation with an offender (Garrard and McNaughton, 2003; Hughes, 2010). The word 'for give' implies 'to give' and has been interpreted to mean 'to give something up' such as ceasing to harbour resentment (Hughes, 2010). Forgiveness, as understood within this (western secular and theological) framework, is also commonly seen to be synonymous with condoning, excusing or tolerating wrongs with little attempt at distinguishing between these behaviours (Hughes, 2010). However, a key point of divergence within the philosophical literature appears to be related to conditional and unconditional forms of forgiveness. Both appear to be underpinned by a definition of forgiveness as releasing resentment but most philosophical (and Jewish) literature endorses conditional forms of forgiveness whereby a victim forgives only on the basis that a wrongdoer repents, apologises or takes some form of action to demonstrate that they are deserving of forgiveness (Novitz, 1998; Wilson, 1988). Unconditional forgiveness on the other hand, as endorsed within parts of the Christian tradition and encompassing reconciliation, is seen to be akin to condoning, tolerating or excusing wrongdoing, which, it is suggested, demonstrates low self-esteem in the victim (Muphy, 1988; Swinburne, 1989). Aristotle for instance regarded individuals who did not express appropriate anger to be 'fools', whilst Kant (2001) and Hume (1958) stated that such individuals are 'imbeciles' who 'lack dignity and respect'. Others have argued that such an understanding of forgiveness may harm victims of violence because they may readily forgive and subsequently reinforce a cycle of abuse by continually reconciling with an offender (Stanlick, 2010). However, in the last decade or so researchers and clinicians have said that there is a lack of clarity and misunderstanding as to what forgiveness is. They have argued that contrary to the above conceptualisations,

forgiveness is a process involving the choice to let go of ruminating over anger, hatred, vengefulness, and developing positive regard, such as compassion, sympathy or pity (Enright and Fitzgibbons, 2000; Wade and Worthington, 2005). The criticism that a victim's lack of anger is demonstrative of low self-esteem (because they may not care about their rights being violated) is also addressed because a distinction is made between initial anger in response to the wrongdoing and anger that results in ruminating. Process-based forgiveness intervention models for instance encourage victims to recognise and express anger over the event, but a key goal of such interventions is to encourage participants to stop ruminating over resentment based emotions, which are thought to cause psychological harm. Contemporary philosophers and psychologists have also stressed that forgiveness is not forgetting a wrong by denying that it occurred or condoning a wrong by claiming that nothing bad happened or not excusing a wrong by attributing blame to some external source. On the contrary, it is argued that forgiveness is compatible with seeking justice for harm caused and that punishment is appropriate, particularly in cases of serious crime where it may be in the wrongdoers best interests to be penalised (Enright and the Human Development Study Group, 1991; Veenstra, 1992; Wade and Worthington, 2005). The most obvious distinction made by modern day investigators is between forgiveness and reconciliation. They have suggested, for instance, that reconciliation is context specific because it is not possible to restore a fractured relationship with an offender who is a stranger or if they are deceased. The criticism put forth by philosophers, that it is harmful for victims to forgive (and re-establish a relationship with a wrongdoer) without seeing a change in the offender such as them apologizing or making amends, is also addressed because forgiveness is not regarded as condoning or tolerating wrongdoing. Victims are instead encouraged to acknowledge

and evaluate the harm experienced and to end an abusive relationship if appropriate (Wade and Worthington, 2005).

Some contemporary researchers have differentiated between forgiveness practiced within the context of on-going relationships, which necessarily involves a change of heart and reconciliation, and intrapersonal forgiveness where a victim tends to relinquish negative emotions without maintaining any relational ties with an offender (Rusbult et al., 2005). This distinction alleviates some of the problems associated with adopting a standard definition of forgiveness, which is seen to be synonymous with reconciliation in all contexts. However, it does raise a number of further concerns. For example, it seems to imply that experiencing a change of heart towards an offender is only applicable in the context of on-going relationships whereas it may well be the case that individuals forgiving wrongdoers with whom they have no physical ties consider it important to develop some form of positive regard for an offender. In other cases an individual may maintain relations with a family member or work colleague (out of necessity) but choose to relinquish resentment and develop sympathy without involving them in the forgiveness process.

Overall, there is still a great deal of consistency between historical and more contemporary definitions, which suggests that at its most basic, forgiveness involves the reduction of negative emotions such as anger, hatred or contempt. A further point of general agreement concerns what forgiveness is not, such that researchers have now distinguished between forgiveness and other behaviours such as tolerating, condoning and in particular, reconciliation. The differences between conditional and unconditional forgiveness are still relevant. For instance, Rusbult et al. (2005) argues

that pro-social change in the context of interpersonal forgiveness requires an offender to actively contribute in order for the victim to forgive. However, as suggested previously, this may be dependent on the nature of the on-going relationship (i.e. romantic, work or family) as well as the nature of the offence. A question that arises concerning conditional forms of forgiveness is whether a victim would continue to hold on to feelings of anger, hatred and contempt if the offender did not make amends, even if it was harming their psychological health. Or, whether a definition of forgiveness that is context specific (i.e. entails reconciliation or requires restitution) should be promoted because such a definition would necessarily exclude some people from choosing to forgive. Increasingly, however, contemporary research definitions seem to differentiate between factors that may facilitate forgiveness (i.e. apology) and forgiveness as a state (i.e. letting go of resentment and developing compassion) (Enright and The Human Development Study Group, 1991; Wade and Worthington, 2005).

In addition to these debates, a further point of divergence in the literature concerns whether forgiveness involves a change from negative to positive emotions and cognitions. Some have argued that people's thoughts about the offender (i.e. being underserving or inferior) perpetuate resentment-based emotions, and that as such there is a need to experience a shift in cognition and affect, whilst others argue that hating a wrongdoer or retaining negative judgments is compatible with forgiveness (Hughes, 2010). Related to this, those promoting unconditional forms of forgiveness argue for the development of positive regard on the basis that forgiveness is a virtue and showing compassion is done out of respect or belief in a shared sense of humanity (Garrard and McNaughton, 2003). Those promoting a view of unconditional

forgiveness tend to argue for the development of positive emotions irrespective of an intra or interpersonal context (Enright and the Human Development Study Group, 1991; Wade and Worthington, 2005) whilst others have suggested the importance of a shift in perception such as viewing an offender in a more 'favourable light' or developing pro-social change as applicable in cases involving reconciliation (Hampton, 1988; Rusbult, 2007).

Disagreements as to whether forgiveness should entail a change of heart may partly stem from simplistic definitions that are historically situated in which no distinction is made between forgiveness, tolerating, condoning or excusing (Wade and Worthington, 2005). Whilst some have claimed that hating a wrongdoer is compatible with forgiveness (Hughes, 2010), contemporary definitions suggest that it is possible to forgive yet not accept or continue to allow offensive behaviour to take place (Wade and Worthington, 2005). Thus it is not necessary to hate a person if the purpose is to express that they have done something wrong because condemning an action and seeking justice are compatible with forgiveness. Further, two commonly applied forgiveness interventions, the REACH and the Enright model (1991) follow a standard process that involves cognitive reframing (seeing the offender in a new light) and developing empathy, which requires an individual to change their perspective such that they are able to understand and relate to the experiences of the offender. RCT studies employing these models have shown them to be effective in facilitating the reduction of resentment based emotions and developing positive affect (Harris et al., 2006; Rye et al., 2012; Coyle and Enright, 1997; Park et al., 2013; Freedman and Enright, 1996), lending empirical support to the notion that a change in cognition and affect may be an intrinsic part of the forgiveness process. Further, research conducted by Freedman and Chang (2010) found that a key factor preventing people from forgiving may be due to a lack of focus on cognitive reframing in which an individual actively changes their perception of an offender to see them in a more positive light. However, it may also be the case that allowing oneself to feel the physical sensations associated with the emotion of anger may result in its reduction and lead to a cognitive shift or perhaps lead to a calmer state allowing the person to think more constructively (i.e. sympathise). Thus, the causal direction may flow from affect to cognitive change.

The majority of experimental research that has used forgiveness scales incorporates items assessing the development of positive regard and has found positive correlations between forgiveness treatment and this latter construct. However, despite this, there seems to be some divergence between research and lay conceptualisations of forgiveness with regard to this issue. For instance, Mullet et al. (2004) administered the Conceptualisations of Forgiveness Questionnaire among a Western European sample (n=1029) and found that only a minority agreed that forgiveness entails regaining sympathy or affection toward the offender. Similarly, Bagnulo et al. (2009) used the same measure and found no evidence of participants viewing forgiveness as involving a change of heart among Latin American and Western European samples. In contrast, Kadima et al. (2007) administered the same questionnaire to over six hundred participants, some of whom identified with Congolese (collectivist) culture, whilst others identified with French (individualist) culture. The authors suggest that in a collectivist culture, in which there is a tendency towards a social self with collective norms, relations and wellbeing, forgiveness is embedded within the justice system. Whilst wrongdoers are initially shunned by society for their crimes, they are

later re-integrated. On this basis, they hypothesised that Congolese participants would define forgiveness as developing sympathy, trust and reconciliation. French participants on the other hand, belong to a culture that promotes independence, self-reflection, personal responsibility and wellbeing with a strong focus on penal institutions devoid of forgiveness and that as such a change of heart would not be found among French conceptualisations of forgiveness. In support of their hypotheses, the findings suggested that for Congolese participants forgiveness involved restoration of sympathy, affection and trust as well as reconciliation, which the authors attributed to cultural differences. Whilst these results need to be interpreted with caution due to the correlational nature of the study designs (i.e. uncertainty regarding causal relationships), they seem to suggest that forgiveness does not involve a change of heart for most included participants.

Nevertheless, the continued divergence between research and lay definitions of forgiveness may be reflective of historical conceptualisations in which forgiveness was seen simply as a reduction in negative affect with no real distinction between this and other constructs such as reconciliation, condoning and toleratin. A further point to consider is that research exploring lay definitions of forgiveness is, on the whole, quantitative and so it is difficult to assess in detail the meanings of participants' responses such as whether these definitions differ depending on context. For instance, in the case of Congolese participants, would reconciliation be applicable in all cases such as harm caused by a stranger compared to re-establishing ties with an abusive partner? Further, these studies assess trait forgiveness, that is, beliefs about what forgiveness is or how people think they would respond to an interpersonal transgression, which may not necessarily reflect lived experiences of forgiveness. In

any case, what these findings suggest is the need to qualitatively explore real life experiences of forgiveness among lay people.

As suggested above, forgiveness has been measured in two ways: the first is state forgiveness, which involves forgiving a specific, real life interpersonal hurt. State scales generally tend to measure participants current forgiveness levels in relation to someone who offended them. Trait forgiveness on the other hand assesses peoples' disposition or belief in their willingness to forgive in the event of a transgression where participants are presented with a series of hypothetical scenarios to assess their personality traits regarding their propensity for forgivingness. To elaborate further on how psychological research has defined and measured forgiveness, I will next present details on four commonly used trait and state forgiveness measures.

Quantitative Forgiveness Measures

Enright Forgiveness Inventory: State forgiveness

The first and possibly most commonly used instrument is the Enright Forgiveness Inventory which is a 60-item self-report Likert scale measuring cognitive, affective and behavioural dimensions using both positively and negatively worded statements. The development of the instrument was informed by philosophical, religious and psychological theories. Thus, forgiveness is defined as a process of choosing to let go of negative affect or judgement toward an offender and viewing them with compassion and benevolence (Enright and The Human Development Study Group, 1991, p. 126). The validity and reliability of the scale was tested among western adolescent and adult samples. Subkoviak et al. (1995) reported internal consistency to be above 0.80, with test-retest reliability of 0.67 to 0.91. The validity of the scale

was documented and it was found to be negatively correlated with other theoretical constructs such as anxiety (Subkoviak et al., 1995). The scale is also reported to have no correlation with social desirability (Gambaro et al., 2008). The scale has been tested cross-culturally using non-western samples and results showed internal consistency to be 0.94 (Park et al., 2013).

Transgression-Related Interpersonal Motivations Scale (TRIM): State forgiveness The second commonly used measure of state forgiveness is the Transgression-Related Interpersonal Motivations Scale. Informed by psychological theories, the authors define forgiveness as 'the set of motivational changes whereby one becomes (a) decreasingly motivated to retaliate against an offending relationship partner, (b) decreasingly motivated to maintain estrangement from the offender, and (c) increasingly motivated by conciliation and goodwill for the offender, despite the offender's actions' (McCullough et al., 1997, p. 321). In contrast to the first scale, the TRIM is more applicable in the context of on-going interpersonal relationships. The scale initially measured two sub-scales of 'avoidance' and 'revenge' whilst a 'benevolence' sub-scale was included at a later stage. The validity and reliability of the scale was tested using undergraduate students between the ages of 18 and 25 The authors report high internal consistency and moderate test-retest vears. reliability; moderate convergent validity was also documented as correlations were found with single-item forgiveness constructs as well as empathy, interpersonal closeness and apology whilst negative correlations were found with vengeance and impression management (McCullough et al., 1998; McCullough et al., 2001). Among a sample of older adults in Switzerland, Allemand et al. (2013) reported internal consistency to be .70 and above, whilst Goldman (2012) reported internal consistency

of 0.87 to 0.94. The scale has also been used cross culturally (Israel) showing internal reliability of 0.90 (Shectman, 2009).

Heartland Forgiveness Scale: Trait forgiveness

Another forgiveness instrument informed by previous psychological research is the Heartland Forgiveness Scale (HFS). This is a trait measure of forgiveness, which is conceptualised as 'the framing of a perceived transgression such that one's responses to the transgressor, transgression, and sequelae of the transgression are transformed from negative to neutral or positive. The source of a transgression, and therefore the object of forgiveness, may be oneself, another person or persons, or a situation that one views as being beyond anyone's control' (Thompson et al., 2005, p. 319). In contrast to the first two scales, this instrument assesses the extent to which people view themselves to be forgiving (dispositional) and includes sub-scales of forgiveness of others, self and situations. Thomson et al. (2005) tested the reliability and validity of the instrument among student and non-student samples and found high internal consistency with moderate to high test-retest reliability. Positive correlations were also found with other trait forgiveness measures, cognitive flexibility and positive affect whilst negative correlations were documented with negative affect and vengeance (Thompson and Snyder, 2003; Thompson et al., 2005).

Mullet Forgiveness Questionnaire: Trait Forgiveness

Another example of a trait measure is the Mullet Forgiveness Questionnaire (MFQ). Drawing on philosophical and psychological research the authors define forgiveness to be 'The disposition to abort one's anger (or altogether to miss getting angry) at persons one takes to have wronged one culpably, by seeing them in the benevolent

terms provided by reasons characteristic of forgiving' (Mullet et al., 1998, p. 290). The author's definition broadly concurs with the previous three measures in that there is a focus on reducing negative affect and developing positive regard. Mullet et al. (2003) tested the reliability and validity of the scale among a community sample aged between 18 and 65 years. They found moderate to high internal consistency. The authors also found that religious involvement was positively connected with the two sub-scales, and negatively correlated with the 'Blockage to Forgiveness' sub-scale across different samples, thus demonstrating external validity.

The above four forgiveness scales are commonly used instruments to assess levels of forgiveness and appear to show reliability and validity among diverse samples. Whilst they measure different aspects such as trait and state forgiveness and differ in item measurement, they are broadly similar in that forgiveness is viewed as a negative to positive change in cognitions, emotions or behaviours. A key distinction, however, is that the Transgression-Related-Interpersonal-Motivations scale specifically assesses forgiveness within the context of on-going relationships, and thus conflates forgiveness with reconciliation. For the purpose of this thesis, forgiveness is assessed and measured both in terms of it being a state involving the reduction of negative emotions such as anger, hatred and contempt as well as the development of positive regard such as sympathy or compassion.

In summary, the word 'forgive' implies giving something up such as ill feeling or the relinquishing of resentment. Historically, western philosophical and theological traditions have promulgated a fairly simple understanding of forgiveness as a process involving the relinquishing of resentment and re-establishing ties with an offender

with no clear distinction between this and other behaviours such as condoning, tolerating or excusing. Some philosophers have argued for conditional forms of forgiveness to be practiced with most linking unconditional forgiveness with acceptance and allowing the continuation of offensive behaviour. Some measures of forgiveness continue to reflect these debates, such as conflating forgiveness with reconciliation (i.e. TRIM scale). However, by and large, forgiveness scales measure relinquishing event specific negative affect and developing positive regard (EFI; HFS; MFQ), irrespective of whether conditional forgiveness is practiced or whether reconciliation occurs. Contemporary researchers have also clarified many of the misconceptions regarding forgiveness and now generally agree on what it is not. They agree that forgiveness does not involve reconciliation because it is not applicable in all contexts and that it does not involve excusing, tolerating or condoning hurtful behaviour. Recent definitions of forgiveness have thereby addressed some of the concerns raised by critics. Distinctions have also been made in relation to intra and interpersonal forms of forgiveness and whilst they raise a number of further concerns, they nevertheless clarify differences between forgiveness practiced within the context of past or present on-going relationships, and noncontinuing relationships such as forgiveness of a stranger. There is also continuing debate as to whether forgiveness necessarily involves a change of heart with empirical evidence suggesting differences between lay and research conceptualisations.

This review of the literature raises a number of issues. First, most of the research exploring lay conceptualisations of forgiveness is quantitative and it is as such difficult to ascertain whether participants feel reconciliation would be appropriate in all contexts such as on-going abusive relationships and to what extent their real life

experiences of forgiveness correspond with their beliefs about what it means. It is unclear as to the extent to which conceptualisations differ between religious/spiritual and non-religious/non-spiritual people. It is also unclear if people who experience or define forgiveness as being conditional report greater levels of wellbeing than those who place greater emphasis on unconditional forms of forgiveness. There is indeed a lack of clarity concerning whether there are differences in psychological health outcomes dependent on whether forgiveness is defined or experienced to be a state involving relinquishing resentment based emotions compared with developing positive regard. Given the many misconceptions regarding historical accounts of forgiveness among philosophers, it might be possible that lay participants who have not reflected on or practiced forgiveness, define it differently to those who have. In any case, further research is warranted and the present study contributes by qualitatively exploring conceptualisations and lived experiences of forgiveness within the context of past or present interpersonal relationships.

In the next section I will discuss historical and contemporary conceptualisations and measurements of mental wellbeing with regard to its key dimensions such as mental health, subjective wellbeing, and psychological functioning.

Mental Wellbeing: Definitions & Measurement

Mental wellbeing is a multifaceted concept that includes various domains of psychological health such as the absence of illness (e.g. depression, anxiety, stress), the presence of positive affect (e.g. life satisfaction, optimism) as well as a broader set of factors such as environmental mastery, personal growth, positive relations with others, and purpose in life (Keyes, 2002). Positive affect tends also to be referred to

as subjective or hedonic wellbeing whilst the broader set of factors are often collectively conceptualised to mean eudaimonic wellbeing (Diener, 1999; Ryff, 1995). Each of these domains has historical roots. For instance, philosophical interest in the concept of eudaimonic wellbeing dates back to the time of the ancient Greeks and the measurement of subjective wellbeing emerged as early as the 1920's. Mental disorder has also been classified for many centuries with a focus on mental health emerging during the 20th century. In the following sections, I will explore each of these domains separately, mapping their historical roots as well as exploring more contemporary meanings.

Mental Illness

Historically, the concept of mental illness or what was more commonly termed as mental disorder, dates back to the time of ancient Greece, and has been broadly applied to classify people said to be experiencing a variety of states such as mania, paranoia, delusion, melancholia, insanity, psychosis and depression (Roberts, 1981). In 1913 the Mental Deficiency Act classified people as having a mental deficiency or defect (i.e. illness) in cases where they required care and could not protect themselves or others against physical danger. Terms such as 'idiocy' or 'imbecile' or the 'mentally retarded' were used to describe people experiencing mental health problems (Roberts, 1981). The focus was predominantly on people with extreme mental disorders, which meant they needed to be looked after and were more often than not placed in asylums (Lawton-Smith and McCullough [no date]). Towards the beginning of the 20th century, however, the 'mental hygiene' movement began to emerge, largely in recognition of the need to treat mental disorders through prevention The movement used the term 'mental hygiene', at times (Mandell, 1995).

interchangeably with the concept of mental health, to mean 'the art of preserving the mind against all incidents and influences calculated to deteriorate its qualities, impair its energies or derange its movements. The management of the bodily powers in regard to exercise, rest, food, clothing and climate, the laws of breeding, the government of the passions, the sympathy with current emotions and opinions, the discipline of the intellect' (Rossi 1962, pages 78-98 in Mandell, 1995). A key focus was the improvement of the mental and emotional health of individuals largely through preventative measures aimed at reducing abuse and neglect during early life experiences.

Following this, the World Health Organisation, founded in 1946, went on to technically, although also somewhat vaguely, define mental health as 'a condition subject to fluctuation due to biological and social factors, which enables the individual to achieve a satisfactory synthesis of his own potentially conflicting, instinctive drives, to form and maintain harmonious relations with others and to participate in constructive change in his social environment' (WHO, 1951 in Bertolote, 2008).

The above two definitions promoted by the hygiene movement and WHO suggest a shift away from the classification of symptoms of mental disorder. Instead, they emphasize mental hygiene/health as a state involving individual self-regulation, ability to interact with the environment but also an important role for external causal factors in influencing this state. The prevalence and classification of mental disorder did, however, continue. The increasing number of soldiers suffering mental illness during World War II and the dissatisfaction expressed among military and veterans

psychiatrists regarding the classification of mental health problems resulted in a more systematised classification scheme called the Diagnostic and Statistical Manual of Mental Disorders (DSM), which was developed in the US (Deyoung [no date]). Published toward the end of the 20th century, mental disorder has been characterised as 'a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability or with a significantly increased risk of suffering death, pain, disability or an important loss of freedom,' (American Psychiatric Association, 1994 and 2000 in Stein et al., 2010). Some of the core categories now being measured in the DSM include delirium, dementia, schizophrenia, psychosis, major depression and generalised anxiety (APA, 2000). Overall, up until the 20th century, clinicians predominantly focused on the diagnosis of more severe forms of mental illness such as major depression, bipolar disorder, and schizophrenia (Roberts, 1981). Whilst these disorders continue to be a key focus for clinicians, in recent times, distinctions have been made between these severe forms of mental illness or what has historically been termed 'psychosis' and what we now know to be 'common mental health problems such as depression and anxiety (Halliwell et al., 2007). The Mental Health Foundation (2007) distinguish between the two on the basis that psychosis tends to include symptoms that interfere with a person's perception of reality including experiences of hallucinations, delusions and paranoia, whilst common mental health problems range from low to severe mood problems. A further distinction between the two is made on the basis of prevalence. Current statistics, for instance, gathered within a UK context suggest that one and two in every 100 people experience severe forms of mental illness whilst one in four British adults are reported to experience depression and/or anxiety in any one year (Halliwell et al., 2007).

Overall, the classification of mental health disorders dates back to antiquity. For centuries clinicians have defined conditions such as mania and psychosis to more common states such as depression and anxiety. There has been much disagreement over definitions of mental disorder. For instance, initial versions of the DSM considered homosexuality to be an illness but this was subsequently removed from later versions. Moreover, contemporary accounts of disorder no longer include terms such as 'idiots' and 'imbeciles' to describe patients. Further, different terms such as mental illness, mental distress, mental health and mental health problems have been and are often still used interchangeably (Halliwell et al., 2007), which perhaps adds to the complexity in trying to define these concepts. Nevertheless, there are some notable differences in definitions. For instance, the DSM's definition, which is largely adopted by many psychiatrists and psychologists, tends to describe symptoms of various types of mental disorder and assumes mental health to be a state that involves the absence of such disorder (Keyes, 2002). In contrast, the mental hygiene movement and WHO have defined mental health as including both symptoms and causes, and to a certain degree they also suggest a shift towards what it means to be healthy (i.e. well-being). Thus, for some, the focus is on symptoms whilst others have included a holistic approach to their definitions of mental health. Whilst there have and continue to be disagreements over definitions, there are a number of consistent themes emerging from historical accounts. These relate to distinctions between severe forms of mental illness such as bi-polar disorder and schizophrenia and the more common forms of mental health problems such as depression, anxiety and stress, the latter of which are the focus of studies included in the present thesis.

As discussed above, prior to the 20th century a key focus for psychiatrists (or superintendents as they were then known) was predominantly on the prevalence or absence of mental illness. Whilst this has continued to the present day, measurement of psychopathology as an indicator of the prevalence or absence of mental health has increasingly been challenged due to research indicating that the absence of mental illness does not result in experiencing good mental health (Bradburn, 1969; Tellegen et al, 1999; Watson and Tellegen, 1985; Keyes, 2002). Using a national probability sample of American adults aged between 25 and 75 from the MIDUS survey, Keyes (2002) for example found that many adults reported experiencing a state of 'languishing', which is not a diagnosable mental illness but was found to be linked to increased risk of major depression, less engagement in daily activities and lower work productivity. In contrast, adults with higher levels of positive emotional and psychological functioning were less likely to become depressed, were more engaged in daily activities and experienced greater work productivity. Keyes (2005) has subsequently proposed a complete state model of mental health, which includes measuring the absence of psychopathology but also includes dimensions of wellbeing such as positive psychological functioning and positive emotional states.

Consequently, researchers and clinicians are increasingly focusing attention on positive psychological health, which includes eudaimonic and subjective wellbeing. The concept of wellbeing is not a new one and theoretical interest in it dates back to the time of ancient Greece. In subsequent sections, I will first provide an historical overview of how hedonic wellbeing has been defined and measured followed by a discussion of eudaimonic happiness.

Subjective Wellbeing

Historically, the concept of happiness has not been clearly defined and few have attempted to investigate its specific properties (Oishi et al., 2013). theoretical interest in hedonic happiness (i.e. subjective wellbeing) and its correlates spans many centuries. For philosophers such as Bentham and Mill wellbeing was akin to happiness, that is, feeling pleasure (Weijer, [no date]). Thus, the ultimate human goal was to pursue or maximise that which results in the greatest pleasure. In recent times and due to the ambiguities surrounding the concept of happiness, researchers such as Diener (1999) promoted the scientific study of subjective wellbeing, defined as consisting of components such as the subjective evaluation of life as a whole, the absence of unpleasant emotions and the presence of positive mood (Oishi et al., 2013). The measurement of subjective wellbeing has incorporated a number of cognitive and affective components such as 'life satisfaction', 'quality of life' or 'levels of happiness' (Diener, 1999). However, whilst it is commonly believed that the measurement of happiness is a relatively new phenomenon (Ryan and Deci, 2001), there is some evidence to suggest that it was measured as far back as the 1920's (Angner, 2011). The first known study in which subjective wellbeing was measured was carried out by Davis in 1929 in which she administered a questionnaire asking participants how happy or satisfied they felt with their sex lives. Following on from this, a series of studies were conducted leading up to the mid-20th century in which authors assessed how happy or satisfied participants felt, mostly in relation to marital relationships (Burgess and Cottrell, 1939; Hart, 1940). In more recent times, the measurement of subjective wellbeing has more or less remained the same. For instance, research within this area tends to measure subjective happiness by asking people how happy they feel on a likert-type scale; 'very happy', 'quite happy', 'not very happy', (Gough and McGregor, 2007) or in other cases their level of satisfaction with life (Samman, 2007). Both indicators of life satisfaction and levels of happiness are often used interchangeably and each aims to assess positive affect with higher scores interpreted to mean greater levels of happiness (Samman, 2007). However, there are also aspects of this domain that have been under-studied such as feelings of calm, love, joy, inner peace, and so forth. Furthermore, philosophers have historically attached importance to the pursuit of pleasure. For instance, Aristippus encouraged any activity that maximised pleasure (Weijers, 2014). This can be seen as problematic on the basis that any number of activities such as taking drugs or revenge may result in temporary pleasure while the long-term effects may in fact cause an individual and others harm. However, subjective wellbeing can be separated from its correlates and an experience of positive emotions, be it pleasure, peace or calmness are naturally occurring states that may lead to a wide range of benefits. For instance, feeling good or positive emotions are suggested to be important because research suggests that positive mood states are protective against cardiovascular disease and all-cause mortality (Chida and Steptoe, 2008). They have also been linked to enhanced attention and problem solving, optimism and generosity (Forgas, 2002; Gasper and Clore, 2000). However, although a focus on positive affect is important, there are also wider human needs that should also be considered (Peterson and Seligman, 2004). As previous research indicates (Keyes, 2005), the ability to fully function is an important aspect of psychological health.

Eudaimonic Wellbeing

Subsequently, some have argued for a wider conceptualisation of wellbeing that incorporates eudaimonic components, which may provide a more holistic and perhaps

durable sense of happiness (Peterson and Seligman, 2004; Dambrun et al., 2012). Eudaimonia is an ancient Greek term that has been described as meaning 'happiness' and 'welfare' although a more common use of the word appears to be 'human flourishing' (Hefferon and Boniwell, 2011). Historically and through to the present time a long line of philosophers have also sought to define eudaimonic wellbeing. A regular theme emerging from the literature appears to be consistent with Aristotle's view, which describes wellbeing as a life of doing and living well – actions that are grounded in or promote moral behaviour, (Hefferon and Boniwell, 2011). Abraham Maslow (1943) and Carl Rogers (1961) also highlight the importance of human needs and of developing physically, emotionally, mentally, socially and spiritually. Even more recently, Ryff (1995) has devised a (eudaimonic) psychological wellbeing measure influenced by a range of philosophical and psychological concepts, which includes the following components: self-acceptance, personal growth, purpose in life, positive relations, environmental mastery and autonomy. Limitations have been noted in regard to this measure. Springer and Hauser (2005; 2006) for instance have found high correlations among four of the six factors in Ryff's scales (i.e. personal growth, purpose in life, self-acceptance, environmental mastery). However, Ryff and Singer (2006) contend that this research lends support for the use of the six factor model and cite numerous empirical studies that have indicated the distinctiveness of each dimension included in the scale (Ryff and Singer, 2006). Further, whilst there are practical limitations to applying this measure such as the length of the survey, it nevertheless provides a comprehensive assessment of (eudaimonic) psychological health and the majority of prior studies have demonstrated consistent reliability and validity among a range of samples for the use of the six factor model (Ryff et al., 2004 and Ryff, 1989; Ryff and Singer, 1996; Ryff and Singer, 2006). Similar to

Ryff's scale, Ryan and Deci (2000) developed Self-Determination Theory; this argues that humans have three basic innate psychological needs of autonomy, competence and relatedness, which they suggest are integral to an experience of personal growth and subjective wellbeing. They also suggest that these needs transcend social and cultural contexts, an assertion that has received some empirical support across cultures (Samman, 2007). Based on historical and contemporary philosophical understandings of eudaimonia, Alan Waterman has also defined eudaimonic wellbeing as comprising of the 'development of a person's best potentials and their application in the fulfilment of personally expressive, self-concordant goals' (Waterman, 2010, p.41). Waterman et al. (2010) have devised The Questionnaire of Eudaimonic Wellbeing (QEWB), which includes the following key items: selfdiscovery, development of best potentials, meaning/purpose in life, intense involvement in activities, investment of significant effort in activities and the enjoyment of activities as personally expressive. In contrast to Ryff's Scales, which do not assess affective dimensions, Waterman et al (2010) incorporate subjective and objective elements in their questionnaire such as feelings relating to accomplishing personal potentials and behaviours that give rise to a sense of meaning and purpose in life. Contemporary instruments measuring eudaimonic concepts appear to be diverse and there seems to be no agreement on what constitutes eudaimonic wellbeing (Waterman, 2008). However, as is indicated by Waterman (2008), empirical investigation of this concept is in its early stages, and more needs to be known about its prevalence among lay populations.

Overall, whilst a hedonic perspective assesses wellbeing on the basis of how satisfied or happy people feel, eudaimonic wellbeing explores broader factors that enable individuals to function more fully and live life to their best potential, such as Ryff's

six dimensions, Ryan and Deci's Needs Theory and Waterman's (2010) questionnaire of eudaimonic wellbeing.

Generally, different domains of mental wellbeing have been measured separately and considered not to be congruent with each other (Sammon, 2007). However, there appears to be a growing consensus about the importance of taking a multifaceted approach to measurement due to increasing research indicating that the absence of psychopathology does not mean individuals are healthy (Keyes, 2005). The focus therefore also needs to be on positive states of health, which includes emotional, cognitive and social factors. The field of positive psychology has tried to develop understanding about what promotes optimal human functioning by integrating and exploring both hedonic and eudaimonic domains. According to Peterson and Seligman (2004) wellbeing consists of experiencing positive emotions (love, joy, contentment, pleasure, etc.) and actions of service, actualising goals and developing healthy relationships. Whilst in other contexts such as the UK, the Royal College of Psychiatrists have defined mental wellbeing as encompassing feeling good and functioning effectively such as experiencing pleasure, engagement, a sense of meaning and achievement. Furthermore, research carried out by Compton et al. (1996) found correlations between hedonic and eudaimonic aspects of wellbeing whilst King and Napa's (1998) research found that lay understandings of a good life comprised both happiness and a sense of meaning in life. On the whole it seems that the three different dimensions of wellbeing discussed above, namely absence of mental illness, happiness, and ability to function, have for the most part been assessed separately, with generally greater weight being given to measurements of the prevalence or absence of mental illness. Keyes (2005) research indicates the need to

move beyond assessing psychopathology and promotes a complete state model of mental health focusing on assessing the prevalence of positive emotions and functioning. However, the degree to which different aspects of these different dimensions of wellbeing may be simultaneously present and how important they are in people's lives is very much under-studied.

In summary, mental wellbeing is a multifaceted concept, which includes the absence of mental illness, the presence of positive affect, and the presence of psychological functioning such as autonomy, personal growth, relatedness and so forth. Historically, different terms have been used to describe more severe forms of mental illness such as mental disorders, deficiencies or defects whilst contemporary definitions distinguish between these latter symptoms and common mental health problems. Despite the presence of many problems with how mental illness has been defined in the past, most conceptualisations appear to have evolved over time. During the 20th century there was a continued focus on classifying disorders from a psychological and psychiatric perspective in which patients were largely treated through medications and talk therapy (Roberts, 1981). At the same time, the mental hygiene movement and WHO developed a sociological and public health focus and an emphasis on the prevention of mental disorders. Towards the middle of the 20th century this established a more technical definition of mental health as being a state caused by biological and to a large degree, environmental factors, and that involved a positive focus with regards to what it might mean to be well. A focus on wellbeing is in fact evident in most mental health definitions as proposed by the hygiene movement and WHO because they emphasise the cognitive, emotional, physical and social health of individuals. Although subjective wellbeing was also measured by

applied psychologists during the 1920's and towards the middle of the 20th century, there was also a proliferation of theoretical and applied interest in eudaimonic wellbeing by psychologists and others. Each of these dimensions are different but related, and each dimension has been the subject of discussion and measurement at different time points. The measurement of these components has more often than not been carried out separately. In the last decade a growing number of investigators have highlighted the benefits of adopting a multidimensional approach, which investigates a broader range of factors encompassing affective, cognitive and social domains, specifically to assess their prevalence amongst the general public.

The present study therefore addresses a number of gaps in the literature. First, the qualitative component explores whether experiences/perceptions of mental wellbeing emerged following the practice of forgiveness among lay participants who self-identified as religious/spiritual or non-religious/non-spiritual. This subsequently informed the second phase survey in which multiple aspects of psychological functioning are assessed. The phase three systematic review then assesses forgiveness intervention studies with regards to the extent of mental health problems, positive affect, and general functioning.

In the next sections, I first review empirical research assessing the effects of forgiveness in relation to different dimensions of mental wellbeing. Following this I review the empirical links concerning barriers to and factors facilitating forgiveness. Key measures that have been used will be outlined, and I draw on a variety of study designs such as correlational, experimental and qualitative research.

Empirical Links Between Forgiveness and Mental Wellbeing

Correlational Studies

At present there are very few studies that examine the relationship between state forgiveness and a variety of mental wellbeing outcomes, including reductions to a range of mental health problems, personal and spiritual growth, autonomy, a sense of meaning, purpose in life as well as positive thoughts and feelings (Toussaint & Friedman, 2009). In a literature review conducted by Toussaint and Webb (2005), it was found that the vast majority of empirical research focuses on associations between forgiveness and depression and anxiety. The review authors identified thirteen correlational studies using undergraduate (n = 7) and community samples (n = 7)= 6), ten of which assessed trait forgiveness of others and three of which assessed state (real life) forgiveness of another person. Toussaint and Webb report that nine of the studies assessing trait forgiveness found it to be negatively associated with depression and eight of these nine studies also found dispositional forgiveness to be related to reduced levels of anxiety. One of the studies investigating the effects of state forgiveness found it to be negatively associated with anxiety. The authors conclude that a very limited number of empirical studies have examined effects of state forgiveness. Even fewer have investigated links with reductions to a wider range of mental health problems, beyond associations between trait forgivingness and depression or anxiety. However, a growing body of research has begun assessing the effects of dispositional forms of forgiveness on subjective wellbeing, producing mixed results. For instance, Sastre et al. (2003) administered the Satisfaction With Life Questionnaire to 810 participants from France and Portugal and found only a weak association between trait forgiveness and a single measure of life satisfaction.

In contrast, others have found positive associations between dispositional forgiveness and life satisfaction: Krause and Ellison (2003) administered a 3-item dispositional forgiveness scale and the Life Satisfaction Index among a sample of one-thousandfive-hundred adults and found trait forgivingness to be associated with increased levels of subjective wellbeing. Using a sample of nine-hundred-and-sixty-two Swiss adults who completed the Tendency to Forgive Scale as well as the Positive Affect and Satisfaction with Life Scales, Allemand et al. (2011) reported positive associations between dispositional forgivingness and positive wellbeing. Similarly, Chan (2013) administered the Heartland Forgiveness Scale and found that a tendency to forgive significantly predicts subjective wellbeing, which was measured using the Satisfaction with Life Scale and Positive Affect Schedule. One prior study by Hill and Allemand (2010) has also examined the effects of trait forgiveness on eudaimonic wellbeing; the authors administered the Tendency to Forgive Scale and the Ryff Psychological Well-Being scale to four-hundred-and-fifty Swiss adults and found dispositional forgiveness to be associated with improved relationships with others. Two studies have also investigated the relationship between state forgiveness and subjective wellbeing. One of these studies administered the Bradburn Affect Scale, Fordyce Happiness Scale and Satisfaction with Life Scale to seventy participants in the USA, and found reductions in (state) unforgiveness to be strongly associated with positive affect (Toussaint and Friedman, 2009). The second study administered the Depression-Happiness Scale and Oxford Happiness Questionnaire–Short Form to 244 participants in the UK and found that state forgiveness (of another person) was associated with increased happiness, albeit to a small degree (Maltby et al., 2005).

Overall, the vast majority of correlational research has examined the effects of trait forgiveness on mental health outcomes such as depression and anxiety (Toussaint and Webb in Worthington, 2005). A growing number of studies have also investigated associations with subjective wellbeing (Sastre et al., 1995; Krause and Ellison, 2003; Allemand et al., 2011; Chan, 2013). However, these associations have been in relation to dispositional forms of forgiveness. One of the above studies (Toussaint and Friedman, 2009) assessed reductions in state unforgiveness whilst one study investigating the effects of state forgiveness has been conducted in the UK (Maltby et al., 2005). There are no known studies assessing the effects of forgiveness of real life interpersonal events on a variety of eudaimonic dimensions. Thus, the cross-sectional internet survey conducted as part of the present project fills a gap in the literature by examining the effects of state forgiveness on hedonic and eudaimonic wellbeing.

Forgiveness Intervention Effects: Experimental Studies

A growing number of experimental studies have been conducted to evaluate the extent to which psycho-educational and therapeutic forgiveness programs promote mental wellbeing among adolescent and adult populations. Almost all experimental studies have assessed the effects of forgiveness interventions on various domains of health. These include psychological functioning, mental health disorders such as depression, anxiety or stress and, in a limited number of cases, effects on other dimensions of wellbeing such as marital satisfaction, gratitude, positive affect, self-esteem, hope and spiritual wellbeing (Lundahl et al, 2008). The vast majority of experimental studies have used two key models of forgiveness interventions to evaluate their effects on different dimensions of mental wellbeing. In what follows, I first outline key features of these interventions. I then discuss the findings and key

limitations of different meta-analyses that have been conducted in which the results of experimental studies have been combined in order to assess the effects of these programs.

Two key models of forgiveness intervention programs have been proposed and investigated: process-based and decision-based interventions. Whilst similar in content, process-based models tend to be one of two types. The first model promoted by Enright and the Human Development Study Group (1991) encompasses twenty units and four key phases, which include cognitive, affective and behavioural The first Uncovering phase involves identification of psychological elements. defences, recognition and expression of anger over the offence, and acknowledgment and evaluation of the psychological harm caused by the offence (e.g. shame, guilt, In the second Decision phase, participants explore meanings of rumination). forgiveness, consider the possibility of forgiveness as a response, followed by a commitment to forgive. The third Work phase, entails cognitive reframing (i.e. seeing the offender in a new light), developing empathy and compassion for the offender and accepting the pain experienced. In the final Deepening phase, participants are encouraged to find meaning in the suffering experienced, recognizing their own past mistakes, which may have required forgiveness. They are also encouraged to develop awareness of the universality of being hurt as well as finding a new purpose in life as a result of the hurt. These steps are intended to help the participant experience event specific decreased negative affect and possibly increased positive affect (i.e. forgiveness) (Baskin and Enright, 2004; Wade and Worthington, 2005).

The second type of process-based forgiveness intervention is the REACH model developed by Worthington (2001). REACH is an acronym for a 5-step forgiveness approach. First, participants recall the hurt (R); second, they develop empathy for the offender (E); third, participants consider forgiveness as an altruistic gift for the offender (A); fourth, they make a commitment to forgive (C); and finally, they hold on to forgiveness in times of difficulty (H) (Wade et al., 2013).

These two models are the most widely used forgiveness interventions. Other authors (Luskin et al., 2005) have developed 6 step models of forgiveness that primarily use cognitive and behavioural therapy. For example, components include: defining forgiveness, using positive and negative visualisations (i.e. related to the event); heart-focused meditation and relaxation techniques; education about the negative health impact of holding grudges as well as teaching about cognitive restructuring (i.e. explaining how grievances are created and maintained). Another model comprises a decision-based forgiveness intervention developed by McCullough and Worthington (1995), which generally comprises of 1 to 2 hour single sessions in which victims are encouraged to develop empathy for the offender and write letters expressing how they felt (Baskin and Enright, 2004).

All four models described above share some commonalities. For example, all define forgiveness and emphasize its potential benefits as well as encourage the development of empathy for the offender. A key distinction, however, is that process-based interventions delve more deeply into cognitive, affective and behavioural elements over a longer period of time. Decision-based approaches are significantly shorter in length and seem largely to rely on cognitive components (Baskin and Enright, 2004;

Lundahl et al., 2008). For the purpose of the literature review conducted as part of the present thesis, only process-based forgiveness interventions were included. Three studies that used decision-based models were retrieved via a previous meta-analysis (which found decision-based models to be ineffective) but these studies did not meet the inclusion criteria because they either did not include a no-treatment control group or did not administer any mental health or wellbeing outcomes. Further, the electronic search conducted for the literature review did not find any decision-based models that had been conducted since the last meta-analysis was conducted (Baskin and Enright, 2004).

A number of meta-analyses have been carried out to assess the effectiveness of forgiveness interventions (Baskin and Enright, 2004; Lundahl et al., 2008; Wade et al., 2013). One of these (Baskin and Enright, 2004), meta-analysed nine published studies to examine the effectiveness of process versus decision-based programs. While the primary research question was not focused on the impact of forgiveness treatment on wider components of mental health and wellbeing beyond emotional health, the authors found that process-based forgiveness interventions are significantly more effective in promoting forgiveness and emotional health compared with decision-based models. However, the dependent variable 'emotional health' comprised a variety of outcomes including positive affect, negative affect, and self-esteem, and it is therefore unclear if change was achieved in all or just some of these outcomes. Another meta-analysis carried out by Wade et al. (2013) examined the efficacy of forgiveness interventions in promoting forgiveness using published and unpublished studies; the authors compared forgiveness interventions with alternative treatments or wait-list/no-treatment controls using both randomized and non-

randomized studies. A secondary research question examined their effectiveness in improving mental health outcomes. This review found that relative to the notreatment control groups, forgiveness treatment improved levels of depression, anxiety and hopelessness. However, this review did not provide estimates of the effectiveness of forgiveness interventions based on data from RCTs alone and both validated and unvalidated measures were combined to assess treatment effect. One meta-analysis has, as a primary aim, specifically assessed the effects of state forgiveness on various dimensions of mental wellbeing. Lundahl et al. (2008) metaanalysed fourteen published studies of process-based forgiveness programs. Their primary interest was in assessing interventions that promoted forgiveness as a means of enhancing functioning as well as testing the effects of moderator variables. The authors found that forgiveness interventions: 1) increased forgiveness; 2) increased positive affect and self-esteem; and 3) decreased negative affect. However, there are a number of major weaknesses of this review. First, the authors included both randomized and non-randomized studies (e.g. Lampton et al., 2005; Freedman and Knupp, 2003). Second, the authors combine results from studies that have used both validated and unvalidated scales. Third, the authors do not make direct comparisons with a no-treatment control group (Al-Mabuk et al., 1995; Hebl and Enright, 1993; Lampton et al., 2005; Reed and Enright, 2006).

Overall, the previous reviews are all meta-analyses but they include a variety of research designs and some do not randomise participants to conditions. Many of the studies meta-analysed do not make direct comparisons between treatment and notreatment control groups and both validated and unvalidated measures are used, making it difficult to assess the true effects of the interventions. Consequently, there

is a need for a systematic assessment of the evidence base concerning the effectiveness of forgiveness treatment in promoting forgiveness for the promotion of mental wellbeing. Thus the review and meta-analysis of experimental studies undertaken as part of this thesis will fill a gap in the literature by addressing some of the limitations of previous reviews by a) only including studies that used a randomized control trial design with wait-list or no-treatment control groups, b) analysing post-test scores from studies using validated scales, c) appraising the methodological quality of the included studies, and d) including five additional studies published since previous meta-analysis (about 7 years since Lundahl et al., 2008).

Qualitative studies

There are no known qualitative studies that investigate perceptions about the role of forgiveness in affecting mental wellbeing, although one study explores understandings of forgiveness in the lives of religious people (Kidwell et al., 2012), and suggests a multifaceted experience of wellbeing. For example, some common themes found were reductions in negative affect such as anger and bitterness felt towards the offender as well as positive emotions of 'peace', 'joy', 'calmness', 'contentment', 'gratitude' and 'better relations' with the offender as emanating from their practice of forgiveness (Kidwell et al., 2012). This study suggests a need to explore in more detail people's lived experiences of forgiveness and wider dimensions of functioning, and factors that may facilitate or obstruct this process.

In summary, a very small number of studies have specifically tested the effects of state forgiveness on general functioning. Some studies that have used cross-sectional

research designs have found correlations between unforgiveness or dispositional forgiveness and subjective happiness, whilst one study in the UK found correlations with hedonic wellbeing. One meta-analysis has assessed the effects of forgiveness interventions on wellbeing but a variety of study designs were used which made it difficult to draw any firm conclusions.

Factors Facilitating & Obstructing Forgiveness

As a result of prior research indicating the mental health benefits of practicing forgiveness, as well as claims that promoting forgiveness can assist in overcoming negative past events that may restrict future wellbeing (Wade et al., 2009), researchers have examined a variety of mechanisms that may obstruct or facilitate this practice. Previous research has identified a number of secular (i.e. non-religious) factors influencing forgiveness. In a study conducted by McCullough et al. (1997) in which 239 undergraduates completed cross-sectional questionnaires, the authors found associations between receiving an apology and empathy, the latter of which was found to be linked to increases in dispositional forgiveness. Studies in which researchers have used hypothetical scenarios of offenses among samples of adults and children have also found correlations between apology and dispositional forgiveness (Darby and Schlenkar, 1982; Gonzales et al, 1994; Ohbuchi et al., 1989). In other cases researchers have found links between offense severity and forgiveness. For instance, in a study conducted by Boon and Sulsky (1997) 56 undergraduates read 40 profiles describing hypothetical transgressions about their romantic partners; the severity of offense differed across profiles and participants rated their willingness to forgive. The authors found that low offense severity was a predictor of forgiveness. A number of studies have also found associations between relationship commitment and forgiveness. McCullough et al. (1998) administered cross-sectional questionnaires to 116 couples and found that the level of commitment in close relationships was a predictor of state forgiveness. Based on survey questions administered to 128 Italian couples, Fincham et al. (2002) found that positive relationship quality (i.e. a perceived good marriage) was linked to responsibility attributions (i.e. viewing an offense as less intentional and avoidable), which was associated with empathy, the latter of which was in turn correlated with levels of dispositional forgiveness. Furthermore, Finkel (2002) randomly assigned 89 undergraduates to experimental conditions and found that highly committed individuals were more likely to forgive acts of betrayal, whilst Karremans et al. (2003) administered cross-sectional questionnaires to over 200 undergraduates and found similar results in that state forgiveness was enhanced in relationships of stronger commitment. Other robust predictors include the Big Five factors of Using a sample of 180 college students, Symington (2002) found personality. associations between neuroticism and agreeableness with dimensions of situational Survey responses gathered from 270 undergraduates have also forgiveness. highlighted narcissistic entitlement, such as constantly thinking about defending one's rights and wanting special treatment, predicted unforgiveness of real life transgressions (Exline, 2004).

In addition to the previously mentioned secular factors known to be associated with forgiveness, researchers have also focused attention on religiosity as a predictor. One reason researchers have focused attention on religiosity is because the concept of forgiveness is deeply embedded and promoted as a virtue within most ancient world religions such as Christianity, Islam, Judaism, Buddhism, Hinduism, Sikhism as well

as modern (new age) spiritual teachings such as Theosophy and A Course in Miracles (Rye et al., 2001; Foundation for Inner Peace, 1975). Consequently, it has been argued that religiosity promotes forgiveness (McCullough and Worthington, 1999). However, whilst theories abound regarding a religion-forgiveness link, empirical data that has been collected over the last decade or so to test this hypothesis presents a complex picture. For example, a narrative review carried out by McCullough and Worthington (1999) concluded that religious involvement (such as levels of religious commitment and church attendance) is robustly associated with trait forgiveness (i.e. people hold beliefs that they are forgiving). Since this review, numerous crosssectional studies have been carried out, which suggest that strength of religious faith, prayer and attendance of religious services are predictive of trait forgiveness (Edward et al., 2002; Fox and Thomas, 2008; Lutjen et al., 2012). Whilst the results of these studies are not necessarily conclusive due to the correlational designs employed, they are nevertheless consistent in their findings of an association over time. In contrast, the extent to which religious/spiritual people are forgiving of specific, real life circumstances is still unclear. For example, a correlational survey study carried out by Subkoviak et al. (1995) found little evidence that highly religious people (i.e. assessed in relation to frequency of religious behaviours) were more forgiving of specific offences than participants low on religiosity. Subsequently, over recent years researchers have attempted to examine if specific religious/spiritual mechanisms might be more predictive of state forgiveness. For example, Vasiliauskas and McMinn (2013) conducted a randomised control trial and found that individuals who engaged in prayer, relative to the control group, showed greater reductions in unforgiving motivations. Another recent study conducted by Krause (2012) found that participants who had a sense of connectedness with others were also more

forgiving of others, although forgiveness was assessed using a non-standardised threeitem general forgiveness measure. Further, Davis et al. (2013) conducted a metaanalytic review and found that contextual religious/spiritual measures (i.e. a victim's appraisal that the transgression destroyed something sacred) were moderately related to state forgiveness. However, the heterogeneity levels in this review were substantial ($I^2 = 81\%$) and therefore it was difficult to assess which components may have been more predictive. Furthermore, the high levels of heterogeneity may have introduced bias, and consequently the results may need to be interpreted with caution.

There is, as such, a fairly robust body of correlational evidence to suggest that certain factors such as religious commitment, attending religious services and prayer, may be facilitative of trait forgiveness. However, despite theoretical links, there is conflicting and relatively sparse evidence to suggest that religious/spiritual beliefs or practices may facilitate state forgiveness although there is indication of novel religious/spiritual factors such as connectedness, meditation and prayer that may influence forgiveness. Some qualitative research has also highlighted the potential role of both secular (i.e. empathy) and religious factors (i.e. prayer; religious study) as being facilitative of forgiveness of specific offenses among religious samples. However, this requires further investigation, which the qualitative and survey aspects of this research address.

Whilst many of the previously mentioned factors are suggested to either hinder or promote forgiveness, relatively few studies have specifically examined unique mechanisms that may be a barrier to forgiveness of real life transgressions. With regards to religious/spiritual factors, a recent correlational study conducted by Davis

et al. (2013) found that negative religious appraisals such as viewing an offender as evil, viewing the offence as a desecration and anger toward God were related to greater levels of unforgiveness. However, the extent to which religious/spiritual factors may be a source of obstruction to forgiveness is to a large degree understudied. Other factors that may play a part relate to externalising causes and on-going transgressions. A qualitative study exploring therapist perceptions of factors facilitating and obstructing forgiveness found that where a victim attributes the cause of their lack of forgiveness as being outside of themselves, they were less likely to be able to forgive (Glaeser, 2009). Moreover, where victims were on the receiving end of a continued form of threat or offence, this too obstructed their forgiveness. Although factors such as externalising causes may not necessarily be specific to participants with a specific set of beliefs, further research is required to more thoroughly understand this process.

In summary, there is very little research exploring the extent to which religious/spiritual or secular mechanisms may hinder or promote forgiveness of specific and real life offenses. In particular, there is a need to examine factors that may assist or hinder the practice of forgiveness among diverse religious/spiritual and non-religious people within a European context.

Conclusions: Gaps in the Literature

In summary, this overview of the literature has highlighted a number of unanswered questions requiring further inquiry. For instance, whether conceptualisations of forgiveness are culturally specific or universal; whether quantitative research that explores definitions of trait forgiveness is applicable to real life experiences of

forgiveness and if outcomes differ depending on the way in which people define forgiveness. Whilst the literature suggests interest in and measurement of different domains of wellbeing spanning centuries, a limited number of studies have examined the prevalence of different dimensions of wellbeing occurring simultaneously among individuals. The majority of empirical research exploring outcomes of forgiveness has assessed effects on reductions in negative states, and more research is therefore required to investigate its impact on wider domains of functioning. Regarding factors influencing forgiveness, a number of secular factors have been identified as being key predictors but many of these relate to dispositional forgiveness and more crosscultural research is required to explore the relevance of these factors among both religious and non-religious samples in the UK. The theorised links between religious factors and state forgiveness, are not necessarily supported by evidence and, as suggested by Davis et al. (2013), much further research that offers explanations as to why this may be the case, is warranted. Overall, there is a need to further examine which factors may obstruct or facilitate state forgiveness. To address these gaps, an innovative mixed methods approach was used. The next section will elaborate further on the methodology applied to answer these questions.

CHAPTER 3

METHODOLOGY

Introduction

The literature overview highlighted a number of unanswered questions requiring further inquiry. For instance, whether conceptualisations of forgiveness are culturally specific or universal; the process involved in practicing forgiveness; key factors that act as barriers to or facilitators of forgiveness, as well as the effects of forgiveness on wider dimensions of mental wellbeing among diverse and under-studied samples. To address these gaps, a mixed methods approach was used. This chapter will present the methods applied to answer these questions. In the first part of the chapter I will examine the philosophical issues with regard to different research methodologies and discuss the rationale for adopting a mixed methods approach. The second part of the chapter describes the methods utilized in order to address the studies aims and objectives.

Philosophical Considerations

This thesis employed a mixed methods research approach to investigate in depth the process of forgiving real life offenses and the effects of state forgiveness on a variety of mental wellbeing outcomes. Mixed methods research is the process of mixing or combining quantitative and qualitative research methods or techniques within a single study (Cresswell et al., 2004; Tashakkori and Teddy, 2003; Johnson and Onwuegbazie, 2004; Symmonds and Gorard, 2008). Historically, researchers have used multiple methods in single research projects for the purposes of triangulation, that is, to increase the validity of findings as well as to counteract the limitations of using a single method approach (Symonds and Gorard, 2008). However, whilst

mixed methods research has continued to develop over the last 20 years, extensive debate has ensued concerning whether quantitative and qualitative methods are compatible, largely on the grounds of perceived underlying ontological and epistemological differences (Guba and Lincoln, 1994). Some researchers have argued for an a-paradigmatic approach that sidesteps philosophical concerns whilst others have continued to advocate the importance of adopting a particular philosophical approach to guide the process of conducting research (Denzin and Lincoln, 2000; Greene, 2007). In what follows, I will provide a brief history of this debate with a particular focus on paradigm issues followed by an outline of the approach taken in the present study.

The Paradigm Wars

Whilst multiple methods have historically been used in single studies for the purposes of triangulation without any concerns being raised with regard to paradigmatic attachment (Galton and Wilcox, 1983), the 1970s and 80s gave rise to what has been termed the 'paradigm wars'. As the use of mixed methods research developed, many began to argue that quantitative and qualitative methods are not compatible because they are underpinned by contrasting ontological and epistemological assumptions; a set of views referred to as the 'incompatibility thesis' (Guba and Lincoln, 1994). Incompatibility theorists have put forth a number of reasons for why research methods cannot be combined. For example, it has been suggested that quantitative research is associated with a positivist world-view that adopts a realist ontological perspective in which it is assumed that there is a social reality that is external to the individual. A second premise of positivism relates to epistemology whereby it is argued that through observation and experiment, knowledge (based on sense

experience) is real, external to the individual and can be acquired objectively (i.e. epistemology). It is as such claimed that quantitative researchers try to access an objective reality, and to acquire knowledge of this reality positivists tend to use rigorous experimental methods that aim to minimize researcher bias through, for example, checks of validity, reliability and generalizability (Cohen and Crabtree, 2006; Lincoln, and Guba, 1985; Cohen et al., 2003).

Qualitative methods on the other hand are associated with an interpretivist paradigm, which tends to view social reality as constructed intersubjectively. According to this view, reality can only be understood through interpretation and it is argued that there are multiple (or nonexistent) realities, all of which can be construed to represent the truth (Bergman, 2008). Thus, knowledge cannot be objectively observed because social reality is constructed and cannot be objectively accessed by researchers, who are influenced by a range of factors including their intentions, beliefs, ideas, interpretations, concepts and so forth (Cohen and Crabtree, 2006). Knowledge, from this perspective, is acquired through understanding meanings, which are interpretations of others interpretations of reality. Further, it is argued that while positivists aim to discover general laws such as the universality of experiences/concepts, interpretivists claim to understand interpretations of differences, which are situation specific (Cohen et al., 2003).

Key distinctions have been made between paradigms and methods on the basis of objectivity and subjectivity with some quantitative researchers claiming that measurement enables researchers to transcend personal judgment. Qualitative researchers on the other hand claimed they were staying faithful to the social world by

allowing data to emerge from context (Bradley and Schaefer, 1998; Gergen and Gergen, 2000 in Symonds and Gorard, 2008). Consequently, incompatibility theorists claimed that such paradigmatic assumptions determine the methods that are applied and that given the ontological and epistemological differences, they are inherently incompatible (Lincoln and Guba, 1985; Onwuegbuzie and Leech, 2005).

However, the claims advanced by incompatibility theorists have been extensively challenged (Onwuegbuzie and Leech, 2005; Symmonds and Gorard, 2008; Tashakkor and Teddlie, 2003; Losifides, 2011) and a number of examples have been provided that question an epistemology-methods link. First, an increasing number of researchers conduct qualitative research whilst adopting a realist perspective (Maxwell, 2004a, 2004b; Pawson and Tilley, 1997). In a study carried out by Losifides (2011) a realist qualitative approach was taken to investigate meanings and perspectives of immigrant workers and their employers in relation to stigmatization and racist categorization. This demonstrates that qualitative research is not necessarily connected to epistemological assumptions that suggest social reality does not exist independent of ideas, interpretations and so forth. Second, Bergman (2008) has argued that it is possible to use quantitative research to model identity constructions from subjective survey responses without necessarily assuming the existence of a single reality. Third, Bergman (2008) also highlights that interviews can provide descriptive textual data of what a participant said and in what context; this data can then be understood from a range of different philosophical positions, some of which assume a single reality or others multiple realities; the approach chosen, he argues, does not necessarily change what was said in the text. It is also often assumed that qualitative research aims to explore differences in human

perceptions whilst quantitative research explores universal laws. However, both methods have, and can be, used for the purpose of examining differences but also the universality of concepts/experiences across samples (Cohen et al., 2000). Differences between the two perspectives and methods have often been perpetuated on the basis that one (i.e. quantitative) aims to gather data objectively whilst the other (i.e. qualitative) is informed by the researchers and participants subjectivity (Cohen, 2000). However, both can be equally viewed as being subjective or objective. For instance, the personal judgment of a researcher may inform the object of measurement in a survey study (Symmonds and Gorard, 2008). At the same time, qualitative researchers can reduce subjectivity (i.e. bias) by reflecting on how their values may facilitate or inhibit acquiring objective knowledge about a person's psychological reality. It is argued that active engagement with processes of perception, reasoning, logical deduction and distinguishing between essences (what something is) and appearances, can promote acquiring accurate knowledge of reality in qualitative research (Ratner, 2002). The contrast between the two views and the incompatibility thesis in general has been further criticized on the grounds that mixed methods was already being successfully applied, in particular for purposes of triangulation where the same social phenomena was being investigated to offset the weaknesses of each method (Tashakkori and Teddie, 2003).

Overall, the above examples suggest that ontological and epistemological differences do not necessarily determine the research method chosen. Arguments put forth by incompatibility theorists have subsequently been extensively critiqued on the grounds that both methods can and have been successfully applied irrespective of the researchers underlying philosophical assumptions. Others have instead argued

against claims of there being quantitative or qualitative epistemologies and suggest that they restrict developing a robust understanding into a phenomenon and prevent effectively combining different methods in order to acquire knowledge (Symmonds and Gorard, 2010; Losifides, 2011).

New Positions

Following the above critique, and for some, the discrediting of the incompatibility thesis, many researchers began to either move away from philosophical constraints or in other cases endorsed 'new' positions (Tashhakori and Teddie, 2003). For instance, some continued to adopt an a-paradigmatic stance, ignoring an epistemology-methods link and selecting methods appropriate to answering the research questions and arguing that: 'methods can be separated from the epistemology out of which they emerge' because for example, it is unnecessary to adopt a set of philosophical assumptions in order to carry out open-ended interviews or make observations (Patton, 1990, p.90 in Tashhakori and Teddie, 2003). The second stance endorsed is that of the multiple paradigm approach which incorporates three sub positions: 'a complementary strengths thesis' where methods are kept separate in order to capitalize on the strengths of each method; the 'dialectical thesis' which aims to gain insights by mixing 'sets of assumptions, understandings, predispositions, values and beliefs with which all social inquirers approach their work' (Greene, 2007, p.12); and the 'multiple paradigm thesis', which advocates that multiple paradigms can underpin different mixed methods designs and that the choice of design (i.e. sequentialexplanatory) determines the underlying philosophical approach (Denzin and Lincoln, 2000).

Single paradigm theses also emerged as a consequence of the paradigm wars. For instance, some researchers felt the need for a paradigm to justify their use of mixed methods research. As a result, researchers such as Howe (1988) advanced a link between pragmatism and mixed methods whilst Mertens (1999 in Tashhakori and Teddie, 2003) promoted a transformative-emancipatory philosophical perspective to support mixed methods research. Some key assumptions believed to underlie a pragmatist approach are that (a) quantitative and qualitative methods can be combined in a single study, thus rejecting the incompatibility thesis; (b) the research question is considered to be of central importance in deciding which methods to employ; and (c) pragmatists avoid adopting a single paradigmatic stance, embracing instead both positivist/constructivist positions depending on the research context and tend not to use concepts such as 'truth' or 'reality' (Tashhakori and Teddie, 2003). Others have argued that pragmatism does not necessarily adopt an epistemologically different paradigm but rather endorses a set of shared beliefs (as outlined above), which tend to be common among a particular community of researchers (Morgan, 2007).

Another single paradigm approach is the transformative-emancipatory position, which advocates that research should serve the purpose of creating a just and democratic society and attaches most importance to investigating the experiences of people suffering from discrimination and oppression. The nature of reality from this perspective is understood in relation to cultural, political, economic and historical contexts, (Tashakorri and Teddie, 2003).

Summary

In sum, a paradigmatic-methods link seems inherently problematic because philosophical assumptions do not necessarily determine the choice of method used. Furthermore, others have argued that unhelpful stark distinctions have resulted from either misrepresentations or misunderstandings regarding positivist and constructivist ontological and epistemological assumptions (Shadish, 1995). Whilst some have aimed to develop a new set of paradigms to justify conducting mixed methods research (Tashakkori and Teddlie, 2003) others have chosen to link methods and analysis techniques to research questions (Symmonds and Gorard, 2010). This allows for the use of a diverse variety of research techniques and perspectives, as opposed to limiting oneself to a vague notion of pragmatism (Bergman, 2008) or the adoption of a transformatory approach, which places central importance on researching the experiences of discriminated or oppressed individuals (Mertens, 1999; Tashakkori and Teddlie, 2003). Integrating a set of research techniques for the purpose of gathering data does not necessarily require the linking of these methods to a particular set of philosophical assumptions (Losifides, 2011; Bergman, 2008). Whilst combining different methods may not be appropriate in all contexts, Symmonds and Gorard (2010) have argued that in order to solve a problem or to address a certain set of questions it is necessary to be open to the use of a variety of research techniques in order to develop as robust an understanding into a phenomena as possible. Connecting research methods to epistemologies necessarily restricts research and prevents effectively combining different methods in order to develop understanding about a phenomena (Symmonds and Gorard, 2010; Losifides, 2011). However, linking data collection and analysis techniques to the research question allows researchers to embrace both subjectivity and/or objectivity, a realist and/or

interpretevist approach, as they deem appropriate (Symmonds and Gorard, 2008). As Bergman (2008) states, it is not necessary to apply a hermeneutic view when conducting interviews if this approach is not conducive to the studies aims and objectives.

Methodological Approach

Although a key purpose of the current study was to increase evidence of participant's real life experiences of the process of forgiveness and its effects on their mental wellbeing, I do not adopt any particular philosophical position. The utilization of different techniques provided me with the opportunity to establish varying levels of insight into people's lived experiences to address particular types of research questions, and to shed light on the overall research problem. For instance, the systematic review of randomized controlled trials provided a more objective assessment of the effects of forgiveness interventions, thereby building on a welldeveloped evidence-base. The interview and internet survey data on the other hand provided an opportunity to explore in-depth an under-researched topic. Both of these approaches enabled me to detect patterns in the data, which could be used to test hypotheses in future research. Thus, whilst it is assumed that interpersonal offenses as well as forgiveness and its effects are real phenomena, which occur external to and within the individual, the degree to which it is possible to capture (objectively) people's real life experiences of these phenomena depends on the research questions, the design employed (i.e. experimental, longitudinal, case study), context of the study as well as the extent to which a researcher reflects on and minimizes distorted values.

The present study used a sequential mixed methods design (Creswell, 2003). This involved the implementation of both quantitative and qualitative data collection techniques in different phases, and then connected the data iteratively. For instance, in phase one, in-depth qualitative interviews were conducted with the aim of gathering contextually rich data to provide a picture of participant's forgiveness experiences. This phase of the study focused on the *process* of forgiveness, that is, how do people practice forgiveness, why do they practice, the effects of practicing forgiveness and what the specific mechanisms were that influenced this practice. Therefore, to assess the dynamics of this process and its effects, semi-structured indepth interviews were considered to be most appropriate. Once themes and patterns had been identified, the phase two quantitative internet survey study was designed and implemented. The qualitative interviews played a substantial part in the design of the second phase quantitative survey. For instance, the data obtained 'on the ground' informed the selection of outcome instruments as well as assisting in choosing moderator variables. A key focus of the survey was to test for any broad relationships between state forgiveness and mental wellbeing as well as to test for the effects of moderator variables in influencing forgiveness such as meditation and beliefs in connectedness with others. The systematic review further contributed to addressing the overall research question by systematically synthesizing and critically appraising data from rigorous study designs that had evaluated the way in which forgiveness interventions targeting diverse populations can modify a range of aspects of wellbeing. As such, the review provided further evidence regarding the relationship between forgiveness and wellbeing. Thus, phase one revealed intricacies of the process of forgiveness, phase two capitalized on the strengths of the qualitative data

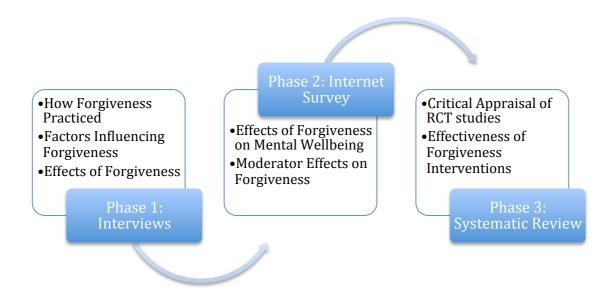
by testing broad patterns, and phase three provided further evidence about the relationship between the core concepts involved in this research.

In sum, the rationale for using a mixed methods design in the present study was to increase evidence on an under-studied topic, by addressing the research question posed (Gorard and Taylor, 2004). At present, there are a number of unanswered questions regarding cross-cultural conceptualisations of forgiveness, including how forgiveness is practiced as well as key mechanisms that may influence this process among diverse populations (Davis et al., 2013; Glaeser, 2008). Studies that combine qualitative and quantitative designs are therefore needed to both assess process as well as to test broad relationships in order to build on the largely quantitative approaches of earlier research.

Next, I will discuss each of these methods and describe how they were utilized to address the research questions. The methods are presented in the order in which they were implemented. The qualitative study data collection and procedures are presented first because this provided the conceptual basis for the internet survey, which is then described. The systematic review was conducted in order to a) explore in further detail the aetiological relationship between forgiveness and wellbeing by examining interventions that could potentially modify the latter as a result of targeting the former; b) to assess whether there is a practical role in terms of the concept of 'forgiveness' with regard to improving mental wellbeing. Although this phase of the study was not informed by the qualitative interviews (as was the case with the survey), the aim was to build on the findings of the internet survey in terms of

examining the potential practical implications. Diagram 1 displays the different phases of the research.

Diagram 1. Different Phases of Research



QUALITATIVE INTERVIEW STUDY

In phase one of this research project, qualitative interviews were conducted in order to develop in-depth descriptions and understanding of participant's experiences with regard to the process of forgiveness and its effects. Specifically, the aims of the qualitative study were to: 1) explore factors influencing state forgiveness as well as how forgiveness is defined and experienced among different (and under-studied) religious/spiritual samples and a secular/atheist participant, and 2) to explore the perceived effects of practicing state forgiveness on mental wellbeing using these diverse samples. In what follows, I will describe the qualitative study method, including information about participant characteristics, the sampling method chosen,

the procedure for collecting data as well as the methods employed for analyzing the qualitative data. The methods of ensuring that participant data was consistent with ethical guidelines as well as the strategies implemented to ensure the quality of the data are then described.

Method

Description of Participants

Eleven English speaking adults affiliated with New Religious, Buddhist, Muslim and Secular/Atheist groups were recruited using a variety of methods such as social media (i.e. Facebook), website contacts, direct email and telephone. The total sample comprised of participants who defined themselves as Muslim (n=2), Buddhist (n=1), A Course in Miracles students (n=5), Theosophist (n=2) and secular/atheist (n=1). Eight participants were recruited from regions across England and three participants who took part were from Ireland. The participants were predominantly male (n=8). Three were female. Ages ranged from 27 to 50 years. The mean age of respondents was thirty-six. Participants were recruited using purposive and snowball sampling methods. Purposive, non-probability (i.e. non-random) sampling was utilized in order to interview participants who were relevant to addressing the studies research questions (Bryman, 2004). For instance, a key criteria of the study was to recruit participants who had practiced forgiveness in response to an interpersonal hurt and who identified and aligned themselves with religious/spiritual and secular/atheist groups. Snowball sampling, in which existing participants helped to recruit more participants who met the previously mentioned criteria, was also used. Over a period of twelve months a total of twenty-one participants were approached; eleven

agreed to take part. Table one presents the demographic and religious affiliation and practice details of participants.

Table 1. Demographic Characteristics

	Gender	Ethnicity	Education	Age	Affiliation
Respondent				Mean = 36	
Brandon	Male	White	College	26-35	A Course in Miracles
Quinn	Male	White	College	36-45	A Course in Miracles
Bill	Male	White	College	46-55	A Course In Miracles
Alan	Male	White	College	26-3	Theosophy
Jax	Male	White	College	26-3	Buddhist
Trisha	Female	White	University	46-55	A Course in Miracles
Amira	Female	Asian	School	36-45	Muslim
Rana	Female	Asian	School	36-45	Muslim
Stuart	Male	White	University	46-55	A Course In Miracles
Lyndon	Male	Black	University	36-45	Theosophy
Alfred	Male	White	University	26-35	Secular/Atheist

Procedure

Of the participants who chose to take part in the study, most (n=8) were recruited directly via website contacts, email or telephone whilst the remaining three participants were recruited through word of mouth via existing participants. The process of recruitment in the case of ACIM members involved initially contacting a teacher/group facilitator based in the US by email, whose details were obtained via their website. The email explained what the study was about and why it was being conducted and that I was looking to recruit ACIM students. Following this email, I was then referred to a colleague of the first person contacted who was another teacher/facilitator based in the UK. After this initial email introduction, a telephone call was arranged to discuss the study and to request if the participant could assist with recruiting other ACIM members. During the email and telephone exchange, all details regarding the study and why it was being carried out were described. This

participant was emailed the invitation letter and information sheet (see appendix A). Consistent with prior research (Kidwell et al., 2012), the participant was also sent a copy of the interview guide (see appendix A). Sending the interview guide to this participant (and all other respondents) was an additional way of ensuring that they fully understood what the interviews would entail, for them to consider whether they were suitable for the study, and for them to make an informed decision as to whether or not they wanted to take part. Also, as the focus of the study was to recruit and interview people affiliated with under-studied religious/spiritual groups, to increase participation, I felt it to be appropriate to be open about and be open to hearing this participant's views about the questions being asked. However, whilst this participant agreed to help recruit affiliate members, this did not result in any respondents taking part, although he agreed to take part himself and was subsequently sent a detailed study information sheet, demographic and religious/spiritual affiliation and practices questionnaire as well as a consent form to complete. This participant was subsequently interviewed over Skype via video link (details regarding the data collection method are provided in later sections).

Due to difficulties in recruiting ACIM members locally, an ACIM Facebook group teacher/facilitator (based in Ireland) was also sent an email invitation. Upon expressing an interest in taking part, he was sent a detailed study information sheet and the interview guide so that the participant understood why the research was being conducted, what it would entail and to enable him to decide whether he wanted to take part. Following this, the respondent was contacted again to address any further questions regarding what the study would involve and how it would be conducted. Once he confirmed his decision to take part, a time was then arranged to conduct the

interview over Skype using video link. Prior to carrying out the interview with the facilitator, he was also asked if he could help to recruit other ACIM members. This facilitator subsequently posted the study invitation letter in his Facebook group. Following this, two further participants contacted me directly via email expressing an interest in taking part. Both of these participants were then sent detailed study information sheets as well as the interview guide, and a call was then arranged to answer any further questions they might have. For instance, I asked again if they were happy to take part; discussed what the interview would involve; checked if they were comfortable being interviewed over Skype, and so forth. A time was then arranged to carry out the interviews. Prior to conducting the interview, all three participants were emailed the consent forms, and questionnaires pertaining to their demographic and religious/spiritual affiliations and practices, which were completed prior to the start of the interview.

Another ACIM participant, who was based in the UK, was called by me directly. Details of this participant were obtained via an ACIM course directory that is publically available on the internet. All relevant information (i.e. who I was, where I was calling from, why they were being contacted, as well as the purpose, criteria and conditions of taking part) was explained and questions answered. For instance, the participant at first appeared a little hesitant, perhaps due to being directly contacted with no prior warning of the call, but I explained that they had previously contacted another ACIM teacher/organiser who had agreed to assist in recruiting participants (which appeared to help) and also explained a little about why I had chosen this particular topic (i.e. interest in religion/spirituality and wellbeing and so forth). After providing the study details, the participant agreed to take part and was also sent the

detailed study information sheet, the interview guide and consent form. A face-to-face interview was arranged, which they chose to be conducted at a quiet public café close to where the participant lived. The consent form as well as the demographic and religious/spiritual affiliation and practice questionnaires were completed on the day of the interview.

One participant who was affiliated with a New Religious group (i.e. Theosophy) and living in the UK, with whom the researcher had made initial contact via an online religious/spiritual group on Facebook, was sent an email invitation. A call was arranged to explain in more detail the purpose of participation and what it would entail as well as to answer any further questions. A study information sheet and interview guide was also sent. Once the participant agreed to take part, he was then sent questionnaires pertaining to his religious/spiritual practices and beliefs, demographic details as well as a consent form. An interview was then arranged at a time that was suitable for the participant. This participant was also asked to recruit other Theosophists. He subsequently suggested that there were two other potential respondents who belonged to the same organisation. I asked the participant to forward the email invitations to both. Of the two, one expressed an interest in taking part in the study and was sent a detailed study information sheet and the interview guide. A call was arranged to discuss these details further and to answer any questions the participant had. After this I asked the participant to contact me at a time that was suitable for him to be interviewed. Prior to conducting the interview the participant was sent further study materials (i.e. questionnaires, consent form), which were returned prior to commencing the interview via video call (i.e. Skype).

The Buddhist participant living in the UK, who was known to the researcher via a local Buddhist center, had provided his contact details to me and was sent a request via email to participate in the study (an information sheet and interview guide was also attached). A call was then arranged to explain what the study was about in more detail as well as to answer any further queries. Subsequent to this, a study packet containing study questionnaires and consent forms were emailed to the participant. A face-to-face interview was then arranged (via email) to be conducted at the participants' home. Similarly, two Muslim participants from England, known to the researcher as being affiliated with the local Muslim community and faith, had also provided their details to me and were subsequently called directly. The study purpose, criteria and conditions of taking part were explained. Where appropriate, participants were sent (via email) further study details and/or administered questionnaires/consent forms prior to the start of the interviews, both of which were conducted face-to-face in the participant's homes. The final secular/atheist participant from the UK was emailed via a secular/atheist Facebook group. Only one secular/atheist was interviewed due to time constraints. However, he did nevertheless provide valuable insights that also helped with the design of the second phase survey in which a larger number of participants affiliated with this group were included. As was the case with all previous participants, the study purpose, criteria and conditions of taking part were explained, and a detailed study information sheet and interview guide was sent to the participant. Once he agreed to take part, a time for a Skype interview was arranged. Prior to the interview the participant was sent the questionnaires and consent forms, which were completed on the day of the interview.

All participants were aware of the study criteria from the outset, which was outlined to them during initial contact as well as through the study information sheets provided. For example, participants were made aware that I was recruiting religious/spiritual or non-religious/spiritual people who had experienced practicing forgiveness in response to being unfairly and deeply hurt within the context of a past or present relationship. The information sheets and interview guides that were sent to participants also outlined that the key aims of the research were to explore in depth their experience of being hurt, how they responded, the process involved in forgiving the offender as well as the effects of this practice. In cases of snowball sampling, the person assisting in recruiting other samples was also aware of these criteria and was sent information sheets to forward to other potential participants. Respondents who volunteered to take part in this study met the inclusion criteria. All participants were made fully aware of their rights, such as withdrawing from the study at any point without giving reason, should they agree to take part. The material administered to participants, namely, consent forms and study information sheets were devised based on guidelines outlined by the Biomedical research Ethics Committee at the University of Warwick whilst the interview guide and demographic questions were guided by prior research exploring similar questions (King et al., 2001; Matsuyuki, 2011).

After the interviews, the majority of participants commented that they had found the experience to be extremely beneficial as it helped them to reflect on the positive progress that they had made with regards to their wellbeing, which may have assisted in recruiting other respondents. Most of the interviews were carried out via video call (Skype), which also allowed access to more samples living in different parts of England and Ireland. Thus, although the initial plan was to recruit participants locally

(i.e. West Midlands), this was only possible in the case of a few participants and furthermore, the response rate from ACIM and Theosophy students was rather low; consequently participants were recruited nationally and from Ireland.

Of the ten participants who chose not to take part, three were ACIM, three were Buddhist, two were Hindu, one was Christian and one was atheist. The details of the ACIM participants were retrieved via an online ACIM web directory. The Christian participant was known to the researcher via attendance at a meditation retreat. One Hindu participant (whose details were given by an existing participant) was emailed by the researcher to request recruiting members of his Hindu community. This person (who was not available to be interviewed himself) then contacted an affiliate member of his community who initially expressed an interest in taking part. With regards to the Buddhist participants, two were known to the researcher (via a meditation retreat) whilst the details of the third were retrieved via a book about forgiveness. Nine of the potential participants who chose not to take part were sent email invitations; three people emailed to say that they did not want to take part due to prior commitments, away travelling, illness or they did not want to discuss personal matters. Five potential volunteers initially expressed an interest in being interviewed but did not respond to emails or telephone calls at a later stage. One person emailed to say they did not want to take part but gave no reason. Another potential participant who was called directly, who did not take part was not interviewed due to receiving therapy for severe psychological trauma (it was not considered appropriate to interview this participant as it was judged that discussing the experience of the interpersonal hurt may have caused him further harm). For instance, I contacted the potential participant to discuss if he wished to take part and what the study entailed. During the telephone

conversation he stated that he was currently in therapy and had been experiencing episodes of hallucinations (he was also taking class A drugs). Further, the interpersonal hurt he wanted to discuss was relating to a major past trauma (for which he was receiving therapy). After speaking to him I felt that discussing this past event outside of a therapy context may well cause further distress. This was explained to the person and they fully understood and appeared content with the reasons for not being interviewed. None of the latter participants proceeded to the stage of receiving the questionnaire packet.

Data Collection Method

Eleven in-depth interviews were carried out. A semi-structured interview schedule was used to elicit responses from participants regarding the process of forgiveness and its effects. All questions were open-ended and allowed participants to steer the conversation. For example, they presented their own perspectives on factors influencing forgiveness, its effects as well as definitions of these terms. Further, to gather as much empirical data regarding their process of forgiveness, participants were encouraged to provide as much detail as possible relating to what happened, how they felt, thought, and behaved so that a clear picture could emerge of their experiences (see interview guide in appendix A for further details). In December 2012 five interviews were initially carried out. Transcripts and the interview guide were subsequently assessed and a further six interviews were then carried out between April and December 2013. With permission, all interviews were audio-recorded and transcribed in full.

The majority of interviews were carried out once. One participant was interviewed a second time because in the first interview the participant spoke generally of forgiveness without discussing a specific interpersonal transgression to which he had applied forgiveness. Thus, he was contacted again to request that he elaborate further and he happily agreed to be re-interviewed in order to discuss in greater detail a lived experience of a hurt and his response to it. All participants were informed that interviews would take approximately one to two hours. The majority of interviews lasted for approximately eighty minutes. A flexible approach was adopted when arranging the interviews so as not to cause any inconvenience for participants. Interviews were carried out face-to-face or in other cases, they were conducted via telephone or video call using Skype. Some participants (n=4) were based within the Midlands and surrounding areas and so it was possible to travel to them. However, where distance and recruiting participants was an issue, interviews were carried out over Skype (n=7), which has both a telephone and video link and is freely available online. Whilst this is a non-traditional method of conducting interviews, participants appeared to be far more comfortable (from the outset) using this method. This may have been due to the fact that the Skype interviewees regularly used Skype to either work with psychotherapy clients, teach/discuss about religious beliefs, as well as to chat with friends. Thus, they were well accustomed to using Skype. This latter finding is contrary to prior research which suggests that the presence of a researcher in face-to-face interviews facilitates building rapport through body language, which can result in the respondent feeling more comfortable (Jackle et al., 2006). Further, in three cases participants opted not to make themselves visible on video call although they could see me, which may have given them a greater sense of control. Prior research suggests that a limitation of telephone interviews is that it is difficult to

ascertain whether or not respondents are lacking in motivation, whether they misunderstand questions or feel frustrated, which an interviewer can respond to if seen (Jackle et al., 2006). Whilst it may have been difficult to detect these factors because I could not see the participants, there were no obvious indications of participants feeling frustrated or lacking in motivation, and the tone of their voice suggested they felt quite at ease and were willing and engaged in sharing their experiences. Where I felt that participants had not understood the question based on their response or tone of voice, clarity was provided. However, there appeared to be no obvious distinction in this regard between the face-to-face and telephone interviews. The face-to-face interviews, however, took a bit more time for the participants to feel comfortable. This was particularly apparent in the initial stages as they appeared a little hesitant to share information (at first) and were waiting for further questions/prompts in contrast to the Skype interviewees who comfortably described their experiences from the outset. This may have been because the Skype respondents were accustomed to using this method of communication and four of the Skype interviews were conducted via video link in which it was possible for me to see the participant. Nevertheless, in the majority of face-to-face interviews (of which there were four) any initial hesitancy only lasted for the first fifteen minutes or so and on the whole, both methods appeared to be effective at meeting the study aims and objectives. Whilst few studies have specifically examined the use of Skype interviews within a research context, Sykes and Hoinville (1985) as well as Gall and et al. (1996) have highlighted that telephone interviews are similar to 'standard' interviews on the basis of reaching similar target populations, similar response rates as well as producing comparable information. However, Couper (2000) has previously found that there is a higher chance of skewed sampling as internet users

(Skype requires an internet connection) tend to be more highly educated, wealthier, younger and white although this research was conducted over fifteen years ago and internet connection tends to be more widely available in present times. A further point of consideration is that previous research has highlighted that face-to-face interviewees may report information (such as their experiences of being hurt and how they responded) untruthfully because they are aware of interviewers reactions (Jackle et al., 2006), although there were no obvious indications of this through participant body language, tone of voice or by what they said.

Data Analysis Method

Grounded theory (GT) methods were applied to analyse the qualitative data because the central purpose of this phase of the research was to identify factors influencing forgiveness as well as the outcomes of state forgiveness. More specifically, a key aim was to find concepts and categories (derived from the data) and to assess for relationships between themes (Corbin and Straus, 2008). For this purpose, a generic set of grounded theory methods were applied by drawing on Corbin and Strauss's (2008) model. Similar to Rich (2012), the qualitative study did not apply a grounded theory approach in the strictest sense; however, some key analytic procedures were used. These procedures consisted of the following steps: 1) repeated reading of the transcript; 2) writing memos regarding what may be emerging from data; 3) open coding involving the separation of data to define concepts such as thoughts, ideas and meanings contained within blocks of raw data; 4) constant comparison such as assessing similarities and differences in emerging concepts within each transcript and across participants; 5) classification where similar and different concepts were grouped together; 6) categorisation where concepts were developed into categories

which were further defined in relation to their properties; 7) axial or intermediate coding (which often occurred concurrently alongside open coding); this 'final' stage of coding concerned relating concepts/categories to each other, such as assessing connections or relationships between data (Corbin and Strauss, 2008; Rich, 2012; Kidwell et al., 2012). In what follows, I will provide a general outline of how I applied these grounded theory procedures to analysis.

Once transcripts had been fully transcribed, I read them and made general notes or underlined key statements. Following this, they were read again and large blocks of raw data were selected, which broadly aligned with themes of interest (i.e. research aims) such as how forgiveness was practiced, influences on forgiveness, and effects of forgiving. Concepts such as thoughts, ideas and meanings relating to these broad themes of interest were then identified. Initially, 'anything and everything' regarding these broad themes was selected, irrespective of whether data emerged from perceptions of lived experiences, opinions or how many times thoughts or ideas were expressed. Often, selected sections or even sentences contained multiple thoughts or meanings and so I continually thought about what the data indicated. During these initial stages of coding I also went back and forth with regards to searching for patterns, identifying major themes and so forth. Corbin and Strauss (2008) highlight that this is usual as open coding and axial coding are often carried out concurrently. As this process of identifying concepts continued, the data was also classified so that similar and different quotations were grouped together to form categories. For example, thoughts such as 'our function on earth is to forgive, that is our sole function' and 'it was pretty much her continually bringing stuff up again' were grouped together to form themes such as 'meaning/purpose' or 'ongoing

transgressions'. Once initial open coding took place and themes began emerging I checked transcripts to ensure that the generated concepts were grounded in what participants had said and that they related to the research aims (e.g. factors influencing forgiveness). Concepts that were not related to the research aims or those that were not clear were removed. For example, in assessing the effects of forgiveness, concepts were selected on the basis that they were discussed in relation to participants lived experiences or removed in cases where it was unclear whether or not concepts were in reference to how forgiveness was practiced; reviewing data in this way was an ongoing process. Once data had been further assessed to ensure that emerging themes were in line with the research questions, I then created a spider diagram. This contained concepts with an overarching category such as 'responsibility' or 'meditation'. Concepts often indicated multiple thoughts or meanings so these were further separated out and classified and data was again checked to ensure that it was in line with the research aims. Creating a diagram of codes greatly facilitated finding new themes and preliminary patterns in the data as it appeared more manageable and provided a clearer (visual) picture of emerging themes and relationships, which enabled me to identify commonly occurring codes as well as similarities and differences within and across datasets. Once emerging categories were more fully developed, I then, more systematically, assessed for relationships between the themes. For example, I first aimed to explain influences on Themes were thus further classified according to whether they state forgiveness. were facilitators or barriers; in the case of the first of these, I diagrammatically represented how specific beliefs and practices were connected to state forgiveness. Similarly, I also assessed what factors were barriers t forgiveness as well as its These themes were also compared and contrasted to assess for any

subcategories. For example, I assessed whether participants were more likely to draw on religious/spiritual beliefs and practices such as spiritual connectedness or prayer. Regarding the effects of forgiveness I also aimed to explain if these were related to subcategories of positive affect or sense of meaning and purpose. Thus during these 'final' stages of analysis, concepts, categories as well as subcategories were more fully related to each other which enabled me to explain how forgiveness was practiced as well as its effects.

Overall, the generic application of grounded theory methods to the analysis of the interview data revealed themes and patterns pertinent to the lives of both religious and non-religious participants. However, it is important to note that the analysis of data did not necessarily reveal a complete picture because other confounding factors would need to be taken into account. Nevertheless, based on participant's perceptions of the process of forgiveness and its effects, the analysis did reveal connections in the data, some of which were tested in the quantitative study whilst others remain to be verified.

Ethical Considerations

This research was reviewed and given favourable opinion by the Biomedical and Scientific Research Ethics Committee at the University of Warwick. All data was gathered using semi-structured interviews and all participants received a detailed study information sheet, which explained why the research was being done and what it would involve. Prior to conducting any interview, I answered participant's questions and participants signed consent forms, which were administered via email or in person. Respondents were made aware that by taking part in the interview they

were giving consent for the data to be used in the study and that there were no known risks associated with taking part in the study. Participants were also provided with my contact details and those of a university official independent of the study in the event that they wished to discuss any concerns or questions regarding the research. All participants were made fully aware that their data would remain confidential and secure; how this was achieved is outlined in the next paragraph.

All electronic files such as consent forms, questionnaires, notes, transcripts and coding frames were saved and stored in a master file kept on a secure passwordprotected computer, to which only I had access. Hard copies of consent forms/questionnaires/transcripts, coding frames, etc. were kept in a secure cabinet, in a locked room, within a securely locked building. All questionnaires/transcripts were labeled with a number and date and descriptive title (i.e. 01 10.09.13 forgiveness). All interview recordings were also saved on a secure password protected computer and labeled with number. descriptive date and title (i.e. 01 10/09/13 Forgiveness.wav), to which only I had access. All personal data (name, names of relatives or friends, references to location) were removed from transcripts and where appropriate, a pseudonym was used. Personal data was only viewed by the researcher and where appropriate, personal data (i.e. names/addresses) were saved and stored in a master file on a secure computer. All information that participants provided was treated with respect, including for example, not speaking about participant personal data to other respondents or people outside the research team.

In line with University regulations, upon completion of the thesis, data will be securely stored for up to 10 years on the University shared drive. All data kept on the

USB will be permanently destroyed once it has been transferred to the University shared drive. Further, all personal identifiable information about participants has been deleted.

QUANTITATIVE SURVEY STUDY

In phase two of this research project a cross-sectional internet survey was carried out in order to address the following aims: 1) to examine the effects of forgiveness on mental wellbeing; 2) to investigate if meditation or sense of connectedness moderate any links between forgiveness and wellbeing and 3) to investigate any significant differences between religious/spiritual and non-religious/spiritual (i.e. secular/atheist) groups with regards to forgiveness and wellbeing outcomes. The central research question was: If we control for the effect of age, employment, meditation and connectedness, is state forgiveness still able to predict a significant amount of the variance in wellbeing? In what follows, I will first outline the study hypotheses. Next I will describe the quantitative study methods, including information about participant characteristics, the sampling method chosen, the procedure for collecting data as well as the methods employed for analyzing the quantitative data. The methods of ensuring that participant data was consistent with ethical guidelines as well as the strategies implemented to ensure the quality of the data are then described.

Hypotheses

The following primary hypotheses were addressed in this study:

 Forgiveness would lead to greater levels of mental wellbeing over and above the level of variance accounted for by demographics, meditation and connectedness. 2. Meditation or connectedness with others would moderate the relationship between forgiveness and mental wellbeing.

The secondary hypotheses addressed in this study are as follows:

- 3. Religious/spiritual people would experience greater levels of forgiveness than non-religious/spiritual people.
- 4. Religious/spiritual people would experience greater levels of mental wellbeing than non-religious/spiritual people.

With regards to the central hypothesis, there are no known studies that have examined the effects of state forgiveness on wider dimensions of mental wellbeing. There is, however, evidence to suggest that state forgiveness reduces depression and anxiety as well as increases positive affect (Lundahl et al., 2008). Regarding the second hypothesis, it has been suggested that specific religious/spiritual mechanisms may be more predictive of forgiveness (Davis et al., 2013). Thus, a further aim of the analyses was to assess if meditation and/or beliefs in connectedness with others are more predictive. These moderator variables were selected because the qualitative interviews suggested that they were key factors that assisted forgiveness among religious/spiritual participants. One previous study found associations between connectedness and forgiveness (Krause, 2012) but again there is little empirical data examining the role of meditation. The first of the secondary hypotheses, that religious/spiritual people are more forgiving, is supported with regards to trait-forgiveness (McCullough and Worthington, 1999). However, despite the theoretical links with state forgiveness, supporting empirical data is still sparse. For instance, a

narrative review carried out by McCullough and Worthington in 1999 concluded that religious involvement (such as levels of religious commitment and church attendance) is robustly associated with dispositional forgiveness (i.e. people who hold beliefs that they are forgiving). However, a correlational survey study carried out by Subkoviak et al. (1995) found little evidence that religious people were more forgiving of specific offences (i.e. state forgiveness) than non-religious participants.

Method

Participants

One-hundred-and-nine English speaking participants affiliated with religious/spiritual and secular/atheist groups were recruited via social media (Facebook), website contacts and direct email using non-random convenience and snowball sampling methods to take part in an internet survey. On the whole, participants were highly educated with seventy-four participants having a degree or higher qualification. Twenty-eight were qualified to A-level or equivalent and six participants were educated to GCSE level. Participants were mostly single (n=58). Twenty-nine were married or cohabiting and fifteen were divorced. The vast majority of participants were white Caucasian (n=83) whilst twenty-six were of minority ethnic origin (n=26), which included Pakistani, Bangladeshi, Indian, Arab and Kenyan. Participants were from England (n = 94), Scotland (n = 9) and Wales (n = 6). All participants were assumed to be non-clinical samples. Forty-three men and sixty-six females took part and the mean age of participants was 27.8 years. Most participants were religious and spiritual (n=72). Thirty-seven participants did not identify themselves as being religious or spiritual.

I sought to recruit participants who met the following criteria: (1) had experienced an interpersonal hurt to which they responded to with forgiveness or unforgiveness; and (2) identified and aligned themselves with religious/spiritual and secular/atheist groups. Over a period of approximately five months a total of one hundred and twenty eight participants completed the survey. Nineteen were excluded for the following reasons: 1) high rates of pseudo forgiveness such as feeling they had not experienced a real problem of someone unfairly hurting them after completing the forgiveness survey; 2) straight line responses; 3) living outside of the UK; and 4) not completing the forgiveness measure. The final sample included in the analysis was 109. Participants were notified at the beginning of the survey that their consent was assumed by them completing and submitting all questionnaires. Tables two and three present the demographic and religious/affiliation and practice variables of participants.

Table 2: Demographic Characteristics of Participants (N = 109)

Variable N Percentage Gender Male 43 39.4 Female 60.6 66 Age 18-24 40 36.7 25-34 24 22.2 35-54 38 34.9 7 55+ 6.4 Ethnicity 83 76.1 White Minority 26 23.9 Marital status Married/cohabiting 34 31.2 Single 60 55.0 Divorced/separate 15 13.8 Highest level of education completed GCSE or equivalent 5.5 A level or equivalent 28 25.7 Degree or higher 74 67.9

Table 3: Summary of Religious/Spiritual Affiliation and Practice Variables of Participants (N = 109)

66.1	
* * * -	
33.9	
13.8	
86.2	
13.8	
86.2	
	86.2 13.8

Sample Size

A non-random, convenience sampling method was used to recruit participants. Whilst there are inherent limitations to applying this method such as threats to external validity as well as high levels of selection bias (Bowling, 1997), the use of non-random samples was warranted on the basis that: 1) there was no sampling frame from which to randomly select participants; and 2) the study aimed to explore associations between forgiveness and mental wellbeing using under-studied minority religious samples (Ihinger-Tallman, 1986 in Abbassi and Singh, 2006; Daniel, 2012). Therefore, for practical reasons, a non-probability sample was used to explore any patterns among key variables.

To determine an appropriate sample size for the independent samples *t* test, a sample size calculation was performed using the formula based on the difference in two means, (Machin et al., 2009). Assuming a difference in means of 0.5 standard deviations, equal group sizes, a power of 80% and type I error of 5%, 32 subjects in each group would be required. Hence, with two groups the minimum sample size required would be 64. The expected effect size of 0.5 standard deviations was chosen because the first two groups to collect data for, religious and secular subjects, were expected to exhibit large differences in the outcome (Toussaint and Friedman, 2009; Rye et al., 2012; Harris et al., 2006). However, whilst the study was powered to detect an effect size of .5, it should be noted that this was based on the findings of previous research that measured depression, stress and trait anger, not other dimensions of mental wellbeing, and whilst they assessed state forgiveness, this was not done using the same measure as that used in this study. Further, these previous studies used clinical and community samples that were predominantly recruited from

the US. In addition, it was very difficult to recruit participants from different religious/spiritual faiths and therefore it was not possible to carry out sub-group analyses as planned and it was subsequently decided to combine samples to form broad categories of 'religious/spiritual'. This also resulted in meeting the minimum sample size requirements. However, there were unequal sample sizes for the t test and subsequently two were carried out. Initially, there was a greater number of religious/spiritual participants (n = 72) compared to the non-religious respondents (n = 72) = 37). It is understood that in the case of unequal samples the probability of committing a type I or type II error is increased (PROPHET StatGuide, 1997). The chance of committing this error may have been reduced because some of the assumptions necessary to the conduct of a t test were found to be met such that samples were independent, the distribution of residuals were normal, and there were no apparent violations of homoscedasticity. However, it has been suggested that with very unequal sample sizes the results can be inaccurate (how2stats, 2012). Hence, a second t test was conducted using balanced samples and whilst this too violated one of the assumptions relating to Levene's test for equality of variances, t tests are generally considered to be robust against this violation in cases of equal sample sizes (Laerd Statistics, 2013). To ensure that the minimum sample size requirements were met for using multiple regression analysis, rules of thumb suggested by Hair et al. (2010) were followed where it was advised that to detect a difference of .23 with 80% power at a 5% level, the minimum number of participants required would be 50, with a minimum of 15 participants per predictor variable. The effect size, which is in line with Cohen's (1988) convention for a small effect, was chosen on the basis of prior literature (Maltby et al., 2005). Whilst there appears to be no consensus on the number of participants required for each predictor category (Courvoisier et al., 2011),

rules of thumb suggested by Harrell et al. (2001) and Vittinghoff and McCullough (2006) is to have ten participants per category for each predictor variable. The total number of participants that were included in the hierarchical regression analysis was one hundred and nine. There were five predictor variables and a minimum of fifteen participants per predictor category, thus meeting the minimum sample size requirements.

Procedure

To recruit volunteers to take part in the internet survey, an invitation letter (see appendix B), which explained what the study was about, why it was being carried out, how to take part, the benefits of taking part as well as providing a link to the survey, was posted in Facebook groups or emailed directly to participants. For example, where appropriate, online (Facebook) group facilitators were first contacted to request permission to post the study information letter in their groups. Next, group facilitators or the researcher posted the letter in online Buddhist, Muslim, Christian and secular/atheist groups as well as groups specifically aimed at organising events around and discussing meditation. In other cases, religious/spiritual and secular/atheist groups were emailed an invitation letter directly via Facebook pages that had been created. Public emails available on religious/spiritual and secular/atheist group websites were also used to send a direct invitation letter (via email) to potential participants. Organisation leaders and personnel (i.e. mosques, churches, temples) were also contacted by telephone to request participation and/or emailed directly. For instance, workers (i.e. administrators/pastors) were called, the study aims and purpose was explained to them followed by a request for their participation. In all cases, email addresses were provided to the researcher and I then

sent an invitation letter and survey link to those expressing an interest in taking part. All potential participants were also encouraged to forward the invitation letter to other members of their community who may have been interested in completing the survey. Where possible, potential participants were sent reminder emails (i.e. the invitation letter or a personal email asking if they would be interested in taking part) a few weeks or months after initially being contacted to take part in the study. Most of the group members were based in England; however, in a few cases participants also resided in Wales and Scotland. Potential participants were given approximately five months to respond to the survey. Recruitment and data collection began in December 2013 and the survey was closed in April 2014.

Data Collection Method

Data was collected using a correlational internet survey design that was administered via an online tool called SurveyGizmo. A link was created for the survey, which directed participants to a website that contained the questionnaires and measures. The first page of the survey briefly explained again the survey aims, the questionnaires to be completed, and also stated that consent was assumed if they completed and submitted the questionnaires. The rest of the survey packet contained questionnaires and measures that asked participants about demographic characteristics, religious/spiritual affiliation and practices, forgiveness and mental wellbeing. There were fifteen pages in total. The link, along with an invitation letter was sent to participants via email or social media (i.e. Facebook). A key strength of using this design was that it enabled access to larger numbers of understudied populations, such as participants living in diverse areas across the UK, many of whom had a strong online presence such as through participation in online groups. Given the length of

the survey it would not have been practical to administer the questionnaires face-to-face, and participants may have felt more comfortable completing the online survey compared with a postal questionnaire, due to the increasing time that many people spend on the internet as well as the ease of not having to return a questionnaire by post (Bryman, 2004). However, a key limitation of this method, which has also been noted in previous research (Coomber, 1997), was that access was restricted to those who had internet facilities. Thus the survey does not represent the views of those with no internet access. Whilst the survey in the present study showed an equal balance of young and old participants from different ethnic groups, previous research has found that internet users tend to be more educated, wealthier, younger and unrepresentative with regards to ethnicity (Couper, 2000) although this latter research was conducted fifteen years ago and the internet is now more widely available. The next section outlines the measures that were used in the survey.

Instrumentation & Variable Coding

i) Demographics

Participants completed a series of demographic questions pertaining to their gender, age, ethnicity, marital status, place of residence and education levels. For the purpose of assessing associations, I coded all variables in the following way: gender was dichotomously coded so that 0 = 'male' and 1 = 'female'. Marital status was also collapsed and coded so that 0 = 'not married/cohabitating' and 1 = 'married/cohabiting'; I coded all other categories of marital status such as 'divorced/separate' and 'single' in a similar way. Each of the education categories (GCSE; A-Level; Degree or higher) were also coded dichotomously so that 0 = 'no

GCSE' and 1= 'GCSE'. Employment was coded so that 'unemployed' = 0 and 'employed' = 1. Age was coded continuously so that 18-24 = 1; 25-34 = 2; 35-54 = 3 and 55+=4. For some variables, such as ethnicity, the number of cases per category (i.e. different ethnic groups) was very limited therefore it was not possible to code and analyse each group, instead, 'white' = 0 and 'minority' = 1.

ii) Religious or Spiritual understanding of Life

To assess if participants viewed themselves as religious, spiritual or neither, a question adapted from the Royal Free Questionnaire for Religious and Spiritual Beliefs (King et al., 2001) was used. First, the following definition of religious and spiritual was presented: 'In using the word religion, we mean the actual practice of a faith (e.g. going to a temple, mosque, church or synagogue). Some people do not follow a specific religion but do have spiritual beliefs or experiences. For example, they may have a sense of relationship or connection with a power or force that transcends the present context of reality. Some people think of this as God or gods, others do not. Some people make sense of their lives without any religious or spiritual belief. Participants were then asked 'Therefore, would you say that you have a religious or spiritual understanding of your life?' with the option of selecting one of the following categories: 'religious', 'religious and spiritual'; 'spiritual' or 'neither religious nor spiritual'. Because there were a limited number of participants who checked 'religious' and 'spiritual' and because the central focus was to compere religious/spiritual with non-religious spiritual respondents, these categories were merged to form a single category of 'religious and spiritual'. These categories were then converted into a dichotomous variable where 1 = 'religious/spiritual' and 0 = 'not religious/spiritual', for example.

In addition, participants were also asked 'what religion are you affiliated to, if any' with response options of 'Not affiliated with any religion/spirituality, Atheist, Agnostic, Humanist, Secular, Muslim, Buddhist, Jewish, Hindu, Jain, Sikh, Christian or A Course In Miracles'. Due to the limited number of cases per religious/spiritual group, subgroup analysis was not conducted.

iii) Spiritual Connection

Questions adapted from The Spiritual Connection Questionnaire (Wheeler and Hyland, 2008) were used to assess participant's level of spiritual experiences. The SCQ is a 14-item self-report Likert scale with response options ranging from -3 ('unlike me') to 3 ('like me'). Higher scores indicate a greater sense of connection. The scale measures three facets; the first is the level of joy and happiness people experience from their sense of spirituality (H). The second measures sense of connectedness with the universe (U), and the third measures a sense of connectedness with others (O). Only the latter two subscales were included in the questionnaire because the first one assesses positive affect (in the form of happiness/joy), which was one of the key outcome variables in the present study. Connection with universe and others were themes found in the qualitative part of the research and they were therefore included to further test any associations using a larger sample. Statements are both positively and negatively worded. For example, 'I feel I have an inner spiritual strength' and 'I feel no spiritual connection to the world around me'. Negatively worded items were reverse scored. The total score for each facet was calculated; higher scores show greater spirituality (i.e. sense of connectedness with others or universe).

iv) Meditation & Prayer

In addition to collecting data on participants' beliefs and views, the questionnaire also asked respondents 'how often do you meditate?' and 'how often do you pray?' Response options included 'twice a day', 'once a day', 'weekly', 'monthly' or 'never'. Due to the limited number of participants stating that they meditate twice a day, this category was collapsed and merged with those who meditate 'once a day'. For the purpose of the main analysis, these variables were dichotomously coded so that 0 indicated 'no daily meditation' whilst 1 = 'daily meditation'. Other categories were not included in the main analysis because they were not a key focus of the research question and they were not correlated with forgiveness or wellbeing.

v) Eudaimonic Wellbeing

The dependent variable was measured using Ryff's Psychological Well-being Scale (Ryff, 1989). This is a 52-item self-report Likert scale in which participants indicate their level of agreement or disagreement using a score that ranges from one to six. Sample statements include 'my decisions are not usually influenced by what everyone else is doing' and 'I like most aspects of my personality'. The scale has six dimensions, namely, autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. For the present study, the total score for all subscales was computed and analysed, with lower scores indicating reduced levels of eudaimonic wellbeing. Ryff et al. (2004) reported internal consistency ranging from 0.66 to 0.87 and test-retest reliability from 0.81 to 0.88 (Ryff, 1989). The validity of the scale was also documented as it was found to be correlated with other domains of the scale (i.e. self-acceptance, environmental mastery) as well as other theoretical constructs such as life satisfaction, affect balance, self-esteem and

morale (Ryff and Singer, 1996, 1998). Springer and Hauser (2005) have found high correlations among four of the six dimensions of Ryff's scales however Ryff and Singer (2006) highlight that the majority of prior research using factor analytic procedures demonstrate support for the use of the six factor model.

vi) Positive Affect

Positive affect was measured using the subscale from The PERMA-Profiler: A Brief Measure of Flourishing (Butler and Kern, 2013). The scale has five dimensions but for the purpose of the present study, only the subscale of positive emotion was of interest. The subscale is a 3-item Likert scale measuring how joyful, content, happy and positive participants feel. Response options range from 0 (not at all) to 10 (completely) with higher scores indicating greater levels of positive affect.

vii) Forgiveness

The key predictor variable was measured using the Enright Forgiveness Inventory (Enright et al., 1996). This is a 60-item self-report Likert scale in which participants indicate their level of agreement or disagreement using scores ranging from one to six. Sample sentences include 'I feel warm towards this person' and 'I think she is nice'. The scale measures cognitive, affective and behavioural dimensions using both positive and negatively worded statements. The total score for all dimensions was computed and analysed. The scores for negative items were reversed and the total score for each participant was calculated. Scores range from 60 (low degree of forgiveness) to 360 (high degree of forgiveness). Subkoviak et al. (1995) reported internal consistency to be above 0.90, with test-retest reliability of 0.67 to 0.91. The validity of the scale was also documented and it was found to be significantly

correlated with other theoretical constructs such as anxiety.

Data Analysis Method

The internet survey data was examined using the following software package -Statistical Package for the Social Sciences (SPSS v. 22, IBM Corp). The survey data was first assessed using chi-square analyses to test for any demographic differences between religious/spiritual and non-religious/spiritual participants and an independent samples t test to explore differences between groups (i.e. religious/spiritual and nonreligious/spiritual) with regards to measures of forgiveness and mental wellbeing. Point Biserial correlations, which are a special case of Pearson's correlation coefficient, were produced to examine associations between dichotomous and continuously coded independent and dependent variables of interest. This was followed by conducting preliminary analyses, prior to the main regression analysis, to assess whether the assumptions necessary for multiple regression were met: data was checked for sample size requirements, normality, reliability analysis, linearity, homoscedasticity, multicollinearity and outliers. Multiple regression analysis serves to assess the relationship between a dependent variable and multiple independent variables. There are different types of multiple regression analysis. In standard multiple regression, all variables are entered into the model simultaneously whilst in stepwise regression, which is not theoretically informed, variables are entered until the 'best' predictor variable is found and not all variables are added in the model if the last variable does not account for any variance in the outcome (Cooksey, 2013). For the purpose of the present study, the main part of the analysis consisted of conducting hierarchical multiple regression. This method of analysis was chosen on the grounds that I aimed to test theoretically based hypothesis (Petrocelli, 2003), that is, I predicted that state forgiveness would account for a significant amount of variance in wellbeing over and above that accounted for by demographics, meditation and connectedness. Prior research and theory suggests that state forgiveness is associated with happiness (Maltby et al., 2005), demographic factors are predictive of wellbeing (ONS, 2012), meditation is associated with mental health (Webb, 2012) and that spirituality, of which connectedness is a component, is correlated with mental health outcomes (Cornah, 2006). Thus, I applied this method to assess the relative importance of forgiveness after taking account of other influencing variables. Also consistent with a hierarchical regression approach, predictors were selected and entered in the model on theoretical grounds so that causes would precede effects. For example, static variables that were assumed to be related to each other were entered first so that age was added in step one, as it is more likely to predict the second variable entered in step one, which is employment. Dynamic variables such as meditation and connectedness were added in step two of the model because demographic factors are known to be more predictive of wellbeing and may potentially influence meditation and developing a sense of connectedness. Prior research as well as the qualitative component of this project also indicates that meditation and connectedness are predictive of forgiveness (Oman et al., 2008; Krause, 2011) whilst some research has also suggested that demographic factors such as age may influence trait forgiveness (Cheng and Yim, 2008). Hence, given the potential influence of all of the previously added variables in predicting forgiveness, it was subsequently added last, in step three. Therefore, hierarchical multiple regression was an appropriate method of analysis because variables were entered in steps and on theoretical grounds for the purpose of assessing the extent to which state forgiveness

accounts for a significant amount of the variance in wellbeing over and above the variance accounted for by previously added predictors.

Ethical Considerations

The quantitative survey received ethical approval from the Biomedical and Scientific Research Ethics Committee at the University of Warwick. All data was gathered using an online survey software tool and all participants were invited to take part in the study via an information letter (see appendix A), which outlined the study aims, questions, purpose and contact details. Participants were also made fully aware that their data would remain confidential and secure (i.e. via the invitation letter). At the beginning of the survey participants were also made aware that by completing all questionnaires they were giving their consent for the data to be used in the study and that there were no known risks associated with the completion of the survey. Participants were provided with the contact details of the principal researcher and a university official independent of the study in the event that they wished to discuss any concerns or questions regarding the project. The researcher also answered any questions that participants had regarding the survey questionnaires, via social media/email. In line with University regulations, all data (i.e. SPSS file) will be stored for up to 10 years on the University shared drive from the date of publication of any data. Furthermore, the SPSS file does not contain any personal, identifiable information. Upon request, all data was permanently deleted from the servers of those providing the survey software.

SYSTEMATIC REVIEW STUDY

Introduction

For phase three of this research project a systematic review was carried out for the purpose of assessing the effectiveness of process-based forgiveness interventions in promoting mental wellbeing outcomes. Electronic databases and previous reviews were used to identify quantitative studies that had used randomised controlled trial designs in which a forgiveness treatment was compared with a wait-list no treatment control group. The first stage of the review involved identification of quantitative research concerning the effectiveness of forgiveness interventions, all of which were then appraised using standardized criteria to assess the quality of the included studies. Following this, a meta-analysis was conducted, which provided a synthesis of all relevant outcome data from the included studies. This review was carried out in accordance with guidelines as outlined by the Cochrane Collaboration.

In what follows, I will outline the methods employed to conduct this review. I will begin by outlining the criteria for including studies in this review such as the types of studies, the types of participants, the types of interventions, and the outcome measures that were used. Next, I will present the methods used to identify the studies. Following this I provide an outline of how studies were selected as well who extracted the data and how it was managed. How studies were assessed for risk of bias is presented next followed by the measures used to assess for the treatment effect. After this I briefly discuss how unit of analysis issues and missing data were dealt with, how heterogeneity was assessed, and provide a description of the method of data synthesis including the models used and the reasons for their use. The final section provides a summary of the chapter.

Methods

Studies using a randomised controlled trial design in which participants were allocated to an experimental or a waiting-list/no-treatment control group were selected for review. Studies implementing a process-based (i.e. delivered over more than one session) forgiveness intervention delivered either on an individual or group-basis, to assess the effects of the intervention on mental health and wellbeing outcomes were included. The participants comprised of students and community samples of adolescents, aged between 12-15 and adults over the age of 18. Only standardized and validated measures from the selected studies were used to assess key outcomes pertaining to mental health and wellbeing. Electronic searches using MEDLINE, PsychInfo, ERIC and Behavioural Sciences collection were carried out and additional records were also identified by examining the reference sections of previous published papers.

Inclusion Criteria

i) Types of Studies

Studies using a randomised controlled trial design in which direct comparisons were made between participants that were allocated to an experimental or a waiting-list/no-treatment control group were selected for review. Studies that compared two alternative treatments were included only where there was also a no-treatment control group.

ii) Types of Participants

The types of participants who took part in the selected studies were adolescents, aged between 12 to 15 and adults over the age of 18 and who were either student or community samples.

iii) Types of Interventions

Studies implementing a forgiveness intervention that met all of the following criteria were included in the review:

- 1. Assessed the effects of forgiveness interventions on mental health and wellbeing
- 2.Used an individual or group-based format
- 3. Were process-based forgiveness interventions (i.e. more than one session)
- 4. Used validated outcome measures to assess mental health and wellbeing

iv) Types of Outcome Measures

Only studies that used at least one standardized and validated measure of mental health or wellbeing were reviewed. In some studies (Rye et al., 2005, 2012; Harris et al., 2006; Wade and Meyer, 2009; Allemand et al., 2013; Shectman et al., 2009) multiple scales were used to assess the same overall concept (i.e. forgiveness or unforgiveness). As such, single scales were selected from these studies and the decision to select single scales was based on the following: three studies (not using multiple scales) measured forgiveness as the development of positive emotions (i.e. compassion) towards the offender whilst four studies measured forgiveness as reductions in avoidance or revenge. Of the four studies that used multiple subscales (Rye et al., 2005, 2012; Harris et al., 2006; Wade and Meyer, 2009) the presence of positive affect (forgiveness) subscale was chosen and of the two studies using multiple scales to assess forgiveness as reduction in event specific negative affect (Allemand et al., 2013; Shectman et al., 2009) the revenge subscale was selected. As a result, there was an equal amount of studies assessing the two related concepts in the meta-

analysis (i.e. six studies assessed forgiveness as developing positive regard for an offender and six assessed forgiveness as reductions in even specific negative affect).

Examples of the types of outcome measures included in this review are described below:

Mental Health:

1.Depression

• The Beck Depression Inventory (Beck et al., 1961)

2. Anxiety

• The State-Trait Anxiety Inventory (Spielberger et al., 1983)

3. Anger/Hostility

• State Anger Scale (Spielberger et al., 1983)

4. Stress & Distress

• The Perceived Stress Scale (Cohen et al, 1983)

Wellbeing:

- 1. Positive Affect (satisfied; happy; confident; hopeful; energetic; grateful)
 - Positive Affect Scale, (Allemand et al., 2012)

2. Self-Esteem

• Coopersmith Self-Esteem Inventory (Coopersmith, 1981)

3. Relationships

• Couples Assessment of Relationship Elements (Worthington et al, 1997)

4. Spiritual Wellbeing

• The Spiritual Well-Being Scale (Ellison & Paloutzian, 1983)

Offense Specific Negative & Positive Affect

1. Forgiveness

- Enright Forgiveness Inventory (Enright, 1996)
- Transgression-Related Interpersonal Motivations Scale (McCullough et al, 1998)

Search Methods For Identification of Studies

i) Electronic Searches

The following electronic databases were searched using broad search terms such as 'forgive' or 'forgiveness', and other terms such as randomised controlled trial or RCT to increase the sensitivity of the search.

- 1. MEDLINE (2011 to 2014)
- 2. PsychInfo (2011 to 2014)
- 3. ERIC (2011 to 2014)
- 4. Behavioural Sciences Collection (2011 to 2014)

ii) Searching Other Resources

Additional records were also identified by examining the reference sections of previous published papers (Lundahl et al., 2008; Wade et al., 2013).

Data Collection and Analysis

i) Selection of Studies

To assess if studies identified through a search of electronic databases and other published papers met the inclusion criteria, titles and abstracts were read. This was followed by a full text review of the articles to further assess if they met the inclusion criteria.

ii) Data Extraction and Management

I extracted the data independently and entered it into Review Manager 5. Where appropriate, study authors were contacted to request missing information relating to risk of bias criteria or to request missing results information.

Assessment of Risk of Bias in Included Studies

The guidelines as outlined in the Cochrane Collaboration tool (Higgins and Green, 2008) were used to examine studies for risk of bias. Studies were assessed for:

- 1. Allocation sequence
- 2. Blinding
- 3. Incomplete data outcome
- 4. Selective reporting
- 5. Other potential sources of bias (i.e. examination/adjustment of confounders prior to and during main analysis)

In assessing the methodological quality of studies, each of the above characteristics were assigned one of three categories: 'low risk', 'unclear risk' or 'high risk'.

Measures of Treatment Effect

Standardized mean differences (SMD) to assess differences in outcomes between groups and 95% confidence intervals (CI) to assess the precision of results are presented for all analyses. The effect size (SMD) was calculated automatically in Review Manager 5, which divides the difference in mean outcomes between experimental and control groups and divides by the pooled standard deviation (Barlow et al., 2011).

In some studies (Rye et al., 2002, 2005, 2012) authors administered forgiveness treatment among multiple groups (i.e. religious, secular). As such, groups were combined using the following formulae to obtain the overall mean and standard deviation:

$$n = n_1 + n_2$$

$$mean = \frac{n_1 \overline{x}_1 + n_2 \overline{x}_2}{n_1 + n_2}$$

$$sd = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2 + \frac{n_1 n_2}{n_1 + n_2} (\overline{x}_1^2 + \overline{x}_2^2 - 2\overline{x}_1 \overline{x}_2)}{n_1 + n_2 - 1}$$

Unit of Analysis Issues

One study (Shectman et al., 2009) randomly assigned groups (i.e. students in different classes) whilst Ripley and Worthington (2002) randomly assigned couples. remaining studies randomly assigned individuals. Studies that randomly assign clusters have limitations resulting from the fact that participants within the same clusters may be similar thus resulting in correlations of observations within clusters (Higgins and Green, 2008). Clustered RCT trials can consequently result in an overestimation of the accuracy of the results such as narrow confidence intervals and a reduced alpha value resulting in an increased probability of a Type I error (Higgins and Green, 2008). Analysis six (in the results section), which assessed state forgiveness, produced significant results. However, sensitivity analysis, in which the two cluster trials were temporarily removed, did not result in a significant change in the overall result. For instance, the overall result for analysis seven with the two cluster studies was SMD -0.55; 95% CI -0.89 to -0.22; P = 0.001) and after removing the two studies results were SMD -0.65; 95% CI -1.04 to -0.25; P=0.001. Therefore, as there were no substantial differences in results for analysis seven, it was considered appropriate not to adjust for the effects of any clustering for the meta-analysis.

Dealing with Missing Data

All studies were assessed for missing data such as selective reporting of outcomes or missing summary data (i.e. standard deviations) for outcomes as well as dropout rates and whether authors applied intention-to treat analysis.

Assessment of Heterogeneity

Evidence of between-study heterogeneity was assessed using the I² and alpha value from the Chi-squared test. A threshold of I² >50% combined with a significant p-value from the Chi-squared test was set as evidence of substantial heterogeneity. In cases where there were significant levels of heterogeneity, further investigation was carried out (i.e. dividing studies into subgroups) or, if appropriate, studies were not combined (Higgins and Green, 2008).

Data Synthesis

When combining studies the decision to use a fixed or random-effects model was dependent on the levels of heterogeneity observed. A fixed-effects model was used where there was no statistically significant heterogeneity present (i.e. $I^2 <50\%$); in cases where I^2 was >50%, a random effects model was applied.

In sum, the third phase of this thesis involved both a research review and metaanalysis. The review synthesized existing data from quantitative research concerning the effectiveness of forgiveness interventions in promoting mental wellbeing. The strengths and weaknesses of the research designs employed in the primary research were also appraised. Following this, a meta-analysis was conducted, which provided an integrated and quantitative summary of results from RCTs evaluating the effectiveness of forgiveness in promoting different aspects of psychological wellbeing (Hakim, 2000).

Chapter Summary

In this chapter I have addressed a number of philosophical and methodological concerns and outlined the sequential mixed methods approach used in the present study. Each of the three phases of research were then described alongside the reasons why this design was used. In the next three chapters, I will present the results of each phase of the research.

CHAPTER 4

QUALITATIVE STUDY RESULTS

Introduction

In this chapter I will present the results of the analysis of interviews with the secular/atheist and religious/spiritual participants. I will begin by providing an outline of the interpersonal hurts experienced by the participants and their demographic details. The section will then present the participant's definitions of forgiveness as well as their real life state forgiveness experiences. Next, participant's experiences of barriers to forgiveness and the outcomes of unforgiveness will be described after which I present the findings regarding facilitating factors and the respondents perceptions and experiences in terms of the effects of forgiveness on their mental wellbeing. Key similarities and differences relating to influences on and outcomes of forgiveness between different participants will also be highlighted. The final section of the chapter will provide a summary of the qualitative results.

Aims of the Qualitative Study

The aims of the qualitative study were to: 1) explore factors influencing state forgiveness as well as how forgiveness is defined and experienced among religious/spiritual samples and a secular/atheist participant; and 2) to explore the perceived effects of practicing state forgiveness on a variety of mental wellbeing outcomes.

Descriptions of Interpersonal Hurt

Participants described experiencing less severe types of interpersonal transgressions, that is, violations of a certain set of rules or expectations that govern interpersonal

relations (Rusbult et al., 2005) as well as more intense forms of offenses such as verbal, physical and emotional abuse. For instance, three male participants described experiencing parental love deprivation and indicated that they had felt 'angry' and 'resentful' towards their fathers because of the way they felt they had been treated by them. Brandon (ACIM) 'judged' his father because his parents separated when he was younger and he 'blamed him for it all'. He described viewing his father as a 'passive and unemotional man' who was 'not there for any us', which left the participant feeling abandoned both physically and emotionally. Similarly, Jax (Buddhist) also described his father as being 'emotionally unaware' and thus his expectation that 'a father should be kind and loving' was not met. Whilst his parents had not separated, this participant also indicated being emotionally neglected by his father. Alan (Theosophist) described experiencing emotional abuse by his father who he experienced as not treating him in a loving and kind way throughout his childhood. For instance, the participant described being told by his father to 'stop crying, boys don't cry only girls cry, you're acting like girls, stop being a wimp' as well as being told that 'you're "expletive" weird' after telling his father about a bad dream. This participant said that he was 'quite sensitive as a child' and felt he was 'more emotionally orientated than his father would have liked'. He also said that he had experienced a period of 'mental breakdown', which he largely attributed to the problems experienced with his father. The previous three examples indicate a violation of norms in which the participants expected their parent to behave in an emotionally intelligent way. Instead, each of these men described how they had experienced (repeated acts of) emotional neglect in which their fathers did not express positive feelings or show any emotions towards them. In the case of Alan, he experienced his parent as having humiliated and criticised him as a child, and as not recognising his individuality, which was perceived to have psychologically harmed the participant quite substantially.

Five of the participants indicated experiencing interpersonal transgressions and varying forms of abuse. For instance, Bill (ACIM) gave a variety of examples such as being unjustly arrested by police as well as being verbally abused by his former partner who he said took his house and children away from him. Similarly, Quinn felt hurt because he felt he was mistreated by his former partner in that she refused to allow him to see his son, which resulted in further conflict and exacerbated feelings of 'anger' and 'rage' towards her. Amira, felt betrayed by her husband and his family, and felt anger and resentment towards them because of numerous offences she said they had committed against her such as verbal and physical abuse:

There was one point his sister physically hit me. The second time it bothered me because he (husband) was standing there but the third time, they spat in my face and everything in front of my children. I'll never forget that. (Amira; Muslim)

The Muslim respondent, Rana, also described being emotionally and physically abused by her partner. She stated that he 'constantly put me down about my looks' and made her feel worthless by saying she was 'a bad mother'. Lyndon (Theosophist), described feeling 'bitter' and 'emotionally disturbed' after being seriously deceived and manipulated by a former partner who had agreed to have a romantic relationship with him because she wanted to get a visa in order to live in the UK.

Three participants described experiencing less severe transgressions. For instance, Trisha (ACIM) gave a variety of examples one of which included a seemingly 'minor' transgression that involved letting cars through on her way in to work and not being acknowledged for her act of kindness. This happened repeatedly over long periods of time, and it was the lack of acknowledgement of her act of kindness that caused her to feel intense anger, which lasted for a considerable period of time. Another example given by Trisha involved her employer reacting with anger towards her because she chose not to accept a promotion at work, which caused her to feel upset. Stuart (ACIM) described experiencing 'conflict for years' with a friend and work partner with whom he was co-teaching. He said that he felt 'abandoned and ignored' and that she had failed to maintain her work responsibilities, which appeared to 'trigger a lot of ill feeling' in him. Alfred (secular/atheist) experienced a lack of forgiveness because he was rejected by his former partner. He stated that she had also behaved inconsiderately towards him on a number of occasions by asking him for advice regarding her 'newer romantic interests', despite knowing he wanted to continue having a romantic relationship with her. Thus, there was an expectation on the part of this participant that his former partner should show some thoughtfulness towards him.

In sum, participants described how they experienced less severe forms of interpersonal transgressions as well as more intense forms of interpersonal abuse. The types of offenses experienced by participants related to parental love deprivation in the case of three respondents, hurt by romantic partners in the case of six participants, and feelings of neglect within the context of work relationships in the case of two participants.

Definitions of Forgiveness

Participants' definitions of forgiveness varied, irrespective of their real life experiences. For example, all respondents defined forgiveness to be a process involving relinquishing resentment based emotions. However, two participants (Jax and Alfred) did not explicitly state that it involved a 'change of heart' whilst the remaining nine participants believed it to be a process that necessarily resulted in developing positive regard. Meanings of forgiveness that emerged from the data highlighted similarities and differences among the different groups of participants. For example, common themes found among all ACIM students were that forgiveness entailed unconditionally loving the offender; different ACIM participants stated the importance of extending the 'love of God within us to everybody' (Bill, ACIM); 'letting go of a lack of love (i.e. resentment) so there can be a wholehearted response to love' (Stuart, ACIM); 'see(ing) behind a person's errors' (Brandon, ACIM); 'see(ing) the person in their true light, totally innocent' and 'identifying with spirit' (Quinn, ACIM). Forgiveness for these participants meant acknowledging the hurt caused but at the same time seeing beyond what they termed a 'mistake' and instead choosing to love or feel compassion for the other person, which was justified on the basis of a belief in human (spiritual) connectedness.

Both of the Theosophy participants also tended to define forgiveness in terms of 'an inner thing' that involved making a decision to 'let go of bitterness, resentment, and any such thought of vengeance (which) should be replaced by compassion' (Alan, Theosophist). For the Buddhist participant (Jax) forgiveness was described as 'letting go' of negative emotions such as anger and resentment. Similarly, Muslim participants described forgiveness as 'letting it go, freeing yourself from anger,

hatred' (Amira) and to 'try and put it behind you' and 'be positive' (Rana). Alfred, the secular/atheist participant felt forgiveness to be a state of 'neutrality' (e.g. not feeling angry), which also involved trusting the other person.

The definitions of forgiveness that participants gave were consistent to a large extent with conceptualisations in the research literature that define forgiveness as a process of letting go and developing positive regard (Enright and the Human Development Study Group, 1991; Wade and Worthington, 2005). Only two participants described forgiveness as being either a state of neutrality such as not feeling angry (secular/atheist) or letting go of resentment (Buddhist), which is consistent with research exploring lay understandings of forgiveness (Mullet et al., 2004). Overall, differences in definitions of forgiveness were observed such that ACIM participants placed greater emphasis on extending love, whilst the Theosophy and Muslim participants gave equal weight to both letting go and developing compassion or positive emotions. In the case of the Buddhist and the secular/atheist participants, a reduction in negative state appeared to be given greater importance.

State Forgiveness Experiences

In addition to eliciting participant's views about the concept of forgiveness this study was also interested in their real life experiences of forgiveness. All of the participants that took part in the qualitative study stated that they had experienced forgiveness in response to being hurt. Overall, respondent's descriptions of their lived experiences suggested that it was a process entailing a reduction in event specific negative emotions and cognitions, and necessarily involving a 'change of heart'. There were, however, some variations in accounts. State forgiveness among ACIM participants

was very similar in that they all experienced a cognitive, emotional and behavioural shift. For example, many described letting go of anger and hatred and developing an affectionate, friendly and non-judgmental view of the person who hurt them. One ACIM participant described forgiving his father as entailing 'seeing him in a nicer and more loving way' and 'just accepting him as he is' (Brandon). Another experienced forgiveness as 'loving (former partner) in an environment that had been so hostile' (Quinn) and was able to maintain friendly relations with her, which also appeared to help with seeing his son. Three other ACIM participants (Bill, Stuart and Trisha) were able to 'let go of the past' and develop understanding and love for the people that hurt them. Such experiences were also consistent with ACIM participant's definitions of forgiveness.

The two Theosophy respondents described similar experiences, which also concurred with their beliefs about what forgiveness is. For instance, Alan described the 'fading away of unforgiving' thoughts and emotions whereby he no longer felt any 'animosity of any kind towards him (his father)' and he was able to develop 'an accepting and compassionate view of (his father)'. The second Theosophist, Lyndon, was able to 'let go' of all the 'hatred and enmity' he felt and was 'completely compassionate' towards his former partner although they did not maintain any form of relationship.

For the Buddhist participant forgiveness was defined as 'letting go', but his real life experiences suggested that it was an ongoing process which when experienced involved relinquishing anger as well as behaving in a more 'positive' way towards his father such as experiencing a sense of openness and pleasure (Jax). Muslim participant's experiences of forgiveness also entailed letting go and developing

positive regard, which was again in line with their understandings of forgiveness. For example, one Muslim respondent stated that the 'negativity' (i.e. anger, hatred and so forth) was replaced with 'positivity', which included understanding and trusting her husband (Amira). The second Muslim participant was also able to 'let go of any grudges' and was able to maintain friendly relations with her husband when he visited their children (Rana). In slight contrast to the definition of forgiveness provided by Alfred, the secular/atheist participant, his real life experiences suggested that forgiveness entailed letting go of anger and acting warmly towards his former partner. Thus, for all participants, their lived experiences of forgiveness involved both a reduction in negative thoughts, emotions and behaviours as well as pro-social cognition and affect (i.e. an increase in compassion and kindness).

In some respects, there were important differences between participants. For instance, new religious groups (i.e. ACIM and Theosophy participants) and the Buddhist participant practiced unconditional forgiveness in which they aimed to let go of anger, resentment and judgments, and fostered love and compassion for the other. Forgiveness for these participants was not determined by whether or not the offender made amends. Instead they appeared to be motivated by a belief that forgiveness is a virtue that would benefit both themselves and others. Muslim participants also appeared to view forgiveness as the right thing to do and something that was necessary because they believed that to be forgiven by God they would need to forgive others. However, whilst Muslim participants also considered forgiveness to be a process of relinquishing anger and hatred, certain conditions needed to be met, in that they considered an apology as an important factor in forgiving the other person. Thus, whilst there were differences on the basis of conditional or unconditional

forgiveness, these factors (i.e. motivations for forgiving, apology and so forth) seem to be facilitators of forgiveness rather than being constitutive of forgiveness per se.

Related to the latter points, for ACIM, Buddhist and Theosophy participants there appeared to be few differences on the basis of intra or interpersonal forgiveness, which were both interlinked. For example, whilst they practiced forgiveness within the context of ongoing and close relationships, it was very much an 'inner' process involving them changing their own emotions, thoughts and behaviours whereby they experienced reductions in anger, animosity, hatred and increases in affection, friendliness, compassion and warmth. This process did not require the offender as such to make amends. Rather, it was an inner process that the offending person often did not know about and in which the participants were able to continue the relationship, which was experienced as improved. The findings appeared to suggest that many participants practiced intrapersonal forgiveness within the context of ongoing interpersonal (and non-continuing) relationships without necessarily involving the offender in the process. For example, one ACIM respondent described developing understanding and love for both his former partner, other family members and the police who he believed had unjustly arrested him. One of the Theosophy participants met with his former partner one year after the incident and felt complete compassion for her although they did not maintain a relationship. None of the ACIM, Theosophist or Buddhist participants forgave on the basis of the offender making significant (or any) amends. Thus, for these participants intra and interpersonal aspects of forgiveness were very much interlinked and a 'change of heart' occurred irrespective of whether these participants had a future with the offender. It is, however, relevant to note that the forgiveness practiced by participants whilst not involving the offender in the process, did not mean overlooking or condoning the offence. The Buddhist participant for instance came to accept his father's emotional neglect and took steps to physically distance himself from him and surround himself in a more supportive and loving environment. Nonetheless he maintained a relationship with his father which was improved on the basis of his ability to learn to let go of factors that were previously causing him to react and perpetuate the negative resentment based emotions.

Overall, the findings suggest that for this group of participants a core feature of forgiveness is that it consists of a process of decreasing (repetitive) negative thoughts, actions and feelings such as vengefulness, enmity and anger, and replacing them with more positive thoughts, actions and feelings in the form of compassion and warmth.

Barriers to Forgiveness

The analysis of interviews with the secular/atheist and different religious/spiritual samples revealed a number of themes that appeared to inhibit state forgiveness. These were: blaming, lack of acknowledgment, powerlessness, ruminating, revenge, ongoing transgressions and physical proximity. A summary of each of the factors inhibiting state forgiveness is provided in table 4.

Table 4. Barriers to State Forgiveness

Blaming Others:

Criticising

Holding other person responsible for psychological state

Lack of acknowledgement:

Wanting recompense; acknowledgment of pain; understanding

Powerlessness:

No control to change state/situation

Ruminating over offence:

Constantly thinking about hurt caused

Desire for Revenge:

Wanting to hurt offender

Ongoing Transgressions:

Continuing to behave in thoughtless/unemotional way

Physical Proximity:

Requiring physical distance

Blaming

Blaming others emerged as a key barrier to forgiving among the Buddhist and ACIM participants. For these participants, holding the other person responsible for how they thought and felt and constantly 'attacking' them and 'blaming' them (Bill, ACIM) appeared to intensify and 'justify the anger' (Brandon, ACIM) and perpetuate the suffering they experienced. These participants appeared to feel that despite the initial hurt experienced, the resulting (ongoing) anger that they felt was caused by their own thought processes. One ACIM respondent illustrated how focusing on his former partners faults was causing more conflict:

It was so easy for me to you know it's "her her her her her" (i.e. blame her) that way, I forgot that I have a choice, I forgot that I have a decision to choose peace instead of this (i.e. unforgiveness). (Quinn, ACIM)

Continually criticising the other person and focusing on what they had done wrong to them was described as making them feel more resentful and experience more suffering:

The view that I was trying to cultivate before was that he's bad, he's wrong, he's not a good dad. For so much of my life I would rather have the feeling that I am right but be in pain. So I'm right, you're wrong but pain just keeps arising again and again. Whereas now there's more a move towards sort(ing) my end of it out, that's all I can do. (Jax, Buddhist)

Another ACIM participant felt that holding on to a grievance and continually blaming others was serving to produce more negative effects:

If you have a grievance with someone, if you want to live life doing the blame game, deflecting your guilt to everybody else then that's the way to live but the more we blame the more guilty we feel, the more worse we feel, which produces more effects. (Trisha, ACIM)

Blaming was also perceived as having a role in maintaining the belief that their happiness could only be derived from a change in external conditions (i.e. the offender).

Lack of Acknowledgement

One ACIM participant stated that unforgiveness was perpetuated as a result of him wanting the offender to acknowledge the pain he had experienced and for some form of recompense. He felt that he was owed something from the offender as a result of the harm caused, which contributed towards his unforgiveness. Underlying this theme appeared to be the belief that the offender needed to change in order for the victim to let go of any resentment based emotions:

We think if we forgive we're kind of holding an IOU. If we forgive it's like we're tearing up the IOU of our own free will and giving up the hope that we are going to get some kind of recompense. We want our wounded self-esteem to be restored and forgiveness means giving up the claim of that restoration. That's the payoff in unforgiveness. When you aren't holding the IOU anymore you don't have any claim on them to give you acknowledgment. (Stuart, ACIM)

Participants also alluded to how a lack of appreciation of their problems, which appeared to result from how the offender had treated them, was a barrier to forgiveness. Alfred, the secular/atheist participant, stated that the offender had not taken account of how he felt and failed to recognize and understand his perspective, which perpetuated the resentment he experienced:

It felt like a betrayal, like she really hadn't understood me and who I was; this was when it annoyed me even more. It became a lot more obvious she clearly hadn't thought about my perspective on this at all. (Alfred, secular/atheist)

Similarly, Amira also stated that she felt she was not listened to and that the offenders did not want to understand her perspective:

None of them gave me the opportunity to talk, none of them had the decency to come to me and say "tell us your side". (Amira, Muslim)

Powerlessness

Participants also alluded to how a sense of powerlessness could act as a barrier to forgiveness. They described feeling they had no control to change what they were thinking, feeling or generally experiencing. For instance, one participant, who also cited 'blame' as a barrier to forgiveness, felt unable to shift his attention away from constantly focusing on what the other person had done to him, which appeared to cause him to feel that he had no control over his psychological state:

If I focus on what the other person is doing then all the power is in their hands; they have complete control over me whilst I'm focusing on what they have done. (Jax, Buddhist)

Another participant felt that unforgiveness negatively affected his psychological health and also indicated how feelings of powerlessness appeared to be inhibiting his ability to forgive. He felt he had no choice in terms of being able to change his experience of unforgiveness and the suffering this was causing him and that he had no power to change his state and be able to influence his wellbeing in order to improve it:

I'm in a situation now, which I'd rather not go into, I'm struggling with it. It (unforgiveness) does impact my wellbeing a lot. You'd think I would want the wellbeing of forgiveness. It seems these go deeper than just your conscious volition, it seems there's roots in you where you feel you can't do anything about them. I don't like the effects on my wellbeing. (Stuart, ACIM)

Ruminating Over Offence

Another block to forgiveness that was evident in the participants' accounts, which is in some ways related to blaming, was their ruminating over the wrongdoings. For example, one of the Theosophist participants described how during his 'mental breakdown' period he kept thinking about how his father had treated him:

It affected me in the sense that I had not forgotten (how father treated him) so it had remained imprinted in me. At the age of 23 when I began to feel increasingly depressed, I began to replay it sometimes in my mind, various things and things like that would come up out of my memory. (Alan, Theosophist)

Another of the Theosophist participants described feeling overwhelmed and totally preoccupied with negative thoughts about the conflict with his former partner:

Every time I tend to go over the event in my mind, that's how you start to feel (bitter, fuming). In a day you can probably feel like that most of the day I think. (Lyndon, Theosophist)

Desire for Revenge

There was also an indication that participants held on to unforgiveness because they felt the offender to be undeserving of forgiveness and described a strong desire for revenge. For example, one of the Muslim participants stated that she wanted to hurt one of the offenders for the pain her and her family endured as a result of his actions, and that she could not let go unless he was punished for the harm he had inflicted:

I've got this vengeance against him. It makes me feel angry towards him. Anybody mentions his name in my house I swear to God I get so angry. I think when God gives justice to what he did to me and my family...if he was going into paradise I swear to God I would stop him, I would say to God I don't forgive him, how could you let him go to paradise? That's how strongly I feel. (Amira, Muslim)

Ongoing Transgressions

The secular/atheist participant stated that he found it difficult to forgive because of ongoing transgressions by his former partner who he felt had continued to behave in a thoughtless way towards him. For instance, after ending their relationship he felt that she disregarded his feelings by asking him for advice about her new romantic interests:

It was pretty much her continually bringing stuff up again, asking me things about; "Oh I like this guy what do you think I should do". It (i.e. anger) lasted longer than it should because she'd quite often ring up asking for advice again on things along that nature. It would have faded a lot faster if she hadn't kept pushing the saucepot as it were. (Alfred, secular/atheist)

The Buddhist participant also spoke about how his father's lack of concern for his emotional welfare was an ongoing issue to which he was continually applying forgiveness. Whilst he limited the time spent seeing his father, when they did meet it would often result in the respondent feeling hurt because he felt his father was emotionally unresponsive, resulting in feelings of unforgiveness:

It's ongoing actually. My dad, he's very very focused. He's very emotionally unaware. (Jax, Buddhist)

Physical Proximity

Similarly, participants experiencing continuing transgressions also indicated that the lack of physical space was a barrier to forgiveness. For instance, the Buddhist participant indicated that he needed to reduce the amount of time he spent with his father at home and in his work environment:

We (participant and father) no longer work together. I clearly said I cannot work with you and that's really helped because when we were at work he's very bloody minded. I'm usually quite stressed and that makes the whole situation worse. I know I can't respond creatively, I know that I can't, I'm not gonna have time in the middle of a busy day to think I'm gonna be mindful with it, it doesn't work. We see each other less now. (Jax, Buddhist)

One Muslim participant (Rana) chose to end her marriage with her abusive partner whilst another Muslim participant stated that the person she could not forgive lived relatively close to her, which resulted in feelings of fear:

At points I would say; "Stop, you don't want to get hurt by these people again". And I'd cut them off again. I was scared of them living down the road from me, only ten doors away, scared of what are they gonna do next, scared for my kids, for my family. (Amira, Muslim)

In sum, the majority of the factors described by participants as barriers to forgiveness were: criticizing and holding the offender responsible for their state of unforgiveness, continually thinking about what the offender did, wanting the offender to accept or recognize the harm caused and for them to understand their perspective and feelings, wanting them to be punished, requiring physical distance as well as feeling powerless to change their condition. Underlying many of the barriers to forgiveness appeared to be the belief that participants lacked control over whether or not they could forgive and that forgiveness could only be determined by a change in external factors (i.e. the offender changing or being punished).

Perceived Effects of Unforgiveness

All of the participants who described barriers to forgiveness also spoke about the negative consequences that a lack of forgiveness had on their mental health and wellbeing. Analysis of participant's accounts revealed three key themes that appeared to be related to the effects of unforgiveness. These were: negative impact on mental health such as how participants felt; negative impact on participant's mental health such as participant's cognitive abilities; and barriers to growth that were both psychological and social. These themes are presented in Table 5 below. All participants spoke about the negative effect of unforgiveness on their psychological health and there appeared to be no obvious distinctions in these themes on the basis of religious/spiritual affiliation.

Table 5. Perceived Effects of Unforgiveness on Mental Wellbeing

Negative effect on mental health/affect:

Felt emotionally disturbed, Depression, Stress No sense of peace, Fear, Guilty, Lack confidence, Depletes energy, Felt static, Worse, Bitter, Worthless, Blood rushing through body, Rage, Darkness

Negative effect on mental health/cognitive:

Inability to think clearly, Suicidal thoughts Thoughts of harming others

Barriers to growth:

Stops you from moving on, Freezes mind, Less dynamic Stuck in a rut
Lack of meaning & purpose in life
Unable to form new relationships
Transferring anger/bitterness into new relationships
Constant falling out

Negative Effect on Mental Health/Affective

All participants described a variety of affective states resulting from unforgiveness, which on the whole, appeared to prevent them from adequately functioning emotionally. One Theosophist participant illustrated this theme by stating the following:

Fuming, you know when you're in a state of bitterness, when you can't really see or reflect properly but you're just completely bitter and emotionally disturbed. (Lyndon, Theosophist)

Many said that they felt depressed (Alan, Theosophist), stressed and 'no sense of peace' (Bill, ACIM). Some also described feeling fear (Brandon, ACIM), guilt (Trisha, ACIM) and a lack of confidence (Rana, Muslim) whilst other examples included feeling a 'lack of energy' (Jax, Buddhist), 'static' and generally 'less dynamic' (Lyndon, Theosophist).

Stuart, described how negative emotions of unforgiveness made him feel that he could not change his state:

The more I'm feeling something strongly negative with somebody the more I stay stuck with that unless I sit down and take time with it. (Stuart, ACIM)

Amira, indicated that unforgiveness resulted in a strong physiological response whereby she experienced feeling an intense negative reaction towards the offender:

The difference I feel towards him (brother in law) and feel towards my sister in law for example, I can talk about her and be happy and nothing will run through my body but when I talk about him it's like this blood rushes through my body. (Amira, Muslim)

Another participant said that he was unable to sleep, experienced intense anger as well as mood disorder:

The last four months I went through a very dark night...I was sleeping nearly two hours a night. A lot of rage, a lot of darkness. (Quinn, ACIM)

Trisha, indicated that holding on to grievances and not forgiving caused unhappiness and a lot of fear, which she described as a very unpleasant state:

When we have a grievance we are unhappy, we are really unhappy. In order to support the grievance we have to defend it, which means we have to attack again, defend it hotly and get support for our grievance, which is a horrid state because we are afraid. (Trisha, ACIM)

Negative Effect on Mental Health/Cognitive

In addition to highlighting how a lack of forgiveness negatively affected the way that participants felt, they also indicated that it negatively affected aspects of their cognitive health such that their thought processes appeared to be overwhelmingly negative. For example, many appeared to experience an 'inability to think clearly' (Rana, Muslim) whilst others indicated the presence of suicidal thoughts and of 'harming others' (Quinn, ACIM). On the whole, and linked to the previous theme, participants appear to have experienced a state whereby they were unable to feel or think constructively. One participant highlighted how the two were interlinked:

Whilst I can't let something go or forgive there's always a portion of my energy that's going in to maintaining that, like the chattering mind, I think that is basically it. My mind, it's like a propaganda machine, it comes up with "they said this and I said that and if they say this I'll say that" and a huge amount of energy goes in to that and even if you're not thinking about it, it's this feeling and yet I do still get it with my dad, it's that telling myself who he is and why he's wrong and why I'm right. I think it goes on in so many areas and it's a slow sort of sapping of resources like emotional and cognitive. (Jax, Buddhist)

Barriers to Psychological Growth & Social Wellbeing

A recurring theme among participants was that a lack of forgiveness is a barrier to growth whereby many felt they were unable to develop or move forward psychologically or in terms of their social wellbeing. For instance, participants spoke of how unforgiveness 'freezes your mind' making you 'less dynamic' (Trisha, ACIM) as well as 'emotionally and cognitively slow' (Lyndon, Theosophist). One participant described how her vengeance and anger made her feel as though she could not move forward:

It stops you from getting on with life, if you can't forgive you're stuck in that rut, stuck there in that place. I feel that. I felt I moved on so much with my sister in law (and husband) from where we were but I can't move on from that particular person (brother in law). (Amira, Muslim)

Others also commented on how it negatively affected wider dimensions of wellbeing such as general relationships because the anger and resentment they felt was preventing them from forming new relationships. This was illustrated in a statement made by the secular/atheist respondent:

I do remember being quite bitter, which didn't help with the ability to form relationships with anyone else. (Alfred, secular/atheist)

Overall, participant's accounts suggested that unforgiveness did not just negatively effect how they felt, it also appeared to have a detrimental effect on their cognitive health and social wellbeing.

Factors Facilitating Forgiveness

As well as highlighting themes and patterns in relation to barriers and the effects of unforgiveness, the analysis of the interview data also indicated a number of strategies utilized by the secular/atheist and religious/spiritual participants that appeared to be linked to state forgiveness. Of the participants that described barriers to forgiveness, the same respondents also spoke about factors that promoted their forgiveness practice. Key themes assisting forgiveness among respondents were: a sense of connectedness with others, focusing on positive qualities, accepting responsibility, acceptance of karma, beliefs about being of benefit to others, meditation, self-observation, prayer, empathy, persistent effort (by the offender) to repair the situation as well as talking to and support from friends. These themes are presented in table 6.

Table 6. Religious & Secular Strategies to Forgive

Connectedness:

Spiritually similar/same essence

Focusing on positive qualities in other:

Seeing other as spirit (love), pure & innocent Seeing/remembering other as good/nice person

Accepting responsibility:

For what you think, feel & experience Responsibility for how you respond I choose the feelings/thoughts that I experience

Belief in karma:

Actions have consequences/response determines psychological state (I.e. happiness/suffering)

Helping others

By not attacking back/responding with hate

Meditation:

Sitting meditation; Focusing on breath; Awareness of body sensation Loving kindness meditation

Self-observation:

Looking within Observing thoughts/feelings, behaviour & letting go Understanding self/reaction to things

Praver:

Internally communicating with God

Empathy:

Understanding offender's actions/perspective

Persistent effort to repair relationship:

Making amends

Talking & support:

Expressing thoughts & feelings

Connectedness with Others

A key theme that emerged among ACIM and Theosophist participants as facilitating forgiveness was a sense of connectedness with others. A central tenet of these participant's belief systems was that the essential nature of all humans is a spiritual self, that is, that all humans are the same on the basis that they emanate 'from the same essence' (Lyndon, Theosophist)

The belief, which one participant described as the 'oneness and divinity of all life' (Alan, Theosophist), was an ongoing (cognitive) practice that appeared to be manifested through forgiving others. By viewing the offender as spiritually similar they were able to initially connect with the other person at an abstract level, which appeared to result in a cognitive shift that then enabled them to let go of ruminating over the harm caused as well as feelings of resentment, and instead develop understanding and love for the person. In response to describing how he forgave, one ACIM participant stated the following:

We are all connected, we are all one, and the only way that we can experience ourselves as separate is in bodies. We forget who we truly are. We're not a body, we are a spirit and that spirit is perfect love. (Bill, ACIM)

Another participant spoke about how a regular practice of changing her perception so that she recognized unity with others helped her to forgive:

It is as normal as breathing to recognise that there is unity with everyone so that I don't even have to think about it anymore but it is regular. It's a change of perception. Yes (belief in unity helps deal with situations) because it's changed my seeing, it's changed how I see and perceive the world and how I perceive those around me. You either are a collection of cells and separate of other people doing things to you or you're not, and we're not. (Trisha, ACIM)

Stuart also indicated that belief in a divine nature, as opposed to an understanding of self in purely physical terms, also facilitated forgiving others:

The Course, its term for us is that we are "sons of God", using Christian terminology and applying the terminology that we're used to applying to Jesus Christ, thinking of him as having this divine nature and being close to God, his nature being holy and divine, it applies that to all of us. That is our real nature, we are sons of God, one with the other sons of God, one with God. (Stuart, ACIM)

Focusing on the Positive Qualities of Others

Similarly, another key strategy utilised by two Muslim participants to help assist forgiveness entailed a cognitive shift whereby they chose to focus on the positive qualities of the other person. For one participant this involved remembering that her husband 'was a good man' (Amira) whilst another stated:

It's probably that I try not to look at the negative side of things but focus on the positive side. He (husband) did have a nice side to him and there were good times that we had. (Rana, Muslim)

Accepting Responsibility

Another theme evident among the participants' responses was the practice of accepting responsibility. For example, respondents felt that 'taking responsibility for (their) own thoughts' and 'reactions' allowed them to 'let go of judgments and condemnations', 'wanting to be right' and feeling like 'victims' (Brandon, ACIM; Trisha, ACIM), the latter being associated with causing them 'more pain' (Jax, Buddhist). Both ACIM and Buddhist participants appeared to feel that they had a choice and a duty to respond differently, such as not attacking back and not ruminating over anger, revenge, hatred and so forth, and that they had control over how they reacted. Participants acknowledged the hurt experienced but also alluded to the fact that when experiencing a transgression or abuse the suffering experienced by the victim mostly arises from ruminating over what happened, getting angry, wanting to take revenge and so forth. And so the responsibility for these participants lay in choosing to think and behave in a more constructive manner, which enabled them to let go and experience less pain. For instance, Quinn who also spoke about how continuously blaming the offender was preventing him from forgiving also stated that accepting responsibility enabled him to recognize that he had a choice in how he responded:

I'd look upon it (i.e. offense) as a mistake; I'm not responsible for what another person does but what I am responsible for is my reaction to it. (Quinn, ACIM)

This ability to choose to react differently may well have been enhanced through their practices of meditation.

Belief in Karma

Two participants explicitly stated that belief in karma was a key factor that facilitated their experiences of state forgiveness. A key factor underlying participant's accounts with regard to the theme of karma is that actions have consequences. Participant's beliefs that how they respond will effect their own level of happiness or suffering (as is the case with the offender) appeared to be an important factor that influenced forgiveness. One respondent who felt emotionally abused by his father stated that any suffering that he experienced as a result of the way he was treated was determined by his own past actions. By accepting what he thought to be the consequences of his own actions, the participant did not blame his father, which appeared to prevent him from feeling resentment:

If we accept Karma and there is no injustice and everything proceeds as it should, in accordance to our own past actions and reaping what we had sown in the past, the thing that happens to us is just and right and had to happen. Even if we wish it hadn't or even if at the time we thought it was unfair. That's one of the things that's affected my overall view, including relationships with people and so stopped me feeling antipathy or resentment. (Alan, Theosophist)

Another participant who felt he was manipulated and deceived by his former partner, and who also stated that ruminating over the hurt and not reflecting on reincarnation/connectedness were barriers to forgiveness, believed that the psychological pain he experienced was a consequence of his past actions. He viewed his state of suffering as an opportunity to forgive and develop good karma. His 'defects' (of the past and present) or his 'bad karma' could be minimised through forgiveness, thus enabling him to evolve as a human:

She's just a soul just like me who reincarnate with defects, which she needs to perfect in her life. Same as me, I was born with defects which I need to perfect in life and that the whole process of evolution is about perfecting our defects. These are the little reflections that helped me to forgive. It put everything into more of a universal context. (Lyndon, Theosophist)

Also related to the concept of karma, participants spoke of universal laws whereby a person's intent and actions have consequences in that they result in either happiness or suffering. For instance, an ACIM participant stated that 'God has one law and that is, what you give is what you receive' (Bill, ACIM). For this participant, forgiving was essential as he believed that how he chose to react (i.e. with anger/criticism or with compassion) would have a direct effect on his own wellbeing. Thus, to respond with resentment would increase his own suffering.

Helping Others

The desire to be of help or service to others also appeared to facilitate forgiveness. Participants beliefs that good intent or action would result in good karma (i.e. happiness), appeared to be manifested through their practice of wanting to help others, which was also linked to their beliefs about connectedness. For instance, one of the ACIM participants said that forgiving, which included not attacking back or blaming the offender, will help the offender to 'awaken' meaning they will feel more connected and recognise their own and their victims 'true nature' (i.e. love), which would also assist the offending person to stop attacking (i.e. being unforgiving):

By me not giving you back that attack, i'm forgiving you and I'm helping you to wake up. That's what forgiveness is. Forgiveness helps the other person to awaken also. So what happens is you may walk away, and you'll know your attack had no effect on me, that's what's gonna change your mind. If I attacked you back, you're walking away full of rage and anger. (Bill, ACIM)

For the Theosophist participant helping others appeared to involve 'renouncing all separate existence' and 'purifying himself' (i.e. developing good karma). Thus, whilst this respondent stated that viewing the offender as being separate and ruminating over the offense, were barriers to forgiving, a key way in which Alan facilitated his forgiveness process was by the desire to help others, which was related to his beliefs about connectedness, and forgiveness appeared to be a key way in which these beliefs were manifest:

I'm interested in helping others and purifying myself so I can be a better use and service to others. (Alan, Theosophist)

Meditation

Meditation also emerged as a key strategy utilised by all ACIM participants, as well as the Theosophists and the Buddhist respondent to help facilitate their state forgiveness process. For many, meditation was an ongoing regular practice that involved sitting meditation in the form of being still, visual meditation, focusing on the breath and/or being aware of body sensations. Participants also utilised these techniques whilst engaging in day-to-day activities. A number of participants spoke of the importance of being aware of body sensations. For instance, one respondent talked about mindfulness of breathing meditation that entailed sitting and trying to focus on his breath whilst at the same time being aware of body sensations such as discomfort or itchiness. By allowing himself to feel the sensations as they were arising, as opposed to blaming the offender (which he said was hindering his ability to forgive and causing him more pain), he was gradually training his mind to be non-

reactive and calm, which he was then able to apply in situations of conflict (such as with his father):

The real key to it is being aware when it happens and just feeling stuff as it happens and you don't get that backlog, that resistance that builds up. The advantage of that is that it also helps in that moment. When someone shoves you out the way you don't immediately react, you feel what it's like. (Jax, Buddhist)

Another participant (Lyndon, Theosophist) practiced 'loving-kindness' meditation in which he engaged in thinking positive thoughts as well as 'feeling and sending positive energy' to the offender, whilst for others it included 'sitting quietly' and 'picturing the person as totally innocent' (Brandon, ACIM). Meditation was a key practice for all new religious and Buddhist participants. It appeared to help them to control their mind so that it was more calm, which perhaps enabled them to respond in a more constructive way as opposed to them harbouring unforgiving thoughts, emotions or behaviours.

Self-Observation

Amongst ACIM, Buddhist and Theosophy participants another form of meditative practice involved self-observation. By watching their thoughts, feelings and behaviour and reflecting on the content of their thoughts and how they were reacting (as opposed to focusing on the other person's faults) they were able to change them and let go:

I was watching to see how I felt. Every time they came through and I wasn't acknowledged and I was watching myself getting more and more annoyed and I was observing myself. (Trisha, ACIM)

Another ACIM participant also indicated how he observed his thoughts, which perhaps enabled him to detach himself from the fear that was arising and helped him to forgive:

Mostly I'd be watching my thoughts, watching my feelings within me, see what's going on for me. It'd be you or something outside that would trigger something and then I remember I know that this is unconscious guilt, fear that's coming to the surface that I have the opportunity to heal, if I truly forgive. (Quinn, ACIM)

Thus, it appeared that self-observation gradually enabled participants to take a step back from initial feelings of anger or rage, and to calm the mind, which may have allowed them to respond in a more pro-social manner. In contrast to the previously described sitting meditations, self-observation was mostly practiced throughout the event although the two may well be interlinked. For instance, it may be that participants initial sitting meditations of observing or feeling sensations equipped them to practice self-observation during times of conflict. It may also be the case that through this practice participants were able to recognise that they have a choice in how they respond and therefore responsible for how they react, which may be related to the theme of accepting responsibility.

Prayer

Prayer was also a common theme found among both ACIM and Muslim participants.

This involved sitting still and internally (i.e. psychologically) communicating with a

God about the issue. One Muslim participant stated the following:

I prayed a lot at that point. I put all my trust in God. I prayed to God: "whatever's right for me do it, let it be and whatever's wrong, take me away from it. If it hurts me then give me peace inside myself to let it go. (Amira, Muslim)

One of the ACIM participants also indicated how he prayed to God so that any barriers in the way of him being able to forgive the offender would be removed:

I prayed and I asked God to help me to see my dad in inner light, in a purer light. I asked to see this person in a loving way, I wanted to love the person and totally forgive them and just get on with it and I wanted to remove any blocks in the way. (Brandon, ACIM)

All religious/spiritual participants sat and internally communicated with a higher being believed to be God; they discussed their concerns and sought guidance on forgiving whilst others read a prayer that appeared to have resulted in a cognitive shift. Participant two for instance stated that by praying for those that hurt him, it helped him to feel better within himself:

I learned that if I prayed for people I felt harmony. That if I prayed for good things for people, all these things I felt would disappear. (Quinn, ACIM)

Thus, the purpose of participants practicing prayer was to seek guidance in forgiving the offenders. The desire and focus on experiencing a cognitive shift during this sitting practice coupled with allowing themselves to feel any negative emotions that may have arisen during prayer may also have contributed towards relinquishing any resentment based emotions.

Empathy

Two participants explicitly referred to empathy as a facilitator of forgiveness. One of these participants described how he chose to think intensely about what had happened in order to try and understand his former partner's position and why she may have behaved in the way she did, and to consider the importance of what had happened:

I decided to reflect, deeply on the whole situation in order to put myself in her shoes and try to really put everything into perspective. I tried to reflect. (Lyndon, Theosophy)

In response to what helped to facilitate forgiveness, Jax stated that empathy was an important factor that helped him to understand what may have motivated the offender, why they may have behaved in a particular way, what factors may have influenced their behavior and so forth:

I try to find out what's going on; how might they see the world differently, why have they done this, what's happened in the past that made them do this, actually is what they've done perfectly ok and I don't like it. I think if you can work it out that way it's much easier to let go. (Jax, Buddhist)

Persistent Effort to Repair the Situation

In contrast to the previously mentioned themes where most participants forgave without expecting a change in external conditions, two participants described how proving the importance of the relationship through persistent effort was an important facilitating factor. One Muslim participant (Rana) highlighted how her former husband's change in behavior towards their children such as spending more time with them, taking them out as well as starting employment, enabled her to forgive him. Another Muslim participant, who also spoke about how a lack of acknowledgment and wanting revenge were barriers to forgiveness, strongly emphasized the importance of the wrongdoer making amends before she could forgive. For instance, she stated that her husband, who had rejected her and failed to prevent his family from abusing her, continuously demonstrated that his family were important to him and that he desired to be with them; apologising both to her and her parents. Consequently, she was able to forgive him:

I gave it a three month trial but in that three months I seen a change in him. I've completely forgiven him cos he's made up for everything. He proved to me, within that year, how much he needs us, how much he wants us. (Amira, Muslim)

The interpersonal hurts that Amira described involved her husband as well as her husband's immediate family. However, whilst she was able to forgive her husband and sister in law (both of whom apologized to her), interestingly she was unable to forgive her brother in law who had made no attempts at restitution.

Talking & Support

The secular/atheist participant who stated that a lack of acknowledgement and ongoing transgressions were barriers to forgiving also repeatedly emphasised that talking to and support from friends was a key factor that helped him to forgive. For instance, he repeatedly stated how expressing his thoughts and feelings in a supportive environment enabled him to let go of feelings of anger:

It helped to talk it through because it just helped me to calm down these things when it was quite frustrating. It allows me someone to whom I can make a joke about the situation when I feel comfortable doing that at least. (Alfred, secular/atheist)

Overall, the majority of participants utilized inner psychological strategies such as meditation, prayer, accepting responsibility, connectedness, focusing on positive qualities, feeling they were helping others, and empathy, to enable them to forgive. Psychosocial factors such as talking as well as the wrongdoer making amends were also important themes for some participants.

Perceived Effects of Forgiveness

All of the participants who described barriers to and factors facilitating forgiveness were able to forgive and experience an improvement to their psychological wellbeing. For the majority of participants state forgiveness had strong ties to their perceived sense of mental wellbeing, including reductions in negative affect, feeling positive emotions, positive relations with others, spiritual growth including having a sense of meaning and purpose in life as well as a greater sense of empowerment. Each of these categories are presented in table 7.

Table 7. Effects of State Forgiveness on Wellbeing

Reduction in negative affect:

Anger, Hatred, Rid of burden, Animosity, Bitterness Irritation, Depression, Conflict

Positive affect:

Peace, Content, Joy, Love, Felt better, Calmer, Freedom from fear, Happy, Uplifted, Inspired, Compassion, Positive, Felt normal, Confidence, Vitality, Autonomy

Positive relationships:

Accepting other (positive attitude; accepting good & bad qualities), Loving other, Caring for/helping other, Understanding, Closer, Value people, Tolerant, Less breakups, Meaningful relationship, Reconciliation, Less reactive, More open, Pleasurable, Healthier for kids, Moving forward, Healed relationships

Personal growth:

Spiritual transformation, Meaning & purpose to life

Sense of empowerment:

Stronger, Independent, Confident, Hopeful, Calmer, In control

Reductions in Negative Affect

All participants spoke about experiencing reductions in event specific negative emotions such as anger, hatred, animosity and rage. For instance, one participant stated the following:

I no longer have any animosity towards him (father). If he said something that would annoy me before or have feelings of animosity, without having to think about it, it just drops off me. I don't have any negative mental reaction to him. I just have an accepting and compassionate view of him. I no longer say to myself, quietly in my mind "I really hate you. (Alan, Theosophist)

Another Theosophist also indicated how feelings of unforgiveness were causing him to feel generally depressed. However, forgiveness enabled him to overcome his mood disorder and feelings of bitterness and instead 'heal' his mental health (Lyndon, Theosophist). Similarly, an ACIM participant indicated that although he was experiencing suicidal thoughts and a lot of 'darkness', forgiveness enabled him to let go of wanting to harm himself, change his depressive state and experience greater happiness, (Quinn, ACIM).

Positive Affect

For all religious/spiritual participants forgiveness appeared to be related to an improvement in general positive emotions and not just event-specific feelings such as love and compassion. Some examples of common descriptions by participants regarding how they felt after practicing forgiveness included (feeling) 'content', 'joy'

(Brandon, ACIM), 'calm', 'better' (Trisha, (ACIM), 'happier (Quinn, ACIM), 'uplifted' (Stuart, ACIM), 'stronger' and 'independent' (Amira, Muslim). Feelings of inner peace were also commonly described by Muslim and new religious participants. Reflecting the views of other ACIM and Muslim participants, one respondent who was able to overcome the depression he was feeling from unforgiveness stated the following regarding the outcomes of his forgiveness practice:

Going through the last few months, although there was conflict, there was rage, there was everything, I'm just much happier, more peaceful within myself; I don't take things as seriously as I used to. (Quinn, ACIM)

Another ACIM participant, who initially said powerlessness was a barrier to forgiving, described how he later experienced a reduction in negative affect followed by an increase in positive emotions as a result of forgiving:

I ended up feeling like I was in a different state of mind that I usually am in, much more positive and loving. And there was also the negative in the sense of negating that feeling of being stuck in the anger. I didn't feel stuck in the anger anymore. (Stuart, ACIM)

The Theosophist participant, who stated that he felt depressed and very angry as a result of the hurt, went on to describe how he eventually experienced an increase in positive emotions within himself as well as for the person that hurt him:

As soon as I forgive I felt compassionate attitude, understanding, I felt some sort of peace within myself. I start to feel some kind of love but not the same love I had for her. (Lyndon, Theosophist)

Positive Relationships

The majority of participants described experiencing improved relationships such as being able to work together constructively, experience intimacy with their partners, empathy, open-mindedness and acceptance as a result of their practice of forgiveness. For example, common themes reported by ACIM participants included: being able 'to love (in an) environment that had been so hostile', 'willing(ness) to work together' (Quinn, ACIM), 'closer family relationships', 'understanding and love for each other' (Bill, ACIM), 'more open', 'tolerant' (Trisha, ACIM) and people 'more valuable, real, worth loving' (Stuart, ACIM). ACIM participants reported that relationships were a significant component of their wellbeing; as one participant stated 'there can be no wellbeing unless your relationships are healed' (Brandon, ACIM), and forgiveness was a key strategy utilised for this purpose:

It (forgiveness) has totally healed my relationship with my parents.

We get along all the time now. There's less in the way of getting on and they can see it in you that you look at them in a nicer, more loving way. (Brandon, ACIM)

One Muslim participant described how her relationship with her husband had improved. She stated that we can 'talk to each other about anything and everything', 'we trust each other' and that their improved relationship made it 'healthier for the

kids', (Amira, Muslim). The Buddhist participant, Jax, felt that his relationship with his father was more pleasant and that he had developed compassion and understanding towards him, whilst Alfred, the secular/atheist participant was able to maintain a friendly relationship with his former partner who had rejected and offended him. One of the Theosophist participants also stated that he 'gradually thought of (his father) in a less negative light' and had developed 'an accepting and compassionate view of him' (Alan, Theosophist) whilst another Theosophist participant felt 'compassion, kindness and peace' towards an ex-partner who had severely deceived him and also found that his general relationships improved:

You develop compassion, kindness and peace through forgiveness that leads you to healthier relationships with people. (Lyndon, Theosophy)

Participants also stated that they came to accept the wrongdoer whereby they stopped criticizing and attacking them and accepted both their good and bad characteristics, and no longer wanted or tried to change the other person. This theme was particularly prominent among ACIM, Buddhist and Theosophy students. For instance, they stated that they came to 'totally accept the person as they are' (Brandon, ACIM) and 'felt more positive' towards them, 'more in contact with all the different facets of (their) character' and no longer felt an 'intense need for (others) to change' (Jax, Budddhist).

Spiritual Growth

Most participants spoke of experiencing spiritual development. For new religious participants in particular this took the form of spiritual growth whereby they experienced a shift in understanding about their own self, which also appeared to give

them a sense of meaning and purpose to life. For instance, one participant spoke of how he 'learned something' about human nature and the importance of insight. He stated that through unforgiveness he was identifying with a superficial self, which was selfish and lacked concern for others, and that unforgiveness resulted in a state that caused him to feel depressed and blocked his spiritual and social wellbeing. In contrast, forgiveness enabled him to manifest beliefs about his 'true self', which he described as inherently selfless:

I identify no longer with my personal self but try and put things in a universal perspective. If somebodies constantly identifying with his personality then he can no longer be conducive to the welfare of his family or his friend because he will value more the self than the community. As soon as you start to think communal (or) universal you're dis-identifying with your personal self. (Lyndon, Theosophy)

Participants felt that their understanding of life and of people expanded as they developed a new sense of (spiritual) self, in which they placed more emphasis on concern for the welfare of others, as well as being compassionate towards themselves and others, which were key elements of their spiritual development:

I felt it was a real turning point for me (forgiving); it was really occasioned by a sense of tremendous leap forward in terms of my own spiritual journey. My goal is spiritual awakening and I think forgiveness is the key in that process. (Stuart, ACIM)

Sense of Empowerment

Forgiveness also appeared to give participants a sense of empowerment and control as they were able to overcome negative feelings associated with unforgiveness, such as hatred and the desire for revenge, and change the state they were in for the better. For instance, common themes found among religious/spiritual participants were feeling 'stronger', 'independent' (Amira, Muslim), 'confident', 'hopeful', 'calmer' (Trisha, ACIM) and 'in control', (Jax, Buddhist). Many ACIM participants stated that by 'healing' the mind (through forgiveness), they had improved their health and wellbeing (Quinn, ACIM). The Buddhist and new religious participants in particular believed that they could choose whether or not to prolong the initial suffering experienced. This may have been related to their beliefs about taking responsibility for how they reacted and what they focused upon. One of the participants suggested that any feelings of resentment were caused as a result of his own thought processes, which he believed he could change at any point:

You accept responsibility for the feelings you experience. I bring that feeling to myself; it's my identification with the ego, with fear.

Accepting responsibility, it's a lot more empowering, you're a lot more in control. (Brandon, ACIM)

For these participants the choice appeared to be between identification with ego (i.e. fear, unforgiveness) or with the 'higher self' (i.e. love/compassion) and by choosing to forgive they appeared to be able to reverse the effects of the harm through inner (cognitive, emotional) change. Letting go, or forgiveness, as one Buddhist stated, was a means of taking control of his life:

If I focus on what the other person is doing then all the power is in their hands; they have complete control over me. Letting go is a way of taking back control. (Jax, Buddhist)

Forgiveness appeared to give participants a sense of empowerment because they could change the negative effects of a lack of forgiveness. The choice to forgive appeared to be facilitated by their knowledge and skills such as accepting responsibility for how they reacted, and meditating, which may have developed their mental capacities, perhaps allowing them to choose more constructive responses. It was through self-effort that they appeared to overcome psychological (i.e. unforgiveness) and perceived environmental obstacles (i.e. offender) and were able to heal themselves and experience wellbeing.

Differences & Similarities in Factors Influencing & Outcomes of Forgiveness

Overall, although there were many similarities across participants, there were also some differences that emerged with regard to influencing factors as well as the effects of forgiveness. For example, among ACIM students, blame was a recurring theme and often cited as a barrier by Brandon, Bill, Quinn and Trisha. These same participants also commonly referred to responsibility, meditation and connectedness as important mechanisms that helped them to forgive. Both of the Theosophy respondents (Alan and Lyndon) described ruminating as a factor hindering their ability to forgive whilst a sense of connection with others or the desire to be of service as well as karma/responsibility was a recurring theme that appeared to assist their forgiveness process. The Buddhist participant (Jax) also cited multiple factors such as

blame, powerlessness and ongoing transgressions as influencing forgiveness. However of these mechanisms, blame was the most commonly cited barrier whilst accepting responsibility and meditation were key facilitators for Jax. Similarly, a range of factors appeared to hinder Amira's ability to forgive such as lack of acknowledgement, physical proximity and the desire for revenge. Both Muslim participants (Amira and Rana) also cited multiple factors such as focusing on positive qualities, prayer and making amends as facilitators of forgiveness however it was this latter theme of proving the importance of the relationship and apologizing that was often cited as a facilitator by both of these participants. Alfred, the secular/atheist respondent felt that not being acknowledged perpetuated feelings of unforgiveness whilst talking about the hurt in a supportive environment assisted forgiving his former partner. Overall, ACIM, Buddhist and Theosophist respondents placed greater emphasis on unconditional forgiveness, which involved letting go of resentment and developing love and compassion irrespective of whether the offender made amends. On the other hand, Muslim participants gave greater importance to receiving an apology and seeing a change in their partner as strategies that helped to facilitate their forgiveness process. Furthermore, most of the factors facilitating forgiveness across most of the religious/spiritual participants could be described as inner transforming (psychological) strategies, which appeared to involve cognitive and emotional change. For instance, recurring themes among ACIM, Theosophist and Buddhist respondents related to beliefs in connectedness, responsibility and meditation, whilst Muslim participants spoke of focusing on positive qualities and prayer. Many of the strategies utilized by these participants such as beliefs in a shared sense of humanity, karma, prayer and meditation were also religious/spiritual in nature. However, it was the new religious participants who appeared to give greater weight to drawing on

religious/spiritual practices to facilitate forgiveness compared to others who tended to utilize secular strategies to a far greater extent. A further pattern that emerged was that in contrast to factors facilitating forgiveness, the majority of participants' accounts regarding barriers to forgiveness were predominantly focused on externalising causes. These involved engaging in certain patterns of thinking and feeling that appeared to reinforce the notion that respondents had no choice or power to change their state of unforgiveness unless something outer changed.

For the majority of religious/spiritual participants (namely ACIM, Muslim, Buddhist and Theosophist) forgiveness appeared to have ties with wider dimensions of wellbeing. For instance, they described experiencing spiritual development, positive relationships, positive affect, and a sense of meaning and purpose. On the whole however, it seems that participants who largely applied inner transforming strategies, without necessarily expecting a change in external conditions, appeared to experience greater levels of forgiveness and mental wellbeing. Unforgiveness on the other hand, which appeared to be reinforced by factors such as blame, feeling powerless, ruminating, and desires for revenge, had a variety of negative effects on participants mental, emotional and social wellbeing. Whilst the themes described here are tentative, there is indication that regular practice of a combination of inner transforming factors such as meditation, responsibility, helping others/connectedness, may be effective in facilitating forgiveness of a specific transgression among certain religious/spiritual samples.

In addition to comparing different religious/spiritual respondents in relation to forgiveness and wellbeing, I also made some general (and tentative) comparisons of

the data on the basis of demographic factors. This suggested that there were no obvious differences in outcomes. For example, there appeared to be no differences in outcome between college and university educated participants; those with GCSE qualifications (two Muslim participants) appeared to experience similar levels of forgiveness as the secular/atheist participant who was a postgraduate student. With regards to gender, results indicated that both male and female ACIM participants experienced equivalent levels of forgiveness although they appeared to experience far greater increases in forgiveness compared to the two female Muslim participants. Similarly, there were no obvious differences on the basis of ethnicity. For example, both white ACIM and the black Theosophist participant appeared to be similar both in terms of factors that facilitated forgiveness as well as its outcomes.

Summary of Qualitative Findings

In sum, demographically diverse samples were recruited to take part in the interview study. Participants described experiencing a range of interpersonal hurts such as minor transgressions as well as varying forms of abuse. Experiential definitions of forgiveness that were provided broadly aligned with prior research findings in which participants experienced a reduction in negative and increase in positive states. With regard to outcomes, the majority of participants stated that forgiveness helped to promote both event-specific and general wellbeing such as positive emotions, a sense of meaning and purpose in life, positive relations with others, acceptance, and spiritual development. The findings also suggest that key factors that appeared to facilitate forgiveness entailed accepting responsibility, meditation, prayer, a focus on positive qualities, beliefs in being spiritually connected with others, talking as well as the offender making amends. In contrast, key barriers to forgiveness were blame, not

feeling understood or acknowledged, powerlessness, constantly thinking about the hurt, wanting revenge, ongoing transgressions, and a need for physical distance. Overall, the analysis revealed a number of themes and patterns with regard to influences on and outcomes of forgiveness that were pertinent to the secular/atheist and religious/spiritual participants. These themes can be tested for verification among similar samples in future research.

In addition to providing a depth understanding of the process of forgiveness and its effects on a variety of psychological health outcomes, the qualitative study also informed the design of the second phase internet survey study. The survey study specifically addressed the question of whether state forgiveness is related to mental wellbeing among a larger number of religious/spiritual and secular/atheist samples. It also tested the hypothesis (formed on the basis of the qualitative data) that meditation and sense of connectedness influence levels of state forgiveness. The results of the survey study are presented next.

CHAPTER 5

SURVEY STUDY RESULTS

Introduction

In this chapter I will present the findings of the second phase internet survey. The first section presents the research questions and hypotheses being addressed by this part of the thesis. I then present a brief outline of the interpersonal hurts participants experienced. The next section presents the analysis of the independent *t* test results, which examine group differences with regards to wellbeing and forgiveness among religious/spiritual (RS) and non-religious/spiritual (non-RS) participants. Pearson's product moment correlation coefficients are then presented for all variables. The results of the preliminary analysis, which examines if the assumptions of multiple regression were met, are then described, specifically in relation to sample size, normality, reliability, linearity, homoscedasticity, multicollinearity and outliers. Following this, the results of the hierarchical multiple regression are presented as well as tests of moderation and mediation with regards to meditation and connectedness. The final section of the chapter provides a summary of the quantitative results.

Research Questions & Hypotheses

The aims of the quantitative survey study were to: 1) examine the impact of forgiveness on mental wellbeing; 2) to investigate if meditation or sense of connectedness moderates any links between forgiveness and wellbeing; and 3) to investigate any significant differences between religious/spiritual and non-religious/spiritual (i.e. secular/atheist) groups with regards to outcomes of state forgiveness and mental wellbeing. The central research question addressed was: does state forgiveness predict mental wellbeing after taking account of demographic

variables, meditation and sense of connectedness? For this purpose, a cross-sectional web-based survey was used to recruit religious/spiritual and non-religious/spiritual participants living in the UK who were eighteen years or older, over a period five months.

The following hypotheses were addressed by this study:

- 1. Forgiveness would lead to greater levels of mental wellbeing over and above the level of variance accounted for by demographics, meditation and connectedness.
- 2. Meditation or sense of connectedness would moderate the relationship between forgiveness and mental wellbeing.

The secondary hypotheses addressed by the survey were:

- 3. Religious/spiritual participants would experience greater levels of forgiveness than non-religious/spiritual respondents.
- 4. Religious/spiritual participants would experience greater levels of eudaimonic wellbeing than non religious/spiritual respondents

Descriptions of Interpersonal Hurt

The first question on the Enright Forgiveness Inventory, which was used to assess the outcome and independent variable (state forgiveness), asked participants if they had been unfairly treated and deeply hurt by someone and by whom. Because the aim of the survey was to assess responses to experiencing a real life interpersonal hurt, participant responses were checked for any pseudo-forgiveness. For instance, the Pseudo Forgiveness Scale asked four questions at the end of the measure regarding whether participants felt they had experienced a real problem, if they were bothered

by the event, if they felt they had been hurt, and whether they felt what the other person did was wrong. Those scoring twenty or higher were considered not to have practiced forgiveness and were subsequently removed from the analysis (n = 20). The authors of the scale state that higher scores on the Pseudo Forgiveness Scale are indicative of denial or something other than forgiveness and should be deleted (Enright and Rique, 2004).

Overall, participants stated that they had experienced a variety of interpersonal hurts, which appeared to result from transgressions as well as various forms of abuse within the context of past and present ongoing relationships such as with romantic partners, friends and work colleagues. Some examples of transgressions included extra-marital affairs, rejection due to ending relationships, arguments, feeling ignored, a lack of support and care, as well as being sacked from a job whilst others appeared to have experienced verbal, emotional and physical abuse from parents, partners or work colleagues.

Group Differences in Demographics: Chi-Squared Test

A chi-squared analysis test, presented in table 8, was carried out in order to compare for any differences in demographics across religious/spiritual and non-religious/spiritual groups. The results showed that the percentage of religious/spiritual and non-religious/spiritual participants did not differ by education, Chi-square (4, N = 109) = 3.447, p = 0.48; gender, Chi-square (1, N = 109) = 1.148, p = 0.28 or marital status, Chi-square (2, N = 109) = 1.533, p = 0.46. However, significant differences were detected between groups for employment, Chi-square (1, N = 109) = 3.636, p = 0.057; age, Chi-square (3, N = 109) = 11.399, p = 0.01; and

ethnicity, Chi-square (1, N = 109) = 16.747, p = 0.001. The results suggest that participants who were unemployed were less religious/spiritual than those who were employed. Those aged between 25 and 54 were more likely to be religious/spiritual. And minority ethnic participants were more religious and spiritual than white participants who tended to be less religious/spiritual.

Table 8. Chi-Squared Analysis: Differences in Demographics for Religious/Spiritual & Non-Religious/Spiritual Groups

Variable	Degrees of Freedom	N	Chi-square	Alpha	
Education	4	109	3.447	0.48	
Gender	1	109	1.148	0.28	
Employment	1	109	3.636	0.05	
Marital Status	2	109	1.533	0.46	
Age	3	109	11.399	0.01	
Ethnicity	1	109	16.747	0.01	

Group Differences in Wellbeing & Forgiveness: Independent T Test

To examine if there were any significant differences in outcome variables depending on affiliation type, an independent samples t test was carried out for the purpose of addressing the following two hypotheses:

- 1. Religious/spiritual people would experience greater levels of forgiveness than non-religious/spiritual respondents.
- 2. Religious/spiritual people would experience greater levels of eudaimonic wellbeing than non-religious/spiritual participants.

The independent variable represented two groups of interest, namely, religious/spiritual and non-religious/spiritual respondents. The dependent variables represented participant's scores using two reliable and validated scales: the Ryff Psychological Well-Being Scale and the Enright Forgiveness Inventory. The results for test one, presented in table 9, which assessed effects on eudaimonic wellbeing, was not statistically significant (t(107) = 0.53, p > 0.05). The results for test two (table 9), which assessed differences in forgiveness outcomes, did not reach statistical significance either (t (107) = 0.59, p > 0.05). The effect sizes, calculated by multiplying the t statistic by two and dividing by the square root of the degrees of freedom (Naegele, 2015), were in line with Cohen's convention for a small (d = 0.10and d = 0.12), but non-significant (p > 0.05) effect size. Contrary to the set hypotheses, these results suggest that religious/spiritual participants did not experience significantly greater increases in wellbeing (M = 245.4, SD = 35.65, p > 0.05) than their non-religious/spiritual counterparts (M = 241.7, SD = 32.70; p > 0.05).

Similarly, the results also indicate that there were no statistically significant differences between religious/spiritual (M = 264.0, SD = 63.66; p > 0.05) and non-religious/spiritual respondents (M = 255.97, SD = 73.99; p > 0.05) in outcomes of forgiveness.

Table 9. Independent T-Test of Group Differences in Wellbeing & Forgiveness: Unbalanced Samples

Variable	Religious/Spiritual N = 72 M(SD)	Non - Religious/Spiritual N = 37 M(SD)	T test (df)
Well-Being	245.4 (35.65)	241.7 (32.70)	0.53 (107)
Forgiveness	264.0 (63.66)	255.97 (73.99)	0.59 (107)

Most of the assumptions such as independence of samples, normal distribution of continuous outcome variables, not having any outliers as well as equal variances in each of the groups, were met. However, one assumption that was violated related to unequal sample sizes whereby there was a greater proportion of participants in the religious/spiritual group (N = 72) than in the non-religious/spiritual group (N = 37). This may have resulted in inaccurate results produced by the t statistic, which may overly rely on or be skewed in the direction of the smaller sample size or variance (ProphetStatGuide, 1997). The resulting alpha level in t tests with unequal sample sizes can also substantially increase and thus provide inaccurate results (how2stats, 2012). Consequently, the data was corrected for by balancing the sample sizes in order to assess if there were any differences in outcomes. The results for this second

analysis are presented in table 10 below. To balance the samples, thirty-seven religious/spiritual out of a total of seventy-two participants were randomly selected using SPSS and then compared with the non-religious/spiritual respondents in order to assess for any differences in wellbeing and forgiveness outcomes (how2stats, 2012). The first test was found to be statistically significant (t(50) = 10.56, p < 0.01) whilst the second test was not statistically significant (t (72) = 0.688, p > 0.05). The calculated effect size for this first test was large and in line with Cohen's (1988) convention for a large effect (d = 2.5). Also in line with Cohen's convention, the second test found only a small effect, albeit non-significant (p > 0.05). Contrary to the stated hypothesis, the results suggested that non-religious/spiritual respondents had significantly higher wellbeing scores (M = 247.40, SD = 9.83; p < 0.05) than their religious/spiritual counterparts (M = 205.83, SD = 21.82). For this second analysis, the assumption underpinning Levene's test for equality of variances, that there is no difference in means across groups, was found to be violated (F (72) = 17.54; p < 0.01). However, t tests are thought to be robust against violations of homogeneity of variance assumptions if there are equal sample sizes (Laerd Statistics, 2013). SPSS does, however, automatically correct for this violation by using a pooled estimate for the error term and adjusts the degrees of freedom (Laerd Statistics, 2013). As a result, correcting for this error and not assuming equal variances across groups, the overall result remained statistically significant, suggesting greater levels of eudaimonic wellbeing among non-religious/spiritual participants.

In sum, both t tests using balanced and unbalanced samples suggested that religious/spiritual participants do not experience greater levels of forgiveness than non-religious/spiritual participants. Whilst the first set of t tests indicated that there

were no differences between groups in eudaimonic psychological health, the second set of analyses, which used balanced samples, detected a difference, suggesting that non-religious/spiritual respondents experienced greater levels of wellbeing.

Table 10. Independent T-Test of Group Differences in Well-Being & Forgiveness:

Balanced Samples

Variable	Religious/Spiritual N = 37 M(SD)	Non - Religious/Spiritual N = 37 M(SD)	T test (df)
Well-being	205.83** (21.82)	247.40 (9.83)	10.56** (50.03)
Forgiveness	250.75 (62.56)	260.86 (63.81)	0.688 (72)

^{*}significant at the 0.05 level **significant at the 0.01 level

Correlations

Point Biserial correlations, which are a special case of Pearson's product moment correlation coefficients (TheRMUoHT Biostatistics Resource Channel, 2012) were conducted in order to examine both dichotomous and interval level data, of the whole sample, in order to test for associations with forgiveness and mental wellbeing outcomes. The results, presented in table 11 below, show that only age, employment, daily meditation and connectedness with others were significantly correlated with eudaimonic wellbeing, whilst there were no correlations between the demographic variables and hedonic wellbeing or forgiveness.

Table 11. Point Biserial Correlations For Mental Wellbeing Forgiveness and Demographic Variables For the Entire Sample

Variable	Eudaimonic Wellbeing	Hedonic Wellbeing	Forgiveness
Age	0.20*	0.07	0.01
Employment	0.19*	0.10	0.03
Ethnicity	-0.00	-0.00	-0.16
Marital Status	0.10	-0.11	0.04
Education	0.05	0.06	-0.03
Religious/spiritual	-0.05	-0.16	0.02
Meditation	0.19*	0.10	0.02
Prayer	-0.02	0.06	-0.12
Connectedness with others	0.26**	-0.10	-0.04
Eudaimonic Wellbeing	1	-0.14	0.19*
Hedonic Wellbeing	-0.14	1	0.02
Forgiveness	0.19*	0.02	1

^{*}significant at the 0.05 level **significant at the 0.01 level

Preliminary Analyses: Assumptions of Multiple Regression

In subsequent sections, I present the results of the hierarchical regression analysis, which was performed to investigate the ability of state forgiveness to predict levels of wellbeing, after controlling for age, employment, daily meditation practice and connectedness. Prior to conducting this type of multiple regression analysis, data was first assessed for any violations of the assumptions underpinning this method (i.e. sample size, normality, linearity and homoscedasticity, multicollinearity and outliers), which are presented next.

Sample Size

In order to detect an effect size (i.e. the difference in outcome between categories) of 0.23 (with 80% power and type I error of 5%) the minimum number of participants required is N = 50. A suggested rule of thumb when using multiple regression techniques is to have between 10 to 15 participants per predictor category (Hair et al., 2010; Vittinghoff and McCullough, 2006). Tables 2 and 3 (in the survey methods section) demonstrate that each of the independent variables used in the regression analysis meet this requirement.

Normality

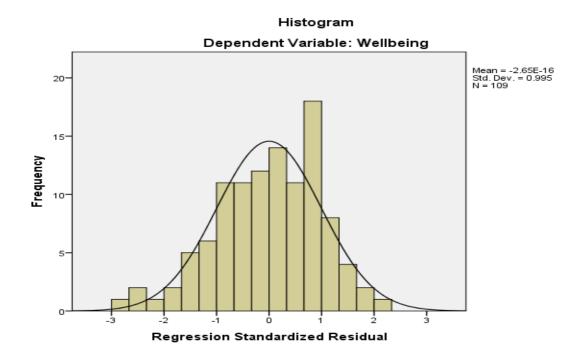
Non-normally distributed variables may misrepresent relationships and significance tests (Osborne and Waters, 2002) therefore in order to minimise the chance of a Type I or a Type II error the dependent variable was assessed for normality. A plot of the residuals for the dependent variable illustrated in diagram 2 shows that: 1) most of the residuals are concentrated around zero; and 2) the residuals seem fairly equally spread above and below zero; this further suggests that there are no problems with normality. The histogram in diagram one illustrates that the distribution of residuals for the dependent variable is normal. Further, the values for skewness (0.231) and kurtosis (0.459) were not greater than plus or minus three, which further indicates that the dependent variable is normally distributed.

Reliability analysis

Unreliable variables may increase the chance of a Type I or Type II error as the variance accounted for may not be apportioned correctly (Osborne et al., 2002). Thus, a reliability analysis was performed. The subscales of the two main measures

used in this study, namely, the Enright Forgiveness Inventory EFI) and the Ryff's Psychological Well-Being measure were both tested for levels of internal consistency using Cronbach's Alpha. Correlations between items for the same subscales showed relatively high reliability. For instance, the forgiveness subscale correlations were all above $\alpha = .9$ whilst the psychological well-being subscale correlations ranged from $\alpha = .71$ to $\alpha = .88$

Diagram 2: Histogram of Distribution For Wellbeing of Residuals



Linearity

Multiple regression analysis also assumes a linear relationship between independent and dependent variables; a violation of this assumption may result in reduced statistical power to detect an effect if there is one and thus increase the probability of a Type II error (Osborne et al., 2002). Pearson's correlations were conducted to test for linearity and table four (above) shows that all the independent variables included in the regression analysis all correlated with the response variable (i.e. wellbeing).

Homoscedasticity

High levels of heteroscedacticity, where the variance in errors is not the same across different parts of the residuals, may produce inaccurate results (Tabachnick and Fidell, 1996; Osborne et al., 2002). To assess the level of variability in scores for the dependent variable a residual plot, depicted in diagram 3, demonstrates that the assumptions of homoscedasticity were not violated. For example, the residuals vary around zero with no observable pattern other than the points being centred around zero.

Scatterplot

Dependent Variable: Wellbeing

R, Linear = 0

R, Regression Standardized Predicted Value

Diagram 3: Scatterplot of Residuals for Wellbeing

Multicollinearity

Multicollinearity, where one or more predictor variables are highly correlated, can produce invalid results for individual predictors (Kumar, 1975). However, the variance inflation factor (VIF) score was below 3 for all independent variables: forgiveness (1.001); meditation (1.112); employment (1.234); age (1.233), suggesting that there is no problem of multicolliniarity among the predictor variables (Martz, 2013).

Outliers

Outliers, which have been defined as 'a data point of dubious or disproportionate origin' (Osborne and Overbay, 2004) can arise due to a multitude of reasons including: problems with data collection; recording and entry; deliberate misreporting of data by participants; sampling error such as mistakenly receiving responses from a different population not of interest to the studies research aims as well as variability in the data from the population of interest (Osborne and Overbay, 2004; Anscombe, 1960). A number of problems may arise from having outliers in data such as increased error variance, reduced statistical power, reduced normality as well as biased estimates (Osborne and Overbay, 2004). In order to establish if there are any outliers in the data, Hoaglin et al. (1986) and Hoaglin and Iglewicz (1987) have proposed an Outlier Labeling Rule, a formula for detecting outliers in situations where the outcome variable is normally distributed and the sample size is not large. This formula comprises of determining the difference between the upper (75th) and lower (25th) percentiles from the data output (table 12) and multiplying by a g value of 2.2. The result of this latter calculation is then added to the upper percentile value, which is then checked against the 'extreme cases' output presented in table 13.

Because there are no values similar to or greater than the calculated output (378.20) in table 13, this suggests that there are no outliers in the data.

Table 12. Percentiles Output For Detecting Outliers in Wellbeing Outcomes

			Percenti	les			
Well-Being	5	10	25	50	75	90	95
	184	194	223	247	271	284	298

Table 13. Extreme Values Output For Detecting Outliers in Wellbeing Outcome

		Value	
Well-Being Hig	hest 1	313	
	2	303	
	3	302	
	4	301	
	5	298	
Lowest	1	153	
	2	158	
	3	159	
	4	169	
	5	182	

To further assess for any outliers in the dependent variable (eudaimonic wellbeing) a boxplot, z scores, and a histogram were also examined. Diagram 4, which depicts a boxplot, indicates that there were no outliers in the dependent variable. Similarly, the

histogram of the distribution for the response variable (diagram 2) detected no outliers. Z-score values were also computed; however, they were not greater than minus or plus three, suggesting no problem of outliers (Osborne and Overbay, 2004).

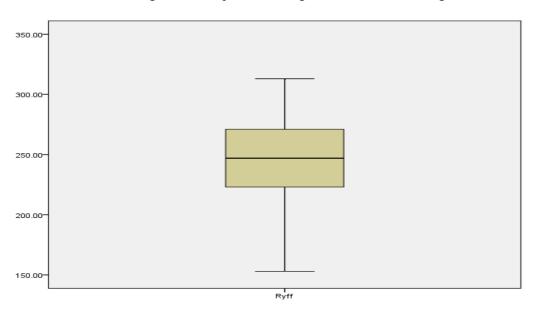


Diagram 4: Boxplot Detecting Outliers For Wellbeing

Hierarchical Multiple Regression Analysis

Hierarchical regression was used to assess if state forgiveness measures accounted for a significant amount of variance in wellbeing after controlling for the effects of age, employment, meditation and connectedness. Specifically, the following research hypothesis was addressed:

Forgiveness would lead to greater levels of eudaimonic wellbeing over and above the level of variance accounted for by demographics, meditation and connectedness.

In contrast to standard multiple regression in which all variables are added into the model simultaneously, or stepwise regression, which is not theoretically informed (Cooksey, 2013), in the present study, hierarchical regression was applied because the independent variables were entered in steps, based on theoretical grounds, to assess the relative contribution of forgiveness over and above the contribution of previously entered predictors. Prior research has indicated that forgiveness and demographic factors such as age and employment are associated with wellbeing (Maltby et al., 2005; ONS, 2012). Oman et al. (2008) found that meditation is linked to increased forgiveness, whilst Webb's (2012) research highlighted associations between meditation and mental health. One prior study has found a sense of connectedness to be related to increases in forgiveness (Krause, 2012) whilst a growing body of research has also indicated that spirituality, which includes connectedness, may be positively associated with mental health outcomes (Corbah, 2006). The qualitative aspect of this project also suggested links between forgiveness and wellbeing, and detected patterns between connectedness, meditation, and a greater ability to forgive in response to interpersonal offenses. Thus, the aim was to test emerging theory, that is, does forgiveness predict a significant amount of variance over and above that accounted for by other predictors, as well as to test for any interaction effects (discussed in the next section). In addition to selecting variables on the basis that they are related to the outcome, the order in which variables were entered was also based on theory. Petrocelli (2003) and Cohen and Cohen (1983) suggest that predictor variables should be entered such that causes precede their effects as results can be influenced by the order in which variables are entered. They further argue that in the case where there is a violation of the causal order, it may become unclear which variable may be most predictive of Y. Therefore, in order to get a clearer idea of the extent to which control variables may explain any variance in the outcome as well as to examine the level of variance accounted for beyond the effects of previous

predictors, it is important to enter variables so that causes precede effects (Cooksey, 2013; Petrocelli, 2013). Petrocelli (2003) further suggests that it is good practice to enter static (demographic) variables first followed by more dynamic predictors based on theoretical grounds. Demographic factors such as age and employment are robustly associated with wellbeing outcomes (ONS, 2012) and there is also indication that they may influence religiosity and forgiveness (Deaton, 2009; Subkoviak et al., 1995). Thus, in the present analysis, demographic factors were entered in step one; age was entered first as it is a static variable and is more likely to influence the second variable added, which was employment (not vice versa). Next, dynamic variables such as meditation and connectedness were added in step two on the basis of their potential relevance to predicting both wellbeing and forgiveness (Oman et al., 2008; Webb, 2012; Krause, 2012). The key independent variable of interest (i.e. state forgiveness) was also found to be associated with wellbeing, and given the potential of all the previously entered variables in predicting forgiveness, it was included in the final step so that the effects of all the control variables could be examined. Therefore, as the following diagram illustrates, in step one, the variables of age and employment were entered. In step two meditation and connectedness were added followed by forgiveness in step three

Diagram 5: Graphical Representation of Variables Included in Each Step of the Regression Model

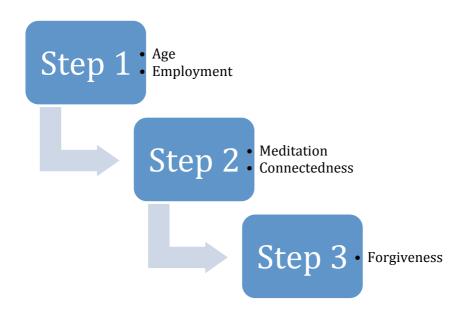


Table 14 presents the results of the hierarchical regression analysis. Preliminary results (presented in previous sections) suggest that the assumptions of normality, linearity and homoscedasticity were met. Tests were also conducted to assess for levels of correlations among predictor variables. Results showed the VIF score for all variables was below three, suggesting no problem in terms of multicollinearity. All independent variables were significantly, albeit weakly correlated with the dependent variable, wellbeing (r = 0.19 to r = 0.30, p < 0.05).

Predicting Mental Wellbeing

In step one of the model, age and employment were entered (with the latter variable dichotomously coded as 1 = employed, 0 = unemployed). This model was statistically significant (F (2, 106) = 3.115; p = 0.048) and explained 5.6% of the variance as a whole in psychological (i.e. eudaimonic) wellbeing. After entering meditation and sense of connectedness with others in step two (dichotomously coded

as 1 = daily meditation, 0 = no daily meditation; with connectedness remaining as a continuous variable), the model as a whole was statistically significant (F (4, 104) = 4.138; P = 0.004) and explained 13.7% of the variance as a whole. The inclusion of meditation and connectedness explained an additional 8.2% of the variance in psychological wellbeing. In model three, forgiveness was entered and the model as a whole explained 17.8% of the variance and was also statistically significant (F (5, 103) = 4.161; P = 0.02). The inclusion of forgiveness explained an additional 4.1% of the variance, after controlling for age, employment, meditation and connectedness (R2 Change = .040; F (1, 103) = 4.458; P < .001). In all three models, of the five variables entered only forgiveness and connectedness were statistically significant. However, forgiveness accounted for an additional 4% of the variance in psychological wellbeing scores that was over and above the effects of demographics, meditation and connectedness.

Table 14 Hierarchical Regression Analysis for Wellbeing Increase on Age, Employment, Meditation, Connectedness & Forgiveness

Model, Step & Predictor Variable	R^2	R ² Change	$\Delta \mathbf{F}$	df
Step 1 Age Employment	0.056*	0.056*	3.115**	(2, 106)
Step 2 Meditation Connectedness	0.137**	0.082*	4.930*	(2, 104)
Step 3 Forgiveness	0.178**	0.041*	5.087**	(1, 103)

 R^2 = variance explained by IV ΔR^2 = additional variance explained by predictor ** p < 0.01. * p < 0.05.

Tests of Moderation: Meditation & Connectedness

To test the hypothesis that meditation or connectedness would moderate the relationship between forgiveness and wellbeing, hierarchical multiple regression was carried out. This method was used because a key aim was to establish whether moderator variables, which were selected on the basis of prior research and theory, would explain any additional variance in the outcome. In accordance with guidelines suggested by Frazier et al. (2004), the following steps were taken to conduct moderator analyses. In step one, I ensured that the first potential moderator variable (meditation) was dummy coded so that a comparison could made between the mean of those who did not meditate (0) with the mean of those who did meditate daily (1). Secondly, I standardized the continuous predictor and moderator variables (forgiveness and connectedness) so that they could be measured in the same units, which is suggested to make interpreting and plotting any significant effects easier (Frazier, 2004). The next step involved creating the product terms by multiplying the nominally coded meditation variable with the standardized forgiveness variable as well as multiplying the z score of connectedness with the z score of forgiveness.

To examine moderator effects, the variables were then entered into the model in two stages. Step one entailed entering the code variable (meditation) and the standardized variables of connectedness and forgiveness. In step two, interaction terms representing previously entered variables were added simultaneously. This order of entry, whereby interaction terms are included after the variables used to create them, is suggested by Aiken and West (1991) and Cohen et al. (2003) as well as Frazier et al. (2004) as it is said to reduce confounding between moderator and predictor variables. Whilst Cohen et al. (2003) have highlighted that assessing the effects of

two or more moderator effects can result in a type I error, Frazier et al. (2004) suggest that such effects can be reduced by entering all interaction terms at the same time, in the second step.

Table 15 shows the results of the moderator analyses. In step one of the model, meditation, connectedness and forgiveness were entered; the model was statistically significant (F (3, 105) = 6.294; p = 0.001) and explained 15.2% of the variance in wellbeing. The unstandardized regression coefficient for meditation was 16.98, however this was not significant. There was a significant relationship between connectedness and wellbeing (p = 0.002) as well as between forgiveness and wellbeing (p = 0.025). In step two, both interaction terms were entered; the model was statistically significant (F (5, 103) = 3.761; p = 0.004) however the interaction terms did not explain any additional variance in the outcome and the unstandardized regression coefficients in both cases were not significant, therefore suggesting no moderator effects.

To assess if moderator results differed depending on the analytic method chosen, I also conducted univariate analysis (Alliant International University, 2009). This test of between-subjects effects did not produce a statistically significant interaction effect between meditation and forgiveness (p < 0.653) or connectedness and forgiveness (p < 0.258). I also carried out a standard linear regression analysis (Allen, 2012). Similar to the hierarchical regression method, independent variables of interest were standardized and multiplied together to form interaction terms. However, rather than only including interaction terms in the second step after entering the variables used to create them, the moderator variables were added in the same step along with

previously entered predictors. The results suggested that there was a decrease in the adjusted r squared statistic (compared to the first regression analysis which did not include the interaction terms) and the moderator variable was not significant in either of the second analyses; thus suggesting no moderator effects.

Table 15. Moderator Effects: Meditation & Connectedness

Step & Variable	R^2	R^2 Change	В	SE B	Beta
Step 1	0.152**	0.152**			
Meditation			16.98	8.99	0.17
Connectedness (z score)			9.79	3.11	0.28**
Forgiveness (z score)			7.06	3.11	0.19*
Step 2	0.154	0.002			
Meditation x Forgiveness			-0.52	9.12	-0.00
Connectedness x Forgiveno	ess		1.68	3.55	0.04

^{**} p < 0.01. * p > 0.05.

Tests of Mediation: Meditation & Connectedness

Due to no moderator effects being detected, I also planned to test for any mediator effects. Baron and Kenny (1986) suggest that for mediation to occur, the causal variable (i.e. forgiveness) needs to be correlated with the mediator (meditation; connectedness). However, as table 11 of Pearson's correlations demonstrates, there were no associations between these variables, and no further tests were therefore conducted.

Summary of Main Findings

A key purpose of the internet survey study was to address the hypothesis that state forgiveness would lead to greater levels of mental wellbeing over and above the level of variance accounted for by demographics, meditation, and a sense of connectedness. In support of this hypothesis, the survey study found that forgiveness significantly predicts some components of mental wellbeing (i.e. eudaimonic) over and above other important variables such as age, employment, meditation and connectedness, although the size of the effect was small. Another purpose of the study was to address the hypothesis that meditation or a sense of connectedness would moderate the relationship between forgiveness and mental wellbeing outcomes. However, despite theoretical and empirical links, the findings did not indicate that connectedness and meditation moderate (or mediate) the association between forgiveness and wellbeing. Thus the second hypothesis was not supported. Whilst it was postulated that religious/spiritual participants would show greater levels of forgiveness and wellbeing, the findings did not support this hypothesis, instead, producing mixed results. For instance, balanced and unbalanced sample were used to conduct two separate tests. Both suggested no significant differences in outcomes of forgiveness whilst the second test suggested non-religious participants experienced greater levels of eudaimonic wellbeing. However the homogeneity of variance assumption in the second test was violated therefore results may need to be interpreted with caution.

CHAPTER 6

SYSTEMATIC REVIEW STUDY RESULTS

Introduction

The purpose of this review was to systematically assess the effectiveness of process-based forgiveness interventions in promoting mental wellbeing among adolescent and adult populations. Electronic databases and previous reviews were used to identify quantitative studies that had used randomised controlled trial designs in which a forgiveness treatment was compared with a wait-list no treatment control group. The first stage of the review involved identification of quantitative research concerning the effectiveness of forgiveness interventions, all of which were then appraised using standardized criteria to assess the quality of the included studies. Following this, a meta-analysis was conducted, which provided a synthesis of all relevant outcome data from the included studies.

The results of the review are presented in the following sections. The first section describes the results of the search. Section two provides a description of the excluded and included studies. Section three assesses risk of bias in each of the included studies. Section four presents the effects of the interventions starting with the meta-analysis results for the primary outcome measures. Next, subgroup analyses assessing the effects of potential moderating factors (e.g. mode, model and effects of number of sessions) on levels of state forgiveness are presented, after which the individual study results are described. The final section of this chapter provides a summary of the systematic review findings.

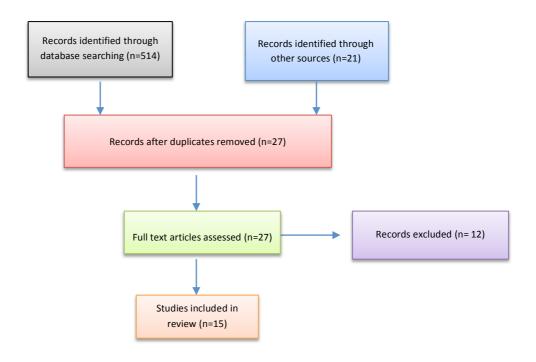
Methods

A full description of the methods was provided in chapter three. In brief, studies using randomised controlled trial designs in which participants were allocated to an experimental or a/no-treatment control group were included for systematic review. The populations comprised of students and community samples, some of whom were adolescents, aged between 12 to15 whilst others were adults over the age of 18. Forgiveness intervention studies that assessed the effects of treatment on different dimensions of mental wellbeing and that used individual or group-based formats and were underpinned by process-based models were included. Only standardised and reliable scales were used to assess key outcomes pertaining to mental health and wellbeing. Electronic searches using MEDLINE, PsychInfo, ERIC and Behavioural Sciences collection were carried out and additional records were also identified by examining the reference sections of previous published papers.

Results of the Search

The electronic searches (depicted in diagram 6 below) in 2014 produced 514 records of which six were relevant to the review. A search of previous meta-analyses produced 21 records. The title and abstracts were initially examined to assess if studies met the inclusion criteria. Twenty-seven articles were identified for potential inclusion. A full text review was then carried out and fifteen papers were included.

Diagram 6. Consort flow Chart



Excluded Studies

After searching databases and reference sections of previous meta-analyses (Lundahl et al., 2008; Wade and Goldman, 2013) a total of 27 articles were identified for further review. Of these 27 studies, twelve were excluded. Ten of these excluded studies did not include a no-treatment or waiting-list control group (Al-Mabuk et al., 1995; Greenberg et al., 2008; Graham et al, 2012; Hui and Chau, 2009; Hebl and Enright, 1993; Lampton et al., 2005; Lin et al., 2004; Lin et al., 2013; Osterndorf et al., 2011; Reed and Enright, 2006). Two studies did not randomize participants (Baskin and Rhody, 2011; Freedman and Knupp, 2003).

Included Studies

Fifteen articles met the inclusion criteria, and the data from fifty validated outcome measures administered at post-test were assessed. Results from 36 of these measures were included in the meta-analysis and fourteen (of these 50 scales) were individually assessed because authors did not provide means and standard deviations or they were single measures that could not be meta-analysed due to the requirement of having a minimum of two scales per analysis. The measures formed six outcome groups, namely: forgiveness; negative affect; positive affect; self-esteem; relationships with others and spiritual wellbeing. Interventions were either group based (n=12) or used an individual format (n=2).

Design

All fifteen studies were randomised controlled trials. RCT designs were selected because they provide the gold standard assessment of whether treatment is causally related to increases or decreases in outcomes by directly comparing experimental with no treatment control groups, and provide an accurate assessment of treatment effects (Sibbald and Roland, 1998).

Treatment and Control Groups

All studies used a no-treatment or waiting-list control group design. Ten studies directly compared forgiveness therapy with a no treatment control condition (Allemand et al, 2013; Coyle and Enright, 1997; Freedman and Enright, 1996; Harris et al., 2006; Luskin et al., 2005; Rye et al., 2012; Rye et al, 2005; Rye and Pargament, 2002; Shectman et al., 2009; Toussaint et al., 2012). In two studies (Rye et al, 2005; Rye and Pargament, 2002) the forgiveness intervention was tested among a religious

and secular group; the outcome results for both of these groups were subsequently combined for the meta-analysis. Five studies used a forgiveness treatment, alternative treatment and a control condition (DiBlasio and Benda, 2002; Goldman and Wade, 2012; Park et al., 2013; Ripley and Worthington, 2002; Wade and Meyer, 2009), but for the purpose of this review only post-test data from two arms were included: forgiveness intervention and control group (i.e. no-treatment/wait-list).

Sample Sizes

The majority of studies (n=14) did not provide details about sample size calculations. However one study (Luskin et al., 2005) reported conducting a power calculation with 80% probability at a 5% one-tailed test and determined that the minimum number of participants required to detect an effect size of .50 would be 22 per group. The sample sizes (i.e. participants randomised to forgiveness treatment and control) in twelve of the studies were as follows: 218 (Harris et al., 2006); 149 (Rye et al., 2005); 146 (Shectman et al., 2009); 99 (Rye et al., 2012); 78 (Allemand et al., 2013); 56 (Goldman and Wade, 2012); 58 (Rye and Pargament); 56 (Ripley and Worthington, 2002); 55 (Luskin et al., 2005); 44 (DiBlasio and Benda, 2002); 32 (Park et al., 2013) and 24 (Toussaint et al., 2012). The remaining two studies had 12 (Freedman and Enright, 1996) and 10 participants (Coyle and Enright, 1997). In one study (Wade and Meyer, 2009) the authors did not specify how many participants were randomised to each group; however, approximately 23 participants started the treatment or if in the control condition, completed pre-treatment questionnaires. The total sample size for all studies was 1060 with samples ranging between 10 to 218 participants.

Location

One study was conducted in Switzerland (Allemand et al., 2013), one in South Korea (Park et al., 2013), one in Israel (Shectman et al., 2009) and one in Sierra Leone (Toussaint et al., 2010). The remaining eleven studies were carried out in the USA.

Setting

Eight studies recruited community samples (Coyle and Enright, 1997; DiBlasio and Benda, 2002; Freedman and Enright, 1996; Harris et al., 2006; Rye et al., 2012; Ripley and Worthington, 2002; Toussaint et al., 2010; Wade and Meyer, 2009). A further five studies recruited student samples (Goldman and Wade, 2012; Luskin et al., 2005; Park et al., 2013; Rye and Pargament, 2002; Shectman et al., 2009) two of which were recruited from schools and the remaining three from Universities. Two studies (Allemand et al., 2013; Rye et al., 2005) used both student and community samples.

Delivery of Intervention

In the majority of studies (n = 12) the setting in which the interventions took place was not specified. The remaining three studies (Park et al., 2013; Shectman et al., 2009; Toussaint et al., 2010) that used student samples delivered the intervention in schools and a correctional facility.

Participants

Two studies included adolescents aged between 12 and 18 (Park et al., 2013; Rye and Pargament, 2002), and the remaining participants were all adults over the age of 18. The age range was between 12 and 70 years. One study (Shectman et al., 2009) did not specify

the mean age of participants. For the remaining fourteen studies the mean ages were 70 (Allemand et al., 2013); 49 (Rye et al., 2012); 48 (Wade and Meyer, 2009) 45 (Rye et al., 2005); 41 (Harris et al., 2005); 38 (DiBlasio and Benda, 2002); 37 (Ripley and Worthington, 2002); 36 (Freedman and Enright, 1996); 33 (Toussaint et al., 2010); 28 (Coyle and Enright, 1997); 21 Luskin et al., 2005); 21 (Goldman and Wade, 2012); 18 (Rye and Pargament, 2002) and 15 (Park et al., 2013).

Samples comprised of older adults (Allemand et al., 2013); post-abortion men (Coyle and Enright, 1997); married couples (DiBlasio and Benda, 2002; Ripley and Worthington, 2002); female incest survivors (Freedman and Enright, 1996); college students (Goldman and Wade, 2012); adults (Harris et al., 2006; Wade and Meyer, 2009); university students (Luskin et al., 2005); female south Korean adolescents (Park et al., 2013); Christian female college students (Rye and Pargament, 2002); divorced individuals (Rye et al., 2005; Rye et al., 2012); Arab/Israeli adolescents (Shectman et al., 2009) and adult teachers (Toussaint et al., 2010).

Offences participants forgave included sexual abuse (Freedman and Enright, 1996); partners' abortion (Coyle and Enright, 1997), marital/romantic relationship hurts (DiBlasio, and Benda, 2002; Ripley and Worthington, 2002; Rye and Pargament, 2002; Luskin, et al., 2005; Harris, et al., 2006; Allemand et al., 2013; Goldman and Wade, 2012), anger at exspouse (Rye et al., 2005; Rye et al., 2012); victimization resulting from aggression (Park et al., 2012) ethnic conflict (Toussaint et al., 2010); sexual abuse/betrayal (Wade and Meyer, 2009) as well as hurts resulting from civil war (Shectman et al., 2009).

Interventions

Thirteen studies used group based forgiveness interventions, and two studies (Freedman and Enright, 1996; Coyle and Enright, 1997) administered the intervention using an individual format. Sessions ranged from fifty-five weeks (Freedman and Enright, 1996); through twelve weeks (Coyle and Enright, 1997; Park et al., 2013; Shectman et al., 2009); eight weeks (Rye et al., 2005); six weeks (Rye and Pargament, 2002; Harris et al., 2006; Goldman and Wade, 2012; Luskin et al., 2005); five weeks (Toussaint, et al., 2010) four weeks (Rye et al., 2012; Wade and Meyer, 2009) and two weeks (Ripley and Worthington, 2002; Allemand et al., 2013). One study (DiBlasio and Benda, 2002) did not state the number of sessions that were delivered, but indicated that the intervention comprised of a three-hour therapy session using a 13-step approach.

All studies used process models of forgiveness. The majority of studies applied Worthington's (1998, 2005) REACH model (n=8). Three studies used Enright and the Human Development Study Group model. DiBlasio and Benda (2002) used a religiously focused (i.e. Christian) 13-step process model whilst Harris et al. (2006), Luskin et al. (2005) and Toussaint et al. (2010) used a cognitive-behavioural approach model.

Outcomes

The fifteen included studies administered 78 outcome measures in total. However, many of these studies used non-validated measures and three studies did not provide post-test means or standard deviations (DiBlasio and Benda, 2002; Luskin et al., 2005; Toussaint et al., 2010). In other cases, multiple scales measuring similar

constructs were used in the same study. As a result, 36 measures were included in the meta-analyses. The data from three studies involving a total of ten (validated) scales could not be combined in the meta-analyses because no means or standard deviations were given. Four scales from a further three studies (Rye and Pargament, 2002; Freedman and Enright, 1996; Ripley and Worthington, 2002) could not be meta-analysed either as there were not a minimum of two studies assessing the same overall concept. Therefore the results of these fourteen outcomes are presented individually. For the purpose of the meta-analysis, three outcome groups were formed on the basis that scales measured similar conditions: negative affect, positive affect and forgiveness. Data from other outcome groups (i.e. spiritual wellbeing, self-esteem, relationships) as well as one additional scale of hope are presented individually.

The following section lists the outcome scales used across the included studies:

Primary Outcomes

All but one study (Ripley and Worthington, 2002) included measures of negative affect. These included scales measuring depression; anxiety; anger and hostility; stress and distress. The following instruments were used.

1. Depression:

- The Beck Depression Inventory (Beck et al., 1961)
- Brief Symptom Inventory (Derogatis, 1993)
- Center for Epidemiology Studies Depression Scale (Radloff, 1977)
- Negative Affect Scale (i.e. disappointed; sad; anxious; worried; sluggish; exhausted) (Allemand et al., 2012)

2. Anxiety:

- The State-Trait Anxiety Inventory (Spielberger et al., 1983)
- The Costello and Comrey Anxiety Scale (Costello and Comrey, 1967)

3. Anger & Hostility:

- State Anger Scale (Spielberger et al., 1983) Trait Anger Inventory
 (Spielberger et al., 1983)
- The Hostility subscale of the Aggression Questionnaire (Buss and Perry, 1992).
- State Hostility Scale (Anderson et al., 1995)

4. Stress & Distress:

- The Perceived Stress Scale (Cohen, 1983)
- The Global Severity Index of the Brief Symptom Inventory (Derogatis, 1993)

A total of ten studies used scales measuring positive emotions (Allemand et al., 2013; Freedman and Enright, 1996; Goldman and Wade, 2005; Luskin et al., 2005; Rye and Pargament, 2002; Rye et al., 2012; Rye et al., 2005; Rye and Pargament, 2002; Toussaint et al., 2010; Wade and Meyer, 2009) and included the following:

5. Positive affect:

- Hope Scale (Al-Mabuk et al., 1995)
- Positive Affect Scale (satisfied; happy; confident; hopeful; energetic)
 (Allemand et al., 2012)

- Batson's Empathy Adjectives (Batson et al., 1987 and 1991)
- Gratitude Questionnaire-6 (McCullough et al., 2002)
- Satisfaction with Life Scale (Diener et al., 1985)
- The Anticipation of a Future subscale from the Miller Hope Scale (Miller and Powers, 1988)

Two studies (Freedman and Enright, 1996; DiBlasio and Benda, 2002) assessed selfesteem using the scales below:

6. Self-Esteem

- Coopersmith Self-Esteem Inventory (Coopersmith, 1981)
- Index of Self-Esteem (ISE) (Hudson, 1992)

Two studies measured relationships with others: One study (Ripley and Worthington, 2002) measured marital satisfaction. The second study (Luskin et al., 2005) measured estrangement/malice with transgressor.

7. Relationships With Others

- Dyadic Adjustment Scale (Spanier, 1976)
- Couples Assessment of Relationship Elements (Worthington et al., 1997)
- Interpersonal Distance Scale (McCullough et al., 1997)

Two studies (Luskin et al., 2005; Rye and Pargament, 2002) assessed spiritual and religious wellbeing. Indicators comprised of the following: religious/spiritual

experiences such as personal growth/compassion/embracing life's fullness and relationship with god, satisfaction with life.

8. Spiritual Wellbeing

- The Spiritual Well-Being Scale (Ellison and Paloutzian, 1983)
- Principles of Living Survey (Thoresen, 1996)

The Fifteen studies included seven types of forgiveness measures. Six of these scales measured state forgiveness (i.e. forgiving an actual offence) whilst the remaining two measured trait or dispositional forgiveness (i.e. willingness to forgive). All studies used state measures whilst five studies (Harris et al., 2006; Luskin et al., 2005; Rye and Pargament, 2002; Rye et al., 2012; Toussaint et al., 2010) used both state and trait scales.

State forgiveness was assessed by measuring the absence of negative emotions, thoughts and behaviours (i.e. hatred, revenge, avoidance), and/or the presence of positive emotions, thoughts and behaviours (i.e. kindness, goodwill, show friendship). They differ from other measures of positive and negative affect because they focus on specific types of feelings, thoughts and behaviours that are offense specific as opposed to general.

9. State Forgiveness

- Enright Forgiveness Inventory (Enright, 1996)
- Psychological Profile of Forgiveness Scale (Freedman and Enright, 1996)
- The Forgiveness Scale (Rye et al., 2001)
- Transgression-Related Interpersonal Motivations (McCollough et al., 1998)

10. Trait Forgiveness

- Forgiveness Likelihood Scale (Rye et al., 2001)
- Heartland Forgiveness Scale (Thompson et al., 2005)

Time Points

All studies administered outcome measures at post-test. The majority of these studies (n=10) administered outcome measures immediately after the treatment. However, in one of these studies (Ripley and Worthington, 2002) the wait-list control group completed post-test measures one week after the treatment group. DiBlasio and Benda (2002) administered post-test measures four weeks after treatment; Allemand et al. (2013) two weeks after treatment whilst participants in Rye and Pargament (2002) completed outcome measures one week post-test. Toussaint et al. (2010) did not state when outcome measures were administered once participants had completed the treatment.

Risk of Bias in Included Studies

Random Sequence Generation

In the majority of studies (n=9) the authors did not specify how participants were randomized to conditions. Freedman and Enright (1996) matched participants on the basis of nature of offence, abuser and demographic variables. Goldman and Wade (2012) used a random number generator. Rye et al. (2005) used a coin toss and random number draw, and Rye and Pargament (2002) randomized participants by throwing a dice. Rye et al. (2012) used a random number draw whilst Harris et al. (2006) used computer generated equal probability allocation.

Allocation Concealment

None of the studies described the steps taken to ensure that participants and investigators were not aware of the groups to which participants would be allocated. However, in three studies (Rye et al., 2012; Rye and Pargament, 2002 and Rye et al., 2005) the author was contacted and it was stated that participants did not know to which group they would be allocated, although the precise method of allocation concealment was not stated.

Blinding

None of the participants were 'blind' to study hypotheses. This may have been due to the fact that it is difficult to 'blind' people in studies of this nature because the interventions require a discussion of the concept of forgiveness. However, in four studies authors did take additional steps whereby group leaders were 'blind' to the study hypotheses (Goldman and Wade, 2012; Rye and Pargament, 2002; Rye et al., 2005; Park et al., 2013; Wade and Meyer, 2009).

Performance Bias

Whilst 'blinding' of participants and most investigators was not carried out, some authors took additional steps to reduce levels of bias. For example, in six studies authors took additional measures to assess for any performance bias of treatment facilitators. For example, in Ripley and Worthington's (2002) study, videotapes of sessions were reviewed by an independent rater. Using a checklist to assess sessions, the authors concluded that workshop leaders implemented the intervention in accordance with the intervention manuals. In Freedman and Enright (1996), tapes were randomly selected by graduate students to assess fidelity by checking if intervention content corresponded with treatment manuals; they found 88% reliability over 30 tapes. Coyle and Enright (1997) used

graduate students to assess treatment fidelity by randomly selecting taped sessions and assessing if they adhered to the treatment outline; they report 100% reliability across sessions and participants. In Park et al. (2013) research team members 'blind' to study hypotheses also randomly selected recorded sessions to assess if the content was consistent with the program manuals; however they did not specify the level of reliability found. In Harris et al. (2006), audio taped intervention sessions were assessed by an independent rater; they found that 90% of activities and topics adhered to the contents of the treatment manual. Goldman and Wade (2012) used research assistants 'blind' to study hypotheses to check if treatment videos corresponded with the intervention manuals; using a computer program to select minutes of each group session to assess fidelity, they found that 99% adhered to manual content.

Incomplete Outcome Data

In the majority of studies all participants who entered the study were properly accounted for at its conclusion. In five studies participants completed all assessments and did not drop out (Allemand et al., 2013; Coyle and Enright, 1997; DiBlasio and Benda, 2002; Freedman and Enright, 1996; Shectman et al., 2013; Toussaint et al., 2010). Nine studies reported the following dropout rates: approximately 44% in Rye and Pargament (2002); 28% (Goldman and Wade, 2012); 22% (Rye et al., 2005); 21% (Rye et al., 2012); 18.7% (Park et al., 2013); approximately 17% in Wade and Meyer (2009); 15.8% (Harris et al., 2006); 10.4% (Ripley and Worthington, 2002); and 9% (Luskin et al., 2005). No intention-to-treat-analyses was carried out in the studies where there was dropout.

Selective Reporting

There was no sign of selective reporting in the majority of the included studies, and data for most assessed outcomes was fully reported. However, one study (Luskin et al., 2005), whilst stating there was no intervention effect on levels of estrangement and malice, did not report the full results and was subsequently rated as 'high risk' for selective reporting. In five studies (DiBlasio and Benda, 2002; Freedman and Enright, 1996; Luskin et al., 2005; Rye and Pargament, 2002; Toussaint et al., 2010) there was missing summary data where the authors did not provide the means and standard deviations, which meant that these studies could not be meta-analysed.

Other Potential Sources of Bias

In the majority of cases authors tested for group differences prior to carrying out the main analysis. Three studies (Allemand et al., 2013; DiBlasio and Benda, 2002; Harris et al., 2006) found no significant differences across groups on demographic, background and outcome variables. Shectman et al. (2009) found no significant differences on age and outcome variables. Similarly, Rye et al. (2012) found no differences except for divorce status and gratitude, which were controlled for in subsequent analysis. Rye et al. (2005) found no significant differences between groups on demographic and background variables except for religious affiliation. Rye and Pargament, (2002) also did not find any significant differences in demographic or background variables. Luskin et al. (2005); Park et al. (2013) and Ripley and Worthington (2002) detected no differences between groups in outcome variables but they did not test for demographic factors. The remaining five studies (Coyle and Enright, 1997; Goldman and Wade, 2012; Freedman and Enright, 1996; Toussaint et al., 2010; Wade and Meyer, 2009) did not examine pretest differences across groups

in terms of demographic, background and outcome variables but in the case of Freedman and Enright (1996) participants were all female, white, similar in age, educational status and similar in terms of offence type and all were clinical samples.

Figures seven and eight (below) present a risk of bias graph and summary table. Diagram seven assesses seven risk of bias criteria with green indicating low risk, yellow, unclear risk and red, high risk. Overall, the graph shows that approximately 40% of studies posed a low risk of bias with regard to detailing the method of randomization. In 100% of the studies it was unclear if a method of allocation concealment was used. All included studies posed a high risk of bias with regard to 'blinding'. About 60% of studies posed a low risk of bias in relation to incomplete outcome data and approximately 90% of studies were rated as low risk on levels of selective reporting. Just over 50% of studies were rated as low risk for other sources of bias such as pre-test group differences. Diagram eight shows how all included studies were rated on each of the risk of bias criteria.

Diagram 7. Risk of Bias Graph: Review Authors' Judgments About Each Risk of Bias Item

Presented as Percentages Across all Included Studies.

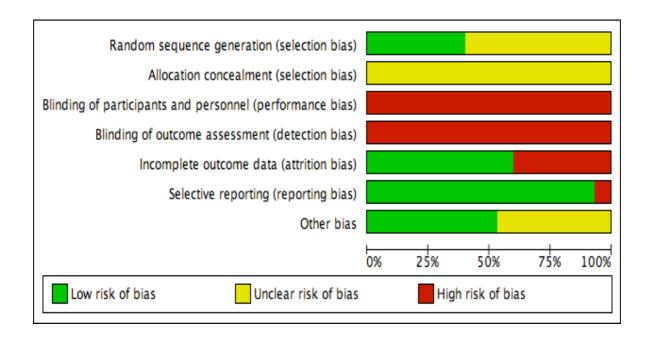


Diagram 8. Risk of Bias Summary: Review Authors' Judgments About Each Risk of Bias

Item for Each Included Study

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Allemand 2013	?	?	•		•	•	•
Coyle 1997	?	?		•	•	•	?
DiBlasio 2002	?	?	•	•	•	•	•
Freedman 1996	•	?		•	•	•	?
Goldman 2012	•	?				•	?
Harris 2006	•	?			•	•	•
Luskin 2005	?	?	•		•	•	?
Park 2013	?	?	•		•	•	•
Ripley 2002	?	?	•		•	•	?
Rye 2002	•	?	•		•	•	•
	_	?				•	•
Rye 2005	•						
	+	?	•	•	•	•	•
Rye 2005			•	•	-	+	•
Rye 2005 Rye 2012	+	?	• •	0 0 0	++		\vdash

Effects of Interventions

In the next section the results of the meta-analyses assessing the primary outcome measures are presented. Following this, subgroup analyses assessing the effects of model, mode and number of treatments on levels of state forgiveness are described. The final part of the results section details the individual study results.

Meta-Analyses – Forgiveness Treatment Versus Control

Of the fifteen studies included in the review, data from only twelve studies were metaanalysed. Three studies (Luskin et al., 2005; DiBlasio and Benda, 2002; Toussaint et al.,
2010) did not provide post-test scores (means, standard deviations) for any outcome
assessments, and data from these studies are presented individually (i.e. ten measures in
total). A further four scales, which assessed self-esteem (Coopersmith Self-Esteem
Inventory), spiritual wellbeing (Spiritual Well-Being Scale) and two that measured marital
satisfaction using the Dyadic Adjustment Scale and Couples Assessment of
Relationship Elements Interpersonal Distance Scale from Freedman and Enright (1996),
Rye and Pargament (2002) and Ripley and Worthington (2002), were individually examined
because a minimum of two measures assessing a similar outcome are required for metaanalysis.

Of the twelve studies included in the meta-analyses, the majority provided data for similar outcome scales, which enabled thirteen meta-analyses using a total of thirty-six scales. Five outcome groups were initially formed but due to significant between-study heterogeneity, negative affect was sub-divided into four outcome groups. Therefore, meta-analyses of forgiveness treatment versus control was carried out for seven outcome groups in total:

- 1. Depression
- 2. Anxiety
- 3. Anger/hostility
- 4. Stress/distress
- 5. Positive affect
- 6. Levels of state forgiveness
- 7. Levels of trait forgiveness

All scales that were combined in the meta-analyses were measured at comparable time points (i.e. post-test) and only standardized scales were included. The results for all meta-analysis involved the calculation of effect sizes (standardized mean difference) with 95% confidence intervals. Results with a minus sign denote that the forgiveness treatment benefits the experimental group. Only post-intervention scores (means, standard deviations) were used. In cases of high heterogeneity ($I^2 > 50\%$) and a significant alpha-value from the Chi-squared test) a random effects model was used, whilst for no or moderate heterogeneity ($I^2 < 50\%$) a fixed effects model was applied.

Analyses one to four (below) present the results for a number of negative affect outcomes and analysis five presents the results for positive affect. Analysis six presents the results for the impact of treatment on levels of state-forgiveness whilst analysis seven presents the results for the assessment of the impact of forgiveness treatment on levels of trait forgiveness.

Due to the fact that analysis six showed substantial levels of heterogeneity and involved a large number of studies, subgroup analysis were also carried out (analyses eight to thirteen) to explore the impact of model, mode and number of sessions on levels of state forgiveness (using the same outcome measures as those presented in analysis six).

Meta-Analyses

Negative Affect Outcomes

Analysis 1: Depression

Six studies (n=415) measured depression (Allemand et al., 2013; Freedman and Enright, 1996; Rye et al., 2005; Rye et al., 2012; Rye and Pargament, 2002; Wade and Meyer, 2009). Four of these studies used the Beck Depression Inventory or Centre for Epidemiology Studies Depression Scale, one study (Allemand et al., 2013) measured negative affect (i.e. disappointed, sad, anxious, worried, sluggish and exhausted) and Wade and Meyer (2009) used the Brief Symptom Inventory. The meta-analysis showed a small significant change favouring the intervention group (SMD -0.37; 95% CI -0.68 to -0.07; p = 0.02). Between-study heterogeneity was not significant ($I^2 = 47\%$; p = 0.09)

Table 16. Effects of Forgiveness Treatment on Levels of Depression

	Expe	rimental Control						Std. Mean Difference	Std. Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI		
Allemand 2013	-1.32	1.11	52	-1.28	1.16	26	20.3%	-0.04 [-0.51, 0.44]	+		
Freedman 1996	6.8	7.7	6	13.9	3.2	6	5.2%	-1.11 [-2.37, 0.14]			
Rye 2002	5.13	3.19	39	8.9	7.59	19	16.8%	-0.74 [-1.30, -0.17]	-		
Rye 2005	13.06	5.32	99	16.46	11.12	50	26.1%	-0.44 [-0.78, -0.09]	+		
Rye 2012	37.81	10.8	58	37.74	11.87	41	23.4%	0.01 [-0.39, 0.41]	+		
Wade 2009	0.56	0.28	11	1	0.64	8	8.0%	-0.91 [-1.87, 0.06]			
Total (95% CI)			265			150	100.0%	-0.37 [-0.68, -0.07]	•		
Heterogeneity: Tau ² =	= 0.06; C	hi² = 9	9.44, d								
Test for overall effect	Z = 2.3	8 (P =	0.02)						Favours (experimental) Favours (control)		

Analysis 2: Anxiety

Three studies (n = 78) measured anxiety. One of these studies (Freedman and Enright, 1996) used the State-Trait Anxiety Scale; Coyle and Enright (1997) administered the State Anxiety Scale and Rye and Pargament, 2002) used the Costello and Comrey Anxiety Scale. The meta-analysis showed a non-significant difference favouring the intervention group (SMD -1.13; 95% CI -2.78 to -0.53; p = 0.18). Between-study heterogeneity was significant ($I^2 = 80\%$; p = 0.007).

Table 17. Effects of Forgiveness treatment on Levels of Anxiety

	Experimental Control						Std. Mean Difference	Std. Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
Coyle 1997	38.33	11.71	5	59.26	9.62	5	30.6%	-1.76 [-3.35, -0.18]	•	
Freedman 1996	66.3	19.1	5	101.6	7.2	5	28.8%	-2.21 [-3.96, -0.45]	•	
Rye 2002	40.8	7.82	39	39.74	9.84	19	40.6%	0.12 [-0.43, 0.67]	•	
Total (95% CI)			49			29	100.0%	-1.13 [-2.78, 0.53]		
Heterogeneity: Tau² = Test for overall effect				f = 2 (P	= 0.0	07); l² =	= 80%		-100 -50 0 50 100 Favours [experimental] Favours [control]	

Analysis 3: Anger & Hostility

Six studies (n=517) measured anger and hostility. Two of these studies used the State Anger Scale (Coyle and Enright, 1997; Park et al., 2013). A further two studies administered the Trait Anger Scale (Harris et al., 2005; Rye et al., 2005). Goldman and Wade (2012) administered the State Hostility Scale whilst Rye and Pargament (2002) used the Hostility Subscale of the Aggression Questionnaire. The meta-analysis showed a medium significant effect favouring the intervention group (SMD - 0.49; 95% CI-0.77 to -0.22; p = 0.0005). Between-study heterogeneity was not significant ($I^2 = 44\%$; p = 0.11).

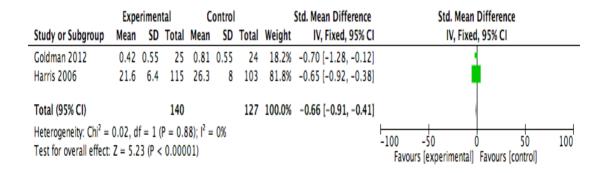
Table 18. Effects of Forgiveness Treatment on Levels of Anger & Hostility

	Expe	rimen	tal	(ontrol			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Coyle 1997	12.8	1.66	5	23.4	10.24	5	3.4%	-1.31 [-2.75, 0.14]	,
Goldman 2012	83.7	22	28	104	22.2	24	14.9%	-0.91 [-1.48, -0.33]	
Harris 2006	18.5	4.3	114	20.5	5.3	102	29.8%	-0.42 [-0.69, -0.15]	
Park 2013	13.8	7.3	16	19.4	9.1	16	11.0%	-0.66 [-1.38, 0.05]	
Rye 2002	19.86	3.78	39	23.42	8.11	19	15.3%	-0.63 [-1.19, -0.07]	
Rye 2005	17.52	7.89	99	18.08	3.79	50	25.6%	-0.08 [-0.42, 0.26]	
Total (95% CI)			301			216	100.0%	-0.49 [-0.77, -0.22]	
Heterogeneity: Tau ² =				-100 -50 0 50 100					
Test for overall effect:	Z = 3.3	v (r =	0.000)					Favours (experimental) Favours (control)

Analysis 4: Stress & Distress

Two studies (n=267) measured stress and distress (Goldman and Wade, 2012; Harris et al., 2006). One study used the Global Severity Index of the Brief Symptom Inventory to measure distress whilst Harris (2006) used the Perceived Stress Scale. Meta-analysis results show a large and significant overall effect favouring the intervention group (SMD -0.66; 95% CI -0.91 to -0.41; p = 0.00001). There was no between-study heterogeneity ($I^2 = 0\%$; p = 0.88).

Table 19. Effects of Forgiveness Treatment on Levels of Stress & Distress



Analysis 5: Positive Affect

Six studies (n=318) measured positive affect. Allemand et al. (2013) measured satisfaction, happiness, confidence hopefulness and energy; Freedman and Enright (1996) used the Hope Scale; Goldman and Wade (2012) as well as Wade and Meyer (2009) measured feelings towards offender (i.e. soft hearted, warmth, compassionate) using Batson's Empathy Adjectives; Rye et al. (2012) administered the Gratitude Questionnaire whilst Rye and Pargament (2002) used the Anticipation of Future Subscale from the Miller Hope Scale. The meta-analysis showed a small significant effect favouring the intervention group (SMD -0.30; 95% CI -0.53 to -0.07; p = 0.01). Between-study heterogeneity was not significant ($I^2 = 19\%$; p = 0.29).

Table 20. Effects of Forgiveness Treatment on levels of Positive Affect

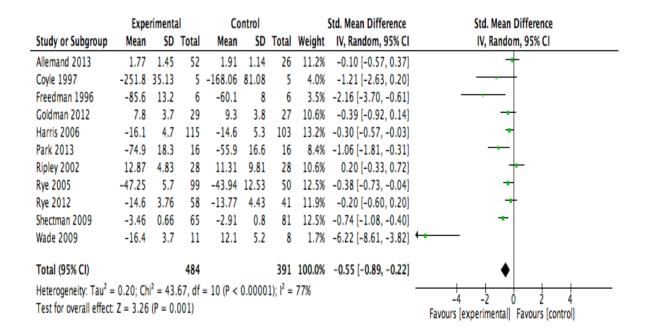
	Expe	riment	al	Co	ntrol			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Allemand 2013	-4.44	0.98	52	-4.37	1.04	26	23.8%	-0.07 [-0.54, 0.40]	+
Freedman 1996	-116	17.1	6	-86.1	11.2	6	2.5%	-1.91 [-3.38, -0.44]	
Goldman 2012	-20	9	28	-16.1	7.5	24	17.3%	-0.46 [-1.01, 0.09]	+
Rye 2002	-27.47	1.49	39	-26.74	2.68	19	17.3%	-0.37 [-0.92, 0.18]	+
Rye 2012	-37.03	6.29	58	-35.8	5.26	41	32.9%	-0.21 [-0.61, 0.19]	*
Wade 2009	-21.5	8.5	11	-17.6	12.9	8	6.3%	-0.35 [-1.27, 0.57]	+
Total (95% CI)			194			124	100.0%	-0.30 [-0.53, -0.07]	•
Heterogeneity: Chi ² =	6.15, df	= 5 (P	= 0.29						
Test for overall effect	Z = 2.53	(P = (0.01)						-4 -2 U 2 4 Favours [experimental] Favours [control]

Analysis 6: Levels of State Forgiveness

Eleven studies (n = 872) measured state forgiveness. Three types of scales were administered in six studies: the Psychological Profile of Forgiveness Scale (Harris et al., 2006; Rye et al., 2005; Rye et al., 2012; Wade and Meyer, 2009); the Enright Forgiveness Inventory (Coyle and Enright, 1997; Park et al., 2013) and the Forgiveness Scale (Freedman and Enright, 1996), to assess the absence of negative emotions, cognitions and behaviour and the presence of positive feelings, thoughts and behaviour towards an offender. In three of the studies that administered the Psychological Profile of Forgiveness Scale (Harris et al., 2006; Rye et al., 2012; Wade and Meyer, 2009), authors presented data for the absence of negative and presence of positive subscales separately; consequently the presence of positive subscale was selected. Four studies (Allemand et al., 2013; Goldman and Wade, 2012; Ripley and Worthington, 2002; Shectman et al., 2009) assessed situation-specific negative affect (i.e. revenge, avoidance) by administering the Transgression-Related Interpersonal Motivations scale. In two of the latter (Allemand et al., 2013; Shectman et al., 2009), the avoidance and revenge subscales

were presented separately and thus the revenge subscale was selected. The meta-analysis produced statistically significant findings favouring the intervention group (SMD -0.55; 95% CI -0.89 to - 0.22; p = <0.001). Between-study heterogeneity was significantly high ($I^2 = 77\%$ (p = <0.0001).

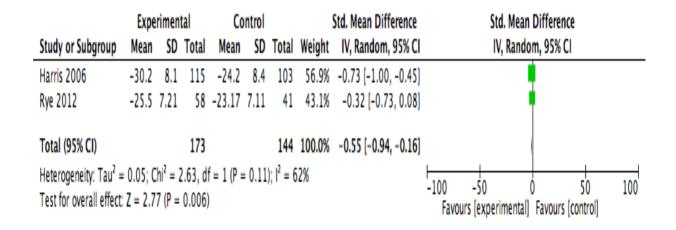
Table 21. Effects of Forgiveness Treatment on Levels of State Forgiveness



Analysis 7: Levels of Trait Forgiveness

Two studies (n=317) measured trait-forgiveness using the Forgiveness Likelihood Scale (Rye et al., 2012; Harris et al., 2006). The meta-analysis results showed a significant overall effect favouring the intervention group (SMD -0.55; 95% CI -0.94 to -0.16; p = 0.006). Between-study heterogeneity was not significant ($I^2 = 62\%$; p = 0.11).

Table 22. Effects of forgiveness Treatment on Levels of Trait Forgiveness

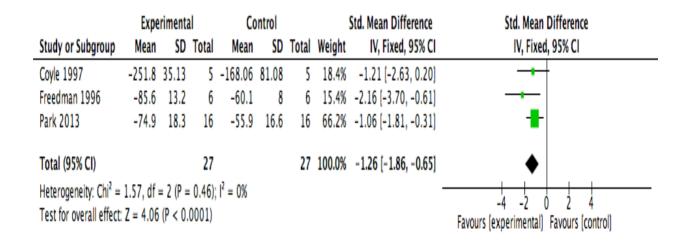


Subgroup Analyses

Analysis 8: Effects of Enright Model on Levels of State Forgiveness

Analysis nine (n=54) included three studies (Coyle and Enright, 1997; Freedman and Enright, 1996; Park et al., 2013) that used the Enright Forgiveness Model to improve state forgiveness. The Enright Forgiveness Inventory was administered in all three studies and measured the absence of negative emotions, cognitions and behavior, and the presence of positive feelings, thoughts and behavior towards an offender. Results showed a large and statistically significant effect favouring the intervention group (SMD) -1.26; 95% CI -1.86 to -0.65; p = 0.0001). No between study heterogeneity was found ($I^2 = 0\%$; p = 0.46).

Table 23. Effects of Enright Model on Levels of State Forgiveness



Analysis 9: Effects of REACH Model on Levels of State Forgiveness

Seven studies (n=600) that used the REACH model were assessed for the intervention impact on levels of state forgiveness. Three of these studies (Rye et al., 2012; Rye et al., 2005; Wade and Meyer, 2009) administered the Forgiveness Scale to assess the absence of negative emotions, cognitions and behavior and the presence of positive feelings, thoughts and behaviour towards the offender. The remaining four studies (Allemand et al., 2013; Goldman and Wade, 2012; Ripley and Worthington, 2002; Shectman et al., 2013) used the Transgression-Related Interpersonal Motivations Scale (TRIM) to measure situation specific negative affect (i.e. revenge, avoidance). The results showed a small effect favouring the intervention group (SMD -0.34; 95% CI –0.59 to -0.09; p = 0.008). Between-study heterogeneity was not significant ($I^2 = 51\%$; p = 0.06).

Table 24: Effects of REACH model on Levels of State Forgiveness

	Expe	riment	al	C	ontrol			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Allemand 2013	1.77	1.45	52	1.91	1.14	26	14.4%	-0.10 [-0.57, 0.37]	+
Goldman 2012	7.8	3.7	29	9.3	3.8	24	12.3%	-0.39 [-0.94, 0.15]	-+
Ripley 2002	12.87	4.83	28	11.31	9.81	28	12.8%	0.20 [-0.33, 0.72]	+
Rye 2005	-47.25	5.7	99	-43.94	12.53	50	19.0%	-0.38 [-0.73, -0.04]	+
Rye 2012	-14.6	3.76	58	-13.77	4.43	41	16.8%	-0.20 [-0.60, 0.20]	-+
Shectman 2009	-3.46	0.66	65	-2.91	0.8	81	19.2%	-0.74 [-1.08, -0.40]	+
Wade 2009	-16.4	3.7	11	-12.1	5.2	8	5.4%	-0.94 [-1.91, 0.03]	
Total (95% CI)			342			258	100.0%	-0.34 [-0.59, -0.09]	•
Heterogeneity: Tau ² =	= 0.06; Ch	ni² = 1							
Test for overall effect	Z = 2.64	(P = 1	0.008)						Favours [experimental] Favours [control]

Analysis 10: Effects of Number of Sessions on Levels of State Forgiveness (2 to 8 sessions)

Seven studies (n=672) that administered 2 to 8 sessions were assessed for the effects of the number of sessions received on levels of state forgiveness. Three of these studies (Allemand et al., 2013; Goldman and Wade, 2012; Ripley and Worthington, 2002) used the Transgression-Related Interpersonal Motivations Scale to measure situation specific negative affect (i.e. revenge, avoidance) whilst the remaining four (Harris et al., 2006; Rye et al., 2012; Rye et al., 2005; Wade and Meyer, 2009) administered the Forgiveness Scale to assess the absence of negative emotions, cognitions and behaviour and the presence of positive feelings, thoughts and behaviour towards the offender. The meta-analysis showed a statistically significant, albeit small difference favouring the intervention group (SMD -0.26; 95% CI -0.42 to -0.11; p = 0.001). Between study-heterogeneity was non-significant ($I^2 = 2\%$; p = 0.41).

Table 25. Effects of 2 to 8 Sessions on Levels of State Forgiveness

	Expe	riment	al	C	ontrol			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Wade 2009	-16.4	3.7	11	-12.1	5.2	8	2.6%	-0.94 [-1.91, 0.03]	
Goldman 2012	7.8	3.7	29	9.3	3.8	24	8.1%	-0.39 [-0.94, 0.15]	
Ripley 2002	12.87	4.83	28	11.31	9.81	28	8.8%	0.20 [-0.33, 0.72]	+-
Allemand 2013	1.77	1.45	52	1.91	1.14	26	10.9%	-0.10 [-0.57, 0.37]	
Rye 2012	-14.6	3.76	58	-13.77	4.43	41	15.1%	-0.20 [-0.60, 0.20]	-+
Rye 2005	-47.25	5.7	99	-43.94	12.53	50	20.6%	-0.38 [-0.73, -0.04]	
Harris 2006	-16.1	4.7	115	-14.6	5.3	103	33.9%	-0.30 [-0.57, -0.03]	+
Total (95% CI)			392			280	100.0%	-0.26 [-0.42, -0.11]	•
Heterogeneity: Chi ² =	6.12, df	= 6 (P							
Test for overall effect									-2 -1 0 1 2 Favours [experimental] Favours [control]

Analysis 11: Effects of Number of Sessions on Levels of State Forgiveness (12 or more sessions)

Four studies (n=200) that administered the forgiveness intervention in twelve or more sessions were assessed for effects on levels of state forgiveness. Three of these studies measured the absence of negative emotions, cognitions and behavior and the presence of positive emotions, thoughts and behavior towards the offender by administering the Psychological Profile of Forgiveness Scale (Freedman and Enright, 1996) and the Enright Forgiveness Inventory (Coyle and Enright, 1997; Park et al., 2013). One study (Shectman et al., 2013) used the Transgression-Related Interpersonal Motivations scale to measure situation-specific negative affect (i.e. revenge, avoidance). The meta-analysis showed significantly large effects favouring the experimental group (SMD -0.95; 95% CI – 1.36 to -0.53; p = 0.00001). No between-study heterogeneity was present ($I^2 = 19\%$; p = 0.29).

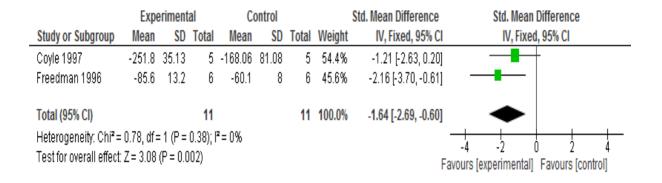
Table 26. Effects of 12 or More Sessions on Levels of State Forgiveness

	Expe	Experimental Control						Std. Mean Difference	Std. Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI			
Coyle 1997	-251.8	35.13	5	-168.06	81.08	5	7.8%	-1.21 [-2.63, 0.20]	•			
Freedman 1996	-85.6	13.2	6	-60.1	8	6	6.6%	-2.16 [-3.70, -0.61]	+			
Park 2013	-74.9	18.3	16	-55.9	16.6	16	23.6%	-1.06 [-1.81, -0.31]	•			
Shectman 2009	-3.46	0.66	65	-2.91	0.8	81	61.9%	-0.74 [-1.08, -0.40]	•			
Total (95% CI)			92			108	100.0%	-0.95 [-1.36, -0.53]				
Heterogeneity: Tau² = Test for overall effect	,		,	,	29); I ² =	: 19%			-100 -50 0 50 100 Favours [experimental] Favours [control]			

Analysis 12: Individual Treatment Effects on Levels of State Forgiveness

Two studies (n=22) that administered sessions using an individual format to deliver the treatment were assessed for effects on levels of state forgiveness. Both studies measured the absence of negative thoughts, cognitions and behaviours and the presence of positive emotions, thoughts and behaviours towards the offender by administering the Psychological Profile of Forgiveness Scale (Freedman and Enright, 1996) and the Enright Forgiveness Inventory (Coyle and Enright, 1997). Meta-analysis results indicate a large and statistically significant overall effect (SMD -1.64; 95% CI -2.69 to -0.60; p = 0.002) favouring the experimental group. No between-study heterogeneity was present ($I^2 = 0\%$; p = 0.38).

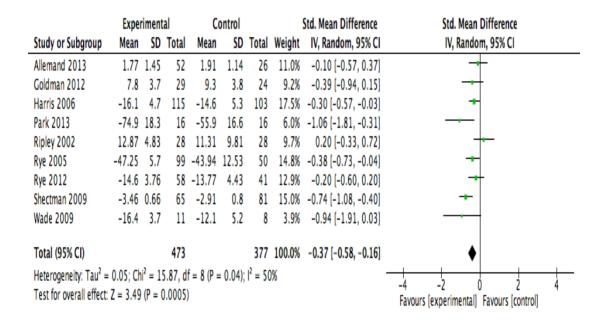
Table 27. Effects of Individual Treatment on Levels of State Forgiveness



Analysis 13: Group Intervention Effects on Levels of State Forgiveness

Nine studies (n=850) administered the treatment using a group mode. Interventions were assessed for effects on state forgiveness. Four of these studies (Allemand et al., 2013; Goldman and Wade, 2012; Ripley and Worthington, 2002; Shectman et al., 2013) used the Transgression-Related Interpersonal Motivations scale to measure situation-specific negative affect (i.e. revenge, avoidance) whilst the remaining seven studies measured the absence of negative thoughts, cognitions and behaviours and the presence of positive emotions, thoughts and behaviours by administering the Psychological Profile of Forgiveness Scale (Freedman and Enright, 1996), the Enright Forgiveness Inventory (Coyle and Enright, 1996; Park et al., 2013) and the Forgiveness Scale (Harris et al., 2006; Rye et al., 2005; Rye et al., 2012; Wade and Meyer, 2009). Meta-analysis results showed a significant, albeit small effect favouring the intervention group (SMD -0.37; 95% CI -0.58 to -0.16; p = 0.0005). Significant between-study heterogeneity was present (I² = 50%; p = 0.04).

Table 28. Effects of Group Treatment on Levels of State Forgiveness



Individual Study Results

Wellbeing Outcomes

Analysis 1: Self-Esteem

Two studies measured self-esteem. Freedman and Enright (1996) used the Coopersmith Self-Esteem Inventory and reported no statistically significant differences between treatment and control whilst DiBlasio and Benda (2002) used the Index of Self-Esteem and reported (clinical) mean differences favouring the treatment group four weeks post intervention but the latter results were not statistically significant.

Analysis 2: Religious/Spiritual Wellbeing

Two studies measured religious/spiritual wellbeing. Luskin et al. (2005) used the Principles of Living Survey and reported that the treatment significantly improved spiritual wellbeing (i.e. personal growth/compassion = p < 0.05) and embracing life's fullness (p < 0.01), favouring the intervention group at post-test. Rye and Pargament (2002) administered the Spiritual Well-Being Scale and found that compared to the control group, religious and secular participants did not improve on levels of religious wellbeing. However, results did show significant improvements in existential wellbeing (i.e. feeling fulfilled/satisfied with life and feeling good about the future) for post-test participants (p < 0.01).

Analysis 3: Hope

Luskin et al. (2005) administered the Focusing on the Future Scale to assess sense of hope towards future relationships. The author reports a significantly large effect favouring the treatment group at post-intervention (p < 0.01).

Analysis 4: Relationship With Others

Luskin et al. (2005) also assessed levels of estrangement and malice with the offender using the Interpersonal Distance Scale. The authors did not report the full results but state that the intervention did not affect levels of malice and estrangement towards the offender in the treatment group.

Ripley and Worthington (2002) assessed levels of marital satisfaction using the Dyadic Adjustment Scale and the Couples Assessment of Relationship Elements

measure. The authors report no statistically significant differences in marital quality between treatment and control groups post intervention (p = 0.61).

Analysis 5: Gratitude; Negative Mood; Stress; Depression & Life Satisfaction

Toussaint et al. (2010) assessed the effects of forgiveness treatment on levels of gratitude and reported that compared with the control group, experimental group participants had higher levels of gratitude post treatment however there was only a trend towards significance (p =0.07). They also reported that participants completing the forgiveness treatment had lower levels of negative mood (p = 0.07) and lower levels of stress (P = 0.09), however, there was again a definite trend towards significance. The authors did however find that forgiveness treatment significantly reduces levels of depression (p = 0.04) and increases levels of life satisfaction (p = 0.03).

Analysis 6: Trait Forgiveness

Luskin et al. (2005) used the Willingness to Forgive Scale to assess levels of forgiveness and found significant effects favouring the treatment group at post-test (p < 0.01).

Summary of Systematic Review Findings

This systematic review aimed to assess the effectiveness of forgiveness interventions in reducing negative affect, and all studies (analyses 1 to 4) produced small, medium to large statistically significant effects in favour of the intervention group and there was no significant between-study heterogeneity. Meta-analysis five, combining five studies using

positive affect scales, produced a total sample size of 318 and a significant, albeit small effect in favour of the intervention group.

To assess the impact of treatment on levels of state forgiveness, all ten studies were metaanalysed. The results showed medium effects (-0.46) and substantial heterogeneity. To
investigate this heterogeneity, subgroup analyses, which assessed the effects of different
models, modes and number of sessions on levels of functioning (i.e. state forgiveness) was
carried out and this significantly reduced heterogeneity in some cases. For instance, sub
group analyses showed that studies administering the Enright model, using an individual
mode of treatment as well as those administering twelve or more sessions produced
significantly large effects (with no heterogeneity) in favour of the treatment group. Analyses
9, 10 and 13 that assessed the REACH model, group based treatment and treatments lasting
2 to 8 sessions showed relatively small effect sizes with analysis 9 and 13 also showing high
levels of heterogeneity.

The individual study results (analyses 1 to 6) assessed self-esteem, religious/spiritual wellbeing, hope, relationships with others, gratitude, negative mood, stress, depression, life Satisfaction and trait forgiveness. There were no statistically significant differences reported between treatment and control groups post-intervention in levels of self-esteem. However, DiBlasio and Benda (2002) reported clinical differences (in means) between the two arms, favouring the intervention group. Analysis two suggested that forgiveness treatment appeared to improve levels of spiritual wellbeing but not religious wellbeing whilst analysis three found significant increases in hope, favouring the treatment group. Analysis four found that forgiveness treatment did not seem to improve relationships with others. In analysis six, the results suggested no significant improvements in gratitude, negative mood

or levels of stress although findings did indicate significant reductions in levels of depression. Also consistent with the meta-analysis results, it was found that trait forgiveness increased as a result of receiving the forgiveness intervention in the treatment group.

Overall, the results of the meta-analyses confirm the results of earlier meta-analyses (Lundahl et al., 2008), and support the use of forgiveness interventions in improving mental health and some dimensions of mental wellbeing such as positive affect.

The next chapter will discuss in more detail the results from each phase of the research project, that is, the interview, survey and systematic review findings followed by a discussion of key strengths, limitations, implications and suggestions for future research.

CHAPTER 7

DISCUSSION

The overall purpose of this study was to investigate the process of state forgiveness and assess its effects on a variety of mental wellbeing outcomes. A mixed methods design was employed where in phase one qualitative interviews were carried out to explore, in depth, how forgiveness was practiced, factors facilitating and hindering forgiveness, as well as the effects of forgiveness among religious/spiritual and secular/atheist participants. The phase two internet survey extended the first phase of the study by testing the effects of state forgiveness on mental wellbeing using a larger sample as well as investigating any moderator effects. In phase three of this project a systematic review of empirical studies using RCT designs was conducted. particular focus of this phase was to assess the quality of each of the studies concerning risk of bias as well as to test the effectiveness of process-based forgiveness interventions in promoting mental wellbeing outcomes. In what follows, I will discuss the findings gathered from each phase of these studies. I will begin by discussing the qualitative results concerning the process of forgiveness as well as the effects of forgiving real life interpersonal hurts. This will be followed by a discussion of the internet survey results with regard to the following themes: the relationship between state forgiveness and mental wellbeing; moderator and mediator effects as well as differences between religious/spiritual and non-religious/spiritual participants in outcomes of forgiveness and wellbeing. Third, I will discuss the results of the systematic review. Here I will focus on the quality of the evidence and the effectiveness of forgiveness interventions in promoting various components of psychological health. I will also discuss the results of subgroup analyses with respect to different intervention models, modes and duration of treatment. In the next section

findings from each phase of the study are integrated and discussed with the purpose of highlighting the contributions and insights obtained from using a mixed methods approach to addressing the overall research problem. The latter part of the chapter discusses the study implications, its key strengths and weaknesses, suggestions for future lines of research and finally, its conclusions.

Phase 1: Summary and Discussion of the Qualitative Findings

Little research has been conducted to examine the process of state forgiveness as well as the effects of forgiving and being unforgiving in response to interpersonal hurts. The key aims of the qualitative study were to interview participants for the purpose of better understanding how forgiveness was experienced as well as the effects of state forgiveness in relation to a variety of mental wellbeing outcomes. To address these aims, ten participants affiliated with different religious/spiritual groups and one secular/atheist participant were interviewed in-depth. The analysis of interviews revealed seven themes that inhibited forgiveness. These were: blaming, lack of acknowledgement, powerlessness, ruminating, desire for revenge, ongoing transgressions and physical closeness. There were no apparent religious/spiritual differences in these themes and they all appeared to be secular categories. A number of themes in relation to the effects of unforgiveness also emerged; these related to the negative impact on participants psychological health (i.e. cognitive, emotional) and social wellbeing (i.e. relationships). Eleven themes emerged as key facilitators of state forgiveness, many of which were unique to different religious/spiritual and the secular/atheist participants. These categories were: connectedness, focusing on positive qualities, accepting responsibility, acceptance of karma, being of benefit to others, prayer, meditation, self-observation, empathy, making amends and talking.

Participant's responses regarding the effects of practicing forgiveness also revealed links with wider dimensions of wellbeing, such as experiencing positive affect, positive relationships, spiritual growth, sense of empowerment as well as reductions in negative affect. Another set of findings related to how participants defined and experienced forgiveness. With regard to the former, there was some variation in that some participants understood forgiveness to entail reductions in negative affect whilst others placed importance on developing positive regard. However, participant's real life experiences of forgiveness, whilst appearing to vary in *levels* of forgiveness, did nevertheless indicate consistency among respondents in that appeared to entail both letting go and developing positive thoughts, emotions and behaviour. Overall, the qualitative component of this research enabled insight into both the processes involved in forgiving as well as its effects. Whilst there have been few studies that have examined the themes described above, in following sections I will attempt to compare and contrast the findings with the wider and mostly quantitative research literature.

Definitions and Experiences of Forgiveness

All participants expressed similarities in understandings of forgiveness in that they all appeared to define it as a process of letting go. However, the extent to which participants understood forgiveness to entail developing positive emotions towards the offender differed across the sample. New religious (ACIM; Theosophist) participants understood forgiveness to be a process of letting go and developing love or compassion, which was similar to Muslim participants who said it was about 'letting go' and being positive. In contrast, for the Buddhist and secular/atheist participant it was mostly understood to be a reduction in negative affect. These

differences in definition reflect the diversity of views between lay and research conceptualisations of forgiveness, and this is consistent with findings from the wider For example, research by Mullet et al. (2004) carried out among a European sample of participants found that only a minority of participants (out of a sample of one-thousand-two-hundred and twenty-nine) agreed that forgiveness entails regaining positive regard for the offender. Similarly, Kadima et al. (2007) found that participants belonging to Congolese collectivist culture (which places importance on forgiving and reintegrating wrongdoers) endorsed the restoration of sympathy, affection, trust, and reconciliation. A difference observed between the above lay definitions and the findings of the present qualitative study were that interviewees who conceptualised forgiveness to entail a change of heart did not necessarily differentiate between intra or interpersonal forgiveness. Moreover, they did not define forgiveness as necessarily involving reconciliation. In the current research, most of the religious/spiritual participants that largely adopted individualist practices (i.e. personal responsibility, self-reflection, intrapersonal forgiveness) with elements of collectivism (i.e. importance of forgiveness, human connectedness) as well as the individualist secular/atheist participant, experienced state forgiveness as necessarily involving a change of heart. This latter finding contradicts the results of the survey studies conducted by Mullet et al. (2004) and Kadima et al. (2007). The results are however consistent with Enright's (1996) process model. This is because the findings suggest that forgiveness entailed a cognitive, emotional and behavioural shift in which participants viewed the offender as having good qualities, showing understanding, letting go of anger, and behaving in a more friendly and positive way towards them. For many of the new age participants, this latter experience of state forgiveness appeared to occur irrespective of whether the hurt occurred within the

context of an exclusive (i.e. marital, family) or non-exclusive (work colleagues) relationship. Further, unconditional forgiveness, for these participants, occurred within ongoing or non-continuous relationships.

Barriers to Forgiveness

Of the factors that hindered forgiveness, blame was cited by the majority of participants to be a key barrier. By continually criticising and focusing on what the offender had done wrong and holding them responsible for the state they were in, participants appeared to be unable to let go of resentment based emotions and the resulting effects. Clinicians have highlighted that blaming others plays an integral role in perpetuating 'human disturbance' (Beck, 1995; Ellis and Dryden, 1997; Macaskill, 2005) and emphasize the importance of forgiveness in alleviating psychological distress (Macaskill, 2005). Further, qualitative research exploring therapist's perspectives on barriers to forgiving suggests that (psychologically) externalizing causes, of which blame is a key component, is an important factor inhibiting forgiveness (Glaeser, 2008).

Another prominent category that emerged, which was in some ways related to the latter theme of blaming, was participant's descriptions of powerlessness. For instance, they felt that by continually focusing on the wrongs committed by the offender, they felt they had no control to change their psychological state (i.e. unforgiveness and its effects) for the better. No known studies have specifically examined links between powerlessness and unforgiveness although there is some correlational literature indicating that environmental mastery (i.e. managing environment, control of external activities and making productive choices) is related

to trait forgivingness (Hill and Allemand, 2010). Another psychological category that was identified, and which is in some ways also related to the theme of blame, was rumination. This involved participants continuously focusing on the harm that was caused to them, and as a result, perpetuated feelings of anger and gradually contributed towards increased general negative emotions such as depression. Lending empirical support to these findings, prior longitudinal research conducted by McCullough (2007) also found that ruminating, a state that involved participants constantly thinking negative recursive thoughts in response to the interpersonal hurt, was also a key barrier to forgiveness.

Some participants indicated that being physically close to the offender was hindering their ability to forgive. Two of these latter participants also highlighted that the continuation of transgressions were a key barrier and perhaps it is for this reason that they felt a need for physical distance from the wrongdoer. Likewise, in qualitatively exploring therapist's accounts of factors that obstruct client's forgiveness process, Glaeser (2008) also found ongoing transgressions to be a key theme. This theme is, however, largely under-researched and more needs to be known about how people cope under such circumstances and the costs and benefits of unforgiveness or forgiveness in response to repeated transgressions.

Correlational research has also indicated that a lack of apology or making amends on the part of the offender can perpetuate feelings of unforgiveness (McCullough et al. 1997). Similarly, for some participants, a failure on the part of the wrongdoer to offer some form of recompense or show understanding of the potential harm they had caused the victim was cited as a factor perpetuating unforgiveness. This is consistent

with the results of a survey study conducted by Exline et al. (2004) in which the authors found that narcissistic entitlement such as wanting preferential treatment and repayment was a key barrier to forgiving.

Effects of Unforgiveness

Consistent with prior correlational research, the analysis of the qualitative interviews revealed links between unforgiveness and depression (Maltby et al., 2001). Previous research literature predominantly focuses on the associations between trait and state forgiveness and common mental health disorders such as depression and anxiety (Toussant and Webb in Worthington, 2005). However, participants in the present study also provided insights in terms of a variety of other problems that appeared to result from a lack of forgiveness. For example, feelings of guilt, worthlessness, a lack of energy (i.e. depleted, static, slow), lack of confidence, and fear. Participants also indicated how unforgiveness negatively impacted their cognitive abilities because they were unable to think clearly, had suicidal thoughts, as well as thoughts of wanting to murder. A majority of participants felt unforgiveness was a barrier to growth as they were unable to move forward in life and felt 'stuck in a rut'. In particular, many stated that feelings of anger and bitterness were transferred into new relationships, which resulted in arguments and constant falling out. Other dimensions of wellbeing that appeared to be affected were feelings of a lack of meaning and purpose in life. Thus, the exploration of participant's experiences of unforgiveness highlighted the prevalence of a wider range of mental health problems. Moreover, it also identified the negative effect unforgiveness had on other aspects of general functioning, an area that has to a large extent been unexplored.

Factors Facilitating Forgiveness

With regard to factors facilitating state forgiveness, a key category relevant among new religious (i.e. ACIM and Theosophist) participants was a sense of (spiritual) connectedness with others. This appeared to involve participants shifting their perception such that they chose to focus on perceived similar and positive characteristics. This is also in line with correlational survey research conducted by Krause (2012) who found that perceived similarities with others was a key predictor of forgiveness. In a content analysis of interventions to facilitate forgiveness, Wade and Worthington (2005) have also highlighted the importance of cognitive reframing in which individuals switch from negative to positive thinking patterns. Similarly, Muslim participants also utilized a strategy of focusing on the positive qualities of the offender. This included remembering good times they had had, giving attention to their nice qualities and highlighting positive behaviours such as being a good parent, which assisted in forgiving the wrongdoer. This latter finding is consistent with qualitative research results reported by Kidwell et al. (2012) in which the authors found that a secular strategy that assisted forgiveness was recognizing the general positive characteristics in the offender, such as being a good father.

Another very prominent category that emerged that assisted forgiveness among new religious and the Buddhist respondents was a regular practice of meditation. This took different forms such as sitting in silence, concentrating on the breadth, focusing on body sensations, as well as an awareness of cognitive and emotional reactions. Few studies have explored the role of these types of meditations in promoting forgiveness of real life offenses but a randomized controlled trial conducted by Oman et al. (2008) suggests that sitting and practicing mindfulness-based meditation

promotes dispositional forgiveness. In addition to meditation, another spiritual practice that appeared to have facilitated forgiveness among new religious and Muslim participants was prayer. This involved communicating with God or the Holy Spirit to seek guidance in forgiving the offender. Previous research using a randomized control trial design has indicated that volunteers who engaged in prayer over a sixteen-day period showed increases in state forgiveness (Vasiliauskas and McMinn, 2013). Qualitative research by Kidwell et al. (2012) also found prayer to be a key strategy utilised to assist forgiveness among religious groups.

A further religious strategy utilized by both Theosophy participants was acceptance of karma, which appeared to facilitate their ability to forgive in order to develop good karma. Prior qualitative research has also found similar results (Kidwell et al. 2012). This theme is in some ways related to the category of accepting responsibility, which was often cited among new religious and the Buddhist participants. Rather than constantly criticizing the offender or constantly thinking about the harm caused, participants appeared to believe that their experience of suffering was determined by themselves because it was their decision to focus on either negative or positive aspects that was causing them pain. As such they felt responsible for their own psychological processes, which enabled them to make better choices about the state they were in. No known studies have examined whether accepting responsibility promotes forgiveness, however it is an interesting line of further enquiry.

Talking to friends about the hurt experienced was a recurring theme found in the secular/atheist's accounts of factors promoting forgiveness. Similarly, in a review of psychotherapeutic interventions to promote forgiveness, Wade and Worthington (2005) highlight that expressing thoughts and feelings is an intrinsic part of most individual and

group based forgiveness therapies as it can help to reduce the emotional intensity felt around the hurt and facilitate forgiveness within therapeutic contexts. Whilst expressing and understanding one's own hurts can reduce unforgiveness, another core feature of almost all forgiveness therapy interventions is developing empathy. Wade and Worthington (2005) highlight that in many intervention studies, approximately four hours is given to developing empathy whereby therapists discuss the importance of taking the offenders perspective by trying to understand what may have motivated them to behave as they did. Forgiveness interventions generally utilize a range of mechanisms to promote forgiveness so the level of variance that this factor accounts for in the outcome is unclear. However, research has indicated that these programs do promote forgiveness and given the strong emphasis placed on empathy, it likely plays a significant part in helping people to forgive. In the qualitative study conducted as part of the present project, two religious/spiritual participants (Theosophist and Buddhist) explicitly described how they tried to understand the perspective and feelings of the transgressor, which helped them to forgive. This latter finding is consistent with correlational research conducted by McCullough et al. (1997) in which the authors specifically tested the effects of empathy on state forgiveness using non-therapeutic samples, and found positive associations between the two.

Despite prior research suggesting that the level of hurt experienced as well as the length of time that has elapsed after an offense has occurred are key predictors of forgiveness (Boon and Sulsky, 1997; McCullough, 2003), these categories did not consistently emerge from this study. For example, levels of unforgiveness such as resentment and anger appeared to be similar in cases of seemingly 'minor' (i.e. Trisha, ACIM; Alfred, secular/atheist) as well as more 'severe' offenses (Alan,

Theosophist; Rana, Muslim). Whilst some participants stated that it took time to forgive, it was unclear if this was a facilitator. In the case of participant seven (Amira), she was unable to forgive one offender despite a number of years passing since the transgressions.

Overall, participants utilized a unique set of strategies to help them forgive the offender for hurting them. Many of these factors were religious/spiritual in nature and entailed a focus on changing perceptions, feelings and an awareness of mental and emotional processes. In other cases, secular strategies whereby external factors such as making amends as well as talking about problems appeared more pertinent for some respondents.

Effects of Forgiveness

Previous experimental research has also shown that forgiveness of real life offenses can facilitate the development of positive affect such as feelings of hope, gratitude and happiness (Rye et al., 2012; Freedman and Enright 1996; Allemand et al., 2013). Similar results were also observed in the qualitative study but extending prior research the results also revealed a more specific and wider set of positive affective outcomes that appeared to result from forgiving. These included feelings of peace, contentment, joy, calmness, freedom, confidence, vitality and autonomy.

In addition to increasing positive affect, another factor that emerged from participant's descriptions of practicing forgiveness was spiritual growth. This encompassed an understanding of a spiritual self that was more connected with others, and entailed a process of learning and understanding about human relationships, both of which gave a

new sense of meaning and purpose to participant's lives. These findings are consistent with experimental research conducted by Luskin et al. (2005) in which he reported that forgiveness treatment resulted in increased levels of spiritual wellbeing such as personal growth/compassion and embracing life's fullness.

Another unique theme that emerged from participant's accounts was that of feeling empowered. For example, participants described how they felt stronger, independent, confident, calmer and more in control as a result of being able to change their negative psychological state to a positive one. No known studies have specifically explored this category but some prior research conducted by Allemand et al. (2013) has indicated links between forgiveness and confidence. It is important to note, however, that empowerment, such as feeling a sense of control, confidence, ability to change a negative situation to a positive one, may be both a facilitator and outcome. For instance, research conducted by Hill and Allemand (2010) suggested that environmental mastery assisted trait forgiveness. However, the present qualitative study results indicated that powerlessness inhibited forgiveness. Therefore, the causal direction may run both ways.

There have been some contradictory findings regarding the effects of forgiveness on interpersonal relationships. In line with the findings of the current qualitative study, some have found that forgiveness improves marital satisfaction (Baskin et al., 2011) and increases positive relations with others (Ostendorf et al., 2011). However, the systematic review conducted as part of the present thesis suggested that state forgiveness does not improve relationships with others. All of these previously cited studies (including the review) have, however, assessed event-specific relationships.

That is, effects of forgiveness between couples taking part in the research or between participants and those who hurt them. No known experimental studies have assessed the impact of forgiveness programs on general relationships. Whilst in the majority of cases the qualitative study participants stated that it was their relationship with the specific offender that improved, they also alluded to experiencing benefits beyond this. For example, participants said that forgiveness enabled them to 'move forward', and to 'develop healthier relationships with (their) children' which felt 'more open'. They also stated that they were able to let go of a variety of negative thoughts and emotions such as bitterness, anger, stress and not being able to think clearly; factors which were hindering them from developing new relationships. Thus, the interview findings suggest that forgiveness positively influenced a number of different aspects of individuals general functioning.

Previous longitudinal research conducted by McNulty (2011) has also found that a greater tendency to forgive is associated with increased psychological and physical aggression over a four-year period. The authors also found that those who had a lower propensity to forgive experienced reductions in psychological and physical aggression over time. However, the qualitative study results indicated that participants experienced more positive relationships with the offender and there was no suggestion of an increase or in fact any further violence over time. In the case of the two participants who experienced domestic violence, Amira said she was much happier in her marriage. Rana on the other hand chose to divorce her husband but was still able to forgive him and noticed that he behaved more positively towards her and the children. Respondent five, Jax, also stated that he experienced ongoing transgressions by his father and subsequently limited the time he spent with him.

However, he continually applied forgiveness in response to being hurt and stated that their relationship was consequently more positive. Nevertheless, further research that specifically examines the reduction or increase in offenses post (state) forgiveness within the context of ongoing close relations is warranted.

Differences and Similarities in Factors Influencing and Outcomes of Forgiveness

A few differences were observed between participants in terms of how they practiced forgiveness and the impact it had on their mental wellbeing. First, Toussaint and Friedman (2009) have suggested that forgiveness may be linked to wider dimensions of wellbeing among religious/spiritual participants. The qualitative study lends support to this theory as almost all religious/spiritual respondents spoke about the way in which practicing forgiveness facilitated experiences of psychological and social A key difference that emerged between participants affiliated with wellbeing. different religious/spiritual groups related to conditional and unconditional forms of forgiveness. ACIM, Buddhist and Theosophist participants for instance, chose to forgive irrespective of whether or not the offender made amends. For the two Muslim participants, the conditions of seeing a change in the offender and them apologizing was key to the forgiveness process. Prior survey research conducted by Krause and Ellison (2003) found that conditional forgiveness was associated with greater psychological distress and reduced levels of psychological wellbeing compared with unconditional forgiveness among a sample of older Christian adults. In the present qualitative study, all participants appeared to benefit from forgiveness. Nevertheless, a general assessment of their accounts did indicate that those who more strongly emphasized practicing unconditional forgiveness appeared to experience greater levels of state forgiveness and subsequently wellbeing. Whilst these latter findings

are tentative, they do indicate the potential problems associated with conditional forms of forgiveness not least because the victim is awaiting some form of recompense from the offender, without which they feel unable to let go of any negative resentmentbased emotions. An apology or expressions of remorse by the offender may never happen in which case the victim may be prolonging unnecessary pain. Another key difference observed between religious/spiritual participants was that for the new religious and Buddhist respondents, forgiveness was facilitated by engaging in inner (cognitive and emotional) change. This included beliefs in responsibility, karma, perceptions of connectedness as well as awareness of thoughts and emotions through meditation. The secular/atheist and Muslim participants on the other hand placed greater emphasis on external conditions such as talking about their problems, receiving an apology, as well as expecting the offender to make amends. Regarding the theme of barriers to forgiveness, almost all participants identified secular and external strategies as blocks to forgiveness with no notable differences in these factors across participants. However, the descriptions of factors that hindered forgiveness lend support to the finding that inner transformative strategies underpinned by unconditional forgiveness may be more facilitative of state forgiveness. This is because all of the opposite factors relating to externalising causes appeared to prevent participants from forgiving and experiencing wellbeing. These findings are, however, tentative. It may well be the case that participants of different backgrounds with different worldviews utilize those techniques that are most suited to their needs. Moreover, practicing other sets of strategies may in fact not lead to any gains. In any case, these differences (and similarities) need to be verified and further examined in relation to their effects.

In sum, the analysis of interviews revealed a variety of themes and patterns in the data. On the one hand, factors facilitating state forgiveness ranged from religious/spiritual beliefs and practices to more secular strategies with key differences observed between participants in relation to inner or external change as well as the practice of conditional or unconditional forms of forgiveness. Themes regarding barriers to forgiveness were consistent across participants. For instance, all respondents spoke of externalizing causes in the form of blaming and wanting the offender to change as key factors that perpetuated experiences of unforgiveness. Previous quantitative research has indicated links between forgiveness and reductions in negative affect, and in a few cases, increases in subjective wellbeing. Extending prior quantitative research, the qualitative interviews also highlighted how, particularly among religious/spiritual participants, forgiveness of real life offenses was related to increases in general wellbeing. Further, the analysis of interviews also revealed that the way in which participants practice forgiveness might influence the level of forgiveness that they experience (i.e. reductions in negative affect and/or development of positive regard), which may in turn determine their levels of wellbeing.

Phase 2: Summary and Discussion of Survey Findings

This section will discuss the findings from the second phase internet survey. First, I will provide a summary regarding the central hypotheses relating to the effects of state forgiveness and any moderator effects followed by a discussion that compares the findings with previous research literature. Second, I will provide a summary and discussion of the secondary hypotheses concerning differences between groups in outcome measures, which will also include a comparison of findings with previous

literature. In the final section I will briefly compare and contrast the survey findings with the qualitative results.

Hierarchical Prediction of Mental Wellbeing

The central hypothesis that the internet survey addressed using hierarchical multiple regression analysis was that forgiveness would lead to greater levels of mental wellbeing over and above the level of variance accounted for by demographics, connectedness and meditation. The conclusion of this analysis is as follows:

Hypothesis one was supported as the findings suggested that state forgiveness significantly contributes to explaining improvements in eudaimonic wellbeing over and above that which is explained by demographics, meditation and connectedness.

In step one of the model, age and employment were entered and they significantly explained 5.6% of the variance as a whole in psychological wellbeing scores. In step two of the model, meditation and connectedness were entered and they significantly explained 12.8% of the variance as a whole. After controlling for all of the previously entered variables, forgiveness was added and significantly explained an additional 4% of the variance over and above the variance accounted for by previously entered predictors. When all five predictor variables were included in the regression model, only two made significant contributions, namely forgiveness and connectedness. The results therefore suggest a significant relationship between the central variable of interest (i.e. forgiveness) and psychological wellbeing. Caution is warranted, however, because employing a correlational design makes it impossible to assess if forgiveness causes wellbeing. Survey research carried out by Hill and Allemand

(2010) found associations between trait forgiveness and one domain of Ryff's Psychological Well-Being Scale (positive relations with others); in the same study, they also found another domain from the same scale (environmental mastery) to be associated with dispositional forgiveness. Nevertheless, previous research using robust RCT designs lends some support to the survey findings. For instance, a metaanalysis carried out by Lundahl et al. (2005) shows that forgiving real life interpersonal hurts promotes various aspects of wellbeing such as positive affect, selfesteem and reductions in negative affect; indicating that the causal direction flows from forgiveness to some dimensions of wellbeing. Furthermore, as described in the literature review chapter, a limited number of correlational studies have also explored similar relationships. Toussaint and Friedman (2009), for instance, found associations between unforgiveness and positive affect among psychotherapy outpatients whilst Maltby et al. (2005) found links between state forgiveness and happiness among students. The survey findings also correspond with the results of the qualitative study, which suggested links between state forgiveness and eudaimonic wellbeing such as sense of meaning and purpose, spiritual growth, acceptance and positive relationships. Thus, previous research lends some support to the suggestion that forgiveness improves levels of wellbeing. The present study contributes further to this literature by addressing real life (state) experiences of forgiveness (outside of a therapeutic context) and wider domains of eudaimonic wellbeing among understudied samples within a UK context. Poor mental wellbeing is postulated to hinder functioning across all areas of life such as increased illness and suicide, as well as reduced levels of learning, educational and work productivity (Royal College of Psychiatrists, 2010). Researchers, clinicians and policy makers are increasingly focusing attention on building an evidence base concerning factors that can enhance

different aspects of wellbeing (Department of Health, 2011). The present study contributes towards this goal by supporting and extending on the findings of previous research indicating that forgiveness may be a key determinant of eudaimonic wellbeing. However, this finding requires further investigation using more robust study designs such as randomized controlled trials to assess if this relationship is causal.

Moderator and Mediator Effects

In addition to assessing associations between forgiveness and wellbeing, the second primary hypothesis examined whether meditation or sense of connectedness would moderate the relationship between forgiveness and mental wellbeing. Findings suggest:

- 1. There is no significant interaction effect between meditation and forgiveness.
- There is no significant interaction effect between sense of connectedness and forgiveness.

Thus, the second set of primary hypotheses is not supported. Consequently, due to not detecting any interaction effects, I also tested for any mediation effects. The following two conclusions were reached:

- 1. Meditation does not mediate the relationship between forgiveness and well-being.
- 2. Sense of connectedness does not mediate the relationship between forgiveness and wellbeing.

To assess if there was an interaction effect between daily meditation as well as sense of connectedness and forgiveness, hierarchical regression analysis was conducted. The results showed there to be no moderator effects as the interaction terms did not explain any additional variance in the outcome and the unstandardized regression coefficients were not significant. In assessing mediation, steps outlined by Baron and Kenny (1986) which suggest testing for associations between all potential mediator variables (i.e. forgiveness, sense of connectedness, meditation, wellbeing) were followed. No associations among forgiveness and meditation practice and connectedness were found, suggesting no mediator effect was present. However, in contrast to the findings of this study, research by Oman et al. (2008) reports that mindfulness-based meditation facilitates dispositional forgiveness. Moreover, Webb (2013) concluded that dispositional meditation mediates the relationships between dispositional forgiveness and mental health. However, there is no evidence relating to state meditation and forgiveness, and the current study did not use the same measures as these previous two studies. Thus, while it was expected that consistent with the qualitative component of this thesis, state meditation would be correlated with state forgiveness, the findings did not support this hypothesis.

Prior cross-sectional research has found that a sense of connectedness with others is positively associated with general forgivingness (Krause, 2012) whilst the qualitative component of this thesis also found connectedness to be often cited as a factor facilitating forgiveness of real life offenses. However, contrary to these findings, the survey study found no such links. Sense of connectedness was also assessed for any mediator effects but this too produced no significant results. In fact, connectedness

was more significantly correlated with eudaimonic wellbeing. However, it is important to bear in mind that the number of new religious and Buddhist participants for whom these variables were key facilitators of forgiveness were very much under represented in the survey, with less than 5% taking part. Many participants also stated that some of the indicators in the connectedness questionnaire were not entirely clear, making it difficult to understand what some of the questions meant. Therefore it may well be the case that for both of these latter variables (meditation and connectedness), the use of non-validated measures may have influenced outcomes. These findings suggest the need to further explore the stated hypothesis in order to develop more clarity on factors facilitating forgiveness.

The secondary hypotheses that the internet survey aimed to address focused on the differences between religious/spiritual and non-religious/spiritual groups. The next section summarises and discusses the results of these analyses.

Differences Between Religious/Spiritual and non-Religious/Spiritual Groups.

In step one of the statistical analysis, this study conducted an independent samples *t* test to assess the hypothesis that religious/spiritual participants would show greater increases in outcomes than secular/atheist participants across measures of forgiveness and wellbeing. The following conclusions were drawn:

 Religious/spiritual participants are no more forgiving than nonreligious/spiritual respondents. Thus, the first secondary hypothesis was not supported. 2. Religious/spiritual participants do not experience greater levels of (wider dimensions) of mental wellbeing than non-religious/spiritual respondents.

Thus, the second secondary hypothesis was not supported.

The results of the t test suggest that religious/spiritual and non-religious/spiritual participants had similar levels of state forgiveness and eudaimonic wellbeing. However, in this initial t test the samples were unbalanced and because this can produce inaccurate results, a second t test was conducted by using balanced sample sizes by randomly selecting thirty-seven religious spiritual participants (out of a total of seventy-two). This second test produced slightly different results concerning the first of the secondary hypothesis, which suggested that non-religious/spiritual participants showed greater increases in wellbeing than religious participants. The results concerning differences in outcomes of forgiveness remained the same in both However, the second test also violated the homogeneity of variance tests. assumption, which requires there to be no difference in means across the two groups. It is suggested that a violation of this assumption is robust in cases of equal sample sizes (Laerd Statistics, 2013) and by correcting for this error and not assuming equal variances, the results produced statistically significant effects, suggesting greater levels of wellbeing among non-religious participants.

It has been hypothesised that religious participants are more forgiving and consequently may experience greater levels of wellbeing. However, previous empirical research has indicated that religious individuals are no more forgiving of actual interpersonal offences than their non-religious counterparts (Subkoviak, 1995). The qualitative component of this thesis suggested that religious/spiritual participants,

particularly new religious respondents, experienced greater levels of state forgiveness and subsequently (wider) dimensions of wellbeing, perhaps due to their use of psychological strategies underpinned by unconditional forms of forgiveness. It may therefore be possible that subgroup analyses would highlight differences among different groups but due to sample size limitations this was not possible to assess as part of the survey because only 5% of new religious participants took part. Therefore whilst the findings of the present study concur with some previous research, which suggests that religious people are no more forgiving than their non-religious counterparts (Subkoviak, 1995), it may well be the case that there are differences depending on how forgiveness is practiced among members of these groups. Potential associations of this sort are worth exploring in order to better understand if individuals who actively learn about and are encouraged to practice forgiveness are more inclined to be forgiving of interpersonal transgressions than those who do not actively educate themselves.

Further, the finding from the second independent samples *t* test suggested that non-religious/spiritual samples experience greater levels of wellbeing. This finding contradicts that of the qualitative study results, as well as prior theory suggesting links between religiosity and eudaimonic wellbeing (Toussaint and Friedman, 2009). One explanation for these differences is that the interview findings included too few non-religious participants to detect any such patterns. Another possibility is that the definitions provided to assess whether respondents were religious, spiritual or both, were more suited to participants practicing Abrahamic or transcendental forms of spirituality as the questionnaire asked participants about attending religious places and whether they had a sense of connection with a power or force that transcends the

current context of reality (Speck and Thomas, 2001). Thus it is plausible that participants that held differing types of spiritual beliefs were more prominent in the non-religious group, hence why there were differences detected in wellbeing outcomes. Alternatively, there may be no such differences between religious or non-religious groups and due to the homogeneity of variance and unequal sample size assumptions being violated, it is not possible to draw any firm conclusions regarding the detected patterns.

In sum, the findings of the internet survey suggest a significant relationship between state forgiveness and eudaimonic wellbeing. This finding is consistent with the results of the qualitative component of this thesis and lends some support to previous quantitative research indicating links with positive and negative affect. Also, contrary to the findings of the qualitative study and prior quantitative research suggesting that meditation and connectedness facilitate forgiveness, the survey results indicated no such links. Furthermore, the survey results found no differences between religious and non-religious participants in outcomes of forgiveness but indicated mixed results concerning wellbeing. However, the qualitative study indicated that there were differences in outcomes between religious/spiritual participants and the secular/atheist respondent, and this finding may justify further exploration in order to better understand if and why this may be the case.

Following on from the theme of understanding the effects of state forgiveness on mental wellbeing, the next section discusses the findings from the systematic review. This aimed to assess the quality of existing RCT evidence as well as to assess the effectiveness of process-based forgiveness interventions.

Phase 3: Summary and Discussion of the Systematic Review Findings

Of the fifteen studies selected for inclusion in this review, a total of twelve studies and thirty-six outcome measures were used to carry out thirteen meta-analyses. Fourteen scales from three studies were assessed individually. Initially, it was intended to combine and analyse studies using broad outcome groups such as negative affect and state forgiveness but the results produced medium effects with substantial levels of heterogeneity. This was due to the fact that whilst the twelve studies included in the meta-analyses were all evaluations of process-based interventions, they were diverse in terms of the model type, mode, number of sessions, cultural context, and the gender and age of participants. In order to investigate some of the observed heterogeneity, subgroup analysis was undertaken on the basis of model type, group versus individual format, and number of sessions received. It was not possible to examine all diversity due to the limited number of studies and in cases where heterogeneity was low, broad outcome groups were formed (i.e. positive affect).

With regard to assessing the effectiveness of forgiveness interventions in reducing negative affect, most studies (analyses 1, 3 and 4) produced small, medium and large statistically significant effects in favour of the intervention group, and there was no significant between-study heterogeneity. For example, small effects were present for depression (SMD-0.37), with a moderate effect observed for anger and hostility (SMD-0.49), and large effects for stress and distress (SMD-0.66). With the exception of anxiety (n=78), which did not produce a significant overall effect, all other meta-analyses assessing negative affect had sample sizes between 270 to 500 participants, with resulting small confidence intervals. These results suggest that forgiveness interventions are effective at reducing various components of negative affect.

In meta-analysis five a number of measures of positive affect such as gratitude, hope, satisfied/happy/confidence and empathy (i.e. feeling 'softhearted/compassionate') were combined. Combining five studies produced a total sample size of 318 and a significant, albeit small effect in favour of the intervention group. Despite the diverse measures used, heterogeneity was not significant.

To assess the impact of treatment on levels of state forgiveness, all ten studies were metaanalysed. The results showed medium effects (-0.55) and substantial heterogeneity. To investigate this heterogeneity, subgroup analyses that assessed the effects of different models, modes and number of sessions on levels of functioning (i.e. state forgiveness) were conducted. These subgroup analyses showed significant effect sizes, all benefitting the treatment group. In the majority of analyses the heterogeneity was significantly reduced. For instance, analysis twelve, examining the effects of administering an individual treatment mode; analysis ten, examining the effects of 2 to 8 more sessions; analysis eleven, examining the effects of twelve or more sessions; analysis eight, examining the effects of the Enright model of forgiveness and analysis seven, which examined levels of trait forgiveness, all produced non-significant levels of heterogeneity. Three of these latter studies produced large effects in favour of the treatment group. For example, analysis twelve found that process-based interventions and using an individual format (SMD-1.64; p<0.01) were superior to group-based interventions (SMD-0.37; p<0.01). In analysis eleven, participants receiving twelve or more sessions (SMD-0.93; p<0.01) benefitted more compared with those receiving between 2 to 8 sessions (SMD-0.23; p<0.01). Analysis eight showed that studies using the Enright process model produced significantly large effects (SMD-1.26; p<0.01), which favoured the treatment group over the control condition in comparison to the REACH model (SMD-0.34; p = 0.02). Sample sizes in each of the analyses with large

effects were 200 (analysis 11); 54 (analysis 8) and 22 (analysis 12). Meta-analyses thirteen, which assessed the effects of group-based interventions, produced significant levels of heterogeneity that remained unexplained.

Subgroup analyses suggested that the Enright process model of forgiveness, using an individual format, and administering longer sessions, were all superior. However, closer examination of outcomes that produced large effects (analysis four, assessing effects on stress and distress; analysis eight, assessing effects of the Enright model; analysis eleven, assessing effects of administering twelve or more sessions and analysis twelve, assessing individual treatment effects) also reveal that a commonality in all five of these analyses is that they all administered longer sessions. Moreover, the type of model used seems to have had a substantial effect when comparing analyses eight and nine, after temporarily omitting two studies using the Enright model (Coyle and Enright, 1997; Freedman and Enright, 1996). However, in analysis eleven results indicated that irrespective of model type, the overall effect was still significantly large and there was no heterogeneity present. Due to the limited number of studies included in the meta-analyses it was not possible to explore in detail the effects of these factors. Nevertheless, in line with previous reviews (Lundahl et al., 2008) the analyses appeared to demonstrate that there is a great deal of variation with respect to type of model used, the mode of treatment and number of sessions administered, and their level of overall effect. Further, the REACH model only administered group sessions, therefore future research could explore if individual REACH interventions are as effective as individually administered Enright models.

The individual study results (analyses 1 to 5) assessed self-esteem, spiritual wellbeing, hope, relationships with others and trait forgiveness. There were no statistically significant

differences reported between treatment and control groups post-intervention in levels of self-esteem. However, DiBlasio and Benda (2002) reported clinical differences (in means) between the two arms, favouring the intervention group. Analysis two suggested that the forgiveness treatment improved some aspects of spiritual and existential wellbeing whilst analysis three found significant increases in hope, favouring the treatment group. Analysis four found that consistent with the meta-analysis results, forgiveness interventions do not seem to improve relationships with others. Also consistent with the meta-analysis results, it was found that trait forgiveness increased as a result of receiving the forgiveness intervention in the experimental group.

The studies included in the systematic review used diverse samples of participants. Adolescents, adults and older adults as well as male and female participants took part and interventions were tested across cultures (Israel, South Korea, Switzerland and USA). Meta-analyses that showed large effects (Analyses 12 and 8) in relation to the impact of treatment on levels of psychological adjustment (i.e. forgiveness) reflected this diversity. However, due to the limited number of studies it was difficult to investigate further the effects of age, gender or cultural context on outcomes over and above key factors such as number of sessions. In addition, the majority of studies were conducted in the USA and therefore further research that assesses the effects of these interventions in different countries and other cultures, among minority ethnic and religious groups as well as educationally and economically diverse samples, is warranted. The studies also evaluated the effectiveness of forgiveness interventions with people experiencing a range of problems such as sexual abuse, abortions, marital hurts, conflict, and a range of other hurtful interpersonal experiences, and the findings are therefore generalizable to a range of contexts.

Agreements And Disagreements With Other Studies

The findings are to a large degree consistent with previous research, which seems to suggest that forgiveness programs improve poor mental health, promote general positive affect and increase levels of forgiveness (Lundahl et al., 2008). However, despite previous research that found decreases in levels of anxiety, the meta-analysis did not support this result. It may be relevant to note that two of the three studies assessing anxiety did produce significant results but that the sample sizes were relatively small. In either case, further research is warranted. Also consistent with previous research the review found that individually delivered programs, using the Enright model of forgiveness and administering longer sessions seem to be more effective in promoting psychological functioning (Baskin and Enright, 2004; Wade et al., 2013; Lundahl et al., 2008). However, as alluded to previously, in some cases subgroup analysis revealed that the number of treatments administered (i.e. 12 or more) appeared to have more of an effect in determining levels of forgiveness, and there were no individually administered REACH models to compare with. Thus, further research making direct comparisons of different model types, modes of treatment and number of sessions is needed.

Whilst the review findings suggest an overall improvement to most aspects of wellbeing post-treatment, it is also necessary to take account of the quality of the evidence. Studies were appraised using the GRADE approach, which incorporates key criteria relating to risk of bias as outlined by the Cochrane Collaboration. Each of the factors outlined in this approach are discussed followed by a judgment on the quality of the included studies.

Quality of The Evidence

The first factor that was assessed relates to the methodological limitations of the included studies. Overall, a key limitation for all studies was that participants and personnel were not 'blind' to allocation condition and none of the studies gave information on the method of allocation concealment. Five studies reported large dropout rates although attrition bias was less than 50% across all studies. All authors claimed to randomize participants, however, only six of the fifteen studies stated the method of sequence generation. Other potential biases were reportedly minimised as most authors found no significant differences across groups on demographic, background and outcome variables, and in the majority of studies there was no evidence of selective reporting. Overall, there was an almost equal balance of high risk (n=6) and low risk (n=5) studies with four studies being rated as unclear risk of bias largely due to a lack of information being provided. It is important to bear in mind that it is not possible to 'blind' participants and personnel in forgiveness intervention studies. Moreover, assuming investigators most probably did protect the allocation sequence before assignment as well as there being an overall low risk in selective reporting and the number of respondents that dropped out, the overall methodological quality of the studies suggests a medium to high risk of bias.

The second factor to consider relates to the directness or indirectness of evidence where studies not assessing the central research question or making similar comparisons may introduce a level of bias. However, there was little evidence of this as all studies made direct comparisons between forgiveness treatment and a notreatment control condition whilst the majority of studies addressed the main research question relating to the effects of treatment on various domains of mental wellbeing. Nevertheless, one study (Goldman and Wade, 2012) assessed psychological health

such as rates of depression as a secondary question whilst Park et al. (2013) and Shectman et al. (2009) did not examine effects on any general wellbeing outcomes. However, three studies did include assessments of levels of forgiveness post-intervention. Therefore, there appear to be minimal limitations regarding the indirectness of evidence.

A further limitation could arise due to high levels of unexplained heterogeneity where, for example, the intervention effects apply to some samples and not others. Concerning the meta-analysis, mental wellbeing outcomes were initially assessed based on various outcome groups such as negative affect and levels of forgiveness, which revealed significantly high levels of heterogeneity. Subsequently, subgroup analyses were carried out, which was effective in reducing much of the observed variance. However, two analyses continued to show significantly high levels of heterogeneity (analyses 2 and 13) that could not be explained by mode, model or number of treatments or in the case of analysis two (assessing anxiety), other mental health indicators. As a result, studies were analysed on the basis of high and/or unclear or low risk of bias. Of the twelve studies included in the meta-analyses, four were rated as 'low risk', two were rated as 'unclear risk' and six rated as 'high risk'. The overall level of risk of bias for each study was based on the number of times each criteria was rated. So for instance, in the case of Allemand et al. (2013) of the seven criteria three were rated as 'low risk', two as 'high risk' and two as 'unclear risk'. In the case of Rye and Pargament (2002), Rye et al. (2005) and Rye et al. (2012) there were an equal number of high and low risk criteria selected but it was decided that the overall rating for these studies should be high because of lack of 'blinding', high dropout rates and lack of clarity concerning allocation concealment. As a result,

sensitivity analyses were carried out by temporarily omitting studies where there was high or unclear risk. For analysis two, only low risk studies were included and thus sensitivity analysis could not be carried out and heterogeneity was not explained. Results for analysis thirteen showed that omitting high-risk studies made no difference to the overall results. However, it did significantly increase heterogeneity to 75%. For analysis six, which assessed effects of treatment on levels of state forgiveness, subgroup analyses did explain away the majority of the heterogeneity present. Nevertheless, omitting high-risk studies as well as unclear risk studies (done separately) did not make a difference to the overall result, and instead significantly increased heterogeneity to 85%. Overall, the results of the sensitivity analysis show that the methodological quality of studies was not an influence on levels of heterogeneity (for this review) or effectiveness. As a result, the variation in these two analyses (2 and 13) remained unexplained. Nevertheless, studies assessing the primary research question (i.e. effects on mental wellbeing) did not show significant levels of heterogeneity therefore the overall quality of evidence in this regard seems to be high.

A further indicator as to the robustness of studies is the level of precision of results (i.e. confidence intervals). Of the thirteen meta-analyses carried out, three (analysis 8, 11 and 12) that produced significant results had very wide confidence intervals. This may have resulted from small sample sizes thus increasing uncertainty as to the true size of the effect and reflecting on the quality of evidence (Higgins and Green, 2008). However, regarding the primary research question, which focused on assessing the effects of intervention on levels of wellbeing, the confidence intervals were not very wide. Therefore, overall, the results were fairly precise giving confidence in the level

of effect, although future research needs to investigate if results concerning the impact of model, mode and number of sessions significantly influence levels of forgiveness.

A further problem can arise due to selection bias in which authors only report the findings of studies showing significant effects. However, there was no evidence of this as authors reported the full results of all measures assessed in the review, which included studies with no effects. An exception was Luskin et al. (2005) who did not report the full results of the effects of treatment on levels of estrangement and malice although it was stated that there was no significant effect for this outcome. There was no indication of conflict of interest although not all studies reported on the source of funding. On the whole and largely due to the reporting of results for almost all outcome measures the studies appeared to pose minimal risk. Publication bias may also be a potential issue whereby only positive study results are published (Higgins and Green, 2011). However, due to the small number of included studies and scales for each of the outcome groups included in the review, a funnel plot to assess for this type of bias could not be carried out.

In sum, taking all of the above factors into account, there was a low to moderate quality of evidence rating for the included studies. This reflects the fact that the methodological quality of the evidence suggested the potential for high-risk of bias. However, this was mostly due to the issue of 'blinding', which is difficult to ensure in such studies. Most other risk of bias factors were either low (randomization, selective reporting, other sources of bias) or generally unclear risk (i.e. allocation concealment). Further, all studies made direct comparisons and addressed the central research question. Steps were taken to address levels of heterogeneity with subgroup

analyses explaining much of the variance. The main analyses addressing the central question of effects on wellbeing showed little variation. Confidence intervals were very wide for some meta-analyses, which largely appeared to be due to relatively small sample sizes. Although these results were not for the main analysis assessing effects on mental wellbeing, they suggest that the effects of these subgroup analyses require further investigation. Finally, the evidence base on the whole did not seem to be affected by selection bias as almost all authors reported significant and non-significant effects, although there were too few studies to conduct a funnel plot to assess for publication bias. Overall, the evidence base did not need to be substantially downgraded and based on a GRADE assessment of risk-of-bias suggested that the quality of evidence is 'low' to 'moderate'.

What this suggests is that we can have a certain degree of confidence in the finding that forgiveness interventions promote mental health and hedonic wellbeing (i.e. positive affect), which is also consistent with the findings of previous meta-analyses (Lundahl et al., 2008). However, there is less certainty about subgroup analyses assessing effects of model, mode and number of sessions on levels of state forgiveness, and further research is required.

Integration of Research Findings

The next section will discuss the interrelationships between findings from each phase of the study and the contributions each of the methods made to addressing the overall research question.

With regard to the central research question about the effects of state forgiveness on mental wellbeing, which each phase of the study addressed, the results seem to be relatively consistent and each phase of the project informed, extended on or corroborated existing findings. For instance, the qualitative study suggested a link between state forgiveness and wider dimensions of (hedonic and eudaimonic) wellbeing, particularly among religious/spiritual participants. This subsequently guided the selection of the outcome measure used in the internet survey. No previous research has been conducted using diverse participants in the UK so it was important to select an instrument that was likely to be representative of participants' experiences. The second phase survey results also concurred with phase one data, finding an association between forgiveness and eudaimonic wellbeing. The third phase data, which consisted of a systematic review of RCT trials, found fairly robust evidence to suggest that forgiveness reduces poor mental health and increases positive affect. Together, all three methods confirmed links between state forgiveness and different aspects of mental wellbeing thus making an original contribution to knowledge.

Another theme that was examined across all three phases was the effects of moderator variables. The phase one (qualitative) data identified a number of previously unknown mechanisms influencing forgiveness such as sense of connectedness with others and regular meditation practice. The quantitative internet survey conducted in the second phase drew on the phase one data and allowed for more patterns to emerge using different and larger samples, and highlighted disagreements between datasets. For example, key facilitators identified in the phase one study, namely connectedness and meditation were subsequently included in the phase two statistical analysis. The

survey results confirmed associations between these variables and eudaimonic wellbeing but not forgiveness. In contrast to the interview data, the correlation analysis and multiple regression analysis did not find meditation or connectedness to be moderator variables. The latter results could be due to the low number of new religious and Buddhist participants in the survey for whom these factors played a greater part in their forgiveness process. Due to difficulties in recruiting large numbers of new religious group participants in the UK, the survey findings predominantly reflected the views of traditional religious group participants. Nevertheless, the phase one study indicated the importance of considering mechanisms and subgroup differences and suggested a direction for further research. The phase one study also highlighted subtle differences between new religious and more traditional religious groups. This was in terms of how forgiveness was practiced (i.e. conditional, unconditional, inner and external strategies) as well as both outcomes of forgiveness and mental wellbeing However, due to the limited number of new religious and Buddhist participants it was not possible to test these findings in the survey, but this too suggests a direction for further research.

In sum, the exploratory nature of phase one (interviews) and phase two (survey) provided new insights into how religious/spiritual and non-religious/spiritual participants experience the process of forgiveness as well as interrelationships between (understudied) factors across datasets. The third phase (systematic review) gave greater insight and substantially increased the evidence base concerning state forgiveness and its links with general functioning. Thus, the use of mixed methods provided a more robust and comprehensive understanding of the phenomena in which state forgiveness promotes different dimensions of mental wellbeing.

Implications

This study has made several contributions to knowledge by addressing a number of gaps in the literature. First, it utilised both qualitative and quantitative methods to increase the evidence base concerning the effects of forgiveness on mental wellbeing. Second, it examined the process of forgiveness experiences and the role that specific mechanisms play in facilitating or obstructing this process. Third, it added to existing debates and evidence concerning the meanings of forgiveness. It also highlighted key differences and similarities in how forgiveness is practiced, and the effects of such forgiveness among diverse religious/spiritual and secular/atheist participants who had experienced a range of interpersonal hurts within the context of both exclusive and non-exclusive interpersonal relationships.

Promoting mental wellbeing is a key public health focus because it is linked to a wide range of individual and societal benefits (Department of Health, 2011). The Royal College of Psychiatrists (2012) stress that mental wellbeing reduces illness and suicide, minimises health service use and decreases premature mortality in the general population as well as among those with longstanding illness. Research also suggests that wellbeing can improve educational attainment, work productivity, reduce absenteeism and burnout as well as decrease crime and violence (Campion, 2007). However, few studies have examined relationships between state forgiveness and general wellbeing outcomes. Moreover, there are no known studies that have reviewed the robustness and efficacy of forgiveness intervention research following evidence based treatment guidelines. The present study therefore responded to the need for further research investigating factors that promote mental wellbeing.

All three methods produced similar results in that they indicated that forgiveness promotes mental wellbeing, albeit different aspects of such wellbeing. For instance, the systematic review of individual studies showed that forgiveness therapy can help improve the psychological health of older adults (Allemand et al., 2013), promote recovery from spousal physical/sexual abuse (Freedman and Enright, 1996); improve the psychological functioning of aggressive victims (Park et al., 2013) as well as provide a hopeful means of recovering from civil conflicts (Toussaint et al., 2010). The meta-analysis conducted as part of this review showed that state forgiveness improves mental health and subjective wellbeing. The review also indicated that the type of forgiveness model, the mode of treatment and number of sessions administered may strongly influence the levels of psychological adjustment experienced post intervention. The in-depth interviews conducted in phase one, indicated that participants perceived forgiveness to have helped them to recover from the effects of a variety of abuses. Participants also felt that forgiving resulted in them feeling better (i.e. peaceful, calm, happy); gave them a sense of meaning/purpose in life and resulted in more positive relations with others. The internet survey, the design of which was informed by the first phase of the study, further confirmed state forgiveness to be associated with eudaimonic wellbeing. Therefore, the present study extends and verifies previous research findings suggesting that higher levels of state forgiveness improves psychological health.

The above findings strongly support the application of forgiveness within clinical and other settings. Moreover, the systematic review results suggest that individually delivered forgiveness therapy, which uses the Enright model and administers 12 or more sessions, may be a more effective method of helping clients to overcome psychological health problems resulting from diverse types of interpersonal hurts, within therapeutic settings. However, counseling and psychotherapy literature and practice has to a large extent avoided discussion

and implementation of forgiveness therapy and there are no known forgiveness intervention studies that have been conducted within a UK context. Macaskill (2005) has identified a number of reasons why this may be the case. First, she argues that forgiveness is not discussed or encouraged due to assumptions that it is a religious practice. However, the systematic review demonstrated that forgiveness interventions are predominantly secular in nature and have been applied in a variety of settings, showing improvements in psychological health across different samples. The second difficulty Macaskill identified relates to the assumptions that wrongdoing must be paid for and that forgiving an offender merely gives them power to perpetuate violence against a victim. However, such assumptions may result from misunderstandings regarding what forgiveness is. literature review section of this study highlighted how, over recent years, researchers and clinicians (particularly in the USA) have come to agree that forgiveness does not entail reconciliation nor does it involve tolerating, condoning or excusing hurtful behavior. This suggests the need to promote a comprehensive understanding of forgiveness, which may enable victims to protect themselves. Relatedly, some anecdotal evidence has found that forgiveness interventions have helped victims stay away from unhealthy relationships (Rye and Pargament, 2002). A third difficulty highlighted by Macaskill is the pathologising of a lack of forgiveness which, she argues, has to some extent been reinforced by the field of positive psychology because forgiveness is seen to be a virtue. Due to the nature of some crimes it is said that forgiveness is sometimes not possible or very difficult to practice and so the pathologising of a lack of forgiveness may perpetuate distress or guilt experienced by the victim. However, understandings regarding definitions may also be a concern here too because forgiveness within the research literature is considered to be a choice and one way of responding to an interpersonal hurt. Rather than pathologising individuals, clinicians have aimed to help clients to improve their psychological health, in some cases, by reducing

negative resentment based emotions. Therefore consideration may need to be given to both definitional issues, as well as to how it is taught within clinical settings. Another issue highlighted by Gangdev (2009) is that within the field of psychiatry there is little awareness of the therapeutic benefits of forgiveness and that this is perpetuated by a lack of clarity concerning whether there is a robust body of evidence. Overall, the evidence that forgiveness improves psychological wellbeing provides a good rationale for the promotion of forgiveness within therapeutic settings. (Macaskill, 2005).

In addition to the previously mentioned clinical implications, this study showed that, consistent with research definitions of forgiveness, both religious/spiritual and nonreligious/spiritual participants experienced forgiveness to be a process of reducing negative and promoting positive regard for an offender. Previous literature has found that lay definitions differ from research conceptualisations (Mullet et al., 2004). However, these research studies have predominantly used quantitative approaches to assess people's beliefs about what forgiveness comprises. The present study contributed to this debate by qualitatively exploring real life experiences of practicing forgiveness among diverse samples. The findings suggest that forgiveness may be a universally applicable concept rather than culturally specific. Furthermore, whilst the interviews and survey were exploratory in nature and had very small sample sizes, they nevertheless indicated the relevance of forgiveness in people's lives (among religious/spiritual and nonreligious/spiritual participants in the UK). This further highlights the need for more discussion relating to, and awareness of, the concept of forgiveness, both within and outside clinical settings, so that people can make a more informed choice as to whether they wish to receive this form of treatment or engage in this practice.

Concerning barriers to and factors facilitating forgiveness among religious/spiritual participants, most previous research has focused on the role of religious dispositional factors (e.g. religious commitment; church attendance) in influencing trait forgiveness. However, there is little evidence suggesting that religious/spiritual people are more forgiving of specific transgressions. Consequently, in recent years a minority of studies have attempted to explore a more diverse variety of religious factors, such as prayer, and its role in affecting forgiveness. The qualitative study further adds to the existing research by highlighting the mechanisms that facilitate and hinder forgiveness among under-studied samples. The findings suggested that specific religious/spiritual beliefs and practices, including viewing an offender as spiritually similar or different, responsibility/karma, blaming others, as well as practices such as meditation and prayer, help to facilitate or act as barriers to forgiveness. Whilst these findings were not necessarily supported by the quantitative survey results, it is important to note that key variables tested in the survey (e.g. meditation; connectedness with others) were most common among new religious and Buddhist participants. Moreover, these samples were not adequately represented in the survey study. More research that addresses forgiveness experiences among these populations is required, so that future interventions can be tailored around the needs of diverse groups.

In sum, this study has highlighted the benefits of applying a mixed methods approach to addressing a particular set of research questions. Through this process it was possible to highlight the commonalities in understandings of forgiveness as well as the need to discuss and raise more awareness of this concept. It also highlighted how participants practice forgiveness (i.e. conditional or unconditional) as well as the various mechanisms that facilitate or obstruct this process. Whilst prior research has highlighted that forgiveness

therapy can improve mental health outcomes, there has been no critical appraisal conducted of previous studies and reviews. Having appraised studies using rigorous research designs to assess the effects of forgiveness interventions, it was found that forgiveness therapy reduces poor mental health and improves subjective wellbeing. Despite the suggested antiforgiveness bias (Sells and Hargreave, 1998 in Macaskill, 2005) within counseling and psychotherapeutic settings, particularly within the UK, these findings indicate the need to consider forgiveness as an option to help people overcome a variety of abuses in order to improve their psychological health.

Strengths & Limitations

The qualitative component of this study provided an in-depth understanding into the experiences of forgiveness among diverse and under-studied groups. However, it had a number of limitations. For instance, the number of Buddhist, Secular/Atheist, Theosophist and Muslim participants who took part in this study was quite low and therefore the findings should not therefore be generalised to others affiliated with these groups. Further, whilst the study recruited a diverse group of participants, it was not possible to explore respondent's perceptions about the effects of gender, ethnicity, socio-economic status and personality characteristics on their forgiveness process. With regard to the quality, a number of steps were taken to ensure rigour and establish confidence in the findings. For example, the study selected an appropriate methodology compatible with answering the set research questions, an appropriate sample was purposively recruited, which kept the study focused on acquiring 'information rich' data and the data was collected and analysed concurrently (Bryman, 2004; Corbin and Strauss, 2008). In addition, and where appropriate, alternative conclusions were considered and tested, (Corbin and Strauss, 2008). One

method of assessing the reliability of accounts relating to the effects of forgiveness on wellbeing was by asking participants to describe their experiences of unforgiveness. As such, negative and positive aspects (of the same theme) could be compared and contrasted and assessed for consistencies in accounts. Further, the general descriptions of accounts could be related back to the original examples of the participants' experience, and the results were compared and contrasted with previous research in other settings, (Corbin and Strauss, 2008).

The survey study included a diverse sample of participants. For example, young and older adults, males, females, ethnic minorities, students, employed and unemployed as well as diverse religious/spiritual groups took part. However, due to limitations relating to the recruitment of religious/spiritual groups as well as sample size limitations, it was not possible to carry out subgroup analyses for many of these factors, therefore the results are not generalizable to other contexts. Further research is needed that explores different religious/spiritual groups in comparison to secular samples whilst controlling for demographic and personality factors.

The benefits of using a cross-sectional web-based survey design to conveniently recruit participants can be useful to explore a particular phenomenon in cases where there is no or little previous research, no sampling frame and under-studied populations (Ihinger-Tallman, 1986 in Abbassi and Singh, 2006; Daniel, 2012). However, there are also inherent limitations to adopting this design and sampling method, which can greatly affect the ability to draw any firm conclusions. Most notably, this relates to a lack of clarity concerning a cause effect relationship. The study may have attracted participants who were more inclined to forgive or had greater commitment to forgive, thus limiting the ability to

make a direct comparison with those who are less likely to forgive interpersonal hurts and the resulting effect this can have on wellbeing outcomes. There was also a high dropout rate in that many participants partially completed (i.e. the first page or two) of the survey, which may have added to a selection bias. Participants were also aware that the study was aimed at comparing the effects of forgiveness across different groups, which may have affected their response to the measures. Further, there may have been other factors, such as family background characteristics, which needed to be controlled for to restrict the impact of other confounding factors.

In addition to the above methodological limitations, the sample size requirements for the survey were not met for comparing differences in means. For instance, there were unequal group sizes and the expected size of the effect within a UK context was not entirely clear, making it difficult to select the minimum size required. Subsequently, a type II error may have occurred in the independent t test analyses. On the whole, whilst it is plausible to suggest that forgiveness might predict general wellbeing, which seems to concur with some previous research evidence, the results of this analysis should be interpreted with caution. Further research is required that replicates these findings, and that also assesses the impact of moderator variables such as meditation and connectedness.

A further difficulty relating to the second phase survey study was that the response rate of different religious/spiritual groups was low. This was particularly the case for new age religious groups such as A Course In Miracles and Theosophy in which as few as six participants volunteered to take part in the research. Others groups such as Buddhist participants were also low on response and as a result recruitment time was extended substantially. However, the final sample size for each group continued to be

low and it was not possible to carry out subgroup analyses. It is difficult to assess the causes of low response but some common factors relate to question content, question construction, method of administration and questionnaire length (De Vaus, 2002). The inclusion of items to assess sense of connectedness with others resulted in many participants leaving feedback and asking questions about the meaning and interpretation of statements used in the scale. This suggests there were problems regarding the comprehensibility of this questionnaire. In addition, whilst many of the questions required participants to think about the statements and questions, the survey length may still have been too long, which may also have contributed to the low response rate. Some participants also expressed skepticism about the ability of quantitative research in measuring what they viewed as 'immeasurable' concepts such as spirituality, forgiveness and its effects. Therefore, for some participants their beliefs may have prevented them from completing the survey.

To assess the quality of the systematic review that was conducted, guidelines outlined by the critical Appraisal Skills Programme (CASP) were followed, each of which are addressed next. First, the overall focus of the review was clear. For instance, the populations under study were clearly stated, the types of interventions and outcome groups that were used were detailed and the outcome scales were specified. Second, only studies administering rigorous study designs (RCTs) that would be appropriate to answering the set questions were included. Third, articles were searched for using a range of electronic sources, scanning reference sections of previous reviews and studies as well as contacting authors to request relevant articles. However, no unpublished studies were included for two main reasons. First, unpublished data may be of low methodological quality than published studies (Higgins and Green, 2011). Second, previous reviews (Wade et al., 2013) were scanned in

which unpublished data was used however no studies that were of relevance to the review were identified. Another difficulty concerned a lack of knowledge in accessing unpublished data in order to assess whether it would meet the studies criteria. A further potential limitation regarding searching for the literature was that non-English language studies were not specifically searched for due to language barriers and time constraints in translating documents, although previous reviews were scanned and non were identified. Fourth, a key strength of the review was that the methodological quality of all of the included studies was critically appraised, which facilitated developing a clearer judgment regarding the effects of the interventions in relation to various domains of mental wellbeing. CASP criteria also state that some key requirements of conducting a meta-analysis are that studies should have similar outcome results, and that these results are clearly highlighted and that heterogeneity is investigated and discussed. By and large, the review met all three of these requirements. Sixth, the overall results of the review were also clearly highlighted using standardized mean differences and alpha levels. Confidence intervals were also presented to assess the precision of the results. Whilst most of the studies were conducted in the US and a few countries outside of America, the populations were mostly non-clinical and there is no reason to suggest that these results would not be applicable to populations within the UK. Finally, all outcomes of relevance to the reviews aims were considered and overall there were no costs to conducting the interventions; to the contrary, it highlighted the importance of forgiveness therapy in promoting population health.

Suggestions for Future Research

Given the relative dearth of research on state forgiveness and its effects on mental wellbeing, most particularly within the UK, further research is required using diverse populations as well as investigating a variety of problems. For instance, does

forgiveness therapy work for victims of bullying and harassment? Is forgiveness an appropriate response within the context of ongoing transgressions? Is it applicable among adolescents, older adults or married couples that have experienced a variety of past interpersonal hurts? All three studies highlighted the need to conduct further research assessing the impact of state forgiveness on general functioning. The phase one qualitative study suggested an improvement in relationships beyond that experienced with the transgressor. However, given that previous research as well as the systematic review in the present study indicated no links between state forgiveness and relationships, more research is warranted to replicate and further test these findings. Furthermore, contrary to existing theory and research the interview data suggested that new religious participants appeared to experience greater levels of forgiveness and wellbeing. However, given the relatively small sample size of the phase one study it is necessary to conduct further research (using religious/spiritual and non-religious/spiritual samples), which assesses if these results can be generalised. In particular, further research that examines the effects of utilizing inner psychological strategies underpinned by unconditional forms of forgiveness is warranted. Similarly, moderator variables such as sense of connectedness, meditation, prayer and accepting responsibility were all key themes found to facilitate state forgiveness. The first two of these variables were tested for moderator effects in the internet survey but no associations were found. Again, this may have been due to the limited number of new religious and Buddhist participants taking part in the survey, and future research should aim to identify associations using similar populations. Another key theme that emerged from the qualitative data was a sense of empowerment that participants felt from practicing forgiveness. This has not been

explored before and further research is needed to better understand this finding and its correlation with other aspects of wellbeing.

The systematic review specifically aimed to assess the effectiveness of forgiveness interventions on different components of mental wellbeing using robust study designs. However, a very limited number of studies have used randomized controlled trial designs and many were excluded on the basis that they did not make direct comparisons between forgiveness therapy and a no-treatment control group, and did not randomize participants to conditions. Thus, a limited number of studies were included and whilst many of these appeared to be methodologically robust, in other cases it was difficult to make a full assessment of risk-of-bias due to a lack of information that was provided. Also, whilst it is not possible to 'blind' participants in these types of studies, authors can take measures to make transparent the methods of sequence generation and allocation concealment, which would greatly assist in appraising the quality of the evidence Therefore, to further increase evidence concerning the effectiveness of base. forgiveness therapy future research that utilises RCT designs and more explicitly states how risk-of-bias was minimized is warranted. Further, there is a need for future research to utilize validated measures that assess a variety of psychological health outcomes. Gangdev (2009) highlights that to promote awareness of forgiveness among psychiatrists there is also a need for more research on the effects of chronic hostility, resentment and desires for revenge on psychiatric disorders among clinical Thus measurement of both psychopathology and wider domains of samples. wellbeing is warranted. There was also a great deal of diversity with regard to the types of models used, how the interventions were implemented as well as the duration of treatment. Whilst subgroup analyses explained much of the heterogeneity present, it also left a number of unanswered questions. For instance, the individually delivered Enright model of forgiveness appeared to be superior to group sessions but there were no individual sessions conducted using the REACH model. Future studies should therefore compare different models and modes of treatment. A clear gap in the literature at present is that there are no forgiveness intervention studies conducted within a UK context. Thus more UK-based research is required to examine if forgiveness helps UK adolescents, adults and older adults to overcome a range of interpersonal hurts.

The findings of this study, most notably the systematic review, provides fairly robust evidence to show that forgiveness can improve mental health and certain other components of mental wellbeing. However, given the general avoidance of the concept of forgiveness within UK therapy settings (Macaskill, 2005), future research could also explore therapist's perceptions of administering forgiveness therapy as well as develop training programs with a focus on clarifying the concept of forgiveness and its health benefits. Finally, further research is required to investigate how general population samples cope with everyday interpersonal hurts (without applying forgiveness) and assess the impact this has on their general levels of functioning.

Conclusions

Most previous (quantitative) research has focused on the role of forgiveness in reducing negative states (i.e. depression and anxiety). In recent years a very limited number of studies have shifted attention towards a focus on mental wellbeing, although primarily factors relating to subjective levels of happiness (i.e. positive

affect). The present study contributes towards developing the knowledge base concerning the process of forgiveness and unforgiveness as well as its effects on wider dimensions of psychological health such as eudaimonic wellbeing among diverse and under-studied samples.

Based on the findings of the qualitative component of this project, a number of conclusions can be identified. First, this study confirmed previous research findings suggesting that forgiveness facilitates subjective wellbeing such as positive affect (happiness, peace, calmness, joy). It also extends previous evidence by indicating links with general positive relationships, a sense of meaning and purpose in life, empowerment and spiritual development among diverse samples. In support of these latter findings, this study found that participant's perceived unforgiveness contributed towards poor mental health and had a negative effect on their general functioning. Moreover, the phase one study contributed to knowledge by exploring the process of forgiveness. Most previous research has focused on the role of religious dispositional factors (i.e. religious commitment; church attendance) in influencing trait forgiveness with little evidence suggesting that religious/spiritual people are more forgiving of specific transgressions. Consequently, in recent years a limited number of studies have attempted to explore a more diverse variety of religious/spiritual factors, such as prayer, and its role in affecting forgiveness. The present study adds to this previous research by highlighting the mechanisms that facilitate and hinder forgiveness among under-studied samples. The findings suggest that specific religious/spiritual beliefs and practices, including viewing an offender as spiritually similar or different, responsibility/karma, blaming others, as well as practices such as meditation and prayer, help to facilitate or act as barriers to forgiveness. Analysis of interviews also

highlighted the importance of conditional forgiveness among traditional and secular participants, and unconditional forgiveness among new religious and Buddhist respondents, as well as the subtle differences observed in outcomes as a result of how forgiveness was practiced. This study also supports previous research in terms of the finding that forgiveness entails a process of letting go of negative emotions and developing positive regard for an offender. Moreover, the interviews highlighted the importance of investigating real life experiences of forgiveness to gain a better understanding into the meanings of forgiveness among the general public.

The survey study investigated the role of state forgiveness in predicting eudaimonic wellbeing and found a positive correlation between the two, thereby extending what is currently known about this issue. In addition, contrary to previous research findings, this study found that sense of connectedness with others and meditation did not moderate the relationship among forgiveness and wellbeing. However, the use of non-validated measures may have affected the ability to detect any associations. Further, there were a very limited number of new religious and Buddhist participants for whom connectedness and meditation may play a more significant part in their forgiveness process. Another aim of this study was to assess differences in outcomes on the basis of affiliation type (i.e. religious/spiritual or non-religious/spiritual). No differences between groups were detected in outcomes of forgiveness. Some previous research has found strong and consistent correlations between religious affiliations and trait forgiveness. However, as mentioned previously, there is a dearth of empirical research supporting a link between religiosity/spirituality and state forgiveness. It may well be the case that religious/spiritual people are no more forgiving of specific transgressions than secular/atheists. On the other hand, the use of standardised and validated measures to assess specific mechanisms among certain groups may produce

different findings. It is important to further examine and compare forgiveness between these different groups in order to assess whether actively learning about forgiveness can enhance its practice. Moreover, there were a number of methodological limitations that affected the quality of the survey data, which made it difficult to assess if the small effect observed for the central research question was a true effect or an error. Further research is warranted.

The systematic review extended on and made a number of unique contributions to knowledge. First, previous reviews have found that state forgiveness reduces poor mental health such as depression and anxiety and promotes self-esteem as well as positive affect (Lundahl et al., 2008; Wade et al., 2013). However, some of the scales administered in these reviews were not validated and both randomized and non-randomized study designs were used. Therefore, it was possible to make a clearer assessment of these effects by only including studies that had used standardized and validated scales as part of rigorous studies that randomly allocated participants to either forgiveness treatment or a no-treatment control This review also assessed the reliability of the findings in terms of the methodological quality of the included studies. Five additional studies, since the last review was conducted by Lundahl and colleagues in 2008, were also appraised from which more scales assessing wider dimensions of positive affect (such as happiness, confidence, energy) were assessed in relation to forgiveness treatment. Together, the assessment of rigorous study designs, the use of valid and reliable outcome scales and the inclusion of additional studies gave confidence in the conclusion that forgiveness therapy can improve mental health and some dimensions of wellbeing. Another finding of the present review, which is consistent with the findings of previous meta-analyses, is that the effectiveness of forgiveness therapy depends on the model type, mode of treatment as well as the number of sessions administered

Overall, each of the methods employed in this study made a unique contribution to knowledge. Together they provide greater insight into the process involved in practicing forgiveness and its effects on diverse psychological health outcomes. This study has in turn increased the level evidence now available about factors that can promote health, and is of relevance to clinicians, researchers and policy makers.

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APPENDIX A: STUDY 1

Invitation Letter

Impact of Forgiveness on Mental Wellbeing

I am writing to tell you about a research study that I'm conducting for my PhD research project at Warwick University in the UK. The purpose of this study is to investigate if forgiveness promotes mental wellbeing, and if so, how. I'm looking to recruit participants that are engaged in religious/spiritual practice, who have experience of an interpersonal hurt to which they may have applied forgiveness and who would be willing to participate in this study by taking part in an interview.

I would be very grateful if you could consider volunteering your time to take part in the study. If you did agree to take part then the interviews would last between 1 to 2 hours in which I would explore your perspectives on two main themes, namely, your experience of forgiveness within the context of a daily relationship, such as with a partner, friend, sibling, child or work colleague and the impact of forgiveness to your mental wellbeing. The study will be totally confidential and to the best of my knowledge, this study contains no risk of harm to you. Whilst I can't offer any incentive to take part in this study, I would be very grateful for your time and contribution to take part and hope that your contribution would help inform the research community, health practitioners, and the general public in understanding the impact of forgiveness on mental wellbeing.

If you have any further questions relating to this study then please don't hesitate to contact me <u>sadaf.akhtar@warwick.ac.uk</u> or you can call on 07792113284.

Thank you in advance for considering this request,

I look forward to hearing from you.

Sincerely,

Sadaf Akhtar Health Sciences Research Institute Warwick Medical School The University of Warwick Coventry CV4 7AL

Information Sheet

Forgiveness & Mental Wellbeing

I would like to invite you to take part in my research study. Before you decide I would like you to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask me 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. My contact details are:

Name: Sadaf Akhtar

Email: Sadaf.Akhtar@warwick.ac.uk Telephone Number: 07852352163

What is the purpose of the study?

The study aims to explore how people respond to negative events that affect themselves and others, and factors that may help to improve or hinder people's mental health and wellbeing. I am looking to recruit participants who are secular/atheist or religious and who would be willing to participate in this study by taking part in an interview.

I will investigate the following themes in the interviews:

- 1. Experiences of forgiveness (or unforgiveness)
- 2. Impact of (un)forgiveness on mental wellbeing
- 3. Factors facilitating/obstructing (un)forgiveness
- 4. Definitions of Forgiveness
- 5. Definitions of Mental Wellbeing

Why have I been invited?

You have been invited to participate in this study as you have expressed an interest in sharing your experience of forgiving someone for unfairly and deeply hurting you within the context of a past or present ongoing relationship. Furthermore, you have been invited as you self-identify as secular/atheist or religious. I believe you can provide valuable information relevant to the topic of this study. If you participate in this study, will be one of 11 participants and interviews will last between one to two hours.

Do I have to take part?

It is up to you to decide to join the study. We will describe the study and go through this information sheet, which we will give you to keep. If you choose to take part, we will ask you to sign a consent form to confirm that you have agreed to take part (if completing and e-mailing a consent form, you are giving consent for the information that you have supplied to be used in this study).

You will be free to withdraw at any time, without giving a reason, and this will not affect you or your circumstances in any way.

What will happen to me if I take part?

Once you have agreed to take part in the study I will once again contact you by phone to check if you have any further questions. I will then gain informed consent by sending you a consent form either by email or post followed by arranging a time and place for you to be interviewed one week later, or at a time that is most convenient for you.

The interviews will be carried out in person or over video call (Skype) at a time and place that is most convenient for you. The interviews will consist of three main sections covering your understanding of (un)forgiveness and wellbeing, your experiences of (un)forgiveness within the context of relationships such as with family, friend, partner, child, work colleague, etc., and lastly the impact of (un)forgiveness to your health and wellbeing. You will be provided with an interview guide with more detailed questions relating to these themes. Interviews will last for one to two hours and will be audio recorded. After the first interview I may contact you again to ask any follow up questions. If you request, I will send you a summary of your interview in order to check the accuracy of the accounts you have given.

You will not be identified personally in the thesis and all personal information, surveys, audio recording, interview transcripts will be stored safely under lock and key. Once the study has been completed all information other than the thesis itself will be discarded safely.

You will be able to contact myself or the research supervisor at any point during the study if you have any questions or concerns of any kind.

Expenses and payments.

You will not incur any costs as a result of participation in this study.

What are the possible disadvantages and risks of taking part?

There are no known risks that you will experience as a result of taking part in this study.

What are the possible benefits of taking part?

I cannot offer any incentive to take part in this study however your contribution would greatly assist the research community, clinicians and members of your community in understanding the potential benefits/costs of (un)forgiveness to mental well-being.

What if I want more information about the study?

If you have any further questions about any aspect of this study please contact Sadaf Akhtar by email on sadaf.akhtar@warwick.ac.uk or by phone on 07852352163.

What happens when the research study stops?

Upon completion of the study all information will be analysed, written up and used in a PhD thesis. For interested participants, a summary of the final report will be sent you.

Who should I contact if I wish to make a complaint?

Any complaint about the way you have been dealt with during the study or any possible harm you might have suffered will be addressed. Please address your complaint to the person below who is a senior University official entirely independent of the study:

Jo Horsburgh
Deputy Registrar
Deputy Registrar's Office
University of Warwick
Coventry
CV4 8UW

T: 024 765 22706E: n.lynch@warwick.ac.uk

Will my taking part in the study be kept confidential?

Yes. All information that is collected about you during the course of this study will be kept confidential. All person identifiable data will be removed so that you cannot be recognised and a pseudonym will be used when presenting the results in the thesis. Any other person identifiable information will be disguised to protect your privacy. During the study data will be stored in a secure office by Sadaf Akhtar. However, in order to ensure the research has been carried out correctly the contents of the interview will be discussed with the two research supervisors, Prof Jane Barlow and Dr Alan Dolan and I may also be required to show the supervisors information that identifies you. After the completion of the study all stored data will be safely destroyed.

Who is organising and funding the research?

This research is being carried out as part of a PhD research program at the University of Warwick, within the Institute of Health Sciences.

Who has reviewed the study?

The research has been reviewed and given favourable opinion by the BioMedical and Scientific Research Ethics Committee, University of Warwick.

Contact

For further information please contact one of the following people:

- 1. Sadaf Akhtar (primary researcher) on Sadaf.Akhtar@warwick.ac.uk
- 2. Prof. Jane Barlow (supervisor) on jane.barlow@warwick.ac.uk

If you have any concerns about the way this study has been conducted please contact the Chair of the University Ethics Committee, Dr David Davies on David.Davies@warwick.ac.uk.

Thank you

We would like to take this opportunity to say thank you for taking the time to read the information sheet.

Interview Guide

Forgiveness and its impact on Mental Well-Being – A Qualitative Interview Guide

Interview code	
Date	_
Location	
Venue	
Time: from	

Introduction

There are four parts to this interview. The first asks you to describe your experiences of forgiveness. The second is about the effects of your experience of forgiveness on your life. The third is about factors that may have facilitated/obstructed your experience of forgiveness. Lastly, there are questions relating to your definition of forgiveness and mental wellbeing.

- 1. Can you please describe, in as much detail as possible, a situation in which you experienced an emotionally challenging event that occurred within the context of an ongoing or daily relationship (past or present) which could be a romantic partner, friend, work colleague, sibling, child or parent.
- 1. Who did it involve? How long ago did the event occur? What happened?
- 2. What were your thoughts about the event? How did you feel emotionally? What was your response?
- 3. Was it possible for you to forgive?
- 4. How, if at all, was it possible for you to forgive?
- 2. What effect did this experience have on your mental wellbeing?
- 3. What was the other person's experience? Did you notice any changes in them such as their emotions/behaviour, etc.
- 4. What factors facilitated or obstructed your experience of forgiveness in relation to the situation you described?
- 5. In what way, if at all, did your beliefs and views about life influence your experience of forgiveness?
- 6. Did any other factors influence your experience of forgiveness?
- 7. What is your understanding of the concept of forgiveness?

- 8. What is your understanding of wellbeing?
- 9. Can you tell me of a time when you were not able to forgive someone how did it impact your health?

Conclusion

- 1. Is there anything else you would like to tell me about which we haven't covered in this interview that you feel is important for me to know?
- 2. Appreciation for participation

Time ended:

Example of Annotated Transcript

SA: Interviewer

I: Interviewee

T: possible emerging themes

SA: How long did you feel like this for after you found out (about offense)?

I: Well, after that event <u>for the next 5 or 6 months</u> I was very <u>miserable</u>. I was just fuming all the time and cursing and all the rest of it (laughs).

T: On-going intense anger

SA: When you say fuming...?

I: <u>Fuming</u> you know when you're in a <u>state of bitterness</u> when you <u>can't see or reflect</u> <u>properly</u> but you're just <u>completely bitter</u> and <u>emotionally disturbed</u> basically.

T: Unable to function cognitively/emotionally

SA: Hmm

I: Whenever you think about that situation you think the time that I invested, the trust that I put in her and her mother, you know...it's just in terms of failure basically I was just angry.

T: Ruminating over what happened; disappointed in self. Angry with self?

SA: And what did you do, what was your response?

I: Well as I said at that time I wasn't actually studying any philosophical teaching, I was a Christian Catholic. I never really practiced but I was interested in Buddhism

but not as deep as I'm involved now, you know what I mean. I did not really think about how to reflect on that. But <u>after 5 or 6 months</u> or so I <u>started to reflect on all</u> the things that had happened and I thought to myself ok I've been pretty naive.

T: Thinking through events; feeling he was too trusting? Reduced anger.

SA: Can I just clarify, you know in that 6 month period, you said you were really bitter and fuming, you felt like that for the whole of the 6 months?

I: No, it's every time I think about the situation. Every time I tend to go over the event, situation in my mind that's how you start to feel (bitter, fuming). In a day you can probably feel like that most the day I think.

T: Ruminating made him feel intense anger

SA: So you were thinking about it every day?

I: Yeah yeah thinking about, reflecting...thinking about it every day yeah. So...this is basically in a nutshell this is what happened.

T: Constantly ruminating/recurring theme

SA: Were you able to forgive her?

I: I was, I told you if I didn't, I wouldn't have met her. After I met her a year and a half (later) I wouldn't have been so composed and been wise about it and everything else. Yes I was about to forgive because after 6 months I kind of decided to have a reflect...deeply in the whole situation in order to put myself in her shoes and you know...try to really put everything into perspective really, I tried to reflect because I thought to myself well you know you can't really force anybody to love you or anything like that but it's just the choice, the miss choice really. People use people. When I went back home my mum told me forget about it and get on with your life basically. That this kind of thing happen and you're not the only one that's been hurt

by the world or action of people and that I should just let go so I <u>started to reflect</u> and that's when my <u>spiritual side started to come out a little bit more because I started to reflect on things and I start to understand.</u>

T: Forgiveness helped him to feel calm when he met offender.

T: Empathy and reflection facilitated forgiveness. Spiritual growth?

Example: Spider Diagram of Codes from Qualitative Data Anaysis

Offence Type: Betrayal/Deception

"I happen to meet a girl that I fell in love with. I started long distance relationship that actually involved me travelling back and forth in order to maintain the relationship and figure out how best to help her to get a Visa that she might travel to the United Kingdom. I pay black market thousands to get her to the UK. The day she arrived in the UK she said she was leaving the apartment so I tried to restrain her and that triggered an argument. So I find myself going to the police station and I was put in the cell. When I was free about 3 o'clock in the morning I was told by the police that this issue was going no further. When I asked where's the girl now they said to me they found a girlfriend of hers came and pick her up at the station and she's gone to her house and that's it. After investigation I realized that the girl really did not in any way wanted to come and stay with me that she had a few friends in the UK which she never told me about and she was actually planning to go and stay with them rather than stay with me and that all this was actually planned carefully since she was back in Africa before she was coming to the UK". p6L153-156

Effect of hurt

"I was really upset . I was so upset, very angry, bitter, cheated, used and naïve. I felt vengeance for her, for myself. The first thought that came to my mind the following day was I should go to the immigration and denounce her but then I thought there's no need for it" p10p6L156-159

"I started to lose weight, I was angry, I was fuming, I was seriously fuming. I started to think about all the effort I made for her, and all those things in my mind I was just angry and bitter. I was very resentful" p10p6L176-178

"it took about five or six months for me to go back to my normal self I never thought in my life that this would ever happen to me and that I would be in that state because I'm very happy go lucky kinda guy so I never actually thought that this would happen but anyway that happened and I was so very very unhappy" p10p7L180-184

No: 1
Code: Hurt
experienced/eff
ects of hurt

Empathy

"after 6 months I kind of decided to have a reflect, deeply in the whole situation in order to put myself in her shoes and try to really put everything into perspective. I tried to reflect because I thought to myself well you know you can't really force anybody to love you or anything like that but it's just the choice, the mis-choice. Really, people use people". p10p8L212

Understanding

"I come to the conclusion we are all human we have weaknesses basically we are all in the process of evolution so to speak that [inaudible] we are evolving at a different rate basically therefore we can understand why people can act the way they act" p10p8L222-224

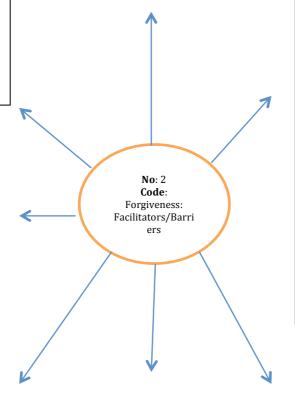
Rumination

"Every time I tend to go over the event, situation in my mind that's how you start to feel (bitter, fuming). In a day you can probably feel like that most the day I think" p10p7L200-201

"Whenever you think about that situation you think the time that I invested, the trust that I put in her and her mother, you know. It's just in terms of failure basically I was just angry" p10p7L191-192

Meditation

"Yeah well already in my mind I already forgiven her cos I think everything that happened happen in the mind first. So in my mind I was completely free, you know when you sit down and you kind of project a positive constructive thought for that other person" p10p14L400-402



Reflections on impermanence; reincarnation; karma

"Sometime in life when you observe. anybody can observe how the cycle of life works and revolves. We see the cycle of summer coming at a certain point in the year, we see the cycle of winter coming at a certain in the year, autumn and spring and so on and so forth. So observing these things repeating themselves in a very logical way, in a very intelligent way we can deduce, we can [inaudible] then that becomes some sort of law in our life. So for me, one cannot forgive out of blind belief. You have to forgive, a decision, as I say, is a decision made consciously upon reflection and insight to let go of bitterness, resentment and any such feeling of vengeance. Such decision must rely upon certain knowledge of oneself and others and ultimately of life. So the meaning of life, in the context of reincarnation of karma and the destiny of man and nature, this kind of thing give you a perspective, a context to develop that compassionate attitude" p10p16&17L471-481

Karma/Reincarnation

"karma, consideration of things such as reincarnation as she's just a soul just like me who reincarnate with defects which she need to perfect in her life. Same as me, I was born with defects which I need to perfect in life and that the whole process of evolution is about perfecting our defect [inaudible]. So this are the little reflections that helped me to forgive, (it) put everything into more of a Universal context and remove myself from the question for a little bit". p10p10L284-288

Spiritual connectedness/Unity

"human being we are a family. There's no one human being who is outside of the human family, we are all part of the same family" p10p8L 225-226

"Which is (what I learned) simply that she as a human being is not perfect you know. Me as a human being, I'm not perfect either. In that sense, since we are all a human family as I say because I strongly believe in the Unity and interdependence, interrelationship between being on this plane and other plane" p10p8L233-235

"we are all from the same essence" p10p9L242

Personality/Separateness

"The factors that block me, is my lower self. Yeah, those things have helped me [inaudible] I identify no longer with a event in my personal self but to try and put things, as I say, in a more universal perspective. It's very simple, once we identify with self, if somebodies constantly identifying with his personality then he can no longer be conducive to the welfare of his family or his friend because he will seriously value more the self than the community. As soon as you start to think communal, start to think universal. You're kinda dis-identifying with your personal self". P17L500-505

Self-reflection

"I start to reflect on, in terms of understanding human nature, you know, in terms of understanding myself, my reaction to things" p10p8L218-220

Introspection

"forgiveness never comes out of the blue, it comes from inside, from introspection, through reflection, through an occult understanding, through the understanding of the real law of nature. It's not just based on belief systems, it's based on truths. Universal truths" p10p13L372-380

A lesson learned: personal/spiritual growth

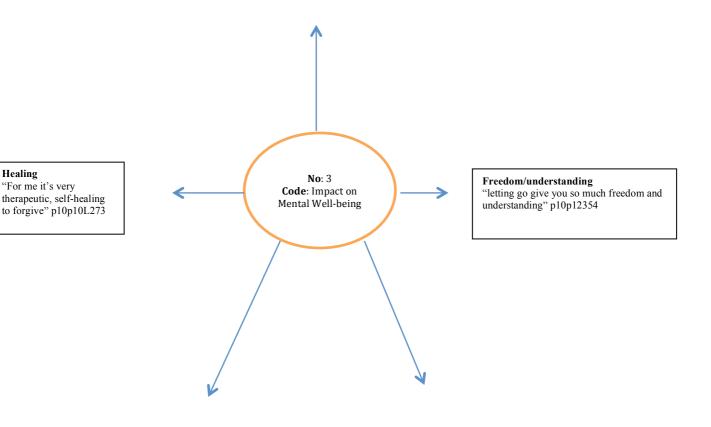
"I learned something about this, I learned something about myself or about that woman as well" p10p8L230-231

"I come to the conclusion we are all human we have weaknesses basically we are all in the process of evolution so to speak that we are evolving at a different rate basically therefore we can understand why people can act the way they act" p10p8L222-224

"We are all a human family as I say because I strongly believe in the Unity and interdependence, interrelationship between being on this plane and other plane" p10p8L233-235

"I identify no longer with a event in my personal self but to try and put things, as I say, in a more universal perspective. It's very simple, once we identify with self, if somebodies constantly identifying with his personality then he can no longer be conducive to the welfare of his family or his friend because he will value more the self than the community. As soon as you start to think communal, start to think universal you're kinda disidentifying with your personal self" p17L500-505

"so I started to reflect and that's when my spiritual side started to come out a little bit more because I started to reflect on things and I start to understand" p10p8L214-216



Positive relationships

Healing

"You develop compassion, kindness and peace through forgiveness that leads you to healthier relationships with people". p10p13L358-360

Positive affect

"As soon as I forgive I felt compassionate attitude, understanding, I felt some sort of peace within myself. I start to feel some kind of love but not the same love I had for her" p10p13L375-376

Negative affect

"I was stress, bitter, angry, vengeful, so all those emotions, these things were festering within me, it's kinda like a little poison inside you, you're not free from them" p10p13L372-375

"You become kind of static; you're no longer dynamic as a human being. Your focus is...on that event, whereas you know emotionally you're a little bit slow". p10p11L311-313

"(unforgiving) I was a little bit anxious and I became anxious and depressed you know you have a little bit of depression, you don't feel like you are depressed but by talking about the thing over and over if what you need is to seek some kind of empathy from people" p10p11L317-318

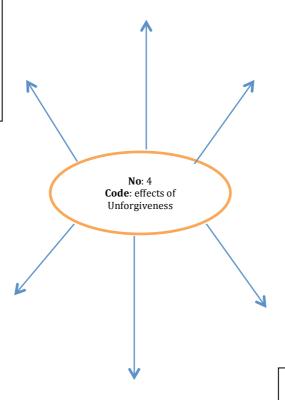
"Fuming you know when you're in a state of bitterness when you can't really see or reflect properly but you're just completely bitter and emotionally disturbed basically" p10p7L188-

Physical health

"losing weight" p10p13L373

Negative JudgmentS

"You are not free from cleaner thinking. Because one life, my life becomes so wrapped up in the wrong way that you can't really enjoy the present. You can't just move, you become undressing other people you think 'oh I'm not gonna be like that' you're attitude become like stereotyping every woman like that but every woman is not like that"p10 p11L313-315



Costs of unforgiveness

"The person who pays the greatest price in this situation is me because I'm the one who has all this negative feeling inside, I'm the one who is festering within all the anger, bitterness, vengeance, I'm the one who is supporting that psychological, emotional injury. So who is going to benefit more than the other with it if you do not forgive" p10p10L269-273

Impact on relationships

"When you're unforgiving that you tend to transfer that anger, that bitterness that negative emotion into every relationship you experience". p10p11L309-310

Lack meaning & purpose

"you kind of lack meaning and purpose to life" p10p11L324

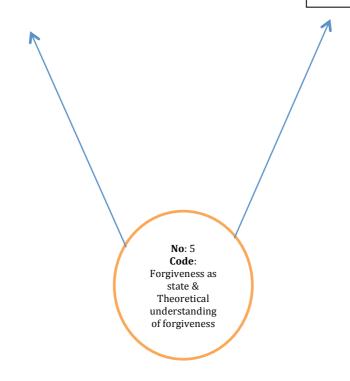
Forgiveness experience

"I was completely normal. I felt no hostility whatsoever. I think that by forgiving, by letting go of grudges and bitterness, I felt compassionate about it,that word is very important, compassion" p10p12L331-333

Letting go & being compassionate

"forgiveness should be replaced by compassion, it's compassion is the word, compassion, compassion, compassion" p10p18L529

"Well forgiveness is a decision made consciously, upon reflection and insight to let go of bitterness, resentment, and any such thought of vengeance such as we mentioned earlier. Such decision must rely upon certain knowledge of oneself and others and ultimately of life" p10p15L465-469



APPENDIX B: STUDY 2 Survey Invitation Letter

Research Study Investigating Forgiveness & Mental Wellbeing

I would like to invite you to take part in a study that I am conducting for my PhD research at the University of Warwick (UK). The study aims to explore how people respond to negative events that affect themselves and others, and factors that may help to improve or hinder people's mental health & wellbeing.

I am looking to recruit around 200 people living in the UK, who maybe either secular/atheist or who practice a religion, and who would be willing to participate in this study by completing an internet survey. The internet survey consists of a range of questions that ask about your background (e.g. age; ethnicity; education, etc), your feelings about forgiveness, and your mental wellbeing. It will take approximately 15 to 20 minutes, and the survey is completely confidential and secure, and there is no way of identifying respondents.

To the best of my knowledge, there are no risks associated with the completion of an online questionnaire of this type, and although I can't offer any remuneration, I would be very grateful for your time and contribution and I hope that the findings of this research will help to inform our understanding about the impact of forgiveness on mental well-being.

If you have any questions relating to this study, you can contact me by email sadaf.akhtar@warwick.ac.uk or you can call on 07852-352-163. If you have any questions about your rights as a research volunteer, you could contact Jo Horsburgh who is a university official that is entirely independent of the study by email at n.lynch@warwick.ac.uk or by phone on 024 7652 2706.

I would be very grateful if you could also forward this invitation to people in your community that may be interested in taking part in this research.

Thank you for considering taking part in this study.

Sincerely,

Sadaf Akhtar

To participate in this study, please click the following link to the online survey (or copy and paste it to your browser).

http://edu.surveygizmo.com/s3/1475409/Forgiveness-and-Mental-Well-being-Survey

Correlations Among All Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12
Variables												
Eudaimonic Wellbeing	1.00											
Forgiveness	.196*	1.00										
Age	.207*	.015	1.00									
Employment	.191*	.034	.435**	1.00								
Ethnicity	009	163	173	130	1.00							
Marital Status	092	.028	.119	.047	.146	1.00						
Education	.051	039	.198*	.269**	.016	.123	1.00					
Religious/ Spiritual	.174	.029	.275**	.133	.053	147	046	1.00				
Meditation	.190*	.030	.308**	.252**	.089	.191	.161	.276**	1.00			
Prayer	022	121	133	086	.029	.213*	046	452**	075	1.00		
Connectedness	.282**	046	.012	.185	.051	101	064	.058	.050	034	1.00	
Positive Affect	144	.029	.072	.107	007	.215*	.069	033	.103	.068	112	1.00

^{*}significant at the 0.05 level **significant at the 0.01 level