1 “To have been forgiven by God and those I have wronged first”: A mixed methods study on
2 self-forgiveness

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Abstract

This pre-registered mixed methods study explored factors associated with self-forgiveness as previous research focused on the forgiveness of others from a quantitative perspective. A convenience sample of 102 participants (72% Christian) completed self-report scales including the Heartland Forgiveness Scale and the Perceptions of Forgiveness Scale. Additionally, participants completed four open questions on their own interpretations of forgiveness. We used multiple linear regression for quantitative data and thematic analysis for qualitative data. The results of the regression analysis found that the model accounted for 46.5% of the variance in self-forgiveness. Divine forgiveness was a positive predictor, but religious commitment and perceived transgressions were negative predictors. Thematic analysis identified three themes: cognitive dissonance, conciliatory behaviour, and God image. The findings suggest that subjective interpretations of religion may have an inhibiting role on an individual's ability to self-forgive. Self-forgiveness appears dependent upon other inhibiting factors including God image, implicitly held virtues, and one's understanding of forgiveness.

Keywords: Self-Forgiveness, Divine Forgiveness, Religion, God Image

Word count: 4925

“To have been forgiven by God and those I have wronged first”: A mixed methods study on self-forgiveness

Psychological studies have explored individual, relational, and situational correlates of forgiveness together with psychopathological, neurological, and physiological health outcomes (Witvliet & McCullough, 2007). Despite this, the phenomenon does not have a universal definition. Hall and Fincham (2008) describe an inflective process involving increased self-esteem, decreased negative ideation towards the offence, and empathy towards the offender. As one forgives, the motivation towards the transgressor reflects a positive and benevolent change with decreased anger and avoidance (Park et al., 2004). Furthermore, Lawler-Row et al. (2006) observe divergent definitions between age demographics of individuals with older adults using emotional terminology including the letting go of negative emotions towards an offender, and young adults referring to behavioural aspects of forgiveness including acceptance and restoration of the earlier equilibrium.

Researchers have tried to understand forgiveness within the dichotomy of dispositional factors. Trait forgiveness involves the inclination to forgive a transgression over differing lengths of time and situational factors and state forgiveness explores the emotive process experienced at the time (Allemand et al., 2007). Consequently, research has found that trait forgiveness has greater negative mental health implications than state forgiveness, since it avoids the need for emotional regulation (Davis et al., 2015).

Self-Forgiveness. Self-forgiveness is the lesser studied phenomenon of forgiveness which may result from its subjective and abstract nature (Ross et al., 2007). Hall and Fincham (2008) assert that a key difference between interpersonal and self-forgiveness is that reconciliation is a necessary precursor to self-forgiveness, yet unnecessary interpersonally. This condition of reconciliation describes a process where transgressors choose to acknowledge their own culpability for wrongdoings while retaining personal worth (Vitz &

Meade, 2011). This is based on the inherent ability to learn from one's mistake and the motivational shift from self-condemnation and avoidance of offence-related stimuli is decreased in favour of self-benevolence (Hall & Fincham, 2008).

Models of self-forgiveness reliant upon personal reconciliation may unnecessarily be divided into implicitly felt senses of 'good' and 'bad' (Vitz & Meade, 2011). Strelan and Zdaniuk (2015) state that reparation of moral self-representation in conjunction with experienced negative emotion can moderate prosocial behaviour. In order to negate dissonance between one's ideal and real self, the pursuit of self-forgiveness may require an individual to uphold both social and moral obligations while maintaining conditions of worth (Exline et al., 2012).

As such, self-forgiveness is more strongly implicated in psychological well-being than other types of forgiveness (Davis et al., 2015). Unforgiveness has been linked to ill health (Worthington Jr. et al., 2001) with symptoms of high blood pressure and heart rate (Lawler et al., 2005); reduced hippocampal volume (associated with chronic stress and anger); and increased limbic activity connected with human emotional regulation (Chester et al., 2017). Due to the negative health implications associated with unforgiveness, it is important to explore what factors are associated with self-forgiveness. Potential factors include perceptions of transgressions, religious commitment, and divine forgiveness.

Perceived Severity of Transgressions. Internalized perceptions of transgressions influence the ability for self-forgiveness. For example, offence severity is positively correlated with shame and guilt (Exline et al., 2012) and increased offence severity correlates negatively with one's belief of being worthy for forgiveness (Wohl & McGrath, 2007). However, an important correlate of this may be how a transgressor's offence contravenes their own personal, moral, or religious principles (Hall & Fincham, 2005). The disproportionate allocation of responsibility may allude to poor self-esteem (Yao et al., 2017), social intergroup belonging (Effron & Knowles, 2015), and religious obligation which may be maladaptive if it

fuels persistent self-critical thought processes and self-punitive behaviour (Davis et al., 2013).

Religious Commitment. The association between forgiveness and religiosity has been well established since forgiveness itself is strongly rooted in theology (Escher, 2013). The role of religion is now cited in the The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) for issues surrounding faith as possible compounding factors of stress-related illness (Griffin et al., 2015). Correlational studies have found that individuals who are more forgiving are more religious (Lawler-Row et al., 2006), yet this might refer to religiosity rather than affiliation as a predictor of attitudinal and projective forgiveness (Fox & Thomas, 2008). Furthermore, although religious commitment may influence forgiveness of others, it does not necessarily promote the proclivity for self-forgiveness (Walker et al., 2011). These contradicting findings suggest that other factors must also contribute to forgiving behaviours.

Divine Forgiveness. Studies investigating the relationship between religion and forgiveness predominantly use Christian and monotheistic populations. These religions are known to promote acts of compassion toward one's transgressor where the victim voluntarily relinquishes their right to a retaliatory response which might threaten the reconciliation of the relationship (Armour & Umbreit, 2006). In Christianity, The Bible cites over 80 passages promoting divine and interpersonal forgiveness with an ideation of forgiving one another just as God forgives (Matthew, 6: 14-15). Yet, it appears that a 'God image' is an important predictor of individual interpretation of scripture since this same passage may also be understood from a transactional perspective; "If you do not forgive men their sins, your Father will not forgive your sins" (Matthew 6:14-15). Pseudo-forgiveness is a possibility where the extension of one's forgiveness is considered obligatory, without sincerity.

The same obligation does not exist for self-forgiveness, nor is there an expectation of worthiness which may compound an attitude that forgiveness is achieved interpersonally or granted by one's deity. The sense of being forgiven by God significantly correlated with

self-forgiveness (McConnell & Dixon, 2012) which may imply that self-forgiveness is a consequence of divine forgiveness and impossible without it. Religious individuals who behave in conflict with their religious perceptions of morality are increasingly likely to experience dissonance between their behavior and their ideal self-representation (Fisher & Exline, 2010). While the virtue of forgiveness is embedded within monostheistic frameworks, the same expectation does not exist for that of self-forgiveness. Religious individuals who prioritize divine and interpersonal forgiveness, to the preclusion of self-forgiveness, may be predisposed to pseudo-forgiveness or self-condemning behavior and rumination in the wake of a transgression. Therefore, they are reliant on divine forgiveness as a precondition of self-forgiveness.

The Current Study. There are two gaps we address in the current study. First, there does not appear to be any research investigating the role of perceived severity of transgressions, religious commitment, and divine forgiveness in self-forgiveness. While all three are associated with forgiveness in general, there is little research that focuses on self-forgiveness. Second, without a clear definition of self-forgiveness, there may be some uncertainty what studies are measuring. Therefore, we use a mixed methods design to use both validated scales and allow participants to provide their own meaning of self-forgiveness. Information rich qualitative data in addition to validated correlation data may counter the challenges of inconsistent definitions of self-forgiveness which are grounded within systems of faith (Tonkin-Crine et al., 2016).

The aim of this study is to investigate how religious commitment, perceived severity of transgressions, and divine forgiveness are associated with self-forgiveness. We hypothesised that: 1) Religious commitment will be a negative predictor of self-forgiveness; 2) Perceived severity of transgressions will be a negative predictor of self-forgiveness, and 3) Divine forgiveness will be a positive predictor of self-forgiveness. The hypotheses, sampling plan, and planned analyses were pre-registered before data collection on the Open Science

129 Framework (OSF). This is important in the psychology of religion due to many articles not
130 reporting an a priori power analysis and taking advantage of the flexibility in the measures
131 (Charles et al., 2019).

DRAFT

Methods

Participants

Quantitative. Participants were recruited through a combination of online social media appeals and poster advertisements in local places of worship. Participants were not offered any incentive for their participation.

We used G*Power (Faul et al., 2009) to conduct an a priori power analysis for linear regression R^2 deviation from zero. Our goal was to obtain 80% power (.05 alpha) to detect a small to moderate effect size range of $f^2 = .10$ to $.15$ using 5 predictors (including age and gender). G*Power indicated we would need a minimum of 92 and a maximum of 134 participants. Data collection would stop when 134 participants had completed the survey or after a period of 30 days and at least 92 participants.

The final sample size consisted of 102 participants. There were 67 females and 35 males, with a mean age of 46.51 years ($SD = 15.42$, range 19-78). The sample were from a predominantly Christian faith ($n = 74$; 72.55%), with a smaller number of participants from a spiritual ($n = 16$; 15.69%), Jewish ($n = 4$; 3.92%), Islamic ($n = 3$; 2.94%), Hindu ($n = 2$; 1.96%), Buddhist ($n = 2$; 1.96%), and Sikh ($n = 1$; 0.98%) faith.

Qualitative. Twenty participants were included for qualitative analysis. The participants were a sub-sample of all the participants who completed the questionnaires. Inclusion in the qualitative section was dependent on Religious Commitment Inventory Scale scoring (Worthington Jr. et al., 2003). Participants were separated into two subgroups of minimal (P1) or significant (P2) religious commitment. This followed Worthington Jr. et al. (2003), where a cut-off value of 22 indicated high or low religious commitment. The qualitative element comprised 10 participants measuring low commitment to faith (< 22) and 10 participants measuring high commitment to faith (> 22). Additionally, participants

had to provide a written answer of 30 words or more (approximately two sentences), ensuring a meaningful qualitative response.

Our rationale for this sample size was based on Sandelowski (2010) who asserts that qualitative data need to be substantial enough to facilitate the generation of information-rich knowledge, yet small enough to allow for a deeper, subjective understanding. Furthermore, Green and Thorogood (2018) suggest that when using subject-specific research questions, little new information from homogenous category populations is produced after 20 responses.

Materials

Religious Commitment Scale (Worthington Jr. et al., 2003). We used the RCI-10 to measure religiosity and commitment to faith on a 5-point Likert scales from 1 (not true of me at all) to 5 (totally true of me). Higher scores mean participants report greater religious commitment. Previous studies have demonstrated the scale has good internal consistency ($\alpha = .85$) and test-retest reliability ($r = .84$) at five months (Worthington Jr. et al., 2003). The internal consistency estimate for this study was very good (Coefficient Omega = 0.96, 95% CI = [0.94, 0.97]). We reported Omega to avoid the limitations associated with Cronbach's alpha (Dunn et al., 2014), with higher values of Omega indicating higher internal consistency. The mean (SD) score in this sample was 36.31 (11.66).

Heartland Forgiveness Scale (Thompson et al., 2005). We used the self-forgiveness sub-scale (questions one-six) in this study which uses a 7-point Likert scale ranging from 1 (almost always false of me) to 7 (almost always true of me). Higher scores implied a greater tendency to forgive in each measured area. Thompson et al. (2005) reported good internal consistency for the self-forgiveness subscale ($\alpha = .75$) and test-retest reliability over a three-week test interval ($r = .72$). The internal consistency estimate in this study was very good (Coefficient Omega = 0.95, 95% CI = [0.94, 0.97]). The mean (SD)

score in this sample was 24.56 (11.89).

Divine Forgiveness Scale (Fincham & May, 2019). This consisted of three statements pertaining individual experiences of their perceptions of God's forgiveness of them. Statements were measured on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). Fincham and May (2019) reported good internal consistency ($\alpha = .75$), but adequate test-retest reliability over 7 weeks ($r = .58$). The internal consistency estimate in this study was also good (Coefficient Omega = 0.76, 95% CI = [0.67, 0.85]). The mean (SD) score in this sample was 10.02 (1.84).

Perceptions of Transgression Scale (Hall & Fincham, 2008). Participants imagined a recent event in which they transgressed against another person. Then they rated the severity of the effect their transgression had on themselves, the other person, and the relationship between them with three individual statements using a 7-point Likert scale ranging from 1 (very positively) to 7 (very negatively). Hall and Fincham (2008) reported good internal consistency ($\alpha = .71$), and adequate to very good test-retest reliability across eight assessments ranging from $r = .59$ to $r = .84$. The internal consistency estimate in this study was very good (Coefficient Omega = 0.8, 95% CI = [0.7, 0.86]). The mean (SD) score in this sample was 15.83 (3.4).

Procedure

The project was approved by the institution's ethics committee and adhered to the British Psychological Society's ethics guidelines. When each participant opened the survey, they were provided with an information sheet and provided informed consent. They were asked to complete a short demographic questionnaire on their age, gender, and religious affiliation. Participants then completed 34 survey questions corresponding to the four scales.

Qualitative questions immediately followed the scale items. Participants were asked to

provide a written response to the following questions: 1) What does self-forgiveness mean to you? 2) How does your faith influence your ability to forgive yourself? 3) Which, if any, transgressions do you believe are beyond self-forgiveness? 4) Participants ranked by importance their perceptions of the importance of self-forgiveness, forgiveness of others, and divine forgiveness. After completing the four qualitative questions, participants were debriefed.

Data analysis

Quantitative. We used R (Version 3.6.3; R Core Team, 2020) for all analyses. The script and summary data are available on the OSF. We analysed the data using hierarchical multiple linear regression. The outcome variable was self-forgiveness, and the main predictors were divine forgiveness, perceptions of transgression, and religious commitment. Block one used age and gender as predictors of self-forgiveness, and block two added religious commitment, divine forgiveness, and perceived transgressions. Model fit was indicated by the Akaike Information Criterion (AIC).

Qualitative. We analyzed the qualitative data using Thematic Analysis because it is not tied to a psychological perspective, meaning it has a broader spectrum of analysis (Braun & Clarke, 2006). This hermeneutic approach allowed for centrality of interpretation and comprehension which lends itself to the ontology of religious experience as opposed to the epistemological expectations of quantitative data. Using the hypotheses and objectives of this study, a thematic framework was established in which the transcribed data collected from participant survey responses were indexed and grouped with themes of similar content. We found parallels and disparities between emergent themes and created a conceptual map. We then assimilated these basic meta-themes, resulting in final groups of sub-themes which were classified under overarching macro-themes (King, 2004).

Table 1

Pearson correlation coefficients among self-forgiveness, religious commitment, divine forgiveness, and perceived transgressions (N=102). The 95% confidence intervals are Holm corrected for multiple comparisons.

Variable	1.	2.	3.	4.
1. Self-forgiveness	1	-	-	-
2. Religious Commitment	-0.38 [-0.57, -0.16]	1	-	-
3. Divine Forgiveness	0.08 [-0.12, 0.27]	0.55 [0.35, 0.7]	1	-
4. Perceived Transgressions	-0.64 [-0.77, -0.46]	0.56 [0.35, 0.71]	0.15 [-0.08, 0.36]	1

Results

Quantitative

Table 1 provides the Pearson correlation matrix for all the scales which were Holm corrected for multiple comparisons.

We created two blocks for the regression analysis to control for age and gender. Results for the first block found that age and gender were not significant predictors of self forgiveness ($F(2,99) = 2.08, p = .13, R^2 = 0.04, 95\% \text{ CI} = [0, 0.13], R^2_{\text{adj}} = 0.02, \text{AIC} = 797.32$). Block two added religious commitment, divine forgiveness, and perceived transgressions, and the model significantly predicted self-forgiveness with a smaller AIC value indicating greater fit ($F(5,96) = 19.81, p < .001, R^2 = 0.51, 95\% \text{ CI} = [0.33, 0.62], R^2_{\text{adj}} = 0.48, \text{AIC} = 735.2$).

Each variable contributed significantly to the model as demonstrated in Table 2. For the main predictors, divine forgiveness was a positive predictor ($b = 1.54, 95\% \text{ CI} = [0.39, 2.69], p = .009$), but religious commitment ($b = -0.30, 95\% \text{ CI} = [-0.52, -0.08], p = .008$) and perceived transgressions ($b = -1.86, 95\% \text{ CI} = [-2.47, -1.24], p < .001$) were negative

Table 2

Coefficients for the final linear regression model predicting self-forgiveness (N=102). The unstandardized regression coefficients are presented with the 95% confidence interval.

	b	Lower CI	Upper CI	SE	t	p-value
Intercept	39.69	26.91	52.46	6.44	6.17	< .001
Gender	3.85	0.16	7.54	1.86	2.07	.041
Age	0.15	0.03	0.28	0.06	2.46	.016
Religious Commitment	-0.30	-0.52	-0.08	0.11	-2.70	.008
Divine Forgiveness	1.54	0.39	2.69	0.58	2.66	.009
Perceived Transgressions	-1.86	-2.47	-1.24	0.31	-5.98	< .001

predictors of self-forgiveness.

Qualitative

The qualitative analysis followed an inductive approach to identify prominent themes throughout the text responses. Analysis of the three open questions uncovered three emergent themes: cognitive dissonance, conciliatory behavior, and God image.

Additionally, a fourth question requiring participants (N = 101, as one participant did not complete this question) to rank typologies of forgiveness found that 69% of participants rated divine forgiveness to be of primary importance (Figure 1), 71% rated forgiveness of others second, and 64% rated self-forgiveness as least important. Only 17% placed self-forgiveness in first position.

Cognitive Dissonance: Beliefs vs Identity. Cognitive dissonance describes the human desire to maintain self-integrity. This may be compromised when there is dissonance

Figure 1. A bar chart demonstrating the ranking exercise for divine forgiveness, forgiveness of others, and self-forgiveness. Each bar is divided into the percentage of participants who ranked the category as 1st, 2nd, or 3rd most important.

between identity and behavior. In this study, when one's religious or moral identity is observed in conflict with the reality of one's behavior. Highly religious individuals described the necessity for divine and received forgiveness as a prerequisite of self-forgiveness (Excerpt. 1)

Excerpt. 1 "To have been forgiven by God and those I have wronged first." (High RCI. Question 1. Participant 8)

In contrast, low religious commitment participants focused on re-establishing the equilibrium following a transgression, particularly in self-improvement and the process of learning from their mistake according to their own personal standards of conduct (Excerpt.

263 2)

264 *Excerpt. 2 “Trying to be a better version of myself.” (Low RCI. Question 1.*
265 *Participant 35)*

266 We identified dissonance between perceptions of one’s actual and religious ideal self.
267 Highly religious participants displayed emotional disturbance in recognition of their failure to
268 adhere to internalized religious virtues. They projected the transgression to be an intrinsic
269 character flaw which rationalized their self-deprecatative response (Excerpt. 3).

270 *Excerpt. 3 “In many ways, I would say my faith, or perhaps my upbringing in*
271 *that faith has made it harder to forgive myself as expectations are so high.” (High*
272 *RCI. Question 2. Participant 95)*

273 In contrast, participants low in religious commitment perceived their transgressions to
274 result from extrinsic situational factors. Their individual self-integrity was only compromised
275 when they were faced with the undesirability of their transgression, or when they perceived it
276 to be a personal failing (Excerpt. 4).

277 *Excerpt. 4 “I will only really feel okay when I know the other person has forgiven*
278 *me. If they don’t it will hang over me until they do. I hate thinking I’m a bad*
279 *person.” Low RCI. Question 3. Participant 39)*

280 **Conciliatory Behaviour: Authentic vs Pseudo Self-Forgiveness.** Individual
281 perceptions of self-forgiveness appeared contradictory between participants. Some spoke of
282 God’s compassion, others described an earned process of reconciliation. Many contradicted
283 the capacity of divine unconditional forgiveness by questioning their deservingness of it.
284 Participants high in religious commitment demonstrated a palliative process of pseudo
285 self-forgiveness where self-degradation and penance was justified as an antidote to their
286 transgressions (Excerpt. 6).

Excerpt. 6 “If I do something wrong, I should expect to suffer. No forgiveness can come from yourself otherwise you can sin freely.” (High RCI, Question 1. Participant 39)

In contrast, those with low religious commitment demonstrated perhaps more authentic self-forgiveness in their acknowledgement of their human fallibility. They cognitively reframed their transgressions in recognition of the emotional cost of self-degradation and the need for acceptance (Excerpt. 7).

Excerpt. 7 “Not being angry or disappointed with yourself for something anymore; being able to make peace that it happened.” (Low RCI, Question 1. Participant 74)

God Image: Self-degradation vs Responsibility. God-image denotes the relational orientation towards one’s deity and their perceptions of God as either compassionate or punitive. This has important ramifications for experiences of self-forgiveness since it is likely that perceptions of God will directly impact conciliatory behavior and emotional response.

Individuals with high religious commitment focused strongly on divine forgiveness. A prominent theme emerged in which they argued self-forgiveness to be dependent on divine forgiveness with some participants questioning whether they possessed the right to self-forgive at all (Excerpt. 8).

Excerpt. 8 “The idea that we can forgive ourselves and give myself permission to move on from an offence against another is absurd. We must earn forgiveness.” (High RCI, Question 1. Participant 82)

Conversely, participants who possessed punitive internalized God-images tended to temper transgression responsibility with self-degradation to redress the balance in utilizing

self-punishing behaviors and earn God's forgiveness (Excerpt. 9).

Excerpt. 9 "When I have been sorry enough." (High RCI. Question 2.

Participant 15)

Low religious commitment participants considered forgiveness as a universal theme involving acceptance of responsibility, acknowledgement of wrongdoing, and permission to move on. This less punitive perception of self-forgiveness appears more congruent with understandings of authentic self-forgiveness with an ability to cognitively reframe transgressions and consider ways in which they had already made effort to make reparations (Excerpt. 10).

Excerpt. 10 "Learning from mistakes and accepting what can't be changed." (Low

RCI. Question 1. Participant 23)

Discussion

The results of this study were consistent with our hypotheses. Individuals who were strongly committed to their faith and had higher perceived transgression severity had lower self-forgiveness measures. This suggests that religion or religious practice may have an inhibiting effect on one's capacity for self-forgiveness. In contrast, we found that divine forgiveness was a positive predictor of self-forgiveness which was further supported by the thematic analysis where participants spoke of divine forgiveness as a prerequisite of self-forgiveness. The mixed methods design proved valuable in the provision of experiential understanding of participants' comprehension of self-forgiveness to complement the correlational data.

Where there exists no agreed shared understanding of self-forgiveness nor the possible processes implicated within its construct (Hall & Fincham, 2008), research like the present

study is valuable in identifying possible predictors of one's ability to forgive in conjunction with an understanding of how it is experienced. Individuals who report to be highly committed to their religious practices value forgiveness more highly than their less-religious counterparts and tend to score more highly for trait forgiveness (Macavei & Miclea, 2008). The current study indicates that in these individuals, self-forgiveness may be less authentic and more consistent with self-condemnation. This suggests a palliative process where individuals address the situational factors of remedying a transgression but negate to acknowledge the emotional and intrinsic source of the distress.

Furthermore, highly religious participants explored forgiveness predominately from an interpersonal standpoint, considering the effect on others or their relationship with the divine before themselves. In the prioritising task, over two thirds of participants rated divine forgiveness and forgiveness of others as of higher importance than self-forgiveness. In many ways this may be expected as consistent with the doctrines of their faith (particularly for Christian denominations) since much of Biblical forgiveness scripture focuses on forgiveness of others and the receipt of divine forgiveness.

Prior research assumes that spiritual appraisals such as these enrich empathy and enhance forgiveness (McElroy et al., 2016). Yet empathy, in a similar way to one's religious virtues, is essentially an outward act in which one seeks to experience another's worldview, and overlooks the introspection which may be necessary for self-forgiveness. Spiritual appraisal may inhibit self-forgiveness dependent upon the emotions they evoke in the transgressor (McCullough et al., 2003). Participants who scored highly for religious commitment were inclined to explore their transgressions from a self-deprecatative and punitive perspective. Conversely, those who reported less commitment to faith demonstrated a more progressive view of religion with a benevolent and compassionate God. Davis et al. (2013) found that a positive God-image as benevolent and compassionate was associated with a greater tendency to self-forgive. This was paralleled in the current study and we found that

individuals who felt answerable to God were less likely to report self-forgiving behaviours.

The present research supports the earlier findings of Tangney et al. (2011) in observing that participants who experienced shame demonstrated both a poor self-view and an avoidant response to their transgression. Participants low in religious commitment demonstrated appropriate guilt for their transgressions but were able to cognitively reframe their transgression and accept their fallibility as situational, not fixed, meaning they were able to separate the 'bad' transgression from their own identity. This is supported by other studies where individuals who experience shame are predisposed to maladaptive behaviours, since they may perceive the transgression to be an intrinsic character flaw and feel unable to change (Ranganathan & Todorov, 2010). It would be naïve to attribute only religion to an individual's propensity to forgive or to assign responsibility to the severity of one's transgressions. When individuals commit a transgression, they will experience feelings of shame and guilt (Riek, 2010). However, this may also be explained by lower self-esteem (Wolf et al., 2010) or an external locus of evaluation (Johnson et al., 2016). However, we did not measure these alternative factors in the current study.

A meta-analysis of religion and forgiveness literature found a modest positive correlation between religious commitment and self-forgiveness (Davis et al., 2013), findings which contradict our study where religious commitment was a *negative* predictor. However, since this study recruited a convenience sample of predominantly Christian participants, this likely produced a bias towards Christian ideals. Worthington Jr. et al. (2003) noted that convenience samples in forgiveness research are predominantly Christian and are reflective of the demographically ethnocentric locations in which they are conducted. Despite this, the strong negative relationship between the perceptions of one's transgressions and self-forgiveness were consistent with other transgression research (Dweck et al., 1995), providing evidence of religion as influential to one's self-identity, which may in turn, inhibit self-forgiveness.

The thematic analysis demonstrated cognitive dissonance within highly religious participants. When one's actual fallible self conflicts with one's spiritual ideal self, we interpreted emotional dysregulation. Sherman et al. (2009) argue that this results from the recognition of one's unattractive characteristics. Additionally, Jarvinen (2016) found that individuals develop religious schemas and expectations derived from spiritual teachings which are reinforced in religious rituals such as prayer and reconciliation. This means participants in our study who were cognitively dissonant had less propensity for self-compassion and self-forgiveness.

There was a positive relationship between divine forgiveness and self-forgiveness, which was further supported within the thematic analysis where divine forgiveness was recognized as a necessary precursor to self-forgiveness. Trevino et al. (2019) observed that victims will often inform offenders when they have reached a state of forgiveness, yet, since it is impossible to see or hear God, one must rely upon one's faith for comfort. Nonetheless, as many religions extol the virtues of forgiveness, it can be expected that highly religious individuals are fundamentally more inclined to ascribe to the belief that God forgives them (Trevino et al., 2019). However, if God's forgiveness is a necessary precursor to self-forgiveness, this may indicate that it is inauthentic since self-forgiveness is arguably experienced implicitly.

Finally, this study identified variance between low and high religious commitment suggesting that this may have an inhibiting effect on self-forgiveness. There were some exceptions: some participants displayed evidence of complementarity where they showed a high commitment to faith and a high propensity for self-forgiveness. These participants questioned the validity of rating different types of forgiveness and argued instead that all constructs are interrelated and dependent upon one another: you cannot forgive yourself without the experience of forgiving and being forgiven. This interpretation is consistent with the Christian theological principles of agape in which one receives love (or forgiveness)

without any expectation of anything in return. This compassionate standpoint appears to facilitate self-forgiveness rather than inhibit it.

Limitations

The current findings are subject to several limitations. The cross-sectional design employed within this study was useful in the identification of predictors of self-forgiveness inhibitors but the data are limited to correlation only. To supplement this, we used a mixed methods approach to facilitate a deeper understanding of the subjective characteristics of self-forgiveness. Future research may benefit from a longitudinal design with experience sampling methods to explore changes in behavior and attitudes in the same participants over time. Additionally, this may also capture emotional responses to transgressions as they occur as opposed to the current limitations of recall.

The population was predominantly Christian, despite every effort to recruit religious individuals belonging to other faiths. The implication of this is that we cannot know whether these results generalize to other systems of faith, especially non-monotheistic faiths. This has been a limitation of much of the pre-existing data on forgiveness and thus future research will need to redress this balance.

Finally, we collected data using self-report scales which may present several methodological biases including social desirability (Gill et al., 2008). Furthermore, measurements of self-forgiveness were derived from the Heartland Forgiveness Scale which does not separate self-forgiveness from pseudo self-forgiveness or self-condemnation. This compromises the legitimacy of our results since we cannot be certain that we are measuring authentic self-forgiveness. This could be mitigated with the implementation of an additional scale measuring emotive responses in conjunction with self-forgiveness measures such as The State Shame and Guilt Scale (Cavalera et al., 2017). This would enable recognition of

inauthentic self-forgiveness responses and provide further insight into different motivational responses.

Conclusion

This study supports the assertion by Hall and Fincham (2005) that self-forgiveness has religious, psychological, and relational antecedence. However, it appears that the propensity to forgive, as promoted within the doctrines of many faiths, does not necessarily extend to that of self-forgiveness. Religious commitment and perceived transgressions were negative predictors, while divine forgiveness was a positive predictor of self-forgiveness. Our qualitative analyses showed that a shared faith does not automatically produce a homogenous effect. We observed differences in how individuals low and high in religious commitment describe their ability to forgive themselves.

While commitment to faith is a negative predictor of self-forgiveness, we can only speculate as to the factors which may contribute to this. It appears that highly religious people internalise their transgressions more severely than less religious people and feel reliant upon divine forgiveness as a precondition of self-forgiveness. However, our findings demonstrate that despite a strong correlation, results are subjective and reliant upon one's own interpretation of the doctrines of one's faith. While our study presents a strong argument for the inhibiting effect of religion on practices of self-forgiveness, our qualitative findings provide reason to pause. Perhaps it is not religion itself that inhibits self-forgiveness, but how one lives and practices one's faith that is a more accurate predictor.

Declarations

Data and Code. The summary level data and code to reproduce these analyses are available on the OSF. The OSF project contains all necessary files to reproduce the analyses and figures.

We used R [Version 4.1.0; R Core Team (2020)] and the R-packages *dplyr* [Version 1.0.7; Wickham et al. (2020)], *ggplot2* [Version 3.3.5; Wickham (2016)], *ggstatsplot* [Version 0.8.0; Patil (2018)], *janitor* [Version 2.1.0; Firke (2019)], *MBESS* [Version 4.8.0; Kelley (2019)], *papaja* [Version 0.1.0.9997; Aust and Barth (2020)], *performance* [Version 0.7.2; Lüdtke et al. (2020)], *psych* [Version 2.1.3; Revelle (2019)], *purrr* [Version 0.3.4; Henry and Wickham (2020)], *readr* [Version 1.4.0; Wickham et al. (2018)], *stringr* [Version 1.4.0; Wickham (2019)], *tibble* [Version 3.1.5; Müller and Wickham (2020)], *tidyr* [Version 1.1.3; Wickham and Henry (2020)], and *tidyverse* [Version 1.3.1; Wickham et al. (2019)]

Conflicts of Interest. The authors declare that they have no conflicts of interest with respect to the authorship or the publication of this article.

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