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Self-disgust and Self-forgiveness: The Mediating Roles of Trait and State Guilt, Internal and External Shame, Empathic Concern, and Personal Distress

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Abstract

Self-disgust and self-forgiveness would superficially appear to correlate negatively, but their empirical relationship has not yet been closely analyzed. Here, two studies of undergraduate students are reported that explore this relationship through a new model combining the emotional determinants of self-forgiveness and a biopsychosocial approach to shame. Study 1 (N = 290) investigates whether this relationship is mediated by internal and external shame, empathic concern, or personal distress. In Study 2 (N = 278), trait and state guilt are added to the first model of self-forgiveness. Structural equation modeling reveals that self-disgust and self-forgiveness are related to one another, but their association is mediated by external and internal shame and personal distress. Internal shame is also found to mediate the relationship between self-disgust and self-forgiveness alone, while trait and state guilt do not mediate this relationship. A new model is presented with these new findings, and implications are discussed.

Keywords: self-forgiveness, self-disgust, internal shame, external shame, empathic concern, personal distress

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Introduction

In the psychology literature, while a vast number of studies have focused on forgiveness, there has been a growing interest in *self*-forgiveness (e.g., Rangganadhan & Todorov, 2010). Several conceptual analyses have been presented describing self-forgiveness and research conducted on the nature of self-forgiveness (e.g., Hall & Fincham, 2005, 2008). This study aims to provide a deeper understanding of internal cognitive and affective states associated with self-forgiveness.

Self-forgiveness

Self-forgiveness has been defined as releasing the self from self-resentment after wrongdoing and inducing compassion, generosity, and love toward oneself (Enright, 1996, p. 115). Given this perspective, self-forgiveness cannot be seen only as an intrapersonal restoration merely reducing a self-punitive response; it must also be viewed as interpersonal restoration with the victim by thinking about responsibility and one's wrongdoing. Self-forgiveness is positively associated with psychological well-being (Davis et al., 2015). On the other hand, being unable to forgive oneself positively correlates with negative affect (Thompson et al., 2005), depression (Cheavens et al., 2016; Thompson et al., 2005), and anxiety (Macaskill, 2012).

Hall and Fincham (2005) conceptualized self-forgiveness as "a set of motivational changes whereby one becomes decreasingly motivated to avoid stimuli associated with the offense, decreasingly motivated to retaliate against the self (punish the self, engage in self-destructive behaviors, etc.), and increasingly motivated to act benevolently toward the self" (ibid., p. 622). According to this model, self-forgiveness has both trait and state forms as well as emotions of shame and guilt, which are all crucial to achieving self-forgiveness; these emotions are labeled "primary social emotions," developed in early social interactions (Gibson, 2015). Rangganadhan and Todorov (2010) analyzed Hall and Fincham's (2005) model of self-forgiveness and included other-oriented empathy and personal distress empathy as potential variables that could affect the self-forgiveness process.

The present study aims to develop a new model for the emotional determinants of self-forgiveness by adding further variables to the models previously developed. It is based partially on Hall and Fincham's (2005) model, which characterizes the emotional aspects of self-forgiveness. In the current study, shame is also extended to different shame concepts—internal and external—and to the shame-related concept of self-disgust.

Self-Forgiveness, Shame, and Guilt

There are three models describing shame and guilt and to what extent these emotions are social (Giner-Sorolla, 2013). First, the person/act model eschews the social context and conceptualizes shame as involving feelings of inferiority and a perception of an inadequate or flawed self, as well as guilt involving experiences of bad or faulty behaviors (Lewis, 1971; Tangney & Dearing, 2002). Second, in the internal/external distinction, guilt is seen as internally located while shame includes more social concern. The third distinction is hierarchical/reciprocal model, which assumes that shame and guilt are intrinsically social.

The biopsychosocial model of shame, a hierarchical/reciprocal distinction, considers shame as a social emotion helping to gain social status by forming a positive image of the self "in the mind of others" (Gilbert, 2007). That is, through human evaluation, competing for social places by creating positive social images of ourselves in the mind of others is crucial to preserve and maintain social relationships (Gilbert, 1997, 2003, 2007). Shame serves as a signal that, in the minds of others, "self" is seen as an unattractive social agent (e.g., being unliked, unwanted, or rejected) (Gilbert, 1997; Gilbert & McGuire, 1998). Therefore, shame evolved in order to protect the self from being rejected and excluded from others by prompting monitoring and regulating responses. Social threats such as rejection or social exclusion activate the threat-processing system, the amygdala, the hypothalamic pituitary adrenal axis and the autonomic nervous system, for self-conscious emotions (Gilbert, 2019). Shame appears to focus on the social world (external shame), the internal world (internal shame), or both (Gilbert, 1998). This provides the focus for the first study undertaken here.

External shame relates to concerns about how one is seen or judged by others; that is, external shame represents "self" in the mind of others, while internal shame involves negative self-evaluation, such as contempt and anger toward oneself (Gilbert, 2007). In internal shame, the attention of oneself is focused on wrongdoings and shortcomings of the self, which makes oneself self-critical.

However, research has not yet examined the biopsychosocial model of shame in the process of self-forgiveness. According to Gilbert (1998), internal and external shame are associated with a different focus of attention and cognitive entities. As shame is a social emotion that emerges in social-threat situations, Gilbert's (2007) biopsychosocial model of shame takes into account social context, while the internal/external distinction of shame eschews social context. Accordingly, in the present study, the biopsychosocial model of shame will be used to understand self-forgiveness.

According to Gilbert and Woodyatt (2017), one might forgive oneself for external shame by forgiving those actions that harmed one's position in the eyes of others. However, internal shame corresponds to how one self-evaluates and feels about oneself (Gilbert, 2000). Self-forgiveness for internal shame occurs by forgiving those actions that have been distorted in the eye of oneself. In this conceptualization, external shame and internal shame may not consistently be related. Someone may not have internal shame for his/her behavior, but that same behavior may be found shameful by others.

This distinction seems important for understanding self-forgiveness. After making a transgression in an intimate relationship, the transgressor may truly "feel ashamed" in self-evaluation or only "be ashamed" as a result of others' evaluations (Gilbert, 2007). One forgives oneself without considering others' attacks or opinions, only regarding their own self-evaluation. Shame and self-forgiveness are strongly and negatively associated because shame often promotes avoiding the victim, which inhibits self-forgiveness (Tangney, 1995).

In internal shame, people close down and avoid the victim (Gilbert & Woodyatt, 2017). This self-evaluative stance may impede individuals' ability to engage in self-forgiveness as they find it difficult to reconcile their perceived deficiencies with the concept of deserving forgiveness. The more severe the internal assessment, the greater the challenge in overcoming feelings of unworthiness and achieving self-forgiveness. According to Gilbert and Woodyatt (2017), external shame involves a focus on how one's actions affect social reputation. In this context, self-forgiveness is an effort to repair one's social standing and alleviate discomfort from perceived failures. Internal shame, characterized by feelings of inadequacy and self-devaluation (Gilbert & Procter, 2006), is anticipated to exhibit a stronger negative relationship with self-forgiveness compared to external shame. The evolutionary basis of guilt is the drive and behavior to provide care, which includes avoiding and repairing harm rather than competing for survival (Gilbert, 2019). Guilt, unlike shame, is not a self-oriented experience (Martin et al., 2006) but includes different motivations, attentional focus, cognitive processing, and behaviors and competencies such as sensitivity to needs, restorative behaviors, and taking care of others (Gilbert, 2003). As caregiving and harm avoidance are basic motives of guilt, the focus of attention is placed on the (other) person we hurt, and behaviors that compensate for the damage inflicted are performed (Gilbert, 2010).

Power and Dalgleish (2008) associate self-focused disgust with guilt and shame, suggesting that self-disgust, which relates to core aspects of the self, can be distinguished from embarrassment and guilt. They also argue that self-disgust is not an isolated phenomenon but is connected to other emotional and cognitive states, including negative self-conscious emotions like shame, embarrassment, and guilt. Moreover, as guilt is characterized as a capacity concern for others and affective connectedness (Gilbert, 1998), it has been hypothesized to link positively to self-forgiveness (in trait and state forms) via empathic concern. Indeed, a few studies have found a positive association between trait guilt and self-forgiveness (Carpenter et al., 2016; McGaffin et al., 2013; Rangganadhan & Todorov, 2010; Strelan, 2007). In Study 2, a positive and significant relationship is expected between self-disgust and self-forgiveness, mediated by guilt and empathic concern. Specifically, it is anticipated that increased self-disgust will enhance guilt, which in turn will increase empathic concern, ultimately facilitating self-forgiveness. Conversely, shame (internal and external) is still expected to be negatively related to self-forgiveness via personal distress.

Self-Forgiveness, Empathic Concern, and Personal Distress

In the development of self-forgiveness, it is important to understand the other emotional determinants that contribute to this process. In Hall and Fincham's (2005) model of self-forgiveness, empathy is another important antecedent of self-forgiveness. Rangganadhan and Todorov (2010), in their model of self-forgiveness, included other-oriented empathy as a mediator between guilt and self-forgiveness and self-oriented empathy between shame and self-forgiveness. Empathy is defined as a concept that has different but correlated components (Davis, 1994). Empathic concern is defined as an emotional response that results from the concern for and the understanding of another's emotional state or condition and resembles what the other person feels or is expected to feel (Eisenberg et al., 2014).

Personal distress is one of the emotional components of empathy and is defined as a reaction to others' feelings in a negative, self-oriented way (Eisenberg et al., 2010); personal distress is evoked when individuals respond in an aversive way to the person who is the source of distress (Eisenberg et al., 2006). Shame is more related to personal distress than empathic concern because it directs the attention more to personal benefits than to the relationship (Leith & Baumeister, 1998). Furthermore, shame and personal distress are both signs of an inability to control strong emotions (Eisenberg, 2000). Shame exacerbates personal distress and hinders self-forgiveness by reinforcing negative self-perceptions. This increased personal distress, in turn, can impair an individual's ability to self-forgive and obstruct constructive progress. Although many studies have shown that trait shame is associated with personal distress (e.g., Leith & Baumeister, 1998; Rangganadhan & Todorov, 2010; Silfver et al., 2008), no inquiry has yet been made into which forms of shame (internal and external) might impact which forms of empathy (personal distress and empathic concern). According to Gilbert (2009) internal shame fosters self-criticism and a sense of unworthiness, which may contribute to personal distress. Building on this explanation, this study hypothesizes that internal shame exacerbates personal distress, which in turn reduces self-forgiveness.Gilbert (2016) argues that guilt can arise in contexts of an empathic awareness of unintentionally causing harm. The ability to distinguish between self and other and understand the minds of others makes it possible to empathize with another's needs and suffering (Malle & Hodges, 2005). Guilt is based on empathy skills (Gilbert, 2003, 2016) because it is a moral behavior and associated with cooperation (De Hooge et al., 2007; Tangney & Dearing, 2002). In Hall and Fincham's (2005) model of self-forgiveness, guilt is expected to have a negative effect on self-forgiveness through increasing other-oriented empathy and conciliatory behaviors. According to this model, people with a high level of empathy may be very concerned about the people they hurt, so it is difficult for them to forgive themselves. Rangganadhan & Todorov (2010) examined the relationships between guilt and self-forgiveness through other-oriented empathy and between shame and self-forgiveness through personal distress.

The links among empathic concern, personal distress, and self-forgiveness are varied. Some research has found empathic concern to be positively related to self-forgiveness (e.g., Rangganadhan & Todorov, 2010) but some others found no link between empathic concern and self-forgiveness (Hall & Fincham, 2008; McGaffin et al., 2013). As personal distress is more likely to show an inability to handle one's own negative emotions (Hodgson & Wertheim, 2007), it inhibits self-forgiveness (Rangganadhan & Todorov, 2010). Negative emotions like shame and personal distress are expected to be released in order to facilitate self-forgiveness. In Study 2, empathic concern is expected to mediate the relationship between guilt and self-forgiveness, such that higher levels of guilt

are associated with increased empathic concern, which, in turn, facilitates greater self-forgiveness. This hypothesis is grounded in the understanding that guilt, as opposed to shame, tends to focus on specific behaviors and promotes reparative actions. According to Rangganadhan and Todorov (2010), guilt results in increased empathic concern towards individuals who have been affected by one's actions. This empathic concern may help individuals approach their mistakes with understanding, allowing for the acceptance of responsibility and, ultimately, the ability to forgive oneself. On the other hand, it is expected that shame will increase personal distress, which, in turn, will negatively affect self-forgiveness. Individuals who experience higher levels of shame are more likely to suffer from intense personal distress, thereby impairing their ability to forgive themselves.

Self-forgiveness and Self-disgust

Self-disgust is a self-directed cognition that includes negative assessments about oneself (Overton et al., 2008). According to Powell et al. (2015), self-disgust is defined as an emotional schema, which includes the interaction of disgust-based emotions and cognitions about self. According to these authors, not all experience of disgust is dysfunctional; a response that is permanent and resistant to change evolves from specific aspects of self. As self-disgust can be a maladaptive response and coping strategy, it means taking revenge on oneself for wrongdoing (Gilbert et al., 2004).

Guilt and shame are said to co-occur and be derived from disgust (Phillips et al.,1998). Some researchers consider disgust as the root of shame (Gilbert, 2015; Power & Dalgleish, 1997). While shame has been described as a form of disgust focusing on the whole self, guilt has been explained as a form of disgust directed at a hurtful behavior. However, self-disgust is, at the very least, a specialized and harsher version of shame and may be a self-conscious emotion in its own right (Roberts & Goldberg, 2007).

Some researchers have suggested that shame and self-disgust are not inevitably associated, that each emotion can occur without the other (Powell et al., 2015). North (1998), however, explained that self-forgiveness can be so obstructed by a feeling of self-disgust that it prevents one from feeling worthy of forgiveness. That is, the route to self-forgiveness seems to pass through shame and self-disgust. This kind of shame could be an internal shame, which is consistent with the above statements.

Gilbert et al. (2004) discovered that self-disgust, wanting to hurt oneself, is negatively mediated by self-reassurance and self-improvement or correction. As a result, people high in self-disgust would be expected to be defenseless against the experience of internal shame. It has been proposed that self-disgust may cause different forms of shame, but there is no research on how self-disgust affects shame and guilt in the process of self-forgiveness.

The Present Studies

There are various models explaining the predictors of self-forgiveness (e.g., Hall & Fincham, 2005; McConnell et al., 2012; Rangganadhan & Todorov, 2010). Through the two studies comprising the present work, we propose a new model of self-forgiveness by modifying previous models and adding the biopsychosocial model of shame and guilt. The hierarchical distinction of shame was chosen to examine the role of shame in self-forgiveness because this involves the crucial role of social context in transgressions.

Study 1 aimed to enlighten the complex features of empathy (empathic concern and personal distress), shame (internal and external), and self-forgiveness. This thus develops the first model of self-forgiveness to include self-disgust and different forms of shame (internal and external) in the development of self-forgiveness. Self-disgust involves cognitive appraisals (Powell et al., 2015) that highlight one's perceived defects and flaws. These appraisals can reinforce both internal and external shame, as self-disgust is considered a source of shame (Gilbert, 2015; Power & Dalgleish, 1997). For instance, thinking "I am disgusting" not only affects how one views oneself (internal shame) but also how one believes others view them (external shame). In Powell et al. (2015), self-disgust is described as an emotional schema that combines feelings, thoughts, and beliefs about oneself. Individuals with self-disgust often view themselves as inherently unworthy, which may amplify internal shame by reinforcing negative self-evaluations. This emotional schema also may involve perceptions of how others view them, leading to heightened external shame as these individuals project their negative self-views onto others, assuming that others judge them harshly. The model in Study 1 differs in that internal and external shame will predict self-forgiveness through the mediator's personal distress and empathic concern. As internal shame intensifies, individuals may exhibit a diminished capacity to transcend their own perspective and attend to the needs and emotions of others (Molleti, 2020). The preoccupation with their own distress can impede their ability to engage empathetically with others, leading to reduced consideration for others' feelings. It is necessary to clarify what kind of shame interacts with empathic concern and personal distress. In order to answer this question, Study 1 anticipates that internal shame will cause people to understand their hurtful behavior as a shameful event and that they feel personal distress but not empathic concern. We propose that self-disgust, described as the root of shame (Power & Dalgleish, 1997), especially internal shame—which associates with self-disgust (Gilbert, 1998)—predicts self-forgiveness more robustly through internal shame than external shame. Self-forgiveness seems to be related to an evaluation of oneself as bad more than to another's evaluation.

External shame involves an awareness of others' perspectives of hurtful behavior (Gilbert & Miles, 2000) and may be related to empathic concern. As Gilbert and Procter (2006) emphasize, empathy involves a cognitive capacity of understanding the cause of distress and a prediction of the effect of one's hurtful actions against others (Gilbert & Woodyatt, 2017). External shame is "to focus the attention on what is in the mind of others about self" (Gilbert & Procter, 2006); it causes a deep empathic understanding of others and oneself. We hypothesized that higher levels of self-disgust associated with higher levels of external shame and empathic concern were associated with higher levels of self-forgiveness. It was also expected that increased self-disgust would influence internal

shame and personal distress which would in turn associated with decreased self-forgiveness.

In Study 2, guilt was added to the first model as another emotional determinant of self-forgiveness, as with Hall and Fincham's (2005) model. Although, these researchers examined the relationship between state guilt and self-forgiveness, in Study 2, we have considered whether state and trait guilt are determinants of self-forgiveness as well as internal and external shame. The aim of Study 2 was to determine whether self-disgust predicts self-forgiveness not only directly, but also indirectly through guilt (trait and state), shame (external and internal), and empathy (emphatic concern and personal distress). Based on the findings of Rangganadhan & Todorov (2010), it has been hypothesized in Study 2 that internal and external shame negatively impact self-forgiveness through personal distress, while trait and state guilt positively predict self-forgiveness through empathic concern. As guilt is characterized as a capacity for concern for others and affective connectedness (Gilbert, 1998), it has been hypothesized to link positively to self-forgiveness (in trait and state forms) via empathic concern. Indeed, a few studies have found a positive association between trait guilt and self-forgiveness (Carpenter et al., 2016; McGaffin et al., 2013; Rangganadhan & Todorov, 2010; Strelan, 2007). Shame (internal and external) is still expected to be negatively related to self-forgiveness via personal distress.

Study 1

Although previous studies have shown a relationship between shame and self-forgiveness (McGaffin et al., 2013; Rangganadhan & Todorov, 2010), this study aimed to understand whether self-disgust predicts self-forgiveness in a model that differs from Hall and Fincham's (2005) and Rangganadhan and Todorov's (2010) model. Study 1 investigated the effect of self-disgust on self-forgiveness via the cognitive domains of shame (internal and external shame) and emotional responses of empathy (empathic concern and personal distress).

Method

Participants and Procedure

The sample size of the study was 290, 75% of which was female and 25% male undergraduate students. Kline (2005) pointed 10:1 ratio for number of case to number of parameter. Therefore, 290 was good enough for the current study. The mean age was 20.36 (SD = 2.06) years, with minimum and maximum ages 17 and 28 years. All participants were Turkish citizens, recruited from a state university in the south of Turkey. They were all volunteers and not given any reward (financial, course credit, etc.). Each participant filled in a questionnaire in a group session. The questionnaire was completed in approximately 20–30 minutes. Models were evaluated based on Hu and Bentler (1999) who recommended using the following cut-off points for approximate fit indices: the root mean square error of approximation (RMSEA) shows a good fit for lower than .06, the comparative fit index (CFI) values are greater than .95, and the standardized root mean square residual (SRMR) is lower than 06.

Instruments

Heartland Forgiveness Scale (HFS) – Self (Thompson et al., 2005). The HFS measures dispositional forgiveness of oneself, others, and situations. In the present study, the self-forgiveness subscale was used. The subscale has six items (e.g., "With time, I am understanding of myself for mistakes I've made,"). Each item was rated from 1 (*Almost always false of me*) to 7 (*Almost always true of me*). In the original Thompson et al. (2005) study, the Cronbach alpha value for self-forgiving was .75. The HFS was adapted to Turkish culture by Bugay and Demir (2010), and for the self-forgiveness subscale, the Cronbach alpha value was .64. In the present study, the scale's internal consistency was α = .62.

The Self-Disgust Scale (SDS) (Overton, et al., 2008). The self-disgust scale is a self-report measure of disgust toward oneself based on the Self-Description Questionnaire III (SDQ-III) (Marsh & O'Neil, 1984). The scale consists of 18 items asking participants to demonstrate to what extent they agree with each on a seven-point Likert scale (1 = *strongly agree;* 7 = *strongly disagree*). In the scale, six filler items are used, and nine items are reversed. A total score is obtained by summing the 12 items. Example items are, "I hate being me" and "It bothers me to look at myself." The minimum score is 12, and the maximum is 84. Higher scores indicate higher levels of self-disgust. The SDS was adapted to Turkish culture by Taysi & Orçan (2020). Item 10 was omitted from the scale due to decreased alpha level. In the current study, the scale's internal consistency for the 11 items was α = .82.

The Interpersonal Reactivity Index (IRI) (Davis, 1983). The IRI is a multidimensional self-rating scale that combines the cognitive and affective aspects of empathy. The scale has four subscales: the fantasy scale, perspective-taking, empathic concern, and personal distress. Each subscale consists of seven items. In this study, only two subscales were used: empathic concern, which evaluates the response to feelings such as compassion, sympathy, or concern for others' misfortunes (e.g., "I often have tender, concerned feelings for people less fortunate than me"), and personal distress, which evaluates feelings of displeasure associated with the unfortunate experiences of others (e.g., "Being in a tense emotional situation scares me"). Items were rated on a five-point scale (1 = *no, does not describe me very well*; 5 = *yes, does describe me very well*). The IRI was translated was adapted to Turkish culture by Engeler and Yargıç (2007). In the current study, the scale's internal consistency was α = .61 for empathic concern and α = .67 for personal distress.

Internalized Shame Scale (ISS) (Cook, 1994). The ISS is a 30-item scale that measures negative self-cognition. It consists of 24 shame-based items, as well as six items designed to measure self-esteem. The self-esteem elements were not used in the current study. The items in the shame scale can be summed to produce a total shame score (range 0–96). Individuals are

required to rate statements relating to how they see themselves on a five-point Likert scale from 0 (*never*) to 4 (*almost always*), for example, "I like to shrink away when I make a mistake" The ISS has demonstrated high internal consistency (Cronbach alpha = .96) and acceptable test-retest reliability (r = .84 for shame items) and is sensitive to change over time. The ISS was translated into Turkish and back-translated by two bilinguals. In the present study, the scale's internal consistency was α = .93.

The Other as Shamer Scale – 2 (OAS-2) (Matos et al., 2015). The OAS-2 was designed to assess external shame. The OAS-2 is a short version of the Other as Shamer Scale (Allan et al., 1994; Goss et al., 1994) and consists of eight items. Participants respond to statements such as "I feel other people see me as not good enough" an "Other people see me as small and insignificant" on a five-point Likert scale ranging from 0 (*never*) to 4 (*almost always*). A total score is obtained by summing all the items. The scale has good internal consistency, with a Cronbach alpha of .82. The OAS-2 was translated into Turkish and back-translated by two bilinguals. In the present study, the scale's internal consistency was α = .86.

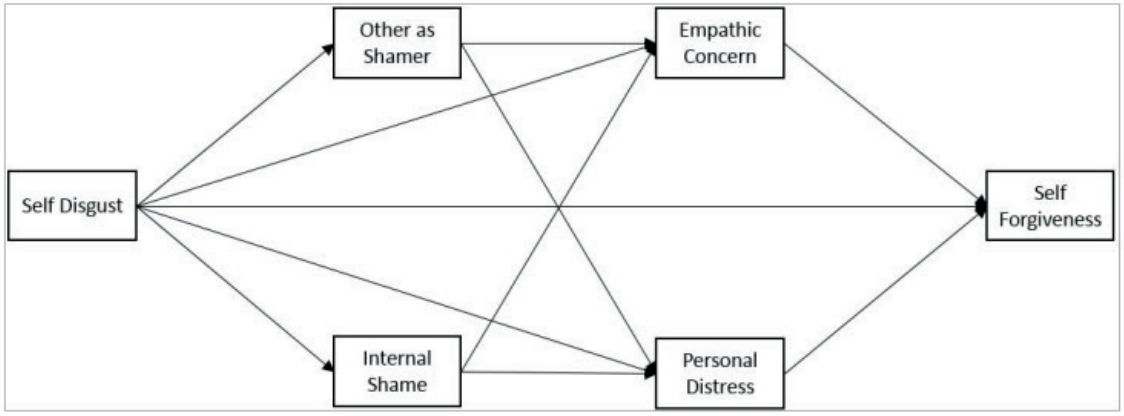
Results

First, the descriptive statistics and correlational analysis for the variables studied here are reported. Then, the hypothesized path models (Model A) are tested. The data were analyzed using SPSS 22 and Mplus 5.1 (Muthen & Muthen, 2008).

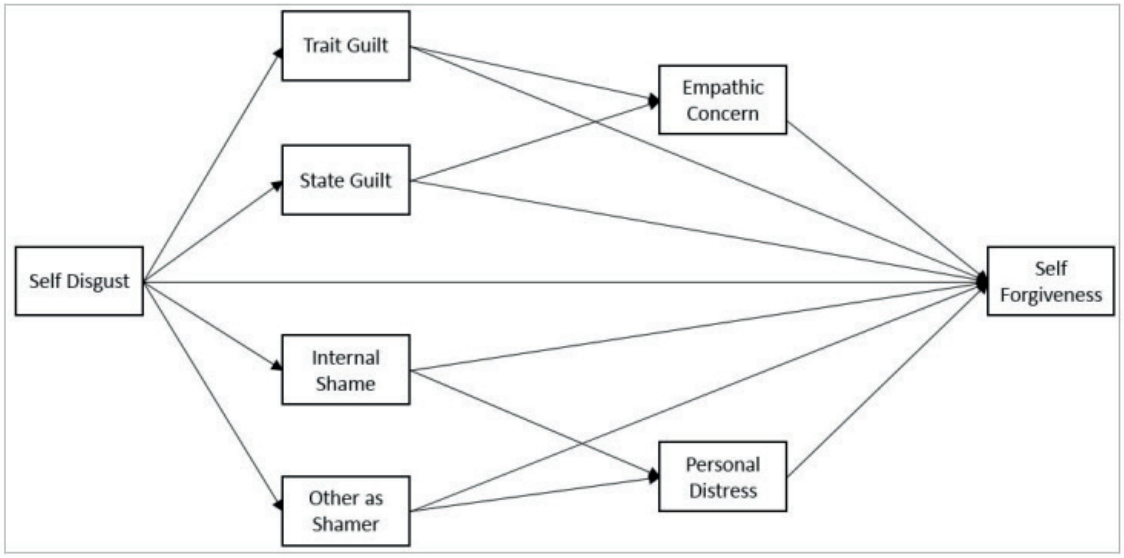
Descriptive Statistics and Relationships among Variables

Average scale scores were calculated and used in the path analysis. Since the data contains no missing values using sum or average scale scores does not affect the correlators among the variables. The descriptive statistics for the dependent and independent variables are shown in Table 1. For example, the minimum score for *Self-Disgust* was 1.36 and the maximum 5.36, with the mean score at 2.60. The last two columns of Tables 1 show the skewness and kurtosis values of the variables. The values between −1 and +1 indicate a normal distribution (Büyüköztürk et al., 2014). Therefore, the maximum likelihood estimation method was utilized for the analysis.

Fig. 1. Hypothesized Path Models



Model A



Model B

Tab. 1. - Descriptive Statistics for the Dependent and Independent Variables.

	Minimum	Maximum	M	SD	Skewness	Kurtosis
Self-Disgust	1.36	5.36	2.60	.72	.93	1.00
Other as Shamer	.00	3.13	.89	.63	.83	.72
Internal Shame	.00	4.00	1.23	.69	.92	.96
Empathic Concern	.71	4.00	2.87	.63	-.35	-.09
Personal Distress	.00	3.71	2.07	.73	-.26	-.02
Self-Forgiveness	1.67	7.00	4.63	.97	-.10	-.18

Tab. 2. Correlations Among the Dependent an Independent Variables

	Self-Disgust	Other as Shamer	Internal Shame	Empathic Concern	Personal Distress
Self-Disgust	1				
Other as Shamer	.58**	1			
Internal Shame	.63**	.70**	1		
Empathic Concern	-.07	-.07	.09	1	
Personal Distress	.25**	.21**	.34**	.20**	1
Self-Forgiveness	-.38**	-.43**	-.58**	-.08	.31**

** p ≤ .01

Table 2 shows the correlations among the dependent and independent variables. *Self-Disgust* was positively related to *Other as Shamer* (*r* = .58), *Internal Shame* (*r* = .63), and *Personal Distress* (*r* = .25) and negatively related to *Self-Forgiveness* (*r* = -.38) at the .01 alpha level. Interestingly, *Empathic Concern* was significantly related to *Personal Distress* only (*r* = .20).

Path Analysis for Model A

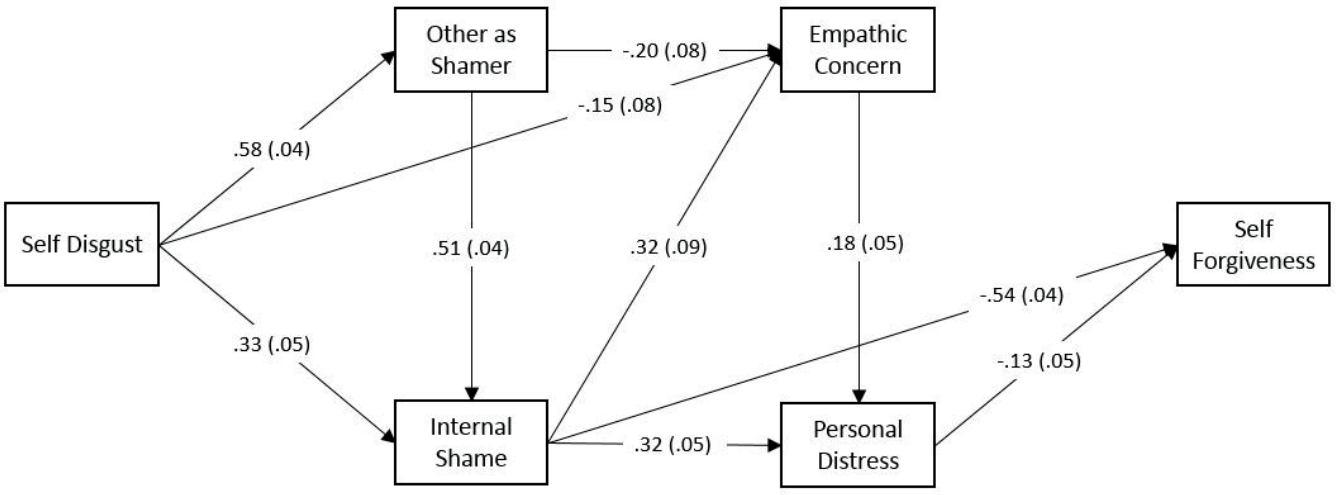
The hypothesized model (Model A) shown in Figure 1 was tested first. Some of the parameters were not significant at the .05 alpha level and were therefore removed from the model. Later, in order to establish a good model-data fit, a few parameters were added back to the models. These parameters were suggested by the Mplus modification indices and supported by the literature. After adding the theoretically meaningful parameters, the final models were formed, as shown in Figure 2.

The final model showed a good model-data fit. Based on the results the chi-square value was 3.18 (*df* = 5, *p* > .05). Besides, approximate fit indices also showed good model-data fits considering Hu and Bentler's (1999) recommendations (CFI = 1.000, RMSEA = .000, and SRMR = .014) for the final model as shown in Figure 2.

Parameter estimates and their standard errors (in parenthesis) are also shown in Figure 2; Only significant paths were included in the analysis, and the values given are the standardized parameter estimates (direct effects). For the hypothesized model, the sizes of the direct effects ranged between .13 (from *Personal Distress* to *Self-Forgiveness*) and .58 (from *Self-Disgust* to *Other as Shamer*) in absolute values. For example, there were two significant direct effects on *Self-Forgiveness*: one from *Internal Shame* and the other from *Personal Distress*. The effect of the former was –.54 (.04), and the latter was –.13 (05).

The independent variable (*Self Disgust*) directly affected three variables in the model (*Other as Shamer*, *Internal Shame*, and *Empathic Concern*); the first two effects were positive, while the last one was negative. The direct effect from *Self Disgust* to *Other as Shamer* was .58 (.04). This means that one standard deviation increase in *Self Disgust* causes .58 standard deviation increments on *Other as Shamer*. The direct effect from *Self*

Fig. 2. Final Path Model for Model A



Tab. 3. Significant Indirect Effects (Standardized Values)

Indirect Effects under Model A	Value	S.E.
Self-Disgust → Internal Shame → Self Forgiveness	-.18**	.03
Self-Disgust → Other as Shamer → Internal Shame → Self Forgiveness	-.16**	.02
Other as Shamer → Internal Shame → Self Forgiveness	-.27**	.03
Internal Shame → Personal Distress → Self Forgiveness	-.04*	.02
Self-Disgust → Internal Shame → Empathic Concern	.11**	.03
Self-Disgust → Other as Shamer → Internal Shame → Empathic Concern	.09**	.03
Self-Disgust → Other as Shamer → Empathic Concern	-.12*	.05
Self-Disgust → Internal Shame → Personal Distress	.11**	.02

* p ≤ .05; ** p ≤ .01

Disgust to *Internal Shame* was .33 (.05). That is, similarly, one standard deviation increase in *Self Disgust* causes .33 standard deviation increment on *Internal Shame*.

Not all paths were positive in the hypothesized model. For example, the direct effect from *Internal Shame* to *Self-Forgiveness* was negative (–.54). This means that one standard deviation increase in *Internal Shame* decreases *Self-Forgiveness* by .54 standard deviation.

In order to check mediation between the dependent and independent variables, mediator analyses were conducted using Mplus *Model Indirect*, which simply multiplies associated direct effects in order to obtain the indirect effect, while the standard error is calculated using the delta method. Table 3 shows the significant indirect effects for the final models. For example, in the final Model A, there was no significant direct effect between *Self-Disgust* and *Self-Forgiveness*; however, *Internal Shame* was a mediator between these two variables. That is, there was a statistically significant indirect effect between *Self-Disgust* and *Self-Forgiveness*.

Discussion

Study 1 represents the first investigation of the associations among self-disgust, internal and external shame, empathic concern, personal distress, and self-forgiveness. The findings give empirical support for our hypothesized model and enhance the literature on self-forgiveness, although a few of the model's pathways did not show significant results.

The first important finding of the study is that internal shame can be identified as a mediator between self-disgust and self-forgiveness. Also as predicted, external shame and internal shame both mediated the relationship between self-disgust and self-forgiveness. That is, individuals who scored highly on the self-disgust measure showed higher levels of external shame and internal shame, which was associated with lower levels of self-forgiveness. Contrary to expectations, empathic concern and personal distress did not mediate the association between self-disgust and self-forgiveness. However, personal distress and empathic concern were predicted by self-disgust through internal and external shame.

Study 2

The purpose of Study 2 was to overcome some of the limitations of Study 1 and to replicate the predictive effect of self-disgust and the cognitive domains of shame on self-forgiveness. In this study, the proposed model was expanded with guilt (trait and state) added, as per the Hall and Fincham (2005) model. In this study, while self-disgust was expected to predict self-forgiveness negatively via trait and state guilt and empathic concern, internal and external shame and personal distress were expected to mediate between self-disgust and self-forgiveness.

Method

Participants and Procedure

Participants were 287 undergraduate students (236 women, 51.men; *M*age = 20 years old; *SD* = 2.05) with minimum and maximum ages 17 and 35 years. Data were collected from students of philosophy, sociology, and psychology departments at a state university in the south of Turkey. All participants were Turkish. The participants in the study were all volunteers and were not given any course credit. Each participant filled in a questionnaire online. The questionnaire was completed in approximately 20–30 minutes. The data set contains no missing values.

Instruments

Heartland Forgiveness Scale (HFS) – Self (Thompson et al., 2005). The self-forgiveness subscale of HFS was again used in the present study. The subscale's internal consistency was α = .70

The Self-Disgust Scale (SDS) (Overton, et al., 2008). The self-disgust scale was again used in Study 2. In the current study, the scale's internal consistency for the 11 items was α = .75

The Interpersonal Reactivity Index (IRI) (Davis, 1983). The IRI was again used in Study 2. In the current study, the scale's internal consistency for empathic concern was α = .53 and for personal distress α = .73

Internalized Shame Scale (ISS) (Cook, 1994). The ISS was used in Study 2, as well. The scale's internal consistency was α = .95

The Other as Shamer Scale-2 (OAS-2) (Matos et al., 2015). The OAS-2 was again used in Study 2. In the present study, the scale's internal consistency was α = .91

The Guilt Inventory (GI) (Kugler & Jones, 1992). This inventory involves Trait Guilt, State Guilt, and Moral Standards subscales and consists of 45 items on a five-point

scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). In Study 2, only Trait Guilt (e.g., "I have made a lot of mistakes in my life") and State Guilt (e.g., "Lately, I have felt good about myself and what I have done") subscales were used. Trait guilt refers to a constant feeling of guilt that is not caused by an environmental event; state guilt is the feeling of guilt for a specific situation. In the original study, Kugler and Jones (1992) informed that internal consistency (Cronbach's alpha) for trait guilt is .89, for state guilt is .83. This inventory was adapted to Turkish by Akın et al. (2018). In the present study, the internal consistency for state guilt scale was calculated at .81 and the trait guilt scale at .84.

Results

First, the descriptive statistics and correlations between the variables are reported for the second data set. Then, the second hypothesized path models (Model B), as shown in Figure 1, was tested. The data were analyzed using SPSS 22 and Mplus 5.1 (Muthen & Muthen, 2008).

Descriptive Statistics and Relationships among Variables

Average scale scores were calculated and used in the path analysis. The descriptive statistics for the dependent and independent variables are shown in Table 4. For example, the minimum score for *Self-Disgust* was 1.50 and the maximum 5.17, with the mean score at 2.77. The last two columns of the table again show the skewness and kurtosis values of the variables, and the values between –1 and +1 indicate normal distribution (Büyüköztürk et al., 2014). Since the *Other as Shamer* variable was not normal, based on the criteria, the robust maximum likelihood estimation method (MLR) was used for this model.

Table 5 shows the correlations among the dependent and independent variables. *Self-Disgust* was positively related to *Other as Shamer* (r = .59), *Internal Shame* (r = .60), and *Personal Distress* (r = .24) and negatively related to *Self-Forgiveness* (r = –.51) at the .01 alpha level. However, it was not significantly related by *Trait Guilt* and *State Guilt*. On the other hand, *Empathic Concern* was only significantly related to *Personal Distress* (r = .27) and State *Guilt* (r = –.13).

Path Analysis for Model B

Before running Model B, the final path model from Model A was run with the second data set in order to cross-validate Model A. Based on the results all the direct effects were significant except the direct effect from *Other as Shamer* to *Empathic Concern*. The direct effect from *Self Disgust* to *Self-Forgiveness* was added to the model, and later, the same modifications were made for the final path model for Model B, as shown at Figure 3 (see Appendix).

After the validation process, the second hypothesized model (Model B) as shown in Figure 1 was tested with Mplus 5.1. Some of the parameters were not significant at the .05 alpha level and thus removed from the model. Later, in order to establish a good model-data fit, some parameters were added to modify the models as suggested by the Mplus modification indices and supported by the literature. After adding the theoretically meaningful parameters, the final model was formed, as shown in Figure 3.

Based on the results, the chi-square value was 23.31 (df = 15, p > .05), the CFI was .989, RMSEA was .044, and SRMR was .034. The result for the final model showed good model-data fits as suggested by Hu and Bentler (1999).

The parameter estimates and their standard errors (in parenthesis) of the final model were reported in Figure 3. Only significant paths were included in the analysis. The standardized parameter estimates (direct effects) were shown in the figure. The sizes of the direct effects ranged between .14 (from *Other as*

Tab. 4. Descriptive Statistics for the Variables under the Second Data Set

	Minimum	Maximum	M	SD	Skewness	Kurtosis
Self-Disgust	1.50	5.17	2.77	.79	.78	.16
Trait Guilt	1.55	4.65	3.02	.62	.13	-.33
State Guilt	1.20	5.00	2.93	.83	.22	-.36
Other as Shamer	.00	4.00	.86	.83	1.42	2.12
Internal Shame	.00	4.00	1.34	.82	.80	.26
Empathic Concern	1.14	4.00	2.88	.57	-.20	-.29
Personal Distress	.00	4.00	1.95	.79	.21	-.32
Self-Forgiveness	1.00	7.00	4.61	.99	-.43	1.00

Tab. 5. Correlations Among the Variables under the Second Data Set

	Self-Disgust	Trait Guilt	State Guilt	Other as Shamer	Internal Shame	Empathic Concern	Personal Distress
Self-Disgust	1						
Trait Guilt	.08	1					
State Guilt	.08	.68**	1				
Other as Shamer	.59**	.14*	.08	1			
Internal Shame	.60**	.15*	.13*	.81**	1		
Empathic Concern	-.06	.01	-.13*	.02	.09	1	
Personal Distress	.24**	.10	.11	.27**	.38**	.27**	1
Self-Forgiveness	-.51**	-.24**	-.24**	-.54**	-.66**	-.01	-.38**

** p ≤ .01; * p ≤ .05

Shamer to *Trait Guilt*) and .69 (from *Other as Shamer* to *Internal Shame*) in absolute values. Based on the results, there were four significant direct effects on *Self-Forgiveness*: from *Trait Guilt* (β = –.14), *Self-Disgust* (β = –.18), *Internal Shame* (β = –.48), and *Personal Distress* (β = –.14). All of the effects on *Self-Forgiveness* were negative. The independent variable (*Self Disgust*) directly affected three variables in the model: *Self-Forgiveness* (β = –.18), *Other as Shamer* (β = .59), and *Internal Shame* (β = .20). For example, the direct effect from *Self Disgust* to *Self-Forgiveness* was –.18 (.05). This means that one standard deviation increase in *Self Disgust* causes .18 standard deviation decrease on *Self-Forgiveness*. Also, the direct effect from *Self Disgust* to *Internal Shame* was .20 (.05). That is, similarly, one standard deviation increase in *Self Disgust* causes .20 standard deviation decrease on *Internal Shame*.

The *Model Indirect* option in Mplus 5.1 was used to check the mediations between the dependent and independent variables. In order to get the indirect effects, Mplus basically multiplies associated direct effects. The standard error of the indirect effects was calculated based on the delta method. Table 6 shows significant indirect effects for the final Model B. For example, there was a direct effect from *Self-Disgust* to *Self-Forgiveness* and an indirect effect between them via *Internal Shame*. Similarly, there were both a direct and an indirect effect from *Trait Guilt* to *Empathy*.

Discussion

Study1 presented partial support for the relationship between self-disgust and self-forgiveness, and only the mediating effects of internal and external shame were found in this relationship. Also, as in Study 2, internal and external shame mediated the link between self-disgust and self-forgiveness. Unlike Study 1, Study 2 provided evidence that self-disgust influenced self-forgiveness not only directly but also indirectly and negatively through internal shame and (negative) personal distress. Although trait guilt and state guilt negatively correlated with self-forgiveness, guilt had no mediating role between self-disgust and self-forgiveness.

General Discussion

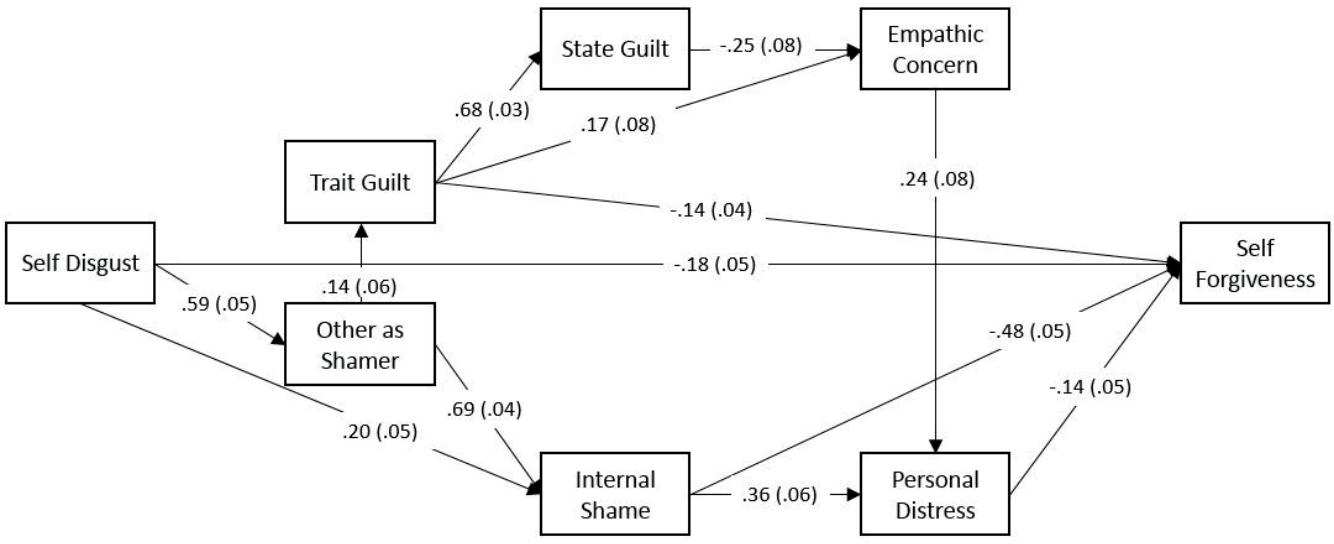
In Study 1 and Study 2, a new model expanding Hall and Fincham's (2005) emotional determinants of self-forgiveness model has been tested in the light of an evolutionary biopsychosocial model (Gilbert, 1998). In Study 1, we examined the association between self-disgust and self-forgiveness via internal shame, external shame, personal distress, and empathic concern. In Study 2, we also examined whether the relationship between self-disgust and self-forgiveness is mediated by guilt (trait and state), shame (external and internal), and empathy (emphatic concern and personal distress). In both studies, as expected, external shame and internal shame served as mediators between self-disgust and self-forgiveness. That is, higher levels of self-disgust is associated with higher levels of external shame and higher levels of internal shame, which, in turn, induces lower levels of self-forgiveness. The link between

Tab. 6. Significant Indirect Effects (Standardized Values)

Indirect Effects under Model B	Value	S.E.
Self-Disgust → Internal Shame → Self Forgiveness	-.09**	.02
Self-Disgust → Other as Shamer → Internal Shame → Self Forgiveness	-.20**	.03
Self-Disgust → Internal Shame → Personal Distress → Self Forgiveness	-.01*	.00
Empathic Concern → Personal Distress → Self Forgiveness	-.03*	.01
Internal Shame → Personal Distress → Self Forgiveness	-.05**	.02
Trait Guilt → State Guilt → Empathic Concern	-.17**	.05

* p ≤ .05; ** p ≤ .01

Fig. 3. Final Path Model for Model B



external shame and internal shame was not expected but found in both models. However, this finding showed that someone who is externally shamed will also direct his/her attention to themself and experience internal shame cognitions. Consistent with this finding, Gilbert (1998; 2003) stated that shame begins in the social environment and is closely relate to how others think and judge the self. External and internal shame not only interconnect (Baldwin, 2005), however, but also have differences (Gilbert, 2003), one of which is the effect of inhibiting self-forgiveness. Our findings also shed light on the components of shame.

Somewhat diverging from our initial expectations, both studies indicated that internal shame independently mediated the relationship between self-disgust and self-forgiveness, partially supporting our hypotheses. These findings support Gilbert's (2003) notion that internal shame is directly related to self-forgiveness, while external shame has no such direct link. They also support Gilbert and Woodyatt (2017), who found that self-disgust is one of the primary emotions of internal shame, which, in turn, leads to unforgiving of the self. This result partially supports other studies (McGaffin et al., 2013; Rangganadhan & Todorov, 2010) and sheds light on what lowers the level of self-forgiveness.

In both studies, self-disgust scores showed a strong correlation with both internal shame and external shame; however, the correlation with internal shame was found to be slightly stronger. Schematic representations of the self as disgusting appear as evidence of the self's weakness and inadequacy. When we see ourselves as disgusting ("I'm a horrible, foul person"), a sense of internal shame is likely to occur ("I'm useless, an idiot"), and the person is less likely to forgive themself. The schematic model of self-disgust (Powell et al., 2018) assumes a degree of interplay between state and trait cognitive-emotional elements, which may activate and confirm negative beliefs about oneself by perceiving an inability to evoke positive emotions in the minds of others. Although Gilbert and Andrews (1998) stated that internal/external shame co-occurs in the therapeutic process of self-forgiveness, internal shame could be given more focus; internal shame mostly appears together with self-disgust in these treatments (Gilbert, 2015). When we consider the finding that internal shame alone mediates the relationship between self-disgust and self-forgiveness, it further highlights the importance of addressing internal shame in working with both self-disgust and self-forgiveness.

One of the hypotheses in both Study 1 and Study 2 proposed that internal shame and personal distress would mediate the relationship between self-disgust and self-forgiveness. This hypothesis was fully supported only in Study 2, where an increase in self-disgust led to internal shame, which in turn caused personal distress, ultimately reducing self-forgiveness. In contrast, Study 1 provided partial support, showing that while internal shame mediated the relationship between self-disgust and personal distress, these variables did not predict self-forgiveness. However, in both studies, personal distress acted as a mediator between internal shame and self-forgiveness, which partially supports other studies (e.g., Hodgson & Wertheim, 2007; Rangganadhan & Todorov, 2010). Woodyatt and Wenzel (2013) explained how self-forgiveness is related to personal distress and, in turn, to one's sense of wrongdoing. The current study supports the Rangganadhan and Todorov (2010) study in which internal shame and personal distress were related and crucial to self-forgiveness. A few studies (Leith & Baumeister, 1998; Silfver et al., 2008; Tangney, 1991) have also found a significant association between shame and personal distress. Personal distress is a self-directed negative emotion, so it is reasonable to expect a link between internal shame and personal distress, which may thus also reduce self-forgiveness. Different from other studies, the present research more clearly revealed which type of shame is associated with empathic concern, personal distress, and self-forgiveness. As a result, self-disgust, internal shame, and personal distress are found to be associated with self-forgiveness.

Study 1 also examined the roles of external shame, internal shame, and empathic concern in the relationship between self-disgust and self-forgiveness No pathways were found to be significant for empathic concern mediating the relationship between self-disgust and self-forgiveness. Indeed, empathic concern had no direct effect on self-forgiveness. In Study 1, as partly expected, revealed an indirect link between self-disgust and empathic concern via external shame and internal shame but not between self-disgust and self-forgiveness. Specifically, an increase in self-disgust led to higher levels of internal shame, which in turn increased empathic concern. Conversely, an increase in self-disgust also led to higher levels of external shame, which decreased empathic concern. These interesting findings suggest that when internal shame increases, empathic concern also increases, but this is reversed for external shame. While no similar study includes all the variables examined here, the findings diverge from those in the literature (Molleti, 2020). External shame may be associated with externalization, and this may increase the blame of others (Bumby, 2000) and involve the risk of harming the other again. It suggests that the path from external shame to empathic concern may not be replicable in this research. Except for this path, Model A from the first study was replicated quite well in the dataset (Model B) of the second study. Although Gilbert (2017) stated that empathy is very important for guilt but less so for shame, it was found that internal shame, like guilt, can also increase empathy.

In Study 2, the pathway involving self-disgust, guilt (both trait and state), empathic concern, and self-forgiveness was not found to be significant. Empathic concern was only found to be related to self-forgiveness through personal distress. Empathic concern involves caring for others' grief, while personal distress is an uncomfortable reaction to it (Davis, 1980). Although it appears less likely that empathic concern would directly increase personal distress, as these two emotions are generally considered distinct, individuals with high levels of empathic concern may still be at risk of experiencing personal distress if their emotional involvement becomes overwhelming. This possibility could contribute to reduced self-forgiveness. This could be explained by Batson et al. (1997) study. There, participants who imagined another person's feelings demonstrated strong empathic concern. Individuals who were instructed to "put themselves into the shoes of another" and imagine themselves in the other's place showed both empathic concern and personal distress. These distinct emotions may be aroused depending on how an individual imagines another person in need (Batson et

al., 1997). It is assumed that personal distress may arise from empathic over-arousal but also from other emotion-related processes, like shame (Eisenberg et al., 2002). This result is similar to others in the literature, showing that there is no direct relationship between empathy and self-forgiveness (Hall & Fincham, 2008; McGaffin et al., 2013). Empathy may, though, play an important role in the forgiveness of others. Further, the link between shame and empathy is mixed in the literature. Shame has been found to have no relationship with empathy (Leith & Baumeister, 1998), yet some studies have found an association between these two variables (Tangney, 1991).

The results found here show that empathic concern is also related to shame cognitions. Feeling disgust toward oneself increased internal shame cognitions, and internal shame is associated positively with empathic concern as a moral behavior but is also related to personal distress as an egoistic orientation. Although shame is generally discussed as a problematic emotion related to aversive motives (Gilbert, 2019), some research has shown it to be also related to prosocial behavior (De Hooge et al., 2010; Lickel et al., 2014). Our findings suggest that internal shame may help to improve relationships as a result of empathizing with the offended person; this seems functional in interacting with the social world.

As shame is defined as self-directed disgust (Phillips et al., 1998), it would not have been surprising to find an association between self-disgust and empathic concern; yet, these two variables showed no direct correlation in our findings. Our study also clarified that self-disgust and shame are not replaceable with each other. It should be noted that while self-disgust did not show a direct link with another variable, disgust and shame were highly intercorrelated.

In Study 2, it was expected that guilt (both trait and state) and empathic concern would mediate the relationship between self-disgust and self-forgiveness; however, this pathway was not found to be significant. That is, trait and state guilt did not mediate the relationship between self-disgust and self-forgiveness. The fourth important result of the present study is that trait and state guilt were related to empathic concern, but empathic concern was not found as a mediator between guilt and self-forgiveness. This may be explained as empathic concern activating our cognitive processes about the condition of others such that we become concerned with their care and well-being (Gilbert, 2003; Eisenberg, 2002). As expected, both trait and state guilt predicted empathic concern, but contrary to expectation, trait and state guilt did not predict self-forgiveness indirectly via empathic concern. This was in accordance with the expectation that guilt would not be related to self-forgiveness like shame because shame was explained as a self-focused experience that activates self-defensive systems (Gilbert, 2003).

Limitations

One limitation of this study is that the analysis only involved a part of Hall and Fincham's (2005) theoretical model. While the present study aimed to investigate shame cognitions, and guilt was assumed to contribute to self-forgiveness, future studies might further test whether positive emotions and cognitive variables could be antecedents of self-forgiveness after a transgression. A second limitation concerns the use of path diagram modeling. In future research, a fuller structural equation modeling could be used to create latent variables.

The cross-sectional nature of the two studies is another limitation. Although the predictive effect of self-disgust on self-forgiveness in Study 1 was supported in Study 2, the findings should be interpreted with caution. This is an exploratory model that supporting that the variables are associated with another, but not that the constructs unfold in a causal way. It seems necessary to use longitudinal studies to better understand the direction effects among self-disgust, self-forgiveness, shame, and empathy, especially in non-clinical samples. Future studies might examine the model of self-forgiveness using the clinical populations to improve generalizability, such as eating disorders, substance use disorder, self-harm. Another limitation is that most participants (75%) were female, a gender imbalance that might affect the generalization of the present results. Future research might employ a more balanced gender sample. Lastly, the data in this study were collected using self-reported questionnaires. Future research could use implicit measures, which might better expose the actual feelings of the participants.

Conclusion

It is important in clinical settings to understand self-forgiveness and the cognitions and emotions associated with this as a process. In light of the present study, shame cognitions should be interpreted carefully and resolved to regain a healthy self-image. An abnormal perception of disgust indicates psychiatric disorders (Phillips et al., 1998), so in clinical settings, self-disgust, as an emotional schema in human beings, should be considered in the process of self-forgiveness. The curing effect of self-disgust may help in the healing of shame and in improving self-forgiveness. The findings of this study suggest the importance of investigating the role of internal and external shame in causing and maintaining unforgiving of the self. This research also provides evidence for the use of external and internal shame in therapy to increase self-forgiveness These studies show that the psychology of self-forgiveness is complex and may be achieved through self-disgust and shame. This study suggests that developing new intervention methods targeting self-disgust may indirectly have an impact on self-forgiveness. Compassion-focused therapy (CFT) that focuses on shame and self-disgust (Gilbert, 1998, 2015) may help to enhance self-forgiveness. The model tested here presented various antecedents of self-forgiveness and showed a good fit to the data.

Ethical Approval

The study was approved by the Ethics Committee of Süleyman Demirel University Ethics Committee.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Author Contributions
Ebru Taysi, writing – original draft, writing – review & editing; Fatih Orçan, data analysis and writing results. Ebru Taysi and Fatih Orçan share first/last authorship. All authors approved the final version of the article.

Conflict of Interests
The authors declare no conflicts of interest.

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Appendix

Cross-validation Results

The final path model for Model A, shown in Figure 2, was run with the second dataset to cross-validate Model A. Based on the results all the direct effects were significant except the direct effect from *Other as Shamer* to *Empathic Concern*. Also, the direct effect from *Self Disgust* to *Self-Forgiveness* was added to the model. Finally, the model fitted to the second data set (*Chi-square* = 5.83, *df* = 5, *p* > .05, *CFI* = 1, *RMSEA* = .024, *SRMR* = .018). As it was expected, the modifications were the same as the final path model for Model B as shown at Figure 3. The model results were shown at the Figure A. In conclusion, Model A was cross-validated with the second data set with the exception of the direct effect from *Other as Shamer* to *Empathic Concern*. However, the paths are similar to the paths at the final model for Model B.

Fig. A. The Path Model Results with Second Data Set.