



The Influence Of Affective States And Anxiety On Forgiveness: A Comparative Study Between Men & Women.

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This is to certify that Shreya Behal is a bonafide student of M.A. (Counselling Psychology) (Enrolment Number A1503621020, 2021-2023 batch) of AMITY INSTITUTE OF PSYCHOLOGY AND ALLIED SCIENCES (AIPS), AUUP. The present dissertation is submitted in partial fulfilment of the requirement of the degree of M.A. (Counselling Psychology). This dissertation under my guidance titled, "The influence of affective states and anxiety on forgiveness: A comparative study between men & women." is an original piece of research work and no part of this dissertation has been submitted for any other degree of any other university to the best of our knowledge.

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Declaration

I, Shreya Behal, hereby declare that this dissertation title "The influence of affective states and anxiety on forgiveness : A comparative study between men & women" is the outcome of my own study undertaken under the guidance of Dr. Annie Khanam for the fulfillment of the partial requirement of the degree of M.A. in Counselling Psychology. It has not previously formed the basis for the award of any degree, diploma or certificate of this institute or any other institute or university. I have duly acknowledged all the sources that contributed in the preparation of this dissertation.



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Abstract

Despite the perception that women are more forgiving than men, many studies have found different results. Additionally, little is known about gender-specific correlations or patterns of forgiveness experiences. In this dissertation, we examine how affect and anxiety influence forgiving behavior in men and women. Measurement tools include the Positive and Negative Affect Schedule (PANAS), the State and Trait Anxiety Inventory (STAI), and the Heartland Forgiveness Scale (HFS). The study included 114 participants, 75 females and 39 males. Quantitative analysis, including descriptive statistics, inferential statistics and correlation were used. The findings revealed that positive affect was related to higher levels of forgiving behaviour whereas, negative affect was related to lower levels of forgiveness, regardless of gender. State and Trait anxiety were found to be higher in women, and were correlated to one another.

Keywords : Forgiveness, Positive Affect, Negative Affect, State Anxiety, Trait Anxiety, Gender Differences

Chapter 1: Introduction

As a complex and multifaceted process, forgiveness plays an integral role in interpersonal relationships, psychological well-being, and overall life satisfaction. Individuals' cognitive (Thompson et al., 2005), emotional, and behavioural aspects (McCullough et al., 1997). are all involved in the forgiveness process. As defined by Enright & The Human Development Study Group (1991), it refers to letting go of negative emotions like anger and resentment and replacing them with positive emotions like compassion and understanding toward a transgressor. It is believed that different factors influence forgiveness, including affective states.

Previous research has been shown that affect plays a significant role in the forgiveness process. (Kaleta and Mróz, 2022,. Marks, Trafimow, Gonzales, and Oates ,2013). Affect can be defined as the range of emotional experiences individuals encounter in response to internal and external stimuli (Ekkekakis & Petruzzello, 2000), and can be divided into two broad categories: positive and negative affect. with positive

affect includes feelings of happiness, joy, and contentment, while negative affect is characterized by feelings of anger, sadness, and anxiety. (Watson, Clark, & Tellegen, 1988.) Previous studies (Davis et al., 2014) investigated the impact of gratitude on forgiveness. The state of gratitude, a positive affective state associated with appreciation and thankfulness, facilitates forgiveness. Higher levels of gratitude were associated with greater levels of forgiveness as well as greater psychological well-being among participants. According to a meta-analysis (Strelan and Covic, 2006), personality traits seem to be associated with forgiveness. Individuals with these characteristics are more likely to engage in forgiveness because they are more likely to be agreeable, conscientious, and emotionally stable.

Previous studies surrounding anxiety, which is characterized by feelings of fear, worry, and physical arousal, has been found to have a significant impact on forgiveness (Subkoviak et al., 1995). Anxiety was found to be a significant barrier to the forgiveness process, as it heightened negative emotions and hindered the development of compassion and understanding towards the transgressor. (Kaleta and Mróz, 2022) Studies in the past have explored the relationship between anxiety and forgiveness, providing insight into the nuanced ways in which anxiety influences forgiveness (Lichtenfeld, Maier, Buechner, & Fernández Capo, 2017). Previous research also claims that individuals who exhibited a greater propensity for forgiveness tended to experience reduced levels of anxiety (Ayten and Karagöz, 2021) Understanding the dynamics between anxiety and forgiveness is crucial for developing therapeutic interventions aimed at promoting forgiveness and reducing anxiety-related barriers. By addressing anxiety and its influence on the forgiveness process, therapists and practitioners can help individuals overcome emotional obstacles, facilitate cognitive shifts, and foster a more compassionate and forgiving mindset.

Anxiety is also experienced and expressed differently by men and women, with some studies suggesting that women may experience higher levels of anxiety than men (McLean et al., 2011). Previous research (Altemus et al., 2014) has shown hormonal fluctuations during the menstrual cycle and hormonal changes during pregnancy and postpartum period were associated with increased vulnerability to anxiety disorders in women. Further, research (Ryan & Kumar, 2005) has demonstrated anxiety and symptoms severity are associated with a willingness to forgive in males, but not in females. In light of these gender differences in anxiety, forgiveness may be impacted because anxiety can interfere with the cognitive and

emotional processes necessary to facilitate forgiveness. (Marks, Trafimow, Gonzales, & Oates, 2013).

Additionally, societal and cultural factors may affect how men and women perceive and respond to anxiety.

Having the ability to forgive is essential for maintaining healthy relationships, resolving conflicts, and enhancing personal development. Although forgiveness has received extensive study over the years, it is still a fascinating and understudied area of research to examine the role of affect and anxiety in forgiveness. By considering the role of anxiety in forgiveness and investigating potential gender differences, this comparative study aims to expand our understanding of the complex interplay between affective states, anxiety, and forgiving behaviour.

Chapter 2: Literature Review

Since the inception of the concept of forgiveness, it has evolved in a significant way. Literature has also examined gender differences in forgiveness, although the results are rather mixed. This section delves into the current understanding of the influence of affect and anxiety on forgiving behaviour and, subsequently, the difference in this process between men and women.

2.1 Forgiveness: Conceptualization and Definitions

Majority of scholars concur that forgiveness is a multifaceted concept (Enright & Fitzgibbons, 2000). Religious and philosophical perspectives were primarily responsible for early conceptualizations of forgiveness. The first definition for “forgive” in Webster’s New Universal Unabridged Dictionary (1983) is “to give up resentment against or the desire to punish; to stop being angry with; to pardon”.

Forgiveness was generally viewed in these contexts as a moral obligation or virtuous act that was often accompanied by compassion, mercy, and renunciation of resentment and revenge (Enright, Freedman, & Rique, 1998).

Robert Enright, a psychologist who pioneered the scientific study of forgiveness and a founding member of the International Forgiveness Institute, has explored what humans experience emotionally when

they forgive someone who has caused them harm. According to them, “forgiveness is the foregoing of resentment or revenge when the wrongdoer’s actions deserve it, is giving the gifts of mercy, generosity and love when the wrongdoer’s actions indicate that he/she does not deserve them and as we give the gift of forgiveness, we ourselves are healed.”

Other studies (McCullough et. al, 1997) expanded upon the psychological perspective by proposing a two-dimensional model of forgiveness based on decisional forgiveness (the conscious decision to forgive) and emotional forgiveness (the replacement of negative unforgiving emotions with positive other-oriented emotions). Therefore, forgiveness has been found to be related to both positive and negative emotions.

2.2 Gender and Forgiveness

In an extensive analysis of 70 studies involving 15,731 individuals, (Miller et al., 2008) discovered a gender disparity in forgiveness, with a modest to moderate effect size. Female participants showed a greater tendency to forgive than male participants. This could be attributed to higher levels of empathy in women, which is known to facilitate forgiveness.

The findings from (Fehr et al., 2010), however, did not find any significant associations between gender and forgiveness in a meta-analysis involving 53 studies and 8,366 participants. In light of these conflicting findings, additional research is necessary to better understand gender influences on forgiveness and the role that affect may play in this process.

Another study conducted (Fehr et al., 2010) asked male and female participants to recall a time in which they were wronged and to express their forgiveness towards the offender. The results indicated that there were no significant differences in forgiveness between the genders.

A study (Karremans & Van Lange, 2008) found that gender differences in forgiveness may be related to the severity of the offense. They assessed forgiveness using self-report measures, which asked participants to imagine themselves in different scenarios that ranged in severity from minor to severe offenses. The offenses were designed to mimic real-life transgressions that might occur in interpersonal relationships, such as breaking a promise or betrayal. Participants were then asked to rate their likelihood to forgive the offender

in each scenario. Women may be more forgiving in minor offenses, but this difference will disappear in severe offenses.

The (Wade and Worthington,2005) study found that there are distinct coping strategies associated with each gender when looking at the forgiveness process. The majority of women tended to utilize coping strategies that were centered on emotions, whereas men tended to use problem-solving strategies. It is possible that this difference in approaches has a significant impact on the forgiveness process, particularly when correlated with positive and negative affect. There is a greater level of emotional processing and expression involved in emotion-focused coping, which is often employed by women. The process of forgiveness may be facilitated if women experience and acknowledge both positive and negative emotions more deeply with this approach. By comparison, the problem-focused coping approach typically adopted by men may involve less emotional involvement, potentially affecting their forgiveness process differently. Moreover, the relationship between emotion-focused coping and positive and negative affect may further influence gender differences in forgiveness. Women may be better able to manage or mitigate negative emotions and cultivate positive ones through emotion-focused coping, thereby encouraging forgiveness. Conversely, problem-focused coping might influence men's forgiveness process by making them less sensitive to the emotional aspects of forgiveness.

2.3 Affect and Emotional States

Human psychology emphasizes the importance of affect and emotional states, which are integral aspects of how an organism interacts with stimuli (Russell, 2003).

Affect can be classified into two types: positive and negative. Positive affect indicates an individual's level of enthusiasm, activity, and alertness. An individual with high positive affect will be highly energetic, fully focused, and engaging in pleasure (Watson, Clark, & Tellegen, 1988), whereas an individual with low positive affect will be sad, lethargic and drowsy.

Conversely, negative affect is a general aspect of psychological distress and unpleasurable engagement that encompasses a number of negative mood states such as anger, contempt, disgust, guilt, fear, and nervousness.

(Watson et al., 1988) High negative affect is characterized by subjective distress and unpleasurable engagement, whereas low negative affect is characterized by calmness and serenity.

As closely related as affect can be, emotional states refer to a psychological and physiological aspect of feeling, that can range from intense joy to profound sadness. As well as being positive or negative, emotions can also be short-lived (e.g., surprise, anger) or long-lasting (e.g., love, grief). In addition to their mildness (e.g., satisfaction, annoyance), they can also vary in intensity (e.g., ecstasy, devastation) (Ekman, 1992).

A study conducted (Marks, Trafimow, Gonzales, and Oates, 2013) examined the relationship between a bad mood and forgiveness, particularly focusing on forgiveness as a method of mood management. Using three studies to study this issue, they found that a bad mood increased forgiveness of hypothetical wrongs compared with a neutral mood. A moderate level of negativity was found to increase the likelihood of forgiveness, and forgiveness reduced negative emotions. According to these findings, forgiveness may play a role in managing negative emotions, which may contribute to its health benefits.

Another prominent study (Kaleta and Mróz, 2022) explored gender differences in dispositional forgiveness and its emotional relationships, including positive and negative affect, anxiety, and emotional control in 2022. An overall sample of 625 participants, aged 19-69, was included in the study, of which 76.5% (478 individuals) were females and 23.5% (147 individuals) were males. Several instruments were used in this study, including the Heartland Forgiveness Scale (HFS), the Positive and Negative Affect Schedule (PANAS), and the Courtauld Emotional Control Scale (CECS), and State-Trait Anxiety Inventory (STAI) to gauge forgiveness and associated emotional factors. Compared to women, men displayed greater levels of forgiveness and were more likely to let go of unforgiveness. Despite this, no significant differences were found in the propensity to forgive. A negative correlation was found between dispositional forgiveness and negative affect, anxiety, and managing anger and depression, while a positive correlation was found between dispositional forgiveness and positive affect. This research offers valuable perspectives on gender-based differences in dispositional forgiveness and associated emotional factors, emphasizing the need to consider these elements during forgiveness focused interventions.

2.4 Anxiety and Forgiveness

The constructs of anxiety and forgiveness have been studied in the past. A study (Kaleta and Mróz, 2022) was conducted that examined the relationship between anxiety and forgiveness. To analyze the data, the researchers used statistical methods such as correlation and regression analyses to understand the relationship between trait anxiety and forgiveness. They also conducted subgroup analyses to examine potential gender differences in these relationships. Researchers found that trait anxiety was inversely related to forgiving behavior, which indicates that individuals with high levels of trait anxiety have difficulties forgiving others. Their findings also indicated that there may be a gender difference in trait anxiety levels, with women exhibiting higher levels than men. As a result, the impact of anxiety on forgiveness may differ between genders.

Further, (Subkoviak et al., 1995) aimed to define and explore the concept of interpersonal forgiveness. Researchers employed the Enright Forgiveness Inventory (EFI) to assess forgiveness among 197 college students and their same-sex parents in the Midwest region of the United States. As a reliable instrument for measuring interpersonal forgiveness, the EFI demonstrated excellent internal consistency and reliability. Researchers examined the relationship between EFI scores and anxiety levels, particularly in circumstances where individuals experienced profound emotional distress. There was a notable negative correlation between forgiveness and anxiety, indicating that forgiveness may reduce anxiety levels, particularly when individuals have experienced significant emotional trauma.

Additionally, (Lichtenfeld, Maier, Buechner, & Fernández Capo, 2017) examined gender differences in anxiety levels and found that women are generally more sensitive to anxiety than men. As anxiety can influence a person's willingness and ability to forgive, this gender difference in anxiety may have implications for forgiveness.

Previous research (Marks, Trafimow, Gonzales, & Oates, 2013) examined how anxiety affects forgiveness. Four hundred and fourteen participants (160 males, 254 females) were recruited for partial course credit from a large Southwestern university. Sample ethnic makeup was 40% White, 49% Hispanic or Latino,

and 11% of other or unspecified ethnicity. Mean participant age was 19.5 years. According to their research, state anxiety, a temporary feeling of anxiety that occurs in specific situations, was negatively correlated with forgiveness (Rayne et al., 2001). The personality measures included agreeableness, conscientiousness, and neuroticism, as well as the 10-item Forgiveness Likelihood Scale (FLS). Based on this finding, it is likely that individuals experiencing high levels of state anxiety may find it difficult to engage in forgiveness due to heightened emotional distress and cognitive biases.

2.5 Research Gap

In this dissertation, we explore the influence of emotional correlates, particularly positive and negative affect and anxiety, on forgiveness. The relationship between these variables has been examined individually in previous studies, but when it comes to their combined impact on forgiveness, particularly between men and women, a research gap exists.

Literature has provided insight into the role of affect and anxiety in forgiveness. Several studies (Lichtenfeld, Maier, Buechner, & Fernández Capo, 2017), have shown that positive affect is associated with higher levels of forgiveness, while others (Marks, Trafimow, Gonzales, & Oates, 2013) have demonstrated the negative impact of negative affect on forgiving behavior. Similarly, research (Kaleta & Mróz, 2022) has revealed the inverse relationship between trait anxiety and forgiveness.

The current study aims to fill the research gap by investigating the combined influence of positive and negative affect, as well as anxiety, on forgiveness. By employing measures such as the State-Trait Anxiety Inventory (STAI), the Positive and Negative Affect Schedule (PANAS), and the Heartland Forgiveness Scale (HFS), this comparative study between men and women seeks to provide a comprehensive understanding of how these emotional factors contribute to forgiving behavior.

This dissertation will contribute to the existing body of knowledge by providing a deeper understanding of the complex interplay between affect, anxiety, and forgiveness. Additionally, the study will shed light on how these emotional factors may differ between men and women in their impact on forgiveness through the examination of potential gender differences.

By addressing this research gap, this dissertation will provide practical implications for individuals who wish to cultivate forgiveness in their lives. Additionally, it may contribute to the development of therapeutic interventions and approaches that focus on the emotional components associated with forgiveness, taking into account potential gender-specific influences.

Chapter 3: Methodology

3.1 Aim

To assess the influence of affective states and anxiety on forgiveness

1. Objectives

- Investigate the influence of positive affect, negative affect, and anxiety on forgiveness.
- Examine potential gender differences in the associations between positive affect and forgiveness.
- Explore potential gender differences in the relationships between negative affect and forgiveness.
- Assess the impact of anxiety on forgiveness in both men and women.
- Conduct a comparative analysis to examine if the relationships between affective variables and forgiveness vary between genders.

2. Hypothesis

- The link between positive affect and forgiveness is expected to be stronger in women compared to men, indicating significant gender differences.
- The negative relationship between negative affect and forgiveness will be more pronounced in men, suggesting gender disparities in how negative emotions affect forgiveness tendencies.
- Anxiety is expected to have a universally negative impact on forgiveness across genders, but this correlation is hypothesized to be more substantial in women compared to men.

- Positive affect will be more influential in promoting forgiveness in women, while negative affect and anxiety will more strongly hinder forgiveness in men, indicating differential affective influences on forgiveness between genders.
- The overall relationship between affective variables (positive and negative affect, and anxiety) and forgiveness will differ between genders, suggesting that gender significantly impacts the emotional responses' role in forgiveness.

3.4 Research Design

In this study, we utilized a comparative quantitative research design to examine the influence of affect and anxiety on forgiving behavior between men and women. It was chosen because it allows for systematic collection, analysis, and interpretation of data in order to identify trends, patterns, and relationships between variables.

3.5 Participants

A sample of 114 participants participated in this study, 75 of whom were women and 39 of whom were men. In order to ensure a diverse sample, convenience sampling was used to select participants from a variety of age groups, backgrounds, and professions. All participants were adults between the ages of 18 and 65. After obtaining informed consent, participants filled the three questionnaires in a single form. The study was conducted in accordance with ethical standards. Participants were informed about the purpose of the study, the confidentiality of their responses, their right to withdraw at any time without repercussion, as well as the voluntary nature of their participation.

3.6 Instruments

The study employed three psychometric instruments to gather data on positive and negative affect, forgiveness, and anxiety.

3.6.1 Positive and negative affect schedule (PANAS).

Positive and Negative Affect Schedule (PANAS) is a psychometric scale developed by Watson and his colleagues (Watson, Clark, and Tellegen, 1988). The scale measures two broad dimensions of affect: positive and negative. Positive affect involves a sense of enthusiasm, activity, and alertness, whereas negative affect involves a range of negative mood states, such as anger, contempt, disgust, guilt, fear, and nervousness.

The scale consists of 20 emotion-related words, 10 for each affect. For each item, participants are asked to indicate to what extent they feel this way "right now" on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). The positive affect scale includes emotions like Enthusiastic, Inspired and Attentive, whereas the negative affect scale includes emotions like jittery, Ashamed and afraid.

The scale exhibits strong psychometric properties. Regarding reliability, Cronbach's alpha values for the PANAS have been reported in the range of .86 to .90 for Positive Affect and .84 to .87 for Negative Affect. This suggests high internal consistency. Both convergent and discriminant validity studies have provided evidence of validity. Convergent validity was confirmed through correlations with other similar measures of affect, while discriminant validity was supported by low correlations with unrelated constructs.

3.6.2 Heartland forgiveness scale (HFS)

The Heartland Forgiveness Scale (HFS) is an instrument developed in 2005 (Thompson et al., 2005) that measures dispositional forgiveness. Dispositional forgiveness is the general tendency to forgive across situations and time. In this scale, forgiveness is assessed in three domains: self-forgiveness (forgiving oneself for wrongdoing), with statements like "It is really hard for me to accept myself once I've messed up", forgiveness towards others (forgiving others), with statements like "Although others have hurt me in the past, I have eventually been able to see them as good people." and forgiveness towards situations (forgiving uncontrollable circumstances) that explore statements like "It's really hard for me to accept negative situations that aren't anybody's fault."

There are 18 items in the HFS, six for each domain. They are rated on a 7-point Likert scale from 1 (almost always false for me) to 7 (almost always true for me). Scores that are higher indicate a greater disposition to forgive.

The HFS has robust psychometric properties. Regarding its reliability, Cronbach's alpha values are .81 for Self-Forgiveness, .73 for Other-Forgiveness, and .77 for Situation-Forgiveness, indicating good internal consistency. The HFS has demonstrated both construct and criterion validity. Construct validity was supported by its correlation with other forgiveness measures. Criterion validity was established by its predictable relationships with mental health indicators, such as depression and satisfaction with life.

3.6.3 State-trait anxiety inventory (STAI)

The State-Trait Anxiety Inventory (STAI) is a self-report tool used to measure anxiety in adults. A psychometric instrument developed in 1983 (Spielberger et al., 1983), it distinguishes between state anxiety, a temporary condition, and trait anxiety, a more persistent condition.

State anxiety is characterized by temporary feelings of tension, nervousness, and worry resulting from arousal of the autonomic nervous system, which can vary with the context. On the other hand, trait anxiety is characterized by a relatively stable tendency to respond to situations that are perceived as threatening.

The STAI contains 40 items, 20 for each type of anxiety, each rated on a four-point scale from 1 (almost never) to 4 (almost always). A higher score indicates a greater level of anxiety. State anxiety explores statements like "I am presently worrying over possible misfortunes", whereas Trait anxiety analyses statements like "I am satisfied with myself"

This instrument has demonstrated excellent reliability and validity across a wide range of populations. As far as reliability is concerned, Cronbach's alpha values are reported at .90 for State Anxiety and .88 for Trait Anxiety, which indicates a high level of internal consistency. The STAI has shown strong construct validity through its correlations with other measures of anxiety and stress. Additionally, this tool shows good criterion validity, as it can distinguish between groups with differing anxiety levels (e.g., clinical populations versus non-clinical populations).

3.7 Procedure

The procedure for this study was structured to ensure both the ethical treatment of participants and the accurate collection of data. The researchers then recruited participants, ensuring a diverse range of individuals with different age groups, backgrounds, and professions. Those who participated in the study were informed about the purpose of the study, the confidentiality of their responses, their right to withdraw at any time, and the voluntary nature of their participation. The order of the questionnaires was consistent across all participants to prevent any order effects from influencing the results. Participants were encouraged to reach out if they were unsure about anything.

Descriptive statistics, including means, standard deviations, and ranges, were calculated for each measure (PANAS, HFS, and STAI) and for each subscale within these measures. This provided an overview of the central tendencies and dispersions in the data, which helped to form an understanding of the overall patterns and trends.

Next, inferential statistics were used to test the study's hypotheses. Independent sample t-tests were conducted to compare the mean scores for men and women on each measure and subscale. This allowed the researchers to determine if there were any significant differences between men and women in their levels of positive affect, negative affect, forgiveness, state anxiety, and trait anxiety.

Pearson correlation coefficients were then calculated to explore the relationships between affect, anxiety, and forgiveness. This helped to determine the strength and direction of these relationships, and whether they differed for men and women.

All statistical tests were conducted at the .05 level of significance, meaning that any p-value less than .05 was considered statistically significant. The results of these tests were then interpreted in light of the study's research questions and hypotheses.

Chapter 4: Results

Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Male, Female	113	1.00	2.00	1.3451	.47753
HFS	114	57.00	126.00	88.7807	13.94411
PANASpos	114	13.00	50.00	35.1228	7.55996
PANASneg	114	10.0	48.0	23.456	8.1285
StateAnxiety	113	36.00	66.00	56.5221	3.34103
TraitAnxiety	114	38.00	73.00	61.1754	5.83436
Valid N (listwise)	112				

The above table elaborates on several variables: gender (Male, Female), Heartland Forgiveness Scale (HFS), Positive Affect (PANASpos), Negative Affect (PANASneg), State Anxiety, and Trait Anxiety. The sample size (N) varies from 113 to 114, with valid data for all variables for 112 participants.

Here's an analysis of each variable:

Gender (Male, Female): Coded as 1 for males and 2 for females, the mean (1.3451) suggests that the sample contains more females than males. The standard deviation (0.47753) is relatively low, indicating a small spread of values around the mean or less variance in gender.

Heartland Forgiveness Scale (HFS): Scores ranged from 57 to 126, with a mean score of 88.78, indicating moderate levels of forgiveness on average. The standard deviation (13.94411) suggests a moderate dispersion in forgiveness scores among the participants.

Positive Affect (PANASpos): The scores ranged from 13 to 50, with an average score of 35.12, suggesting that the participants experienced a moderate level of positive affect overall. The standard deviation (7.55996) indicates a moderate spread of positive affect scores around the mean.

Negative Affect (PANASneg): The scores ranged from 10 to 48, with a mean score of 23.456, indicating moderate levels of negative affect. The standard deviation (8.1285) shows a somewhat larger spread in negative affect scores, indicating a greater variety in individuals' experiences of negative emotions.

State Anxiety: The scores ranged from 36 to 66, with a mean of 56.52, suggesting that participants experienced high levels of situational or "state" anxiety. The small standard deviation (3.34103) indicates that the scores were closely clustered around the mean, suggesting a more homogeneous experience of state anxiety among participants.

Trait Anxiety: The scores varied between 38 and 73, with a mean of 61.17, implying high levels of enduring or "trait" anxiety among participants. The standard deviation (5.83436) suggests a moderate spread of trait anxiety scores around the mean.

In summary, this sample appears to include more females than males, and participants showed moderate levels of forgiveness and affect (both positive and negative), but high levels of both state and trait anxiety.

Forgiveness in men & Women

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	Lower	Upper
						One-Sided p	Two-Sided p				
HFS	Equal variances assumed	.175	.676	.854	111	.197	.395	2.30942	2.70362	-3.04798	7.66683
	Equal variances not assumed			.832	71.993	.204	.408	2.30942	2.77502	-3.22249	7.84134

The independent samples t-test is used to compare the means of two independent groups to determine if they are significantly different from each other. In this case, the Heartland Forgiveness Scale (HFS) scores were compared between two groups.

Firstly, Levene's test for equality of variances was conducted. The null hypothesis for Levene's test is that the variances of the two groups are equal. Here, the F statistic is 0.175 and the significance (p-value) is 0.676. Since the p-value is greater than 0.05, we fail to reject the null hypothesis, which means we can assume that the variances of the two groups are equal.

Next, the t-test for equality of means was conducted under the assumption of equal variances. The t statistic is 0.854 and the degrees of freedom (df) is 111. The significance (p-value) for the one-sided test is 0.197 and for the two-sided test is 0.395. Both these p-values are greater than 0.05, indicating that we fail to reject the null hypothesis of the t-test, which is that the means of the two groups are equal. In other words, there's no significant difference in HFS scores between the two groups.

The mean difference is 2.30942, with a standard error difference of 2.70362 (under equal variances assumed) or 2.77502 (under equal variances not assumed). The 95% confidence interval of the difference ranges from -3.04798 to 7.66683 (under equal variances assumed) or from -3.22249 to 7.84134 (under equal

variances not assumed). Since the confidence interval contains zero, it further confirms that there's no significant difference in HFS scores between the two groups.

Group Statistics

	Male, Female	N	Mean	Std. Deviation	Std. Error Mean
HFSself	Female	74	29.1892	6.31301	.73387
	Male	39	29.0256	5.87361	.94053
HFSothers	Female	74	31.1081	5.83229	.67799
	Male	39	28.5128	6.00820	.96208
HFSsit	Female	74	28.9865	6.40311	.74435
	Male	39	29.4359	5.93737	.95074

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
HFSself	Equal variances assumed	.523	.471	.134	111	.447	.894	.16355	1.22012	-2.25420	2.58130
	Equal variances not assumed			.137	82.448	.446	.891	.16355	1.19297	-2.20945	2.53654
HFSothers	Equal variances assumed	.009	.927	2.226	111	.014	.028	2.59529	1.16610	.28459	4.90599
	Equal variances not assumed			2.205	75.431	.015	.030	2.59529	1.17698	.25085	4.93972
HFSsit	Equal variances assumed	.273	.603	-.364	111	.358	.717	-.44941	1.23624	-2.89910	2.00028
	Equal variances not assumed			-.372	82.689	.355	.711	-.44941	1.20746	-2.85113	1.95231

The t-test results for HFS others suggest that there is a significant difference between men and women when it comes to forgiveness of others. The p-value of .014 (two-tailed) and .028 (one-tailed) are both less than .05, which indicates this difference is statistically significant.

Gender Differences in Affect

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
PANASpos	Equal variances assumed	.245	.621	-.619	111	.269	.538	-.92481	1.49522	-3.88770	2.03808
	Equal variances not assumed			-.646	87.319	.260	.520	-.92481	1.43186	-3.77064	1.92102
PANASneg	Equal variances assumed	.196	.658	.992	111	.162	.323	1.5832	1.5958	-1.5791	4.7454
	Equal variances not assumed			.982	75.141	.165	.329	1.5832	1.6129	-1.6299	4.7962

These are the results of independent sample t-tests for PANASneg and PANASpos. The Levene's Test for Equality of Variances tests the assumption that the variances of the two groups being compared are equal. If the p-value is greater than .05, we do not reject the null hypothesis that the variances are equal.

PANASneg: The Levene's Test for Equality of Variances is not statistically significant ($F = .196$, $p = .658$), indicating the assumption of equal variances has not been violated. The t-test for Equality of Means is also not statistically significant ($t = .992$, $df = 111$, one-sided $p = .162$, two-sided $p = .323$), suggesting there is no significant difference in PANASneg scores between the two groups being compared.

PANASpos: Similar to PANASneg, the Levene's Test for Equality of Variances is not statistically significant ($F = .245$, $p = .621$), indicating the assumption of equal variances has not been violated. The t-test for Equality of Means is also not statistically significant ($t = -.619$, $df = 111$, one-sided $p = .269$, two-sided $p = .538$), suggesting there is no significant difference in PANASpos scores between the two groups being compared.

In both cases, the results are the same whether we assume equal variances or not. Thus, we can conclude that there are no significant differences in PANASneg and PANASpos scores between the two groups being compared in this dataset.

Table of multiple independent samples t-tests for the variables:

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
PANASpos	Equal variances assumed	.245	.621	-.619	111	.269	.538	-.92481	1.49522	-3.88770	2.03808
	Equal variances not assumed			-.646	87.319	.260	.520	-.92481	1.43186	-3.77064	1.92102
PANASneg	Equal variances assumed	.196	.658	.992	111	.162	.323	1.5832	1.5958	-1.5791	4.7454
	Equal variances not assumed			.982	75.141	.165	.329	1.5832	1.6129	-1.6299	4.7962
StateAnxiety	Equal variances assumed	10.780	.001	3.992	110	<.001	<.001	2.50996	.62873	1.26396	3.75596
	Equal variances not assumed			3.063	41.358	.002	.004	2.50996	.81950	.85538	4.16454
TraitAnxiety	Equal variances assumed	.918	.340	5.133	111	<.001	<.001	5.37249	1.04671	3.29836	7.44662
	Equal variances not assumed			4.706	61.247	<.001	<.001	5.37249	1.14152	3.09007	7.65490
HFSself	Equal variances assumed	.523	.471	.134	111	.447	.894	.16355	1.22012	-2.25420	2.58130
	Equal variances not assumed			.137	82.448	.446	.891	.16355	1.19297	-2.20945	2.53654
HFSothers	Equal variances assumed	.009	.927	2.226	111	.014	.028	2.59529	1.16610	.28459	4.90599
	Equal variances not assumed			2.205	75.431	.015	.030	2.59529	1.17698	.25085	4.93972
HFSsit	Equal variances assumed	.273	.603	-.364	111	.358	.717	-.44941	1.23624	-2.89910	2.00028
	Equal variances not assumed			-.372	82.689	.355	.711	-.44941	1.20746	-2.85113	1.95231

The table presents the results of multiple independent samples t-tests for the variables: State Anxiety, Trait Anxiety, PANAS negative (PANASneg), PANAS positive (PANASpos), and three subscales of the Heartland Forgiveness Scale (HFSself, HFSothers, HFSsit).

State Anxiety: With a significant Levene's Test ($p = .001$), unequal variances are assumed. The t-test indicates a significant difference between groups ($p < .001$ for both one-sided and two-sided tests). The mean difference is 2.50996, and the 95% confidence interval does not cross zero (0.85538 - 4.16454), reinforcing the significant difference in state anxiety between the two groups.

Trait Anxiety: The Levene's Test is non-significant ($p = .340$), so equal variances are assumed. The t-test indicates a significant difference between groups ($p < .001$ for both one-sided and two-sided tests), suggesting differing mean levels of trait anxiety between the two groups. The mean difference is 5.37249, and the 95% confidence interval (3.29836 - 7.44662) does not cross zero.

PANASneg: Levene's Test is non-significant ($p = .658$), so equal variances are assumed. The t-test shows no significant difference between groups ($p > .05$ for both one-sided and two-sided tests), suggesting similar levels of negative affect in both groups.

PANASpos: Levene's Test is non-significant ($p = .621$), so equal variances are assumed. The t-test is also non-significant ($p > .05$ for both one-sided and two-sided tests), implying similar levels of positive affect in both groups.

HFSself: Levene's Test is non-significant ($p = .471$), so equal variances are assumed. The t-test shows no significant difference between groups ($p > .05$ for both one-sided and two-sided tests), indicating similar levels of self-forgiveness in both groups.

HFSothers: The Levene's Test is non-significant ($p = .927$), so equal variances are assumed. The t-test shows a significant difference between groups ($p = .014$ for one-sided and $p = .028$ for two-sided tests), suggesting differing levels of forgiveness towards others between the two groups. The mean difference is 2.59529, and the 95% confidence interval (0.28459 - 4.90599) does not cross zero.

HFSsit: Levene's Test is non-significant ($p = .603$), so equal variances are assumed. The t-test is also non-significant ($p > .05$ for both one-sided and two-sided tests), suggesting similar levels of forgiveness in situations beyond control in both groups.

In summary, there were significant differences between the groups in State and Trait Anxiety, and forgiveness towards others (HFSothers), but not for negative and positive affect (PANASneg and PANASpos), self-forgiveness (HFSself), or forgiveness in situations beyond control (HFSsit).

Correlation Table

		Correlations					
		Male, Female	HFS	PANASpos	PANASneg	StateAnxiety	TraitAnxiety
Male, Female	Pearson Correlation	1	-.081	.059	-.094	-.356**	-.438**
	Sig. (2-tailed)		.395	.538	.323	<.001	<.001
	N	113	113	113	113	112	113
HFS	Pearson Correlation	-.081	1	.272**	-.394**	-.032	.038
	Sig. (2-tailed)	.395		.003	<.001	.733	.691
	N	113	114	114	114	113	114
PANASpos	Pearson Correlation	.059	.272**	1	-.302**	-.169	-.055
	Sig. (2-tailed)	.538	.003		.001	.074	.562
	N	113	114	114	114	113	114
PANASneg	Pearson Correlation	-.094	-.394**	-.302**	1	-.090	-.012
	Sig. (2-tailed)	.323	<.001	.001		.344	.898
	N	113	114	114	114	113	114
StateAnxiety	Pearson Correlation	-.356**	-.032	-.169	-.090	1	.495**
	Sig. (2-tailed)	<.001	.733	.074	.344		<.001
	N	112	113	113	113	113	113
TraitAnxiety	Pearson Correlation	-.438**	.038	-.055	-.012	.495**	1
	Sig. (2-tailed)	<.001	.691	.562	.898	<.001	
	N	113	114	114	114	113	114

** . Correlation is significant at the 0.01 level (2-tailed).

This correlation matrix provides information about the strength and direction of the relationships between pairs of variables in your dataset. Here's an interpretation of the correlations:

Male, Female and HFS: There is a weak negative correlation (-.081) that is not statistically significant ($p = .395$). This suggests that gender does not strongly predict HFS in this sample.

HFS and PANASpos (Positive Affect): There is a moderate positive correlation (.272) that is statistically significant ($p = .003$). This suggests that individuals who score higher on the PANAS positive affect scale tend to have higher HFS scores.

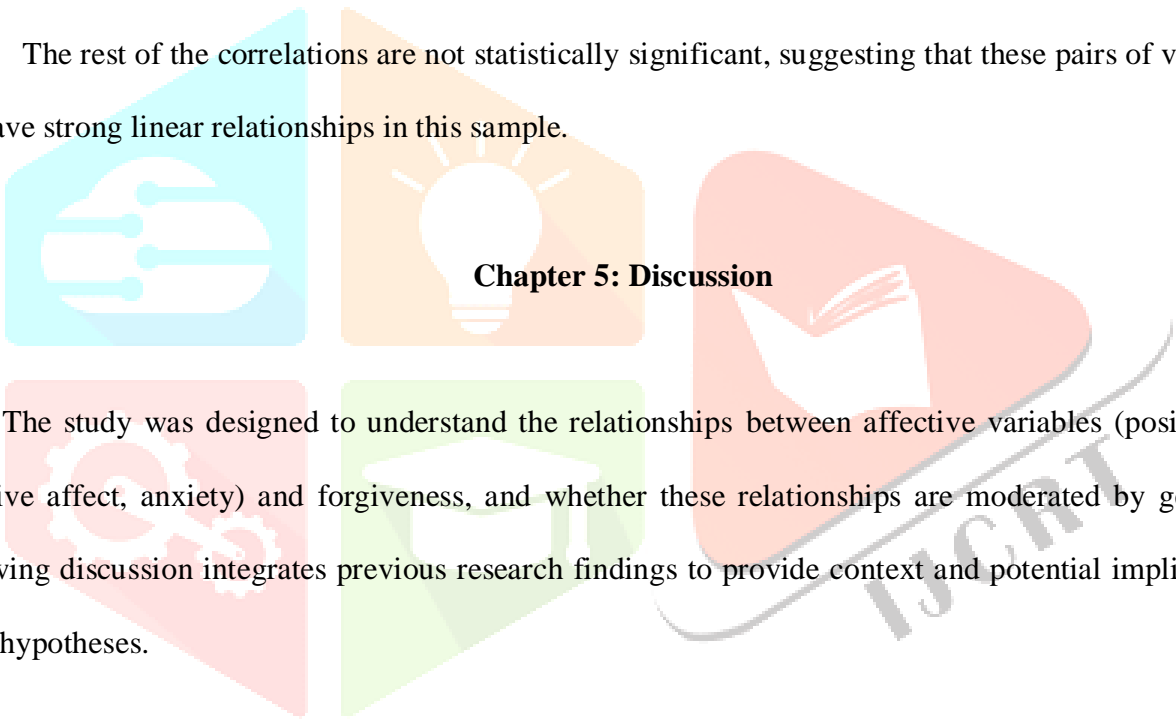
HFS and PANASneg (Negative Affect): There is a moderate negative correlation (-.394) that is statistically significant ($p < .001$). This suggests that individuals who score higher on the PANAS negative affect scale tend to have lower HFS scores.

StateAnxiety and Male, Female: There is a moderate negative correlation (-.356) that is statistically significant ($p < .001$). This suggests that males tend to have lower state anxiety scores than females.

TraitAnxiety and Male, Female: There is a moderate negative correlation (-.438) that is statistically significant ($p < .001$). This suggests that males tend to have lower trait anxiety scores than females.

StateAnxiety and TraitAnxiety: There is a strong positive correlation (.495) that is statistically significant ($p < .001$). This suggests that individuals who have higher state anxiety also tend to have higher trait anxiety.

The rest of the correlations are not statistically significant, suggesting that these pairs of variables do not have strong linear relationships in this sample.



Chapter 5: Discussion

The study was designed to understand the relationships between affective variables (positive affect, negative affect, anxiety) and forgiveness, and whether these relationships are moderated by gender. The following discussion integrates previous research findings to provide context and potential implications for these hypotheses.

An integral part of this analysis revolves around the Positive and Negative Affect Schedule (PANAS) and its correlation with Heartland Forgiveness Scale (HFS).

Positive affect, as measured by PANASpos, showed a significant positive correlation with forgiveness, indicated by a Pearson correlation coefficient of 0.272 which is significant at the 0.01 level. This finding supports the psychological literature that emphasizes the role of positive emotions in promoting forgiveness. (Worthington et al,2005) have suggested that positive emotions, such as empathy and compassion, can facilitate forgiveness by altering how individuals appraise their transgressors and offenses. Positive affect can

provide a buffer against holding grudges, facilitating cognitive reappraisal, and helping individuals to see past their pain, thereby promoting forgiveness.

In therapeutic settings, these findings can be invaluable. Therapists can work with clients to help them cultivate positive emotions as a pathway to forgiveness. Techniques such as cognitive-behavioral therapy (CBT) can be employed to help individuals reframe their experiences and perceptions, thereby reducing negative affect and promoting positive affect. Furthermore, interventions for individuals who have difficulty forgiving may include techniques to manage anxiety and promote positive affect. For example, mindfulness-based stress reduction (MBSR) or acceptance and commitment therapy (ACT) can be used to manage anxiety levels.

Additionally, by incorporating strategies that promote positive affect and manage anxiety, wellness programs can potentially foster a higher propensity for forgiveness, thereby improving interpersonal relationships and overall mental health.

On the other hand, negative affect (PANASneg) demonstrated a significant negative correlation with forgiveness, with a Pearson correlation coefficient of -0.394. This suggests that individuals who experience negative emotions, such as anger or sadness, are less likely to forgive. This aligns with previous findings (Fehr, Gelfand, & Nag's, 2010), which suggested that negative emotions can create a cognitive barrier to forgiveness. Negative affect can augment feelings of resentment, increase rumination about the offense, and reinforce the pain associated with the transgression, thus hindering forgiveness.

Therapists can utilize techniques from emotion-focused therapy to help clients acknowledge, express, and regulate their negative emotions. By dealing with these emotions directly, individuals can start to reduce their negative affect and in turn, become more open to forgiveness.

Interestingly, the correlation analysis did not reveal a significant association between state anxiety and forgiveness, which contradicts some previous research. For instance, previous research (Toussaint et al. ,2001) suggested that anxiety, as a state of heightened physiological arousal and negative affect, could impede forgiveness. The discrepancy between our findings and earlier studies might be due to variations in sample

characteristics, measurement tools, or the specific conceptualization and operationalization of state anxiety and forgiveness.

The potential indirect effects of state anxiety on forgiveness highlight the importance of a holistic therapeutic approach. Studies (Hayes, Orsillo, & Roemer, 2010) have suggested that acceptance and commitment therapy (ACT), a form of cognitive-behavioral therapy that focuses on accepting and mindfully observing emotional experiences, can help reduce anxiety and emotional reactivity. By reducing emotional reactivity, ACT could potentially foster a mental environment more conducive to forgiveness.

On another note, research (Thoresen et al., 2000) has highlighted the role of forgiveness therapy in reducing trait anger and symptoms of depression and anxiety. This suggests that interventions targeting forgiveness could also benefit mental health more broadly, underlining the potential reciprocal relationship between forgiveness and psychological well-being.

Further, previous work (Witvliet, Ludwig, & Bauer, 2002) supports the idea that forgiveness interventions can be useful in reducing physiological stress responses associated with unforgiveness, which may in turn alleviate feelings of anxiety. This suggests that integrating forgiveness therapy into broader treatment plans could potentially help to reduce state anxiety, even if state anxiety and forgiveness are not directly correlated.

However, trait anxiety showed a slightly positive but non-significant correlation with forgiveness. This outcome warrants further investigation. Trait anxiety refers to an individual's propensity to respond to stressors with anxiety, and it is a relatively stable characteristic. While a robust link between trait anxiety and forgiveness was not evident in this study, it's possible that this relationship could be moderated or mediated by other variables not considered in the current analysis.

In conclusion, while state anxiety may not be directly correlated with forgiveness, therapeutic interventions targeting both state anxiety and forgiveness may still be beneficial due to the potential indirect effects of state anxiety on forgiveness and vice versa.

The data in this study indicates a weak negative correlation between gender and forgiveness (HFS), with a Pearson correlation coefficient of -0.081 , which is not statistically significant ($p = .395$). This finding suggests that there may not be substantial gender differences in the general propensity to forgive. This aligns with several previous studies, such as Miller et al. (2008), who also found no significant gender differences in forgiveness.

However, For HFSothers, Levene's Test shows a p-value of $.927$, indicating equal variances. However, the t-test shows a p-value of $.014$ (two-tailed) and $.028$ (one-tailed), which are less than $.05$, indicating a statistically significant mean difference in forgiveness of others between genders. This significant difference in forgiveness of others between genders can potentially be explained by various social, cultural, and psychological factors. For instance, some research suggests that women may be more forgiving than men due to higher levels of empathy and a stronger orientation towards relationships. On the other hand, men might show lower forgiveness due to societal expectations of masculinity, which may discourage the expression of forgiving attitudes.

In a therapeutic context, practitioners can thus apply forgiveness interventions to both male and female clients without concern for gender-based efficacy. This is supported by the previous research work that found that forgiveness therapy can be beneficial in reducing anger, anxiety, and depression, regardless of gender. (Wade & Worthington, 2005)

In the broader context of mental health services, this finding can help inform policy and program development. For instance, mental health programs aimed at reducing community violence or promoting reconciliation can incorporate forgiveness interventions, knowing that they are likely to be equally effective

for both genders. This can also inform policy decisions about funding and implementing such programs at a larger scale.

In terms of the relationship between positive affect (PANASpos) and forgiveness (HFS), the data shows a significant positive correlation ($r = 0.272$, $p = .003$). However, the lack of significant correlation between gender and forgiveness implies that this positive relationship is likely to be similar for both genders. This observation supports the null hypothesis 1 that there will be no significant gender differences in the relationship between positive affect and forgiveness. This finding is consistent with previous research, such as that of Toussaint and Webb (2005), who found that the influence of positive affect on forgiveness did not differ significantly by gender.

Similarly, the relationship between negative affect (PANASneg) and forgiveness (HFS) shows a significant negative correlation ($r = -0.394$, $p < .001$). But again, due to the lack of significant correlation between gender and forgiveness, it suggests that this negative association does not vary significantly by gender. This finding supports null hypothesis 2 that there will be no significant gender differences in the relationship between negative affect and forgiveness. This is in line with previous studies like Karremans et al. (2011), who also found that negative affect influenced forgiveness similarly in both genders.

These findings contribute to the ongoing debate in the literature regarding gender differences in forgiveness and its associated factors. While some studies have suggested that women might be more forgiving than men (Koutsos et al., 2008), others have found no significant gender differences (Miller et al., 2008). Our findings lean towards the latter perspective, suggesting that the influence of affective states on forgiveness might be universal across genders.

However, it's important to note that the complexity of forgiveness and the factors influencing it are likely to extend beyond gender and affective states. Future research should consider exploring other factors

such as personality traits, cultural norms, and the context of the transgression, which could potentially interact with gender and affective states to influence forgiveness.

The results of this study show a non-significant correlation between state anxiety and forgiveness ($r = -0.032$, $p = .733$), and a similarly non-significant correlation between trait anxiety and forgiveness ($r = 0.038$, $p = .691$). This suggests that, at least within this dataset, anxiety does not appear to have a strong direct influence on forgiveness, thus not supporting alternate hypothesis 3 that predicted a negative correlation between anxiety and forgiveness.

However, the significant correlations between gender and both state anxiety ($r = -0.356$, $p < .001$) and trait anxiety ($r = -0.438$, $p < .001$) suggest a more complex picture. This implies that while anxiety may not directly affect forgiveness, gender may play a role in mediating the relationship between anxiety and forgiveness.

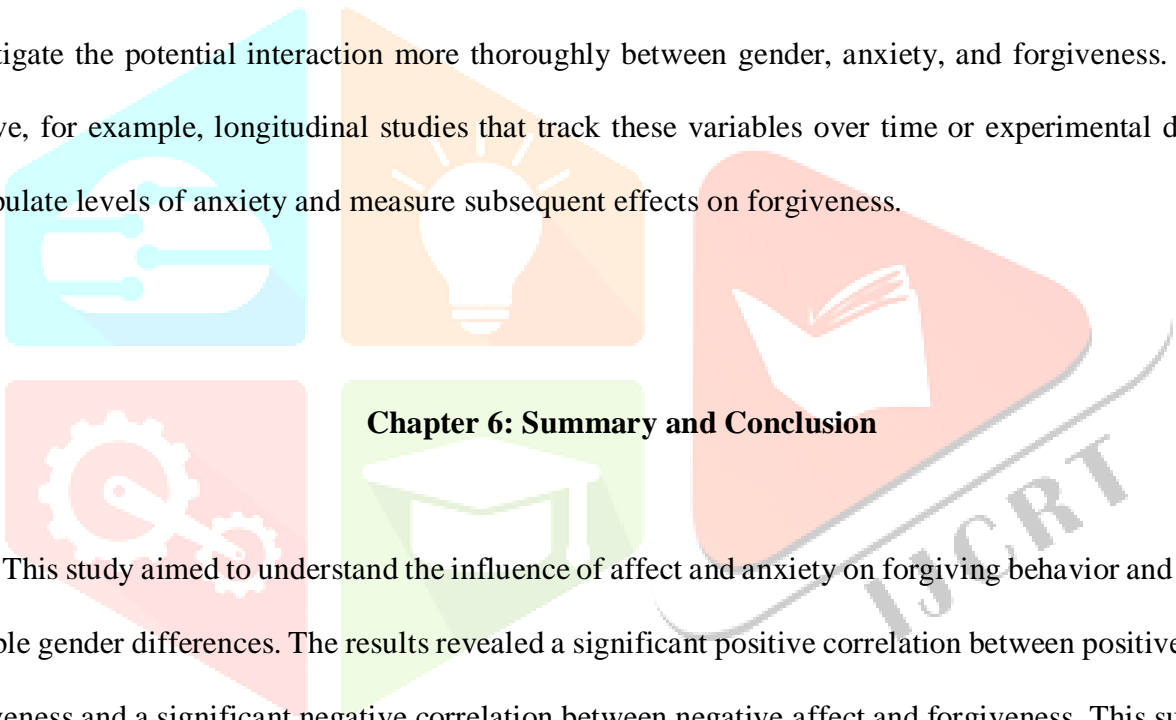
This finding aligns with a body of research suggesting that men and women may experience and express anxiety differently, which could in turn influence their propensity to forgive. For instance, studies (McLean et al. ,2011) found that women tended to report higher levels of anxiety than men, and this was associated with lower levels of forgiveness.

A study (Maio et al. ,2008) also found gender differences in the relationship between anxiety and forgiveness, with anxiety having a more detrimental effect on forgiveness among men than women. This suggests that the impact of anxiety on forgiveness may not be straightforward, but instead moderated by gender, with anxiety potentially leading to decreased forgiveness in individuals who are more susceptible to its effects.

Firstly, it suggests the need for a nuanced understanding of how gender, anxiety, and forgiveness interact. For instance, therapists should be aware that men and women may experience anxiety differently and

that these differences may influence their capacity to forgive. Therefore, interventions designed to promote forgiveness in the context of anxiety might need to be adjusted according to the gender of the individual. Secondly, these findings highlight the importance of gender-sensitive approaches in mental health interventions. This involves recognizing and respecting the different experiences, needs, and strengths of men and women. In practice, this could involve offering separate group therapy sessions for men and women, or using gender-sensitive language and examples in therapy.

However, this conclusion should be considered with caution. Given the lack of a significant direct correlation between anxiety (both state and trait) and forgiveness in this dataset, further research is needed to investigate the potential interaction more thoroughly between gender, anxiety, and forgiveness. This could involve, for example, longitudinal studies that track these variables over time or experimental designs that manipulate levels of anxiety and measure subsequent effects on forgiveness.



Chapter 6: Summary and Conclusion

This study aimed to understand the influence of affect and anxiety on forgiving behavior and investigate possible gender differences. The results revealed a significant positive correlation between positive affect and forgiveness and a significant negative correlation between negative affect and forgiveness. This suggests that fostering positive emotions and reducing negative ones could potentially enhance individuals' ability to forgive, aligning with previous literature. Interestingly, state anxiety did not significantly correlate with forgiveness, contrary to some prior research, and trait anxiety showed a non-significant positive correlation with forgiveness. This highlights the need for further investigation into the role of anxiety in forgiveness. Gender did not significantly correlate with forgiveness, suggesting no substantial gender differences in the propensity to forgive. However, gender was significantly correlated with both state and trait anxiety, hinting at possible gender roles in mediating the relationship between anxiety and forgiveness. Despite certain limitations, this study contributes valuable insights into the complex interplay of affect, anxiety, and

forgiveness across genders, providing a useful basis for further research and informing therapeutic approaches for promoting forgiveness in various mental health contexts.

Limitations

There are several limitations to this study that should be noted:

1. **Sample Size and Composition:** The sample size of this study was relatively small, and there was an uneven distribution of men (n=39) and women (n=75). This disparity in sample size can limit the statistical power of the analyses and the ability to detect significant differences between genders. Furthermore, the participants' demographic information such as age, ethnicity, socio-economic status was not controlled for, which could introduce confounding factors.
2. **Cross-sectional Design:** This study used a cross-sectional design, which limits the ability to infer causality. While significant correlations were found between affect, anxiety, and forgiveness, it is not possible to determine the direction of these relationships. Longitudinal studies would be needed to assess the causal relationships between these variables over time.
3. **Self-report Measures:** The study relied on self-report measures, namely the Positive and Negative Affect Schedule (PANAS), Heartland Forgiveness Scale (HFS), and State-Trait Anxiety Inventory (STAI). Although these are well-established instruments, they are subject to biases such as social desirability and recall bias. Also, they may not fully capture the complexity of emotions, anxiety, and forgiveness in real-world situations.
4. **Lack of Contextual Information:** The study did not account for the context of the offenses that required forgiveness. The severity and nature of the offense, the relationship between the offender and the forgiver, and the time elapsed since the offense can significantly impact forgiving behavior. Future studies should consider these factors to provide a more comprehensive understanding of forgiveness.
5. **Cultural Factors:** The study did not take into account cultural differences in expressing and perceiving affect, experiencing and coping with anxiety, and attitudes towards forgiveness. Cultural norms and values can significantly influence these psychological constructs, and therefore the results may not be generalizable to individuals from different cultural backgrounds.

Despite these limitations, this study provides valuable insights into the interplay of affect, anxiety, and forgiveness between genders, offering a useful starting point for further research in this area. Future studies could benefit from addressing these limitations to deepen our understanding of these complex relationships.



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Appendix A

Positive And Negative Affect Schedule



THE OHIO STATE UNIVERSITY

Positive and Negative Affect Schedule (PANAS-SF)

Indicate the extent you have felt this way over the past week.		Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
PANAS 1	Interested	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 2	Distressed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 3	Excited	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 4	Upset	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 5	Strong	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 6	Guilty	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 7	Scared	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 8	Hostile	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 9	Enthusiastic	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 10	Proud	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 11	Irritable	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 12	Alert	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 13	Ashamed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 14	Inspired	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 15	Nervous	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 16	Determined	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 17	Attentive	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 18	Jittery	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 19	Active	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
PANAS 20	Afraid	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Appendix B

Heartland Forgiveness Scale

HFS

Directions:

In the course of our lives negative things may occur because of our own actions, the actions of others, or circumstances beyond our control. For some time after these events, we may have negative thoughts or feelings about ourselves, others, or the situation. Think about how you **typically** respond to such negative events. Next to each of the following items write the number (from the 7-point scale below) that best describes how you **typically** respond to the type of negative situation described. There are no right or wrong answers. Please be as open as possible in your answers.

- | | | | | | | |
|------------------------------|---|---------------------------|---|--------------------------|---|-----------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Almost Always
False of Me | | More Often
False of Me | | More Often
True of Me | | Almost Always
True of Me |
-
- ___ 1. Although I feel badly at first when I mess up, over time I can give myself some slack.
- ___ 2. I hold grudges against myself for negative things I've done.
- ___ 3. Learning from bad things that I've done helps me get over them.
- ___ 4. It is really hard for me to accept myself once I've messed up.
- ___ 5. With time I am understanding of myself for mistakes I've made.
- ___ 6. I don't stop criticizing myself for negative things I've felt, thought, said, or done.
- ___ 7. I continue to punish a person who has done something that I think is wrong.
- ___ 8. With time I am understanding of others for the mistakes they've made.
- ___ 9. I continue to be hard on others who have hurt me.
- ___ 10. Although others have hurt me in the past, I have eventually been able to see them as good people.
- ___ 11. If others mistreat me, I continue to think badly of them.
- ___ 12. When someone disappoints me, I can eventually move past it.
- ___ 13. When things go wrong for reasons that can't be controlled, I get stuck in negative thoughts about it.
- ___ 14. With time I can be understanding of bad circumstances in my life.
- ___ 15. If I am disappointed by uncontrollable circumstances in my life, I continue to think negatively about them.
- ___ 16. I eventually make peace with bad situations in my life.
- ___ 17. It's really hard for me to accept negative situations that aren't anybody's fault.
- ___ 18. Eventually I let go of negative thoughts about bad circumstances that are beyond anyone's control.



Appendix C

State-Trait Anxiety Inventory for Adults

SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1

Please provide the following information:

Name _____ Date _____ S _____
 Age _____ Gender (Circle) M F T _____

DIRECTIONS:

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

VERY MUCH SO
 MODERATELY SO
 SOMEWHAT
 NOT AT ALL

- 1. I feel calm 1 2 3 4
- 2. I feel secure 1 2 3 4
- 3. I am tense 1 2 3 4
- 4. I feel strained 1 2 3 4
- 5. I feel at ease 1 2 3 4
- 6. I feel upset..... 1 2 3 4
- 7. I am presently worrying over possible misfortunes 1 2 3 4
- 8. I feel satisfied..... 1 2 3 4
- 9. I feel frightened..... 1 2 3 4
- 10. I feel comfortable 1 2 3 4
- 11. I feel self-confident 1 2 3 4
- 12. I feel nervous 1 2 3 4
- 13. I am jittery..... 1 2 3 4
- 14. I feel indecisive 1 2 3 4
- 15. I am relaxed..... 1 2 3 4
- 16. I feel content 1 2 3 4
- 17. I am worried..... 1 2 3 4
- 18. I feel confused..... 1 2 3 4
- 19. I feel steady 1 2 3 4
- 20. I feel pleasant 1 2 3 4

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-2

Name _____ Date _____

DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel.

- | | ALMOST NEVER | SOMETIMES | OFTEN | ALMOST ALWAYS |
|--|--------------|-----------|-------|---------------|
| 21. I feel pleasant..... | 1 | 2 | 3 | 4 |
| 22. I feel nervous and restless..... | 1 | 2 | 3 | 4 |
| 23. I feel satisfied with myself..... | 1 | 2 | 3 | 4 |
| 24. I wish I could be as happy as others seem to be..... | 1 | 2 | 3 | 4 |
| 25. I feel like a failure..... | 1 | 2 | 3 | 4 |
| 26. I feel rested..... | 1 | 2 | 3 | 4 |
| 27. I am "calm, cool, and collected"..... | 1 | 2 | 3 | 4 |
| 28. I feel that difficulties are piling up so that I cannot overcome them..... | 1 | 2 | 3 | 4 |
| 29. I worry too much over something that really doesn't matter..... | 1 | 2 | 3 | 4 |
| 30. I am happy..... | 1 | 2 | 3 | 4 |
| 31. I have disturbing thoughts..... | 1 | 2 | 3 | 4 |
| 32. I lack self-confidence..... | 1 | 2 | 3 | 4 |
| 33. I feel secure..... | 1 | 2 | 3 | 4 |
| 34. I make decisions easily..... | 1 | 2 | 3 | 4 |
| 35. I feel inadequate..... | 1 | 2 | 3 | 4 |
| 36. I am content..... | 1 | 2 | 3 | 4 |
| 37. Some unimportant thought runs through my mind and bothers me..... | 1 | 2 | 3 | 4 |
| 38. I take disappointments so keenly that I can't put them out of my mind..... | 1 | 2 | 3 | 4 |
| 39. I am a steady person..... | 1 | 2 | 3 | 4 |
| 40. I get in a state of tension or turmoil as I think over my recent concerns and interests..... | 1 | 2 | 3 | 4 |