



## RELATIONSHIP BETWEEN DYSFUNCTIONAL ATTITUDE, LONELINESS, AND SOCIAL ANXIETY AMONG UNIVERSITY STUDENT

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### Abstract

*The research aimed to explore the predictive role of dysfunctional attitudes as an independent variable in relation to loneliness and social anxiety as dependent variables. The present study examined how dysfunctional attitudes contribute to variation in social anxiety and loneliness among individual. For this purpose, present study tested. The effect of demographic variable was also sought in relation to the mentioned variables. The sample of present research comprised of (N= 300) university students among which (n=150) males and (n=150) females who were selected by convenient sampling to assess to psychometric properties of instruments and test the study hypothesis. Data were collected using standardized instruments including Dysfunctional Attitude Scale (DAS-SF) by Christopher et al; (2007), to measure dysfunctional attitude, UCLA Loneliness scale by Daniel Russell (1996) to measure loneliness and Liebowitz Social Anxiety Scale (LSAS) by Liebowitz, (1987) to measure social anxiety were used to measure study variables. The result confirms the reliability and validity of these scales with the targeted population. Correlation analysis revealed that dysfunctional attitudes is significantly positive correlated with loneliness and social anxiety and social anxiety is significantly positively correlated with loneliness. Regression analysis revealed that dysfunctional attitudes significantly predict to loneliness and social anxiety. The impact of gender was tested through T-test which revealed significant difference in the variables of present study performance. Limitation, suggestions and implication were also discussed.*

**Key words:** dysfunctional attitude scale (DAS-SF), UCLA loneliness scale and LSAS (social anxiety scale).

Dysfunctional attitudes refer to unrealistic or negative thought patterns, such as perfectionism, catastrophizing, overgeneralization, and excessive need for approval, which contribute to emotional distress and maladaptive behaviors (Dozois & Beck, 2011). These cognitive distortions are linked to anxiety, depression, low self-esteem, and social withdrawal (Beck & Clark, 1988). Perfectionism fosters constant dissatisfaction and fear of failure, while reliance on external approval heightens social anxiety. Catastrophizing magnifies threats, leading to avoidance and generalized anxiety (Fresco et al., 2001). Overgeneralization reinforces hopelessness after setbacks, reducing motivation to pursue opportunities (Burns & Spangler, 2001). Similarly, self-criticism perpetuates feelings of inferiority and has been shown to maintain depressive and anxious symptoms, though cognitive-behavioral therapy can reduce such tendencies (Shahar et al., 2012).

Several theoretical perspectives explain dysfunctional attitudes. Beck's cognitive theory highlights the cognitive triad of negative views about the self, world, and future, emphasizing how maladaptive attitudes sustain depression and anxiety through distorted interpretations (Beck & Clark, 1988). Self-determination theory suggests that unmet psychological needs of autonomy, competence, and relatedness may foster perfectionism and other maladaptive cognitions (Deci & Ryan, 2000). Schema theory further explains how early maladaptive schemas, such as abandonment or defectiveness, shape dysfunctional attitudes throughout life (Young et al., 2003). Overall, dysfunctional attitudes play a central role in psychological distress and remain a key focus for therapeutic intervention.

The Cognitive Vulnerability Model explains how dysfunctional attitudes increase susceptibility to psychiatric disorders when triggered by stress. Individuals with higher scores on the Dysfunctional Attitudes Scale (DAS-SF) are more likely to interpret stressful life events negatively, making them vulnerable to depression and anxiety (Hankin & Abramson, 2001). Similarly, the Cognitive Behavioral Model of Social Anxiety (Clark & Wells, 1995) highlights how distorted beliefs about rejection and criticism maintain social anxiety through avoidance behaviors.

Loneliness is a key factor affecting mental health, reflecting a gap between desired and actual social relationships. It is linked to stress, vascular dysfunction, and impaired immunity (Cacioppo & Hawkley, 2009; Hawkley & Cacioppo, 2010). Maladaptive cognitions, such as low self-worth and fear of rejection, intensify loneliness, especially in socially anxious individuals (Lim et al., 2016). Weiss's Cognitive Discrepancy Model distinguishes social and emotional loneliness, emphasizing subjective perceptions (Weiss, 1973). Evolutionary theory views loneliness as an adaptive survival mechanism, though maladaptive in modern contexts (Cacioppo et al., 2006). Other perspectives, such as the Interactionist Model (Peplau & Perlman, 1982) and Cognitive Bias paradigms (Hawkley & Cacioppo, 2010), highlight how distorted cognition sustain loneliness.

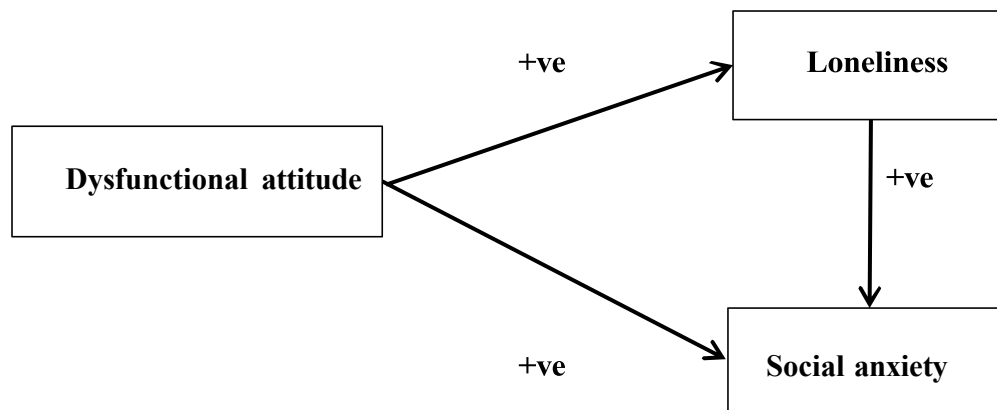
Social anxiety involves persistent fear of scrutiny and negative evaluation in social situations, often leading to avoidance behaviors (Liebowitz, 2013; Stein & Stein, 2008). While mild forms are common, severe cases impair functioning and contribute to loneliness (Ungar & Jefferies, 2020; Schneier et al., 2014). The Cognitive-Behavioral Theory highlights distorted beliefs and avoidance as maintaining mechanisms (Clark & Wells, 1995). Evolutionary perspectives suggest it once served protective functions in maintaining group status (Buss, 1980), while Social Learning Theory emphasizes observational learning in its development (Bandura, 1977). Additional models, including the Self-Presentation paradigm (Schlenker & Leary, 1982) and Social Information Processing model (Beck & Emery, 1985), further explain how biases in self-perception and social cue processing contribute to social anxiety.

Research shows a significant association between maladaptive cognitions and social anxiety. Dysfunctional attitudes—rigid, irrational, and negatively oriented—intensify social phobia by fostering negative self-appraisals and heightened fear of evaluation. Clark and Wells (1995) emphasized that such attitudes, particularly perfectionism and fear of criticism, elevate vulnerability to social judgment. Similarly, Garcia and Roberts (2019) noted that dysfunctional thinking independently predicts social anxiety beyond self-esteem, highlighting the value of cognitive interventions to reduce irrational beliefs.

Loneliness also strongly relates to social anxiety in a reciprocal cycle. Individuals who feel socially isolated often fear negative evaluation, while socially anxious individuals avoid interaction, reinforcing loneliness (Heinrich & Gullone, 2006). Chronic loneliness distorts perceptions of social encounters, making neutral interactions seem threatening (Adams & Morgan, 2018). This bidirectional relationship suggests that targeting either loneliness or social anxiety can reduce the other.

The present study aims to explore these interconnections among Pakistani university students, addressing gaps in non-Western research. Prior studies have focused largely on depression, neglecting how dysfunctional attitudes may simultaneously drive loneliness and social anxiety. By examining these constructs together, this research seeks to inform culturally relevant interventions that integrate cognitive screening with support strategies for young adults (Garcia & Roberts, 2019; Heinrich & Gullone, 2006).

Conceptual framework



### Figure 1: Conceptual Framework

Figure 1. Dysfunctional attitude serves as independent variable while loneliness and social anxiety serves as dependent variables. Figure 1 presents a positive relation between dysfunctional attitude, loneliness and social anxiety. Findings revealed a positive relationship between dysfunctional attitudes, loneliness and social anxiety.

### Objectives

- 1.To examine the role of demographic variables in relation to the study constructs.
- 2.To explore the relationship between dysfunctional attitudes and social anxiety.
- 3.To explore the relationship between dysfunctional attitudes and loneliness.
- 4.To investigate the relationship between social anxiety and loneliness.

### Hypothesis

1. There will be a significant positive relationship between dysfunctional attitudes and loneliness.
2. There will be a significant positive relationship between dysfunctional attitudes and social anxiety.
3. There will be a significant positive relationship between social anxiety and loneliness.
4. Dysfunctional attitudes will significantly positively predict loneliness.
5. Dysfunctional attitudes will significantly negatively predict social anxiety.
6. There will be no significant gender differences across the study variables.

### Method

#### Research Design

The study adopted a cross-sectional correlational survey design to examine the relationship between dysfunctional attitudes, loneliness, and social anxiety among university students.

#### Sampling

A stratified random sampling technique was employed to select 300 university students, equally divided by gender (150 males and 150 females), aged between 19 and 25 years, from various universities in Pakistan.



### Inclusion Criteria

Participants included university students aged 19 to 25 years, currently enrolled in academic programs, and willing to provide informed consent.

### Exclusion Criteria

Individuals younger than 18 years and those with severe social anxiety disorder were excluded from the study.

### Research Instruments

Dysfunctional attitudes were assessed using the Dysfunctional Attitude Scale-Short Form (DAS-SF) revised by Christopher et al. (2007), consisting of 18 items divided into two parallel halves, rated on a 4-point Likert scale with acceptable reliability coefficients ( $\alpha = .60$  to  $.61$ ). Loneliness was measured using the UCLA Loneliness Scale (Version 3) by Russell (1996), a 20-item scale rated on a 4-point Likert scale with high internal consistency ( $\alpha = .83$ ). Social anxiety was evaluated using the fear/anxiety subscale of the Liebowitz Social Anxiety Scale (LSAS) by Liebowitz (1987), comprising 24 items rated on a 4-point scale with excellent reliability ( $\alpha = .87$ ).

### Ethical Considerations

The study obtained ethical approval from the relevant research ethics committee. Permission to use the scales was granted by their original authors. Participants were informed about the study objectives, assured of confidentiality and anonymity, and provided informed consent. They were free to withdraw at any time without penalty. Data collection was conducted in accordance with ethical guidelines, and analyses were performed using SPSS Version 21.

## Results

**Table 1**

*Demographic Profile of Participants in the Main Study (N = 300)*

Demographics	N	%
Education	300	100
BS	279	93
MS	21	7
Gender	300	100
Male	150	50
Female	150	50

**Table 1** presents the demographic characteristics of the study sample (N = 300), which consisted of 150 male and 150 female university students aged between 19 and 25 years. The majority of participants were enrolled in undergraduate programs, with a smaller proportion pursuing postgraduate studies. A stratified random sampling technique was used to ensure equal representation across gender. This distribution provides a balanced perspective on psychological patterns among university students in the Pakistani academic context.

**Table 2**

*Descriptive Statistics for the Scales used in Main Study (N = 300)*

Measures	M	SD	$\alpha$	Potential	Range	
					Potential	Actual
UCLA loneliness scale	29.50	11.95	0.83	80		3-71
Liebowitz social anxiety scale	31.17	15.01	0.87	96		0-86
DAS-SF1	20.58	3.92	0.61	36		9-33
DAS-SF2	21.81	3.32	0.60	36		12-33

**Note.** DAS-SF1 = Dysfunctional Attitude Scale–Short Form 1; DAS-SF2 = Dysfunctional Attitude Scale–Short Form 2. The DAS-SF used in this study consists of two parallel halves that together assess overall dysfunctional attitudes. K = number of items;  $\alpha$  = Cronbach’s alpha; M = mean; SD = standard deviation.

Table 2 presents the psychometric properties of the study variables. The reliability coefficients for the Dysfunctional Attitude Scale short forms were  $\alpha = .61$  for DAS-SF1 and  $\alpha = .60$  for DAS-SF2. Although these values are lower than the conventional threshold of .70, they are considered acceptable in exploratory research, particularly in cross-cultural or non-clinical settings. The nearly identical reliability scores for both DAS-SF1 and DAS-SF2 ( $\alpha = .61$  and  $\alpha = .60$ , respectively) support the internal consistency of responses and indicate that participants completed both parallel forms with attentiveness and interpretive clarity. The UCLA Loneliness Scale demonstrated high internal consistency ( $\alpha = .83$ ), as did the Liebowitz Social Anxiety Scale ( $\alpha = .87$ ), both exceeding the commonly accepted standard for reliability. Overall, the instruments used in this study showed sufficient psychometric strength to support the findings.

**Relationship among Study Variables**

The main objective of this study was to check the relationship between the study variables. Table 3 represents the results of correlation.

**Table 3**

*Correlation Matrix of Dysfunctional Attitudes, Loneliness, and Social Anxiety (N = 300)*

Scales		1	2	3	4
1	DAS-SF1	1	.671**	.331**	.106*
2	DAS-SF2		1	.250**	.218**



3	Liebowitz social anxiety scale	1	.397**
4	UCLA loneliness scale		1

\* $p < .05$ . \*\* $p < .01$ .

The above table depicts that presents the Pearson correlation coefficients among the study variables. DAS-SF1 showed a significant positive correlation with social anxiety ( $r = .331, p < .01$ ) and a weak but significant positive correlation with loneliness ( $r = .106, p < .05$ ). DAS-SF2 was also positively correlated with both social anxiety ( $r = .250, p < .01$ ) and loneliness ( $r = .218, p < .01$ ). Additionally, social anxiety was moderately and positively correlated with loneliness ( $r = .397, p < .01$ ). These findings suggest that dysfunctional attitudes, particularly as captured by both parallel halves, are meaningfully associated with emotional and interpersonal challenges in university students.

**Table 4**

*Linear Regression Analysis of predictors of loneliness (N=300)*

Variable	$\beta$	SE	t	P	95% CI
Constant		4.400	1.573	.000	[28.14-30.86]
DAS-SF1	.297	.225	4.031	.000	[20.13-21.02]
DAS-SF2	.050	.265	.632	.238	[21.43-22.19]

\* $p < .05$ .

Table 4a shows linear regression analysis. Dysfunctional attitudes significantly predicted loneliness. DAS-SF1 was a significant predictor ( $\beta = .297, p < .001$ ), while DAS-SF2 was not. Results shows that DAS-SF- SF1 ( $\beta = .297, p < .05$ ) and DAS-SF2 ( $\beta = .050, p > .05$ ) which significantly predict it positively. The  $R^2$  value .111 indicate that predictor variable changes explained 11.1% variances in outcome variable with  $F = 18.78$ .

**Table 4b**

*Linear Regression Analysis of predictors of social anxiety (N=300).*

Variable	$\beta$	S.E	t	P	95% CI
Constant		5.710	1.871	.000	29.46-32.87]
DAS-SF1	-.072	.292	-.950	.007	20.13-21.02]
DAS-SF2	.266	.344	.266	.021	21.43-22.19]



R<sup>2</sup> .050

\*p < .05.

Table 4b presents the results of a linear regression analysis examining whether dysfunctional attitudes predict social anxiety. The overall model was statistically significant,  $F(2, 297) = 6.31, p < .05$ , and explained 5% of the variance in social anxiety ( $R^2 = .050$ ). Among the predictors, DAS-SF2 was a significant **positive** predictor ( $\beta = .266, p = .021$ ), indicating that higher levels of dysfunctional attitudes on this scale were associated with increased social anxiety. In contrast, DAS-SF1 was a significant **negative** predictor ( $\beta = -.072, p = .007$ ), suggesting a small inverse relationship. These findings indicate that different dimensions of dysfunctional attitudes may relate to social anxiety in different ways.

The combined results of both regression analyses show that DAS-SF1 is a significant positive predictor of loneliness and a small but significant negative predictor of social anxiety. In contrast, DAS-SF2 significantly and positively predicts social anxiety but does not significantly predict loneliness. These findings suggest that different components of dysfunctional attitudes may influence emotional and interpersonal outcomes in distinct ways.

**Table 5**

*Gender-Based Differences in Study Variables (N = 300)*

Variables	Male (n=150)		Female (n=150)		t(300)	P	Cohen's d
	M	SD	M	SD			
DAS-SF1	20.66	4.12	20.50	3.73	.338	.001	.04
DAS-SF2	21.66	3.14	20.50	3.24	.728	.337	.08
UCLA loneliness scale	28.52	12.33	30.48	11.53	-1.41	.000	.16
Liebowitz social anxiety scale	30.16	15.25	32.18	14.75	-1.16	.004	.13

\*p < .05

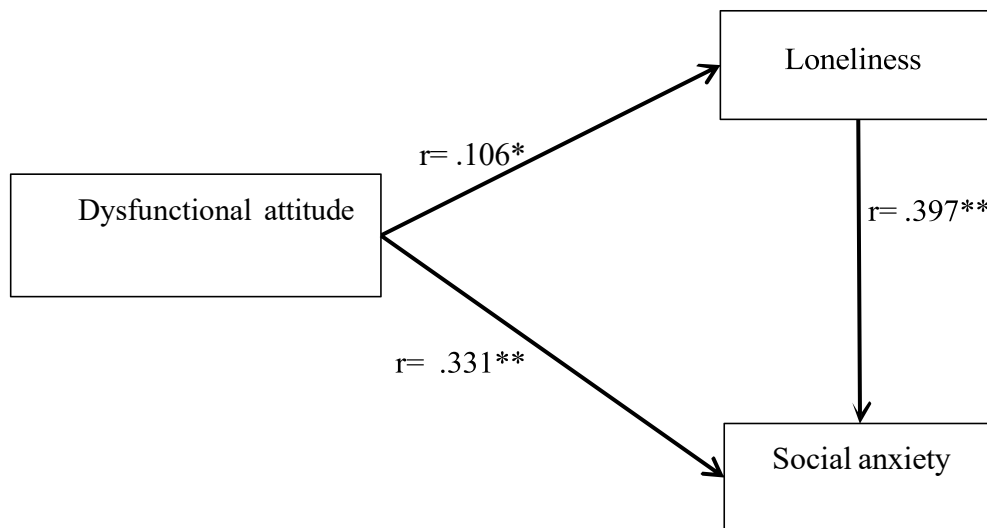
Results in Table 5 present gender-based comparisons across dysfunctional attitudes, loneliness, and social anxiety among university students aged 19–25. Male participants (n = 150) scored slightly higher on DAS-SF1 (M = 20.66, SD = 4.12) and DAS-SF2 (M = 21.66, SD = 3.14) compared to female participants (n = 150) with DAS-SF1 (M = 20.50, SD = 3.73) and DAS-SF2 (M = 20.50, SD = 3.24). In contrast, females reported slightly higher levels of loneliness (M = 30.48, SD = 11.53) and social anxiety (M = 32.18, SD = 14.75) than males (Loneliness: M = 28.52, SD = 12.33; Social Anxiety: M = 30.16, SD = 15.25).

However, none of these mean differences were statistically significant. The t-values were low across all variables: DAS-SF1 ( $t(300) = 0.34$ ), DAS-SF2 ( $t(300) = 0.73$ ), Loneliness ( $t(300) = -1.41$ ), and Social Anxiety ( $t(300) = -1.16$ ). These t-values correspond to p-values greater than .05, indicating a lack of significant gender differences.

Effect size estimates further support this conclusion. Cohen's d values were all below the conventional cutoff of 0.20: DAS-SF1 (d = 0.04), DAS-SF2 (d = 0.08), UCLA Loneliness

Scale ( $d = 0.16$ ), and Liebowitz Social Anxiety Scale ( $d = 0.13$ ), indicating negligible to small practical differences between male and female participants. Overall, the findings suggest that gender does not play a meaningful role in influencing levels of dysfunctional attitudes, loneliness, or social anxiety in this sample.

### Emergence model



**Figure 2;** Emerged model show positive significant relationships between dysfunctional attitude, loneliness and social anxiety.

### Discussion

The purpose of this study was to investigate dysfunctional attitudes, loneliness, and social anxiety among university students, while also examining the potential influence of demographic variables such as age, gender, and education.

Consistent with prior research, the findings revealed significant associations among dysfunctional attitudes, loneliness, and social anxiety. Dysfunctional attitudes, defined as rigid, negative, and maladaptive cognitive patterns, appear to intensify both loneliness and social anxiety. This aligns with Rothermund and Eiser (2010), who reported that individuals endorsing higher levels of dysfunctional attitudes experienced greater loneliness and social anxiety.

The study proceeded in two phases. The first phase pretested the instruments on a pilot sample to ensure clarity and comprehension of the items, which participants confirmed. The second phase involved testing the main assumptions.

One assumption predicted a positive relationship between dysfunctional attitudes and loneliness. This was confirmed, supporting the findings of Aderka et al. (2014), who noted that perfectionistic and self-critical thought patterns exacerbate feelings of isolation. Another assumption proposed a positive correlation between dysfunctional attitudes and social anxiety, which was also supported. This is consistent with Dandeneau et al. (2007), who found that maladaptive cognitions such as perfectionism and fear of negative evaluation increase vulnerability to social anxiety.

It was also assumed that loneliness would positively correlate with social anxiety. The results validated this, echoing Heinrich and Gullone (2006), who demonstrated that social isolation intensifies anxiety by reducing social support and increasing negative self-perceptions. Regression analyses tested further assumptions. Findings indicated that dysfunctional attitudes positively predicted loneliness (Wilbert & Rupert, 1986), but negatively predicted social anxiety. This unexpected outcome suggests that maladaptive cognitions may influence loneliness and anxiety differently, highlighting the need for further research to clarify the mechanisms underlying these associations.

The assumption regarding gender differences revealed no statistically significant mean differences in dysfunctional attitudes, loneliness, or social anxiety. Although females scored slightly higher in loneliness and social anxiety, effect sizes were small, indicating minimal gender-based influence in this sample. However, Shahid et al. (2024) found that women reported higher levels of depression compared to men among young adults in Pakistan, suggesting that in the cultural context of Pakistan, women may be more vulnerable to internalizing problems such as loneliness, anxiety, and depression. This provides partial cultural justification for the observed trend in the present findings, even though gender differences were not significant.

### **Implications**

The findings suggest that dysfunctional attitudes play a central role in shaping loneliness and social anxiety among university students. Identifying maladaptive cognitive patterns can help in the early detection of psychological distress. Cognitive-behavioral strategies and psycho-educational workshops should be introduced in academic settings to encourage students to challenge irrational thoughts. Furthermore, culturally adapted interventions may strengthen coping strategies, promote resilience, and reduce both loneliness and social anxiety. This study highlights the need for universities to prioritize mental health services, particularly focusing on cognitive restructuring techniques to support student well-being.

### **Limitations**

Despite its contributions, the study has certain limitations. First, the reliance on self-report measures may have introduced biases such as social desirability or under-reporting of symptoms. Second, the cross-sectional design prevents the establishment of causality between dysfunctional attitudes, loneliness, and social anxiety. Third, cultural differences in the measurement tools may limit the generalizability of findings. Fourth, the study did not account for other important factors, such as stress, socioeconomic status, or family dynamics, which may influence outcomes. Lastly, the sample was limited to university students, which restricts the applicability of results to other populations.

### **Recommendations**

Future research should consider longitudinal designs to establish causal relationships between dysfunctional attitudes, loneliness, and social anxiety. Additionally, incorporating mixed methods, including qualitative approaches, may provide deeper insights into how students experience these issues in their everyday lives. Expanding the sample to include diverse populations beyond university students would improve generalizability. Furthermore, the development of culturally sensitive assessment tools is crucial for accurately measuring cognitive and emotional constructs in non-Western contexts. Finally, mental health



interventions in universities should integrate preventive programs that address dysfunctional thinking styles, enhance social connectedness, and build emotional resilience among students.

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