



# Dysfunctional Attitudes and Automatic Thoughts among University Students of Pakistan

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
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
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## Abstract

Existent literature has evident that dysfunctional attitudes and automatic thoughts are associated with mental health difficulties. The present study attempts to investigate the relationship between dysfunctional attitudes and automatic thoughts and examining gender differences across both variables. A sample of 27 male and 53 females were collected from different universities of Rawalpindi and Islamabad, Pakistan. Dysfunctional attitudes of students were measured by the short form of Dysfunctional Attitude Scale (DAS) while automatic thoughts were measured by Automatic thoughts Questionnaire-negative (ATQ). Results indicate that dysfunctional attitudes are not associated with automatic thoughts ( $p > 0.001$ ), except confusion escape ( $r = .348, p < 0.001$ ). We found that male university students experience more dysfunctional attitudes and confusion escape subscale of automatic thoughts as compared to female students ( $p < 0.001$ ). However, there were no gender differences in negative self-concept, personal maladjustment, loneliness, and giving up subscales of automatic thoughts. Result suggests that students should be trained to control these thought negative patterns and resultant psychopathologies.

**Keywords:** Dysfunctional Attitudes, Automatic Thoughts, University students, Pakistan.

## Introduction

Universities play major role in training the individuals socially and intellectually in addition to transferring the facts and values to every generation. University not only helps in cognitive acquisitions but are also main source of student's personal, social and academic activities and advancement Eisen & Kearney [1]. In general, university students are more vulnerable of developing different emotional disorders Benton, Robertson, Tseng, Newton & Benton [2]; Eisenberg, Gollust, Golberstein, & Hefner [3] due to numerous factors such as academic stress, growing into adulthood, uncertainty of future, and poor relationships. These problems have enduring effects on student's life and impair their personal, social, and academic achievement, and lowers the quality of life in later years e.g. Cooley, Toray, Valdez, & Tee [4]; Tosevski, Milovancevic, &

Gajic [5]; Zivin, Eisenberg, Gollust, & Golberstein [6]; Knopf, Park, & Mulye [7]. Consistent with the growing number of psychological issues among university students, role of cognition is essential to investigate covert process involved in psychopathologies such as depression Free & Oei [8]; Kendall [9]. Accuracy in assessment of psychopathologies increases therapist ability to provide effective management plan. Current study emphasizes on two cognitive evaluation of depression, dysfunctional attitudes and Automatic thoughts because these both constructs have been extensively applied in clinical research and practice and are more consistent with Becks theoretical context Clark [10]. Development of innovative interventions for controlling depression are based on cognitive factors for instance systematically changing dysfunctional

thinking and automatic thoughts Beck, Rush, Shaw, & Emery [11]; Hollon & Beck [12,13]. Studied argued that such interventions are equal to pharmacological treatment and are more efficient compared to conventional psychotherapies in reducing symptoms of psychological issues Free & Oei, [8]; Rush, Beck, Kovacs, & Hollon [14]. Despite of growing interest in cognitive theory and therapy in reducing psychological problems such as depression Kendall & Korgeski [15]; Oei, Duckham, & Free [16]; Oei, Lim, & Young [17], there are little efforts to investigate the cognitive factors involved in depression.

Dysfunctional attitudes are relatively stable schemas, which are associated with the development and maintenance of the depression Beck, Rush, Shaw, & Emery [11]. Current studies have assessed these maladaptive views by applying Dysfunctional attitudes scale DAS; Dobson & Shaw [18]; Oliver & Baumgart, 1985). Dysfunctional attitudes are a set of beliefs that defines strict criteria for assessment of personal capabilities and self-confidence Kuiper & Olinger [19], such as "If I do not do well all the time, people will not respect me". Individuals with dysfunctional attitudes believe that everything should be in their control, they need social approval, no matter what they do, and they should be successful in every aspect of life, moreover they report more depression and anxiety Azizoğlu [20]; Palabıykoğlu et al. [21]; Tschacher [22].

In terms of automatic thoughts, Beck [23] believed that core beliefs develop during early childhood due to interplay of the environment, these core beliefs manifest as automatic thoughts, appears unexpectedly and can reoccur at any phase of life Kılınç & Sevim [24]. Activation of negative core beliefs fill the mind with the automatic negative thoughts Hjemdal, Stiles & Wells [25]. These repeated thoughts have positive or negative ideas Mathew, Sudhir & Mariamma [26]. The interpretation of automatic thoughts depends upon individuals' experiences, they gained from their environment Nobre & PintoGouveia [27]. Individuals make their world and understand others on the bases of their schemas demonstrated as automatic thoughts Wenzel & Cochran [28]. These automatic thoughts influence the individuals' behaviors and feelings directly Beck [29]; Bask and Can [30] and are not activated until individuals encounter any stressful situation Rush, Beck, Kovacs & Hollon [14]; Wierzbicki & Bartlett [31]. Negative automatic thoughts and dysfunctional attitudes could be accessed and addressed during the therapy.

Existent literature indicated that cognitive markers such as dysfunctional attitudes and automatic thoughts significantly contributes to psychological disorders such as depression and anxiety Harrell, & Ryon [32]. Investigation of thinking styles emphasis on recognition of irrational or automatic thoughts, thinking errors and evaluation of biases in response Shaw & Dobson [33], which help in reducing the psychopathologies. Martin and Anderson reported that cognitive flexibility has vital

significance and help the individual in adapting a new situation, whereas irrational thinking significantly adds to the psychological difficulties. Aydin [34] investigated automatic thought and trait anxiety among Turkish university students and reported that 39% state anxiety of the total variance is explained by automatic thoughts of the students. Similarly, Kiliç D [35] studied the dysfunctional attitudes of Turkish university students with respect to their demographic information such as gender, area of study, parental attitudes, kind of graduate school and socioeconomic level. He reported that dysfunctional attitudes of students differed according to gender, faculty, but did not differed with respect to socioeconomic statuses, parental attitudes and kind of schooling.

Previous studies reported that clinical sample have higher dysfunctional attitudes than non-clinical sample Eaves & Rush [36]; Tajima [37], but still we are not sure to what extent general population specifically university students have these cognitive biases. In the current study, research group is composed of university students' non-psychiatric people because of growing number of psychological difficulties among student population of Pakistan Saleem, Mahmmod & Naz [38]; Bukhari & Khanam [39]. To our best knowledge, previous studies have addressed dysfunctional attitudes in clinical population Bibi, Masroor & Iqbal [40]; Bibi & Masroor [41]; Bibi, Masroor & Khalid [42], no study has addressed the dysfunctional attitudes and automatic thoughts despite their strong association with psychological issues among university students of non-Western culture of Pakistan (which is important for making trans-cultural comparisons). Therefore, current study addressed this research gap and would be helpful for educationist, counsellors and psychotherapist in assessment of mental health problems of students. Consequently, it was hypothesized that

- (a) There is relationship between dysfunctional attitudes and automatic thoughts among university students.
- (b) There is gender difference in dysfunctional attitudes and automatic thoughts among male and female university students.
- (c) There would be differences in dysfunctional attitudes and automatic thoughts in students from different socioeconomic status.

## Methodology

### Sample

A sample of 27 male and 53 female students were recruited from National University of modern language Islamabad and International Islamic university Islamabad, Pakistan during August 2016 to September 2016. Nonprobability convenient sampling technique was used to collect the data. Age of students were ranged between 18 years to 40 years. Students less than 18 and more than 40 years of age, with previous psychiatric history, which would limit the study method were excluded from current study. Students

were approached irrespective of the discipline, education and socioeconomic status.

## Measures

Participants completed the Dysfunctional Attitude Scale Form A, negative automatic thought questionnaire and demographic variables sheet (i.e., age, gender, nationality, marital status, and education).

**Dysfunctional attitude scale forms A Beck, Brown, Steer & Weissman, [43]:** Dysfunctional attitudes of the participants were measured by applying dysfunctional attitudes scale form A (DASS-A). DASS-A consist of 30 items, participants responded each item on 7-point likert scale ranged from 1 (fully disagree) to 7 (fully agree). Higher scores indicate higher dysfunctional attitudes. In our sample, Cronbach alpha reliability of DASS-A is 0.65 (Acceptable).

**Automatic thoughts questionnaire negative (ATQ) Hollon & Kendal, [44]:** Automatic thoughts of the participants were measured through automatic thought questionnaire negative. Participants responded 30-items on five-point Likert scale from 1 (not at all) to 5 (all the time). It has five subscales: Negative Self-Concept, Confusion Escape, Personal Maladjustment, Loneliness, Giving Up. Higher scores indicate higher automatic thoughts in that domain. In our sample Cronbach alpha of Negative Self-Concept was 0.83 (Good), Confusion Escape 0.32 (Unacceptable), Personal Maladjustment was 0.26 (Unacceptable), Loneliness was 0.42 (Unacceptable) and Giving Up 0.66 (Acceptable).

## Procedure

Correlational cross-sectional research design was applied. Current study was approved by Ethical committee of National University of Modern languages Islamabad. Students were

approached in their free time. They were informed about informed consent, nature of the study, anonymity, and voluntary participation. After informed consent, participants were given questionnaire. They were explained items of questionnaire and encouraged to ask questions in case of any ambiguity. Participants took about 20 minutes in completion of survey.

## Statistical analysis

Data was analyzed by using Statistical package of social science 24 (SPSS). Descriptive analysis was tabulated in term of frequency, mean, standard deviation, skewness and kurtosis. T-test was used to analyses the gender difference and correlational analysis was used to analysis the correlation between dysfunctional attitudes and automatic thoughts. One-way analysis was used to examine the effect of socioeconomic status on dysfunctional attitudes and automatic thoughts.

## Results

### Demographic characteristics

Missing data were completely deleted from the data set. Frequencies, and percentages of demographic variables of participants such as age, gender, education and socioeconomic status were presented in Table 1. Descriptive characteristics of both scales such as mean, standard deviation, minimum, maximum, skewness, and kurtosis are presented in Table 2.

### Correlation between dysfunctional attitudes and automatic thoughts

Correlation between dysfunctional attitudes and automatic thoughts were examined. Results showed that dysfunctional attitudes are not associated with automatic thoughts except confusion escape ( $r = .348, p < 0.001$ ) (Table 3).

**Table 1:** Frequencies and percentages demographic variables of University students (N= 80).

Sample Characteristic		Frequency (f)	Percentage (%)
Gender	Male	27	33.8
	Female	53	66.3
Age (in years)	18-25	59	73.3
	26-35	17	21.3
	Above 35	4	5
Education	Bachelors	29	36.3
	Masters	33	41.3
	MS/M. phil	18	22.5
Marital status	Single	64	80
	Married	16	20
Socioeconomic class	Upper middle class	11	13.8
	Middle class	56	70
	Lower middle class	13	16.3

Note: N = 80; f= Frequency; %= Percentage

**Table 2:** Psychometric Properties of the Study Variables (N = 80).

Variables	M	SD	Min	Max	Skewness	Kurtosis
Dysfunctional Attitudes	145.24	16.06	110	172	-0.435	-0.177
Negative self-Concept	22.75	7.81	11	38	0.151	-0.066
Confusion Escape	16.16	3.65	9	23	-0.066	-0.994
Personal Maladjustment	8.88	2.3	5	15	0.31	-0.085
Loneliness	9.13	2.72	4	14	-0.543	-0.394
Giving Up	10.39	3.55	4	17	-0.253	-0.494

Note: N=80; M=Mean; SD= Standard Deviation; Min= Minimum; Max= Maximum; Skew= skewness, Kurt= kurtosis.

**Table 3:** Correlation between dysfunctional attitude and automatic thought among University students (N=80).

Variables	DAS	NegSC	CEF	PMDFC	Lon/Isol	GvupHlp
DAS	1	0.03	.348**	0.118	0.014	-0.216
NegSC		1	.638**	.384**	.633**	.724**
CEF			1	.287**	.287**	.455**
PMDFC				1	0.167	.224*
Lon/Isol					1	.520**
GvupHlp						1

Note: P<0.05, DAS= Dysfunctional Attitudes, NegSC= negative self-concept'; CEF=Confusion & escape fantasies; PMDFC=personal maladjustment and desire for change; Lon/Isol=Loneliness Isolation; GvupHlp=giving up/helplessness'

### Gender differences

We applied independent t-test to analyze the gender differences and found that male students experience more dysfunctional attitudes and confusion escape automatic thoughts than female students, whereas there were no gender differences in negative self-concept, personal maladjustment, loneliness, and giving up subscales of automatic thoughts (Table 4).

### One-way analysis (ANOVA)

ANOVA was used to investigate the difference in the socioeconomic classes among students from different socioeconomic class. We found that dysfunctional attitudes are higher among students belongs to lower socioeconomic class as compared to students from middle and upper socioeconomic class (Table 5).

**Table 4:** Mean, standard deviation and t-test of dysfunctional attitudes and automatic thoughts among male and female university students (N=80).

Variables	Male (n = 27)		Female (n=53)		t	p
	M	SD	M	SD		
Dysfunctional Attitudes	152.67	17.97	141.45	13.68	3.11	0.003
Negative self-Concept	24.44	10.23	21.89	6.18	1.39	0.168
Confusion Escape	18.19	3.36	15.13	3.38	3.82	0
Personal Maladjustment	9.19	2.15	8.72	2.38	0.859	0.393
Loneliness	8.44	3.23	9.47	2.38	-1.62	0.11
Giving Up	10.96	4.65	10.09	2.84	1.04	0.304

Note: N = 80; M = Mean; SD = Standard Deviation; variance. p=significance.

**Table 5:** One Way Analysis of Variance of Scores of DAS on Three levels of socioeconomic status among with conversion Disorder (N=80).

Variables	Lower socioeconomic (n = 29)		Middle socioeconomic (n=14)		Upper socioeconomic (n = 07)		F	P
	M	SD	M	SD	M	SD		
Dysfunctional Attitudes	162.69	12.7	141.02	15.53	146.09	4.72	12.4	0
Negative self-Concept	22.92	12.96	22.3	6.88	24.82	3.8	0.474	0.625
Confusion Escape	18.31	2.96	15.39	3.85	17.55	1.44	4.66	0.012
Personal Maladjustment	8.38	0.51	8.91	2.34	9.27	3.32	0.459	0.633

Loneliness	8.46	4.31	9.27	1.68	9.18	4.45	0.461	0.632
Giving Up	9.38	6.36	10.82	9.38	9.36	1.57	1.407	0.25

Note: N = 80; M = Mean; SD = Standard Deviation; MANOVA=multivariate analysis of variance. p=significance

## Discussion

The present study investigated association between dysfunctional attitudes and automatic thoughts, and gender differences across both variables. Result indicated that dysfunctional attitudes are positively associated with confusion escape, whereas not significantly associated with other subscale of automatic thoughts. Male students experience more dysfunctional attitudes and confusion escape automatic thoughts as compared to female university students. However, no gender differences were found for other subscales of automatic thoughts. Moreover, students from low socioeconomic class scored higher on dysfunctional attitudes as compared to students from middle and upper socioeconomic class. However, there were no differences in automatic thoughts in students from different socioeconomic status except confusion escape.

Inconsistent to our expectation and previous studies, our first hypothesis that there are association between dysfunctional attitudes and automatic thoughts is not fully supported by the data of the current study. One possible explanation of this could be that automatic thoughts are brief and spontaneous thoughts whereas dysfunctional attitudes are enduring and persistent beliefs. Though both influence individual's normal functioning, quality of life and contribute to depression and anxiety symptoms. Hamamcı and Duly [45] found significant relationship between "perfectionist attitudes" sub-dimension of DAS and loneliness in a sample of university students and suggested that social skills training based on cognitive approaches could be significantly helpful in decreasing dysfunctional attitudes among university students.

In the current study, we found that male have higher dysfunctional attitudes and confusion escape subscale of automatic thoughts in comparison to women. These gender differences in dysfunctional attitudes could be attributed to the financial and cultural role of the men. In Pakistan, men are considered responsible for earning and all matters of home, they remain under pressure and do not share their problems as compared to women, consequently, experience more dysfunctional attitudes. In consistent to our study, previous studies indicated that female have more desire of approval, to be loved and need for parental approval as compare to males Coleman & Ganong, [46]; Eryüksel'in, [47]. Yurtal [48] found in his study conducted with the university students that male students have more accusatory tendencies than the female students. Kiliç [35] in his study with the sample of university students found gender differences in dysfunctional attitudes. He found that female students experience significantly higher dysfunctional attitudes than male students. Similarly,

Lichterberg and Johnson [49] conducted study on adult sample and reported that female scored higher on competence, achievement and approval.

We also hypothesis that there would be differences in dysfunctional attitudes in students from different socioeconomic classes. Result indicates that students with lower socioeconomic status experience more dysfunctional attitudes. It could be because of the academic challenges, uncertain future and financial crises that make them more vulnerable to experience more dysfunctional attitudes and automatic thoughts. Our findings are inconsistent with the Kiliç [34] study, who claims that socioeconomic status does not change the dysfunctional attitudes of the students. However, we didn't find the effect of socioeconomic status on automatic thoughts except confusion escape. It could be because automatic thoughts are brief and almost all students experience it because of academic stress.

Despite of many strengths, current study has also some limitations, first data was collected from few universities of Pakistan, which may not be true representative. Secondly, sample size of study was small. Due to this, we cannot generalize finding of current study. One must interpret results cautiously. Thirdly, we applied self-report inventories which are easy to apply and cost effective, however can leads to social desirability. Hence study investigated dysfunctional attitudes and automatic thoughts, future studies should improve the sample size to broaden the generalization of the study and continue to investigation other psychological variables such as symptoms of depression, stressful events, attribution style, which are associated with these both variables [50].

The current study has practical implication for counsellor, psychotherapist, educationist administration and policy makers. They all should collaborate to develop effective polices and management plans to address the dysfunctional attitudes and automatic thoughts among students. As they cause depression, anxiety and influence the personal, social and academic achievements of students. Building a positive relationships and communication with other students can help them in overcoming negative emotions and automatic thoughts. Family support, social networks, and support groups can also protect the individual from negative consequences of dysfunctional attitudes and automatic thoughts.

## Conclusion

Present study found that higher dysfunctional attitudes are not associated with dysfunctional negative automatic thoughts. Gender

differences were observed in dysfunctional attitudes. Male students experience more dysfunctional attitudes. Socioeconomic status is also associated with dysfunctional attitudes.

## Declarations

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### Availability of Data and Materials

The data will be made available on request through proper channel.

### Authors' Contributions

AB was responsible for the conception and design of the study. AB and MAK analyzed and interpreted the data. AM collected the data; AB drafted the article and revised the article critically for important intellectual content. All authors read and approved the final manuscript.

### Ethics Approval and Consent to Participate

Approval from the Institute Ethics Committee of NUML Islamabad was obtained before this study.

### Consent for Publication

Consent to publish is not applicable.

### Competing Interests

The authors declare that they have no competing interests.

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