ORIGINAL ARTICLE

COGNITIVE DISTORTIONS, SOCIAL INTERACTION ANXIETY AND LIFE SATISFACTION AMONG SCHOOL STUDENTS

SAIRA KHAN¹, AYUB KHALID², MUHAMMAD MAQSOOD IQBAL³, NEELUM SHAHZADI⁴

¹Assistant Professor, Department of Applied Psychology, GC Women University Faisalabad. ²MS Clinical Psychology.

³Clinical Psychologist, Director, Mustafai College for Women (Post Graduate) Faisalabad. ⁴PhD Scholar GC University Faisalabad.

CORRESPONDENCE: SAIRA KHAN

Email: sairakhan@gcwuf.edu.pk, sairakhan2003@gmail.com

Submitted: 29 October 2021 Accepted: 18 January 2022

ABSTRACT

OBJECTIVE

To investigate the relationship between social interaction anxiety, cognitive distortions, and life satisfaction among school students.

STUDY DESIGN

Correlational and Cross-sectional research design was used for the present study.

PLACE AND DURATION

Present study was conducted in Faisalabad during 2019 to 2020.

SUBJECTS AND METHODS

A sample of 200 students having interaction anxiety (boys=100, girls=100) with age range 14-16 were recruited through purposive sampling from Government schools of the Faisalabad. Demographic Information Sheet, Social Interaction Anxiety Scale, Cognitive Distortions Scale and student's life satisfaction scale were used to collect information about the students, social interaction anxiety, cognitive distortions and life satisfaction of the respondents.

RESULT

The results indicated that social interaction anxiety had a significant and positive correlation with cognitive distortion (r = .66, p < .001) and negative but significant correlation with life satisfaction (r = ..60, p < .001). Cognitive distortion was emerged as strong predictor for social interaction anxiety that accounted 46% variance for social interaction anxiety and social interaction anxiety was emerged as strong predictor for life satisfaction that accounted 36% of variance for life satisfaction. Results indicated that female students were having more social interaction anxiety and cognitive distortions and less satisfied with life as compared with male students.

CONCLUSION

Individuals with social interaction anxiety had dysfunctional thoughts. Due to cognitive distortions these individuals evaluated social situations in a negative way and prior to interaction, these individuals appraised the social situation in a negative way. These individuals were also dissatisfied with their life. The findings of the study might be helpful for teachers, parents and the students to identify and handle the cognitive distortions.

KEY WORDS

Social Interaction Anxiety, Cognitive Distortions, Life Satisfaction.

INTRODUCTION

Speaking in public and to interact in public situations with others become challenging for some people who believe that they don't have social skills for these social activities. This wrong belief and lack of these social skills create fear of social situations and they start avoiding such social situations. This avoidance and lack of social skills can have some serious social and emotional effects which may hinder learning at academic level and performance at professional level, consequently such people cannot develop proper skills to handle and interact effectively in such social situations.¹ According to cognitive model, people who remain anxious in social situations have some negative beliefs and thoughts about themselves and ways of others to judge their behaviors.² Present study aimed to explore and look at the connections among cognitive distortions, social interaction anxiety and life satisfaction.

The most common feared social situation for socially anxious individuals is the public speaking. For socially anxious people, the fear of interaction and performance is mainly motivated by the desire to avoid degradation and embarrassment in the social situations. Persistent and constant fear of degradation and wrong interpretations of social information were seen as the root of socially anxious individual.³ They rated their ability to speak in public as of poor quality.⁴

Cognitive model⁵ suggests that the socially anxious individual activates a set of negative beliefs and distorted assumptions as he enters the feared situation. These negative beliefs and wrong assumptions are the concerns about their inability to speak and behave in social situations. These cognitive distortions or dysfunctional assumptions put the socially anxious individuals at the risk to evaluate social situations in a negative way. With these assumptions socially anxious individuals appraise that specific social situation as perilous, and expect that they are unable to meet their own standards for performance and negatively conclude how they would appear to other people and what other people would be thinking about

Journal of Pakistan Psychiatric Society

them.⁶ According to Kuru E, et al,² individuals who are anxious in social situations have some negative beliefs and thoughts about themselves and ways of others to judge their behaviors.

Social anxiety is intensified by the deficits in social skills. Relations with peers and other people are attributed as threats whether imagined or real that serve to maintain social anxiety.⁷ Friends of socially anxious people consider them as lacking of such social skills which are necessary for life. Alden and Tylor⁸ reported that the increase in social anxiety heightened avoidance in social gatherings which contribute to negative interpersonal experiences and weak self-efficacy. Socially anxious people are less socially skilled and less confident and have lower social competence with peers. Additionally, from behavioral observation of the children with social anxiety, it was found that they had less interactions and rarely speak with peers.⁹

Fear of social situations can damage major areas of the lives of the individuals having social interaction anxiety. Social anxiety has substantial negative effect on academic functioning, schooling, peer relationship and badly influence self-esteem and their family environment.¹⁰ Keeping in view the severe impact on many areas of life and the enduring effects of social anxiety, present study was aimed to investigate the type of association between cognitive distortions, social interaction anxiety and life satisfaction among school students. It was hypothesized that cognitive distortions would serve as the strong predictor for social interaction anxiety and social interaction anxiety would serve as the strong predictor for life satisfaction.

SUBJECTS AND METHODS

Participants

Present study was aimed to examine the association between cognitive distortions, social interaction anxiety and life satisfaction in school students. Correlational and Cross-sectional research design was used. From the population of school students, a sample of 200 students having social interaction anxiety (boys=100, girls=100), studying in 8th, 9th and 10th class, with age range 14-16 years, were recruited from government schools of the Faisalabad through purposive sampling.

Instruments

Demographic Information Sheet, Social Interaction Anxiety Scale,¹¹ Cognitive Distortions Scale¹² and student's life satisfaction scale¹³ were used to collect information about students, to measure social interaction anxiety, cognitive distortions and life satisfaction of the respondents.

Procedure

After collecting of the data from the sample, raw data was put in Statistical Package for Social Sciences (SPSS). Different

statistical methods for example correlation, t-test and regression analysis were used to make inferences from the data.

RESULTS

Results showed that 29% of sample was 14 years old, 31% was 15 years old and 40 % was 16 years old. There were 50% boys and 50% girls participated in the study. 27.5% students were studying in 8th class, 26.5% were in 9th class and 46% students were studying in 10th class. Result also showed that 56.5% respondents belonged to Joint family and 43.5% belonged to nuclear family. 51.5% participants were having only one friend, 34.5% were having two friends and 11% participants were having three or more friends.

Table-1 showed that cognitive distortions had a significant positive association with social interaction anxiety, r = .66, p < .001 and negative association with life satisfaction, r = -.46, p < .001, which indicated that respondents who had cognitive distortions they also had high social interaction anxiety and low life satisfaction. Results of the present study also reported significant

Table 1

Pearson Product Moment Correlation among Social Interaction Anxiety, Cognitive Distortion and life Satisfaction (n=200).

Variables	Cognitive Distortions	Social Interaction Anxiety	Life Satisfaction
Cognitive Distortion	-	.66**	46**
Social Interaction Anxiety Life satisfaction		-	60*** -

**p < .001.

Table 2

Regression analysis on relationship between social interaction anxiety and cognitive distortions (n=200).

		Social Interaction Anxiety 95% Cl		
Predictor	В	ш	UL	
Constant	1.62	-3.85	7.05	
Cognitive Distortions	.75	.639	.869	
R ²	.46	-	-	
F	163.79	-	-	

**p <.01; CI for the Confidence interval; B for Unstandardized regression coefficient.

Table 3

Regression analysis to predict Life Satisfaction from Social Interaction Anxiety.

		Life Satisfaction 95% Cl		
Predictor	В	ш	UL	
Constant	35.70	32.80	38.60	
Social Interaction Anxiety	33	39	30	
R ²	.36	-	-	
F	119.79	-	-	

**p <.01; CI for the Confidence interval; B for Unstandardized regression coefficient.

Journal of Pakistan Psychiatric Society

Table 4

Independent t-test on Cognitive Distortion, Social Interaction anxiety and Student life Satisfaction as per gender (N=200).

Variable	Male (n=100)		Female (n=100)					
	М	SD	М	SD	df	t	р	Cohen's d
Social Interaction Anxiety	40.75	17.3	46.80	16.81	198	-2.60	.01**	0.35
Cognitive distortion	38.26	13.19	45.46	19.95	198	-3.01	.001***	0.43
Student life Satisfaction	23.51	7.79	20.21	9.84	198	2.61	.01**	2.81

negative correlation between life satisfaction and social interaction anxiety, r = -.60, p < .001, which showed that participants who had social interaction anxiety also experienced less satisfaction from life.

Regression Analysis was performed for predicting social interaction anxiety while using cognitive distortions as predictor. Table-2 showed that cognitive distortions were the strong predictor for social interaction anxiety among school students (F = 163.79, $R^2 = .46$), cognitive distortions contributed 46% variance in social interaction anxiety.

Regression Analysis was performed for predicting life satisfaction while using social interaction anxiety as predictor. The results in Table-3 confirmed the social interaction anxiety is a strong predictor of life satisfaction, (F = 119.79, R²=.36), analysis depicted 36% variance in life satisfaction.

Table-4 displayed highly significant difference on the mean scores of cognitive distortions, social interaction anxiety and life satisfaction between female and male students. The results indicated that there was a significant mean difference between male and female on their scores of social interaction anxiety, t = -2.60, p = .01, and have medium effect size, Cohen's d = .35. The social interaction anxiety was more in female students (M = 46.80, SD = 16.81) as compared with male students (M = 40.75, SD = 17.30). The result also indicated significant mean difference between male and female on their mean scores of cognitive distortions, t = -3.01, p = .001 with medium effect size, Cohen's d = .43. Female students had higher mean scores (M = 41.46, SD = 19.95) as compared with male students on cognitive distortions.

Furthermore, the result also indicated significant mean difference between male and female students on their scores of life satisfaction, t = 2.61, p = .01 with high effect size, Cohen's d = 2.81. The life satisfaction was higher in male students (M = 23.51, SD = 7.79) as compared with female students (M = 20.21, SD = 9.84).

DISCUSSION

The findings of the present study add to the literature by demonstrating the association between cognitive distortions, life satisfaction and social interaction anxiety among the school students whose age was ranged between 14 to 16 years. It was presumed that there would be a strong

relationship between social interaction anxiety, cognitive distortions and life satisfaction. Results indicated that these variables were highly correlated. Consistent with cognitive model of social anxiety, present study proposed that individuals with social interaction anxiety have dysfunctional assumptions. According to cognitive model, people who are anxious in social situations have some negative beliefs and thoughts about themselves and the ways of others to judge their behaviors.² These cognitive distortions or dysfunctional assumptions put the socially anxious individuals at the risk to evaluate social situations in a negative way.⁵ Prior to interaction these individuals appraise the social situation in a negative way and conclude how they would appear to other people and what other people would be thinking about them.⁶

Results of the present study indicated that social interaction anxiety was significantly and negatively correlated with the life satisfaction of the students, is consistent with the findings of the study¹⁴ which indicated that people having social anxiety were unhappy and dissatisfied from the achievement and the quality of their social functioning. Alkhathami¹⁵ also reported that quality of life and social interaction anxiety were negatively and significantly correlated. The fear and the anxiety that surrounds social interaction and performance in social situations, for socially anxious people, is mainly driven by the desire to avoid humiliation and embarrassment. An insistent fear of embarrassment and humiliation and the negative interpretations of social information are at the root of socially anxious individual.³ Results indicated that the cognitive distortions emerged as the strongest predictor for social interaction anxiety that accounted for 46% of variance in social interaction anxiety. These results are complimenting many studies examining social interaction anxiety and cognitive distortions, Kuru et al² concluded that people with social anxiety had more cognitive distortions compared with the healthy controls. The results of the present study are in line with previous study that indicated that socially anxious individuals had a negative cognitive processing style.¹⁶

For the present study it was hypothesized that the intensity of social interaction anxiety would determine lower life satisfaction in the respondents. The results of present study have proved this hypothesis. Social interaction anxiety was the strong predictor of life satisfaction. Negative value of beta indicated that with an increase in the predictor variable (social interaction anxiety), the outcome variable (life

Journal of Pakistan Psychiatric Society

satisfaction) would decrease. These findings of present study were consistent with findings of a research which revealed that severity of social anxiety was strongly related to satisfaction with Achievement and Social Functioning. They reported that people with social anxiety were dissatisfied with the quality of their social functioning and achievement.¹⁴ Present study also found substantial differences in the mean scores of cognitive distortions, social interaction anxiety and life satisfaction between male and female. Such differences in social interaction anxiety have also been indicated by some other researches. Consistent with the results of the present study, some other researchers¹⁷ also found that female had higher levels of fear than male in some particular social situations for example speaking in front of an audience, talking to an authority figure and being observed at work.

CONCLUSION

Present study was conducted to the find the root cause of the social interaction anxiety and its impact on the satisfaction from the life. It is revealed from the present study that distorted cognitions are at the root of social interaction anxiety, as cognitive distortions have been proved as the strong predictor for social interaction anxiety. These cognitive distortions or dysfunctional assumptions put the socially anxious individuals at the risk to evaluate social situations in a negative way.⁵ Prior to interaction these individuals appraise the social situation in a negative way and conclude how they would appear to other people and what other people would be thinking about them.⁶ Present study also revealed the strong negative association between life satisfaction and social interaction anxiety. Present study proposed that people having social anxiety remained dissatisfied from the quality of their life. Social interaction anxiety emerged as the strong but negative predictor of life satisfaction.

REFERENCES

- 1. Eleby C. The impact of a student's lack of social skills on their academic skills in high school (Unpublished master's thesis). Marygrove College, Detroit, Michigan. 2009.
- Kuru E, Safak Y, Özdemir İ, Tulacı RG, Özdel K, Özkula NG, Örsel S. Cognitive distortions in patients with social anxiety disorder: Comparison of a clinical group and healthy controls. The European Journal of Psychiatry. 2018 Apr 1;32(2):97-104.
- 3. Hirsch CR, Clark DM, Mathews A. Imagery and interpretations in social phobia: Support for the combined cognitive biases

hypothesis. Behavior therapy. 2006 Sep 1;37(3):223-236.

- 4. Abbott MJ, Rapee RM. Post-event rumination and negative self-appraisal in social phobia before and after treatment. Journal of abnormal psychology. 2004 Feb;113(1):136.
- 5. Heimberg RG, editor. Social phobia: Diagnosis, assessment, and treatment. Guilford Press; 1995 Oct 27.
- Clark DM. A cognitive perspective on social phobia: In Crozier WR, Alden LE (Eds) International handbook of social anxiety: Concepts, research and interventions relating to the self and shyness. (2001): 405-431.
- Clark DM, Crozier WR, Alden LE. A cognitive perspective on social phobia. The essential handbook of social anxiety for clinicians. 2005 Jun 24:193-218.
- 8. Kashdan TB, Farmer AS. Differentiating emotions across contexts: comparing adults with and without social anxiety disorder using random, social interaction, and daily experience sampling. Emotion. 2014 Jun;14(3):629.
- 9. Alden LE, Taylor CT. Interpersonal processes in social phobia. Clinical psychology review. 2004 Nov 1;24(7):857-82.
- 10. Spence SH. Social skills training with children and young people: Theory, evidence and practice. Child and adolescent mental health. 2003 May;8(2):84-96.
- 11. Essau CA, Conradt J, Petermann F. Frequency, comorbidity, and psychosocial impairment of anxiety disorders in German adolescents. Journal of anxiety disorders. 2000 May 1;14(3):263-79.
- Mattick RP, Clarke JC. Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. Behaviour research and therapy. 1998 Apr 1;36(4):455-70.
- 13. Covin R, Dozois DJ, Ogniewicz A, Seeds PM. Measuring cognitive errors: Initial development of the Cognitive Distortions Scale (CDS). International Journal of Cognitive Therapy. 2011 Sep;4(3):297-322.
- 14. Eng W, Coles ME, Heimberg RG, Safren SA. Domains of life satisfaction in social anxiety disorder: Relation to symptoms and response to cognitive-behavioral therapy. Journal of anxiety disorders. 2005 Jan 1;19(2):143-56.
- 15. Alkhathami, S. Social anxiety and quality of life in adolescents: cognitive aspect, social interaction and cultural tendency'. PhD thesis. 2014. University of Bedfordshire.
- Ferreri F, Lapp LK, Peretti CS. Current research on cognitive aspects of anxiety disorders. Current opinion in psychiatry. 2011 Jan 1;24(1):49-54.
- 17. Wittchen HU, Stein MB, Kessler RC. Social fears and social phobia in a community sample of adolescents and young adults: prevalence, risk factors and co-morbidity. Psychological medicine. 1999 Mar;29(2):309-23.

S. No	Author's full name	Designation and institutional address	Author's contribution	Signature
ı	Saira Khan	Assistant Professor, GC Women University Faisalabad	Methodology. Data Analysis, Results	5.4
2	Ayub Khalid		Data Collection and data entry, Writing introduction & literature review and discussion	Armbolk
3		Director Mustafai College for Women (Post Graduate) Faisalabad	Drafting the article and the critical revision of the article	-
4	Neelam Shahzadi	PhD Scholar. Department of Education GC University Faisalabad.	Data Collection. Writing discussion and conclusion	Deelow