

A Correlational Study between Cognitive Errors and Anxiety among Adults Studying in Selected University of Gurugram, Haryana with a View to Develop an Informational Pamphlet for its Management and Prevention

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Abstract: A correlational study between cognitive errors and anxiety among adults studying in university of Gurugram Haryana. In this study a quantitative research approach and correlational research design was used with purposive sampling technique, on 100 samples who were attending Starex University Haryana. Tool was consisting of structured questionnaire on Cognitive errors and anxiety further checking the correlation between cognitive errors and anxiety among adults. A pamphlet prepared for giving awareness among adults about cognitive errors and its preventions and management. In adults majority (51%) have severe cognitive errors. Majority of adults (45%) having severe anxiety. And there was strong positive correlation between cognitive errors and anxiety among adults. There was no association between cognitive errors and selected background data variables.

Keywords: Cognitive errors, Adults, Anxiety, Information pamphlet

1. Introduction

Cognitive errors or errors are thoughts that cause individuals to perceive reality inaccurately. We all have pattern of thinking and this may impact our emotional state and behaviour. There are specific (and common) ways people distort their thinking. These irrational thoughts and beliefs (i.e., errors) can lead to problematic emotional states and behaviour, like anxiety, low self-esteem, and depression and relationship conflicts.

2. Review of Literature

- 1) A study were conducted to determine the relationship between cognitive errors and anxiety symptoms in school aged children and to analyze the age group and gender effects on the 4 cognitive errors, out of 205 children aged 8-13yrs the results shows older children have more cognitive errors than younger and female showed higher cognitive errors than male, higher levels of anxiety associated with more cognitive error.^[1]
- 2) A study examined the linkage between cognitive errors and anxiety among 251 samples of children and adolescent referred for anxiety problems. Results indicated that the measure of anxiety were significantly related to each of cognitive errors i.e. catastrophizing, overgeneralization, personalization and selective abstraction.^[2]

Objective

- 1) To assess the cognitive errors among adults studying in selected University of Gurugram , Haryana.
- 2) To assess the level of anxiety among adults studying in selected University of Gurugram, Haryana.

- 3) To determine correlation between cognitive errors and anxiety with demographical variable among adults studying in selected University of Gurugram, Haryana.
- 4) To develop & validate an informational pamphlet for management of cognitive errors and anxiety among adults studying in selected University of Gurugram, Haryana.

Delimitation

The study is delimited to:

- The adults (18 to 26years) people coming to Starex University during period of data collection.
- Only for 100 samples in Starex University of Gurugram, Haryana.

3. Methodology

Quantitative research approach and correlational research design was used in this study.

Population: adults (18-26 yrs of age)

Sample: Students studying in Starex University Gurugram, Haryana

Sample size: 100

Sampling Technique: Non probability purposive sampling technique

Hypothesis of the Study

H₁: There will be significant correlation between cognitive errors and anxiety among adults studying in selected University of Gurugram, Haryana, at 0.05 Level Of Significance

Data Collection Tools and Technique

S.No	Tool	Purpose	Collection Technique
1.	Selected background data variables	To assess the background data of the sample	Structured interview schedule
2.	CD-Quest questionnaire	To assess the cognitive errors	
3.	Hamilton anxiety rating scale	To assess the anxiety	

Reliability

Name of the tools	Method	Reliability
CD-Quest questionnaire	Cron bach's alpha	.88
Hamilton anxiety rating scale	Cron bach's alpha	.73

Content Validity of the Tool

The content validity of the tool was obtained by submitting the tools to seven (7) experts. All experts were agreed with statement except for few suggestions.

Final study

The final study was conducted in the Starex University Gurugram, Haryana. The data was collected form 19/01/2019 to 28/01/2019 by using structured interview schedule.

Table 1: Frequency and Percentage distribution of adults studying in University of Gurugram Haryana according to background data variables, N=100

Section-1 Socio Demographic Proforma	Frequency (f)	Percentage (%)
Age (in years)	18-20	20 20%
	21-23	28 28%
	24-26	52 52%
Sex	Male	44 44%
	Female	56 56%
Religion	Hindu	76 76%
	Christian	17 17%
	Muslim	7 7%
	Others	0 0%
Education	Graduate	57 57%
	Post Graduate	43 43%
Living Arrangement	Hosteller	62 62%
	Day Scholar	38 38%
Type of Family	Nuclear Family	74 74%
	Joint Family	26 26%
Number of Siblings	One	0 0%
	Two	54 54%
	Three	38 38%
	Above 3	8 8%
Family Income per Month (Rs)	< 20,000	0 0%
	21000-40,000	22 22%
	41000-60,000	47 47%
	> 60,000	31 31%
Mothers Education	< 12 th	66 66%
	Graduate	34 34%
	Post Graduate	0 0%
	Doctorate	0 0%
Fathers Education	< 12 th	28 28%
	Graduate	70 70%
	Post Graduate	2 2%
	Doctorate	0 0%
Mothers Occupation	Private Employee	6 6%
	Govt Employee	10 10%
	Health Professional	15 15%
	Housewife	69 69%

Fathers Occupation	Private Employee	26	26%
	Govt Employee	47	47%
	Health Professional	17	17%
	Businessman	10	10%
Area of Residence	Rural	32	32%
	Urban	68	68%
	Semi Urban	0	0%
Do you have Knowledge regarding cognitive errors??	Yes	0	0%
	No	100	100%
Do you have any anxiety related problems?	Yes	2	2%
	No	98	98%

Table 1 shows that Majority of adults were of age 24-26 years (52%), majority of adults were females (56%), religion wise most of the adults were Hindu (76%), majority of adults were graduates (57%), majority of the adults were living in hostels (62%), half of the adults were day scholar (50%),majority of adults belongs to nuclear family (74%), majority of adults were having 2 siblings (54%) with family income of more than 41-60,000 (47%), majority of the adults mothers were educated upto 12thstandard (66%) and fathers educated upto graduates (70%), majority of the mothers of adults were housewife (69%), and fathers were govt employee (47%), majority of adults were residing in urban area (68%), No adults were having any knowledge regarding cognitive errors (0%), majority of adults doesn't have any anxiety disorders (98%).

Table 2: Frequency and percentage score of adults related to cognitive errors

Criteria Measure of Cognitive Errors	Frequency	Score
Category Score		
SEVERE (33-60)	51	51.0
MODERATE (25-32)	35	35.0
SLIGHTLY (15-24)	10	10.0
ABSENT/MINIMAL (0-14)	4	4.0

Table 2: Showing most of the adults (51%) having severe cognitive errors, 35% having moderate, (10%) having slightly and (4%) having minimal cognitive errors.

Table 3: Showing Frequency and percentage distribution of level of anxiety scores among adults studying in University

CRITERIA MEASURE OF ANXIETY SCORE		
Category Score	Percentage	Frequency
Moderate to Severe (25-30)	45.0	45
Mild to Moderate (18-24)	37.0	37
Mild Anxiety (0-17)	18.0	18

Table 3: showing that majority of the adults (45%) were having moderate to severe anxiety, 37% of the adults were having mild to moderate and 18% of the adults were having mild anxiety.

Table 4: Correlation between cognitive errors and anxiety among adults studying in University, N=100

Pearson's Correlation	Cognitive Errors Score	Anxiety Score
Mean	32.94	21.79
SD	9.607	6.466
N	100	
Correlation	0.738	
Table Value	0.197	
P Value	0.000	
Result	Significant	

Hence it was inferred that there was strong positive correlation between cognitive errors and anxiety among adults.

Table 5: Findings related to Association between cognitive errors score and background data variable, N=100

Demographic Variables		Levels (N=100)				Association with Cognitive Errors Score				
Variable	Option	Absent/Minimal	Slightly	Moderate	Severe	Chi Test	P Value	df	Table Value	Result
Age (in years)	18-20	0	1	8	11	5.547	0.236	4	9.488	Not Significant
	21-23	3	3	12	10					
	24-26	1	6	15	30					
Sex	Male	2	4	12	26	1.791	0.408	2	5.991	Not Significant
	Female	2	6	23	25					
Religion	Hindu	4	6	28	38	1.699	0.791	4	9.488	Not Significant
	Christian	0	3	7	7					
	Muslim	0	1	0	6					
	Others	0	0	0	0					
Education	Graduate	4	5	21	27	0.764	0.682	2	5.991	Not Significant
	Post Graduate	0	5	14	24					
Living Arrangement	Hosteller	4	7	21	30	1.388	0.499	2	5.991	Not Significant
	Day Scholar	0	3	14	21					
Type of Family	Nuclear Family	4	8	26	36	2.047	0.359	2	5.991	Not Significant
	Joint Family	0	2	9	15					
Number of Siblings	One	0	0	0	0	2.407	0.661	4	9.488	Not Significant
	Two	1	6	17	30					
	Three	3	3	16	16					
	Above 3	0	1	2	5					
Family Income per Month (Rs)	< 20,000	0	0	0	0	4.351	0.361	4	9.488	Not Significant
	21000-40,000	0	1	9	12					
	41000-60,000	4	5	14	24					
	> 60,000	0	4	12	15					
Mothers Education	< 12 th	3	5	26	32	0.352	0.839	2	5.991	Not Significant
	Graduate	1	5	9	19					
	Post Graduate	0	0	0	0					
	Doctorate	0	0	0	0					
Fathers Education	< 12 th	0	3	10	15	1.900	0.754	4	9.488	Not Significant
	Graduate	4	6	25	35					
	Post Graduate	0	1	0	1					
	Doctorate	0	0	0	0					
Mothers Occupation	Private Employee	0	0	2	4	5.467	0.485	6	12.592	Not Significant
	Govt Employee	0	3	1	6					
	Health Professional	2	1	4	8					
	Businessman	2	6	28	33					
Fathers Occupation	Private Employee	0	5	9	12	5.051	0.537	6	12.592	Not Significant
	Govt Employee	3	3	16	25					
	Health Professional	1	2	7	7					
	House wife	0	0	3	7					
Area of Residence	Rural	2	4	10	16	5.604	0.061	2	5.991	Not Significant
	Urban	2	6	25	35					
	Semi Urban	0	0	0	0					
Do you have Knowledge regarding cognitive errors??	Yes	0	0	0	0	NA				
	No	4	10	35	51					
Do you have any anxiety related problems?	Yes	0	0	1	1	0.576	0.750	2	5.991	Not Significant
	No	4	10	34	50					

Table 11: The Chi-square test value shows that there was no significance association between the level of score and other background data variables. The calculated chi-square values were less than the table value at the 0.05 level of significance.

4. Conclusion

As there is a strong positive correlation between cognitive errors and anxiety among adults with 0.738 significance using Pearson correlation coefficient. Gaining better knowledge regarding cognitive errors will help to reduce the

incidence of anxiety and other behavioural disorders among adults. It also helps to reduce the complication which turns to improve the health and behaviour of adults and reduces major public health crisis.

5. Recommendation

- The study need to be replicated in the large sample to validation and generalized its findings.

- A similar study can be conducted to assess the cognitive errors and their correlation with depression and other mental health disorders.
- A similar study can be conducted to assess the cognitive errors and their correlation with other mental health disorders among clinical samples.
- A follow up study can be conducted to assess the effectiveness of awareness programme regarding cognitive errors on management of anxiety among adults.

References

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