



EFFECTS OF ALCOHOL; COGNITIVE DISTURBANCES, PESSIMISM, DEPRESSIVE SYMPTOMS AND PSYCHOLOGICAL MALADJUSTMENT AMONG ALCOHOLICS

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ABSTRACT... Objectives: The present study examined the effects of alcohol consumption on cognitive failures, depressive symptoms, pessimism and psychological maladjustment among alcoholics. The research further explored predictive relationship between cognitive disturbances, depressive symptoms, pessimism and psychological maladjustment in alcoholics. **Study Design:** Between-groups correlational research design. **Settings:** Lahore city. **Method:** A sample of 33 men and 4 women (age: 20-60 years) who were addicted to alcohol were recruited. Equal number of comparison group who do not use alcohol, matched on age, gender and socioeconomic status were recruited. Cognitive Failure Questionnaire¹, Personality Assessment Questionnaire², Life Orientation Test³ and Centre for Epidemiological Scale for Depression Scale⁴ were used as assessment measures. **Results:** Results of the study showed that alcoholics had higher scores on cognitive failures, depressive symptoms, pessimism and psychological maladjustments as compare to the non-alcoholics. There was a significant predictive relationship between cognitive failures, pessimism, depressive symptoms and psychological maladjustment. Results of AMOS show model fit with cognitive failure, depressive symptoms and pessimism as significant predictors of different dimensions of psychological maladjustment among alcoholics.

Keywords: Cognitive failure, depressive symptoms, psychological maladjustment, alcoholic

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INTRODUCTION

Alcoholism is the term mostly used to describe alcohol dependence that is associated with severe consumption of alcohol, abusive use of alcohol and leads towards drinking pattern through impulsivity.⁵ Diagnostic and Statistical Manual of Mental Disorders⁶ by American Psychiatric Association (APA) names alcoholism as alcohol use disorder and alcohol intoxication which is defined as a problematical form of alcohol consumption leading to clinically significant impairment or distress for at least twelve months period. Alcohol use disorder covers consumption of heavy amount of alcohol, craving and extra urge to drink alcohol which ultimately subsequent in incapable to accomplish major role obligation in many areas of life i.e., occupational, social, interpersonal problems. Recreational activities are also disrupted. The person cannot help himself/herself drinking alcohol even if there are

physical hazardous.

Alcohol dependence is assisted by the severe consumptions of alcohol. The abusive use of alcohol, leads a person towards drinking pattern through impulsivity.⁶

Abnormal alcohol usage patterns including severe consumption can have devastating effects on the body and brain functioning including memory deficits or loss, problems in storing and executive functioning of central nervous system. Wernicks' syndrome and Karasoffs' syndrome could be the most severe consequences.⁷

The psychological consequences of chronic patterns of alcohol consumption can be developing symptoms of depression and distress. Alcohol use disorder is often associated with symptoms of depression, anxiety and many of

the maladjusted behaviors. Associated with both morbidity and mortality, depression is a major public health problem throughout the world and is characterized by lowered mood, loss of capacity to experience pleasure, increased sense of worthlessness, fatigue, and preoccupation with death and suicide.^{8,9,10}

In a longitudinal study by¹¹, the researchers explored effects of late middle aged adults' drinking behavior on their subsequent 10-year depressive symptoms. They recruited 7939 adults who were regular consumers of alcohol and assessed them twice in a year for ten years on their depressive symptoms. The researchers found association of subsequent long-term course of alcohol consumption with their depressive symptoms.

Pessimism is a state of mind or disposition in which the person anticipates undesirable outcomes or believes that the evil or hardships in life outweigh the good. The pessimism disposition had effects on all major areas of thinking.¹⁰ Scheier and Carver's (1985)¹² model of optimism/pessimism suggests that pessimism contains traits like tendencies to hold negative experiences about the future. Pessimists may avoid goal-directed activities because of negative expectations.¹³ Studies related to pessimism and substance abuse are scarce but some studies have examined associations between pessimism and drugs. Some of the epidemiological studies found morbidity of anxiety and depressive symptoms in addition to legal, social and occupational problems in people who excessively consume alcohol^{14,15} which turn into maladaptive behavior as well¹⁶ because when individuals do not able to fulfill the responsibilities then it creates a stress in which indirectly develop depressive feature in them.¹⁷ Studies¹³ with longitudinal data described significant link between alcohol and alcohol dependence and major depressive disorder. Literature suggest that alcohol dependence is more predictor of major depressive disorder as compare to major depressive act as contributor of alcohol dependence.¹⁸ Maladaptive behavior is defined as psychological maladjustment

which is associated with dependency, negative self-esteem, negative self-efficacy, emotional unresponsiveness, emotional instability and negative world view.²

Pakistan, being an Islamic country prohibits every type of drug consumption by state law and by religion as well. But opposite to this, many segments of society are involved in drug abuses including consumption of alcohol.¹⁹

OBJECTIVES

Objectives of the study included exploring differences between alcoholics and non-alcoholics regarding cognitive failures, psychological maladjustment, pessimism and depressive symptoms. Further, the research also explores predictive relationships between cognitive failures, psychological maladjustment, pessimism and depressive symptoms among alcoholics.

Hypotheses of study

Following hypotheses were included:

1. There is likely to be differences between alcoholics and non-alcoholics related to cognitive failures, psychological maladjustment, pessimism and depressive symptoms.
2. There is likely to be predictive correlation between cognitive failures, psychological maladjustment, pessimism and depressive symptoms among alcoholics.

METHOD

Research design

The present study used a correlational between-subjects research design.

Participants

Sample included 33 men and 4 women who use alcohol. Equal number of comparison group was included who do not use alcohol or any other drugs which also include smoking. Both the groups were matched on age, gender and socioeconomic status. The age range of the sample was between 20-60 years. Inclusion criteria for the sample who use alcohol were recruiting

only those persons who drink alcohol regularly, who take alcohol and smoke simultaneously and who do not have any diagnosed psychological disorder. Those alcoholics were excluded who use multiple types of drugs along with alcohol, who use alcohol once in a while or occasionally and those who were non-Muslims. Majority 30 (81 %) of the sample was post-graduate and 7 (19%) were graduate. 25 were married and 12 were unmarried. Frequency of the alcohol consumption was reported 21 servings weekly.

ASSESSMENT MEASURES

Cognitive Failure Questionnaire (CFQ1)

CFQ is used to assess self-reporting failures in perception memory and motor functions. CFQ is a 25 item Likert-type scale and the response options range from "very often (4)" to "never (0)". Cronbach's alpha reliability of the scale for the present research was excellent i.e., .95.

Life Orientation Test (LOT)3

LOT is a 10 items scale that assesses optimism (3 items) and pessimism (3 items) in personality. Respondent rate items on a five points Likert-type scale i.e., strongly agree, disagree, neutral, agree and strongly disagree. The Chronbach's alpha reliability of LOT is .81 for the present research.

Centre for Epidemiological Studies for Depression Scale (CES-D4)

CES-D is a 20 items scale used to assess the severity of depressive symptoms in adults. Items are arranged on likert type scale that ranges from 0 to 3 point. The scale had .85 chronbach's alpha reliability for the present research.

Personality Assessment Questionnaire (PAQ²)

PAQ is a 42 item Likert-type scale use to assess psychological maladjustment. The response options range from almost always not true to almost always true. PAQ assess personality maladjustment on seven personality dimensions i.e., dependency, negative self esteem, negative self efficacy, emotional unresponsiveness, emotional instability and negative world view. Chronbach's alpha reliability of the scale for the present research was excellent i.e., .89.

Demographics

Demographic information included sex, age, religion, marital status, education, physical disability if any, any diagnosed psychological disorder. Questions about consumption of alcohol included taking information about the frequency of alcohol intake per week.

Procedure

After finalizing assessment measures and permission process, sample was approached. As sample was collected through snow-ball sampling and personal contacts, participants were recruited from Pearl Continent bars, James n Java cafes, Pakistan Institute of Mental Health rehabilitation centers and Lahore Gymkhana club. Participants were informed about the objectives of the research and their informed consent was taken. They were assured about the anonymity and confidentiality of information. Initially, 45 men gave consent to participate in the study, but only 33 men (73%) completed the questionnaires. Out of 16 women, only 4 (25%) completed the questionnaires. The reasons for quitting from participation were included non-serious attitude and lack of time for men and fear of being exposed (concerns about confidentiality/anonymity) for women. Data were collected, analyzed and discussed.

RESULTS

To see differences between alcoholics and non-alcoholics related to cognitive failure, psychological maladjustment, pessimism and depressive symptoms, the t-test analysis was done and the results are presented in Table-I.

Results revealed significant differences between alcoholics and non-alcoholics related to cognitive failure, psychological maladjustment, pessimism and depressive symptoms. Mean scores show that alcoholics had higher mean scores on cognitive failures, psychological maladjustments, pessimism and depressive symptoms as compare to non-alcoholics.

To see predictive correlation between cognitive failures, psychological maladjustment, pessimism and depressive symptoms among alcoholics.

Pearson correlational analysis was done. The results are presented in Table-II.

Results showed significant relationship between cognitive failures, depressive symptoms, pessimism and psychological maladjustment.

Finally, we tried to see cognitive failures, depressive symptoms and pessimism as predictors of psychological maladjustment. Stepwise regression analyses was employed and results are presented in Table-III.

Results revealed that regression analysis worked out in two steps. In step 1, cognitive failures and depressive symptoms emerged as significant predictors of psychological maladjustment accounting for twenty-nine percent of the variance.

In the second step, cognitive failures, depressive symptoms and pessimism emerged as significant predictors of psychological maladjustment. These variables accounted for twenty-two percent of the variance.

Internal validity of results and Model Fit through Analysis of Moment Structure (AMOS)

Results were validated by applying fitting a model through AMOS. AMOS requires the criteria for model fit i.e., CFI (Comparative Fit Index) $> .90$; GFI (Goodness of Fit Index) $> .90$; NFI $> .90$; REMSEA (Root Mean Square Error of Approximation) $< .05$.

For the present study, the values of CFI, GFI, NFI and REMSEA show perfect model fit. The results are presented in table given below

Variables	Alcoholics		Non-Alcoholics		t(df)	p	Cohan's d
	M	SD	M	SD			
Cognitive failure	51.8	18.8	33.6	19.8	4.00(72)	.000	0.94
Psychological Maladjustment	154.5	21.9	139.2	15.1	3.4 (72)	.000	0.81
Pessimism	27.8	11.6	19.4	10.5	4.00 (72)	.000	0.89
Depressive Symptoms	25.9	11.9	16.7	7.1	5.56 (72)	.000	0.938

Table-I. Mean differences of Alcoholics and Non-Alcoholic on Cognitive Failure, Psychological Maladjustment, Pessimism and Depressive Symptoms

Variables	1	2	3	4	M (SD)
1-Cognitive failures	.35**	.22*	.37**	.42**	42.7 (21.2)
2-Depressive symptoms	-	.21*	.32**	.26**	21.3 (10.8)
3-Pessimism		-	.29**	.39**	11.1 (4.3)
4-Psychological maladjustments			-	.32**	146.8 (20.2)

Table-II. Pearson Correlation between Cognitive failures, depressive symptoms, Psychological Maladjustment Alcoholics (n=74)

Note. * $p < .05$. ** $p < .01$.

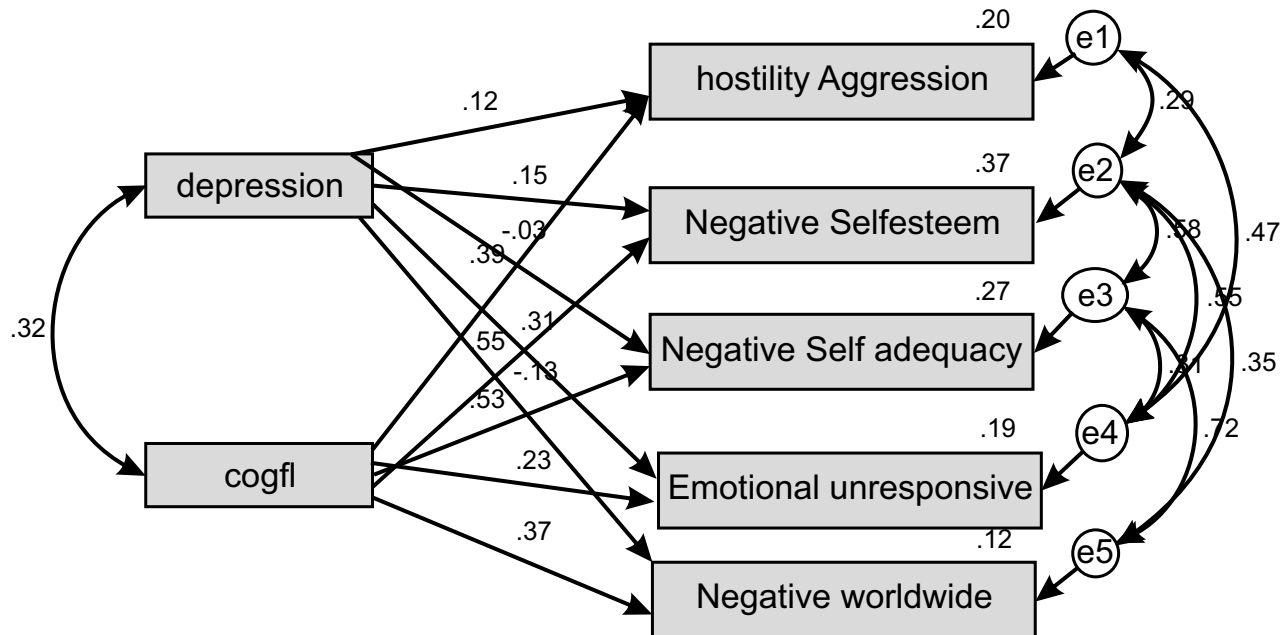
Predictors	β	R ²	ΔR^2	Predictors	β	R ²	ΔR^2
Step 1				Step 2			
Cognitive failures	.44***	.29**	.29**	Cognitive failures	.33**	.22**	.22**
Depressive symptoms	.30**			Depressive symptoms	.28**		
				Pessimism	.24**		

Table-III. Regression Analyses to see Cognitive Failures, Depressive Symptoms and Pessimism as predictors of Psychological Maladjustment (n=74)

Note. ** $p < .01$. *** $p < .001$.

Model	χ^2	Df	CFI	GFI	NFI	REMSEA
Default	3.41	3	.99	.98	.98	.04

Table-IV. Indices of Model fit through AMOS



The model shows that cognitive failure and depressive symptoms emerged as significant predictors of psychological maladjustment which had seven dimensions i.e., hostility/aggression, negative self-esteem, negative self-adequacy, emotional unresponsiveness and negative worldview. The model endorses the results of regression analysis.

DISCUSSION

The current study explored differences regarding cognitive failures, pessimism, depressive symptoms and psychological maladjustment between alcoholics and non-alcoholics. Further, the research tried to explore predictive relationship between cognitive failures, pessimism, depressive symptoms, and personality maladjustment among alcoholics. For the first aim, the results revealed significant differences in the mean scores of alcoholics and non-alcoholics on cognitive failures, pessimism, depressive symptoms and psychological maladjustment. Mean scores of alcoholics was significantly higher than those who do not addicted to alcohol. The results from the present study are in line with those of Abramson, Metalsky and Alloy²⁰ indicated that feelings of loss of meaningfulness (cognitive disturbances) in everyday tasks and a persistent negative affect and

serious affective dysfunctions mainly depression are characteristics of individuals who use alcohol. Similarly, the relation between cognitive failures, depressive symptoms and maladjusted behavior is confirmed by different studies.²¹ Some of the previous literature revealed gender differences regarding personality maladjustment in psychological and emotional adjustment and adaptive resources of life. The findings of the study reported a significant difference in high negative effect of maladjustment in men and women who use alcohol.¹⁰

The results from the present study revealed significant predictive relationship between cognitive failures, pessimism, depressive symptoms, and personality maladjustments among alcoholics. These results are in line with the findings of a research conducted by Kahler, Read, Wood and Paflai (2003) as the researchers found significant relationship between alcoholism and personality traits leading to maladjustment. In another study⁵, the researchers found significant relationships between alcoholism and depressive symptoms in middle aged men and women.

Similarly, these results are endorsed with the results in a study²² in which the researchers found

that depressive symptoms lead to psychological maladjustment and found strong association between depressive symptoms psychological maladjustment. In another study, Lee²³ explored sense of belongingness, resilience and depressive symptoms among alcoholics and non-alcoholics. The findings revealed that on depressive symptoms, alcoholics scored significantly higher than non-alcoholics. A study was conducted to see certain personality dimension of alcoholics leading towards maladjustment. The findings of study revealed that alcoholics scored high on assessing impulsivity as compared to non-alcoholics.

CONCLUSION

To sum up, present study has served a number of purposes, such as exploring the use of alcohol, influence of alcohol on different dimensions of personality as developing depressive symptoms, cognitive failures and maladjustment. In Pakistan, scarce literature and research is available on studying the direct effects of alcohol on the alcoholics due to the difficulties in accessibility of sample. The current study found that the individuals who use alcohol had high cognitive failures, pessimism, depressive symptoms and psychological maladjustment. Cognitive failures and depressive symptoms emerged as significant predictors of psychological maladjustment among alcoholics.

Limitations

Sample was not easily available. The recruitment of sample especially women who used alcohol was very difficult as many of the women denied to participate due to the fear of disclosure.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Hira Aziz	Conceived, Designed and collected data, Analyzed data, Results, discussion and references.	
2	Dr. Fauzia Naz	Supervised thesis, Analyzed the data and prepared complete manuscript	