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EXAMINING THE EFFECTS OF METACOGNITION AND SOCIAL COGNITION IN ALCOHOL USE AMONG UNIVERSITY STUDENTS IN TURKISH REPUBLIC OF NORTHERN CYPRUS

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Abstract: Since harmful alcohol consumption among university students still presents a significant problem, our team of researchers has conducted this study to add and contribute to the current research findings regarding this social issue. The study, conducted at universities in the Turkish Republic of Northern Cyprus (TRNC), included 200 students aged 18 to 65. The research used a quasi-experimental design, employing an assessable study technique to evaluate data and generalize findings from the sample of the target population. Furthermore, quantitative research was used to determine the correlation between the variables. The correlation of AUDIT, MAST, R-MET and MCQ-30 subscales was found according to the socio-demographic characteristics of the participants. As predicted by our hypothesis, the investigation of the link between alcohol use, metacognition, and social cognition showed that alcohol drinkers had lower social cognition than non-alcohol ones. Morover, according to the results, alcohol consumption is linked to impairments in social cognition and metacognition.

Keywords: *Alcohol, Alcohol Use, Metacognition, Social Cognition, Students, Theory of Mind, University*

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Introduction

Across the world, people have been drinking alcohol for at least 13,000 years (BBC, 2018). Egyptians consumed wine ever since 4000 BC, and by 2700 BC Babylonians have enjoyed drinking beer so much that they introduced adoring a goddess to oversee their beer consumption into their religious practices (Mark, 2017).Drinking alcohol, the most commonly consumed psychotropic substance, is common at social gatherings in many areas of the world (WHO, 2010).

Alcohol consumption, which has shown a rising trend in recent years, especially in developing countries, can have a strong effect on one's mood and mental state. Alcohol is an extensively consumed substance among youth within the U.S.(CDC,2015). Countless issues in young people have been attributed to alcohol use including the causing ofmajor injuries, increased suicide and homicide rates, risks of sexual and physical abuse, abnormal brain development, impaired judgment, educational, social, and legal problems (e.g., effecting school dropout behavior and juvenile delinquency) (Kaminer & Winters, 2011; NIAAA , 2015). Additionally, an early onset of alcohol use is related to unintentional injuries, truancy, unprotected sex, driving under the influence of alcohol, traffic crashes, as well as to dependence on various substances harmful to health, and subsequent drug use in late adolescence and young adulthood years. (Bradshaw et al., 2013; Corte & Szalacha, 2010; Komro et al., 2010). Additionally, underage alcohol intake is accountable for 4,400 deaths annually, including suicides (CDC, 2013).

Alcohol use disorder (AUD) is best described by consuming a large amount of alcohol regardless of the negative consequences in the individual (Ron & Barak, 2016). Levola et al. (2014) stated that social impairment is among the most hazardous features of AUD. Approximately 240 million people throughout the world are affected by alcohol consumption (Gowing et al., 2014). Heavy drinking among university students persists to be a public health hazard for universities and colleges (Johnston et al., 2011). Alcohol use has been reported to affect university students' mental health in which, it features an increase of depressive symptoms that are accompanied by drinking to cope (Bravo et al., 2017; Gonzalez et al., 2011), suicide attempts, self-harm behaviours (Peltzer et al., 2016; Toprak et al., 2011) in addition to aggressive behaviours (Ali, et al., 2013).

Metacognition relates to a psychological process that hypotheticallyplays a major role in how well people comprehend and respond to the social and psychological problems caused by psychiatric disorders (Lysaker et al., 2013a). Essentially, metacognition is a cognitive process or knowledge involved in reviewing, controlling and evaluating cognition (Sadeghi, 2011).

Social cognition is assessed through the use of social perception, judgment measures, recognition and stimulation of appropriate elements of emotional regulation, including memory (Holdnack et al., 2011; Kandalaft et al., 2012).

Alcohol-related defects have been identified in the cross-modal integration of empathetic skills, decoding of effective states, social cognitive data, and the theory of mind (Thoma et al., 2013). Maurage et al. (2009) reported widespread impairment in difficulties of understanding facial expressions and emotional decoding, as well as body postures that ranged across emotional valences in heavy alcohol consumers. In addition, excessive alcohol drinkers showed an elevated level of alexithymia, an emotional processing deficiency characterised by difficulty in expressing, identifying, and distinguishing emotions (Stasiewicz et al., 2012).
Bosco et al. (2013) argue that brain injury caused by alcohol abuse could lead to mental impairment. *Reading the Mind in the Eyes Test* (Baron-Cohen et al., 2001) has been used to evaluate the theory of mind and has been shown to be influenced by demographic variables that contain cultural distinctions (Provost et al., 2014) and verbal intelligence quotients (Peterson & Miller, 2012). ToM is stated to be a multi-dimensional structure with both cognitive and emotional components. (Sebastian et al., 2013; Shamay-Tsoory & Shamay-Tsoory et al., 2010).

This research can help us gain an insight into how people's different backgrounds affect their dealing with or assessing their alcohol use. Moreover, we have conducted it to gain a more accurate and deeper understanding of the executive cognitive function, its relationship with alcohol, and to raise awareness regarding this issue. The results of this study will contribute to an inadequately chartered area of psychology, raise awareness about it and develop our understanding of the topic. Finally, the intention of the research is to broaden the investigation of metacognition and alcohol consumption, especially in youth and university students.

Materials and Methods

This study has a quasi-experimental design. This type of design is either descriptive or experimental. The descriptive method has been used in this survey by employing five scientific scales; Reading the Mind in the Eyes Test, Alcohol Use Disorder Identification Test, Socio-demographic Questionnaire, Michigan Alcohol Screening Test, and Metacognition Questionnaire. An assessable investigation method was used in order to quantify data and generalize findings from a sample of the targeted populace. Finally, quantitative research was undertaken for this study to determine the correlation among the variables.

Participants

This research took place at two university campuses, Near East University and the American University of Cyprus. The study was conducted with university students, the sample consisting of 200 undergraduate, graduate, and Ph.D.students aged 18 to 65. The research has been conducted in the Turkish Republic of Northern Cyprus to local citizens, Turkish and international ethnicities. The original or translated versions of instruments were used in the study.

Instruments
Socio-demographic Questionnaire

Socio-demographics questionnaires show nothing more than some general characteristics of the participants. We use them when we want to know more about the background and history of the participants, such as their age, gender, education level, occupation, income, and location.

Alcohol Use Disorder Identification Test (AUDIT)

AUDIT is a 10 item monitoring tool established by World Health Organization (WHO) to evaluate alcohol use, drinking habits, and alcohol-induced problems. AUDIT has been used on a wide range of racial and ethnic groups. It is suited to be used in primary care (health care) settings. Since alcohol consumption is linked to a high rate of mortality and morbidity in the United States, the U.S. Preventive Services Task Force advises clinicians to screen all adults and give short counseling treatments

to those who are at risk (Centers for Disease Control and Prevention, 2020).

Michigan Alcohol Screening Test (MAST)

The Michigan Alcohol Screening Test was developed by Selzer (1971) in the United States of America and it originally consisted of 25 questions. The MAST is a very popular alcoholism detection questionnaire that evaluates selected adverse medical and psychosocial consequences of excessive drinking. Two additional types of the MAST test were created later; the 10-item Brief MAST (B-mast: Pokorny et al., 1972) and the 13-item Short MAST (Smast: Seltzer et al., 1975).

Metacognition Questionnaire (MCQ-30)

Wells & Cartwright-Hatton (2004) advanced a 30-item version of the MCQ; known as MCQ-30. As the other MCQ items have been employed, The MCQ-30 items are assessed using a 4 pointed ordered-category scale ranging from 1 (do not agree) to 4 (agree very much). There are 5 subscales of the test; 1-positive beliefs about worry, 2- negative beliefs about thoughts concerning uncontrollability and danger, 3- cognitive confidence, 4-negative beliefs concerning the consequences of not controlling thoughts, and 5- cognitive self-consciousness.

Reading the Mind in the Eyes

The "Reading the Mind in the Eyes" test is a complex yet advanced test, particularly important in the field of social cognition It was created in 2001 by Baron-Cohen S, Wheelwright S, Hill J, Raste Y, and Plumb I. One of the downgrades of alcohol dependence is emotional impairment, including evaluating the emotional facial expressions of others. For this study to obtain a relatively accurate evaluation "Reading the Mind in the Eyes" test was used to detect perception of emotions in alcohol dependence. This test consists of 36 images of male and female eyes in various emotional states. Participants are asked to select the emotional state that best characterizes the eyes in each image from a list of four options.

Data Analysis

This research used several tests and methods for the analysis of the collected data. First, we performed a Pearson correlation to explore the relationship amongst clinical variables. Following this, various descriptive and frequency tests were used. The Mann-Whitney U test was employed to compare differences between two independent groups, whereas The Kruskal Wallis was conducted to compare two or more independent samples of equal or different sample sizes. Finally, the Regression Analysis has been performed, allowing us to analyse the relationship among two or more interest variables. The statistical significance criterion (p) was set at 0.05 and all analyses were conducted using commercially accessible statistical analysis software. The collected data were entered into and analyzed by using Statistical Package for the Social Sciences (SPSS). (IBM Corp. Armonk. NY. SPSS Statistics 21.01).

	Number(n)	Percentage(%
Gender		
Female	84	42.0
Male	116	58.0
Marital status		
Married	33	16.6
Not married in a relationship	57	28.6
Not married not in a relationship	109	54.8
Country		
TRNC	86	43.0
Turkish	107	53.5
Other	7	3.5
Level of Education		
University	148	74.0
Masters	36	18.0
PHD	16	8.0
Profession		
Freelancer	31	25.8
Regular Job	89	74.2
Financial Status		
Bad	16	8.0
Moderate	137	68.5
Good	47	23.5
Place you live		
Not town center	44	22.1
Town center	155	77.9
Habitudes		
None	44	22.0
Cigarettes	12	6.0
Alcohol	55	27.5
Cigarettes & Alcohol	89	44.5
Psychiatric treatment		
None	175	87.5
Antidepressants	14	7.0
Psychotherapies	3	1.5
Combination Therapies	8	4.0
Psychiatric treatment before		
None	172	86.0
Antidepressants	3	1.5
Anxiolytics	1	0.5
Antipsychotics	2	1.0
Psychotherapies	11	5.5
Combination Therapies	11	5.5

Results

Socio-demographic Characteristics of Participants

Table 1.

The distribution of the participants according to socio-demographic characteristics was examined with a frequency table. 84 (42.0%) female students and 116 (58.0%) male students were included in this study. 33 (16.6%) of the participants were married, 57 (28.6%) were not married and in a relationship, 109 (54.8%) were not married and not in a relationship. In the research 86 (43.0%) were TRNC citizens, 107 (53.5%) were Turkish citizens and 7 (3.5%) were citizens of other countries. When the education level variable was examined, 148 (74.0%) participants were at the undergraduate level, 36 (18.0%) participants were at the master level, and 16 (8.0%) participants were at the Ph.D. level. 31 (25.8%) of these participants worked in a freelance job and 89 (74.2%) in a regular job. When examining where they lived it was determined that 44 participants (22.1%) did not live in the city center whereas155 (77.9%) did. 44 (22.0%) participants didn't have any habit, 12 (6.0%) were smoking, 55 (27.5%) were consuming alcohol, 89 (44.5%) were both smoking and consuming alcohol. When the psychiatric treatments of the participants were examined, there were 175 (87.5%) participants who did not receive any treatment.14 participants (7.0%) were using antidepressants, 3 participants were (1.5%) receiving psychotherapy, and 8 of them were (4.0%) receiving combined treatment. When the previous psychiatric treatments were examined, 172 (86.0%) participants did not receive any treatment, 3 were (1.5%) using antidepressants, 1 was (0.5%) using anxiolytic, 2 were (1.0%) using antipsychotics, 11 were (5.5%) receiving psychotherapy, and 11 participants were receiving combination treatment (5.5%). When the age variable was examined, the standard deviation of the participants in the 18-56 age range has been identified as 26.07 ± 7.17.

Comparison of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Gender of the Participants

The Mann Whitney U analysis is employed to compare AUDIT, MAST, Read the Mind in the Eyes Test, and MCQ-30 sub-scales according to the gender of the participants. Male participants had a higher AUDIT rate than female participants, and a significant difference was found between the

gender variable and AUDIT ($p<0.05$).

Comparison of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Occupations of the Participants

The Mann Whitney U analysis is once again used to compare AUDIT, MAST, Read the Mind in the Eyes Test, and MCQ-30 sub-scales according to the occupations of the participants. The level of MAST was found to be higher in participants who *worked in an irregular job* compared to those who worked in a regular job. Furthermore, a noticeable difference between the occupation variable and MAST can be seen. ($p<0.05$).

Correlation of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Marital Status of the Participants.

Kruskal Wallis analysis was used to compare AUDIT, MAST, R-MET, and MCQ-30 sub-scales according to the marital status of the participants. AUDIT and MAST levels were found to be higher in *not married in a relationship* participants than the other participants and in marital status variable a significant difference was found between AUDIT and MAST ($p<0.05$).

Correlation of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Educational Background of the Participants

Kruskal Wallis analysis was used to compare AUDIT, MAST, R-MET, and MCQ-30 sub-scales according to the educational background of the participants. MAST scores of *undergraduate* participants were higher than those of other participants and a significant difference was found between the education level variable and MAST.($p<0.05$).

Correlation of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Income Level of the Participants

Kruskal Wallis analysis was used to compare AUDIT, MAST, R-MET, and MCQ-30 sub-scales according to the *financial status* of the participants. Participants with good income were found to have higher levels of *cognitive self-consciousness* (MCQ-CSC) from the MCQ-30 sub-scale than the other participants, and a significant difference was found between *financial status* and *cognitive self-consciousness* (MCQ-CSC) ($p<0.05$).

Correlation of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to the Habitudes of the Participants

	Habitudes	N	Mean Rank	X^2	df	p
AUDIT	None	44	52,17	58.89	3	.000**
	Cigarettes	12	47,67			
	Alcohol	55	110,81			
	Cigarettes & alcohol	89	125,15			
MAST	None	44	77,62	18.05	3	.000**
	Cigarettes	12	61,92			
	Alcohol	55	104,83			
	Cigarettes & alcohol	89	114,34			
R-MET	None	44	115,33	11.20	3	.010*
	Cigarettes	12	91,88			
	Alcohol	55	85,45			
	Cigarettes & alcohol	89	87,37			
Beliefs about uncontrollability & danger	None	44	88,67	2.75	3	,431
	Cigarettes	11	95,45			
	Alcohol	54	107,62			
	Cigarettes & alcohol	89	100,43			
Cognitive Confidence	None	44	102,28	3.74	3	.291
	Cigarettes	12	74,29			
	Alcohol	54	108,14			
	Cigarettes & alcohol	89	97,40			
Beliefs about need to control thoughts	None	44	80,52	12.84	3	.005*
	Cigarettes	11	87,50			
	Alcohol	54	120,67			
	Cigarettes & alcohol	89	97,52			
Cognitive Self-Consciousness	None	43	74,10	10.68	3	.014*
	Cigarettes	12	109,71			
	Alcohol	53	107,03			
	Cigarettes & alcohol	89	104,80			
Positive beliefs about worry	None	44	77.85	10.61	3	.014*
	Cigarettes	11	96.00			
	Alcohol	54	115.44			
	Cigarettes &	89	100.97			

Kruskal Wallis analysis was used to compare AUDIT, MAST, R-MET, and MCQ-30 subscales based on health-harmful habits of the participants. Participants who consumed both cigarettes and alcohol were found to have higher AUDIT and MAST levels compared to the others. Those without any health-harmful habits were found to have higher scores in R-MET. Individuals who consumed only alcohol were demonstrating higher levels of *beliefs about the need to control thoughts* (MCQ-NC) and *cognitive self-consciousness* (MCQ-CSC) than the other participants. A significant difference was found between AUDIT, MAST, *beliefs about the need to control thoughts* (MCQ-NC), and *cognitive self-consciousness* (MCQ-CSC) subscales, and the health-harmful habits.

Comparison of AUDIT, MAST, R-MET & MCQ-30 Sub-scales According to Where the Participants Live

	B	Std. Error	Beta	t	p	ΔR^2	Adjusted R^2	F
MAST	1,442	,104	,735	13,837	,000*	,720	,500	28,59
RMET	,070	,073	,050	,952	,343			
Beliefs about uncontrollability & danger	,016	,104	,009	,151	,880			
Cognitive Confidence	-,096	,074	-,073	-1,296	,197			
Beliefs about need to control thoughts	-,033	,088	-,023	-,373	,709			
Cognitive Self-Consciousness	,203	,102	,112	1,987	,048*			
Positive beliefs about worry	-,006	,071	-,005	-,083	,934			

As it can be seen, there are 7 predictors which are MAST, Read the Mind in the Eyes Test, and Metacognition's 5 subscales; *beliefs about uncontrollability & danger*, *cognitive confidence*, *need to control thoughts*, *cognitive self-consciousness*, and *positive beliefs about worry*. Two of them have been statistically predicted. Regression analysis was used to test if MAST, R-MET, and MCQ-30 subscales significantly predict the alcohol identification test in students. MAST's levels significantly predicted Alcohol Use Identification Test, ß=1.44, t=13.837, p<0.5. The results of regression also showed that the Metacognition subscale; *cognitive self-consciousness* significantly predicted the Alcohol Use Identification Test, ß= .20, t= 1,98, p<0.5.

	B	Std. Error	Beta	t	P	ΔR^2	Adjusted R^2	F
RMET	-,055	,036	-,077	-1,527	,128	,740	,531	32 24
Beliefs about uncontrollability & danger	-,009	,051	-,010	-,169	,866			
Cognitive Confidence	,100	,036	,148	2,770	,006*			
Beliefs about need to control thoughts	,053	,043	,074	1,221	,223			
Cognitive Self-Consciousness	-,091	,050	-,099	-1,804	,073			
Positive beliefs about worry	,015	,035	,023	,434	,665			
AUDIT	,352	,025	,690	13,837	,000*			

We can see that there are 7 predictors which are AUDIT, Read the Mind in the Eyes Test, MCQ-30 subscales; *beliefs about uncontrollability & danger*, *cognitive confidence*, *need to control thoughts*, *cognitive self-consciousness*, and *positive beliefs about worry*; two of them have been statistically predicted. AUDIT's levels significantly predicted the Michigan Alcohol Screening Test, ß= .35, t= 13, 83, p<0.5. The results of regression also showed that the metacognition subscale; *cognitive confidence* significantly predicted the Michigan Alcohol Screening Test, ß= .10, t= 2, 77, p<0.5.

Discussion

Alcoholism is considered to be an important factor for disorders and loss of function, especially in developing countries (WHO, 2009 Rehm J et al., 2009). Having this habit particularly in youth and middle-aged individuals increases the likelihood of alcohol consumption to be destructive. Unfortunately, approximately 2.5 million people in the world die every year due to alcoholism (WHO, 2011). Nevertheless, the number of alcohol dependence is increasing despite all the actions taken. The frequency of alcohol consumption in Turkey's young population according to a survey conducted by the Ministry of Health was found to be 42.6%. In a study conducted with Ege University Science Faculty students, it was determined that 14% of the students had abused alcohol (Yiğit & Khorshid, 2006). High schools in Northern Cyprus studies show that smoking, alcohol,and psychoactive substance use trial age has decreased to 11 and that the age at

which students start using alcohol, cannabis, ecstasy, and heroin increased compared to 1996 (Eş A., 2015). Alcohol use rates were higher than other psychoactive substances when compared to previous high school studies in TRNC (Çakıcı M. & Çakıcı E. 2000). In a study, lifetime alcohol use rate in adults was found to be 72.1%. In a lifetime using alcohol for at least once was 82.1.34% (Çakıcı M. et al., 2003) in the 2003 study and 77.1.35% (Çakıcı M. et al., 2014) in the 2008 study. When these data are compared, it is seen that alcohol is used at high rates in TRNC.

When examining the data on alcohol in 2012 by Turkey Statistical Institute Health Survey, the table "Distribution of individuals' alcohol use by gender, age, location based on their marital status", the ratio of total alcohol use in Turkey is considered to be 10.4% (Akvardar, 2005). When the distribution according to gender variable is taken into consideration, the alcohol use rate is 17.2% male and 3.8% female. In the current research, AUDIT levels of male participants were found to be higher than female participants, and a significant difference was found among AUDIT and the gender variable.

In Mental Health Resources (MHR), university students with a low resistance to distress have a higher rate of alcohol addiction, alcohol abuse, and drug addiction. In another similar research, it was discovered that low distress tolerance was linked directly to alcohol intake, and inability to tolerate anxiety, sensitivity, and restlessness was associated with alcohol intake and mediator variables (Howell et al., 2010). Finally, Hearld et al. (2014) proved that the prevalence of panic disorder and alcohol use disorder was very high. Similarly, Márquez et al. have shown that alcohol abuse is a significant tool to decrease the seriousness and frequency of panic symptoms in patients with panic disorders (2003). In a study conducted by Beşirli (2007) with 288 students, only 1.3% of the students were drinking to get rid of their problems. Cox et al., (1998) demonstrated that one of the most important reasons for alcohol use was avoiding a negative result, coping with problems, and not being able to withstand distress. Buckner et al., (2006) found that alcohol abuse or addiction in adolescents stems from coping with problems and this behavior leads to depression. Studies researching the impacts of alcohol are prevalent in literature reviews and the causes and impacts of alcohol use have been discussed from the past to the present (Akvardar, 2005). In the current research, the effects of alcohol use on metacognition and social cognition were investigated.

The Self-Regulatory Theory developed by Wells and Matthews (1994) suggests that the metacognition factors play a huge role in causing persistent psychological disorders. One of the main reasons for using alcohol is to reduce feeling unwanted emotions (Kuntsche et al., 2006). People with low performance in using their metacognitive abilities may experience sadness, distress, anxiety and, etc. and their emotions are intense (Cartwright Hatton and Wells, 1997). As a result, the option of using alcohol to deal with issues created by the failure to use metacognition characteristics is one of the subjects lately investigated. There are many self-regulation theory based studies investigating a relationship between alcohol and metacognition. One of these studies was conducted by Spada and Wells (2005). They suggested that there may be a relationship between metacognition and alcohol use because metacognition factors may affect emotion and alcohol use directly or indirectly. There has not been much research on metacognitive skills (Anthonysamy et al., 2020). This study was the first to analyze the impacts of university students on metacognition and alcohol use in TRNC.

Alcohol consuming participants' MCQ-30 subscale *need to control thoughts* and *cognitive self-consciousness* levels were found to be the highest. In addition, it was found that *cognitive awareness*, which is the MCQ subscale, predicts alcohol use when the metacognition is thought to affect alcohol use in terms of AUDIT and MAST risk factors. The significant difference between metacognition and alcohol intake obtained in these research findings is that alcohol use affects metacognition in individuals and has similar characteristics with some research results (Spada et al, 2007; Ipek et al, 2015). The *cognitive confidence* (MCQ-CC) was found to be higher in students who did not reside in the city center whereas *cognitive self-consciousness* (MCQ-CSC) was higher in students that resided in the city. Also, it was found that participants without any health-harmful habits had high scores in R-MET. AUDIT and MAST levels were found to be higher than any variable. Majorly the numbers of participants that both consume and smoke cigarettes at the same time are found to be higher in MAST and AUDIT.

Various studies on cognitive functions include social cognition (Frith & Frith, 2007). In the study titled "Assessment of Social Cognitive Skills of Adolescents Diagnosed with Internet Addiction"; it was found that the internet addict participants had lower social cognition than the control

group (Saatçioğlu, 2016).

The relationship between alcohol use, metacognition, and social cognition was examined. Just like stated in the hypothesis, the social cognition of alcohol users was lower than the other participants. In the current study, the social cognition of individuals without alcohol and smoking habitudes was found to be the highest. To measure social cognition, R-MET was applied to the participants and there was a correlation between R-MET and alcohol intake. The results obtained are similar to the related literature review. This study aims to establish that students with different backgrounds have different metacognition and students with higher social cognition tend to consume less alcohol. According to the statistical findings, this study has reached its goal and supported the results with relevant research results in the literature.

CONCLUSIONS AND RECOMMENDATIONS

Alcohol use disorders are one of the bio-psychosocial problems that have been encountered, which should be examined in every aspect. The rate of alcohol use among university students has been increasing day by day and has become a huge behavior risk. Risky alcohol consumption has become a huge public health problem affecting since it negatively affects the mental health of society individuals. The results of the research show that the impairment in social cognition and metacognition are related to alcohol use. The findings of this study support the literature of other studies. It was concluded that socio-demographic factors such as gender, age, and marital status, and income levels had an impact on alcohol intake.

The students who have high social cognition do not use alcohol and those who perform poorly in using their metacognitive abilities are exhibiting high alcohol consumption rates. When this research is examined, similar results are seen. The risk of alcohol use among the young population of university students is increasing, and there are not many studies investigating the underlying causes. Therefore,this study is intended to be a big contribution to the literature. It is hoped that future researches will give more evidence and insight in the relationship of alcohol consumption and cognitive impairment. It is extremly important to intervene by helping individuals with problematic alcohol intake behavior to timely pervent role cognitive impairments in that population.

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