Alcohol consumption among young adults in Italy: The interplay of individual and social factors

(Article begins on next page)

17 August 2022

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Abstract

The consumption of alcohol among young adults is determined by different individual and environmental factors. The present study aims at comparing the effects of different predictors on the alcohol consumption of Italian young adults. Data were collected by means of a self-report questionnaire on a sample of 311 university students. Four different types of predictors were considered: (1) socio-demographic characteristics; (2) quality of social relations (Perceived social support); (3) Sensation-seeking personality trait; (4) Motivation to drink alcohol that the Motivational Model (Cox & Klinger, 1988) classifies according to the valence (positive or negative) and the source (internal or external) of the outcomes individuals expect to achieve from alcohol use. To test the influence of different groups of variables we performed three hierarchical regression analyses. Several significant influences were found. Alcohol consumption is of social value, it is linked to positive social relations and it is motivated by positive rather than negative valence motivations. Drinking motives confirmed their role of most proximal antecedents of alcohol use.

Keyword: Drinking Motives; Perceived Social Support; Sensation Seeking; Alcohol consumption; Young adults.

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1 Introduction

In Europe and North America alcohol use among young people is widespread and carries a significant risk of adverse psychological, social, and physical health consequences such as academic failures, unplanned pregnancies, sexually-transmitted diseases, suicide attempts, and violence and injury (Gmel & Rehm, 2003; Hingson et al., 2002; Perkins, 2002). The consumption of alcohol among adolescents and young adults is determined by different individual and social factors (Ham & Hope, 2003; Kuntsche et al., 2004; Ennett et al., 2008). In relation to individual factors considerable research has been conducted applying two theoretical frameworks: The theory of planned behaviour (TPB; Ajzen, 1988, 1991) and The Motivational Model (Cox & Klinger, 1988). The TPB maintains that alcohol behaviour is determined by individuals' attitude toward drinking, their beliefs about what others do and what is expected of them (i.e. subjective norms), and individuals' beliefs about the ease or difficulty of performing the behaviour (i.e. perceived behavioural control, PBC). Several studies explained the alcohol use among students using the TPB (Armitage, Conner, Loach, & Willets, 1999; Huchting, Lac, & LaBrie, 2008; McMillan & Conner, 2003). Attitudes toward drinking and subjective norms predict the intention to use alcohol and drinking behaviour, whereas perceived behavioural control predicts the drinking behaviour. The influence of PBC on the intention to use alcohol was significant just in some studies (McMillan & Conner, 2003). The Motivational Model (Cox & Klinger, 1988) assumes that the motivation to drink alcoholic beverages can be classified according to two dimensions: the valence (positive or negative) and the source (internal or external) of the outcomes individuals expect to achieve from alcohol use. Individuals drink to obtain positive outcomes or to avoid negative consequences and they may be motivated to drink by internal or external rewards. Crossing the two dimensions generates four distinct drinking motives. The first drink motive is called *Enhancement*: internally-

generated motivations with positive valence (e.g., drinking to have fun). The second is *Social*: externally-generated positive reinforcement motives (e.g., to better enjoy social gatherings). The third is *Coping*: internally-generated negative reinforcement motives (e.g., to forget personal problems). The last one is *Conformity*: externally-generated negative reinforcement motives (e.g., not to feel left out of the group). Cox and Klinger (1988) suggested that drinking motives are the most proximal antecedents of alcohol use, whereas other variables such as personality factors influence alcohol consumption by way of their associations with drinking motives. One of these personality traits that correlates with drinking motives is the *Sensation seeking* (Kuntsche et al., 2006). This traits is defined as "a need for novelty and intensity which develops its motivational power via the registration of discrepancies between the as-is and the to-be state" (Roth & Hammelstein, 2012, p. 11). Sensation seeking is not based on specific behaviours (e.g., partying, sexual behaviours, gambling, practicing dangerous sports) but on the search for experiences of intensity that can be satisfied by these behaviours. The relation of Drinking motives and Sensation-seeking with alcohol consumption has been found in different countries and cultures. For example these variables have been used in studies in Britain (Atwell et. al., 2011), Italy (Mazzardis et. al., 2010), Switzerland (Kuntsche & Kuntsche, 2009), Brazil (Hauck-Filho et. al., 2012), and the United States of America (Borsari et. al., 2007).

As far as social variables are concerned, a significant influence on young adults' alcohol consumption and related behaviours is the context of peer relationships. The transition from adolescence to adulthood is characterized by intensified contacts with peers (Schulenberg et al., 1996); going out to pubs, night-clubs and parties is considered important for the development and maintenance of friendships as well as romantic relationships. Often in these settings the use of alcohol and the development of peer relations co-exist (Træen & Nordlund, 1993) and drinking can be assumed to facilitate peer group integration (Maggs et al., 1997). Drinkers preceive themselves as more self-confident and sociable, and less nervous and emotional (Engels et al., 2006). Then social relations can facilitate the alcohol consumption. But family, friends and partners are also

potential sources of support that help individuals in coping with traumatic and ordinary life events (Coughlin 2008; Dyrdal et al. 2011) and in general to have a good level of quality of life (Heller et al. 2006; Tartaglia, 2012). Then, being a coping resource, relational support can prevent the use of alcohol to face difficulties.

According to the social ecological perspective, multiple social contexts and the interdependencies among contexts must be considered in order to explain the development of problematic behaviours, such as alcohol misuse (Ennet et al., 2008). Most of the recent studies have been conducted in the North-American context, while some studies have shown that different countries have different attitudes and patterns of alcohol use (Kuntsche et al., 2006; Room et al., 2012). In Southern European countries, alcohol is often moderately consumed at mealtimes (Room & Mäkelä, 2010) whereas in other European countries people drink more for social reasons (Atwell et. al., 2011). In Italy the relation among social factors and alcohol consumption could be ambivalent. The consumption of alcoholic drinks is traditional and deeply-rooted, nevertheless alcohol consumption in Italy is lower than in most of the countries of the European Union and has been decreasing constantly in the last forty years (European Community Health Indicators)[1]. Moreover in the Italian culture, where food and drinks have an important place as means of social interaction, there are several positive stereotypes towards alcohol (Beccaria & Prina, 2010). For all these reasons we could not automatically apply to Italy, that is a low drinking norms context, the results of the studies carried out in other countries (i.e. the USA or the UK).

The present study aims at comparing the effects of different predictors on the alcohol consumption of Italian young adults. On the ground of previous cited literature, four different types of predictors were considered: (1) socio-demographic characteristics (gender, age); (2) quality of social relations (Perceived social support); (3) Sensation seeking; (4) Drinking motives.

2 Method

2.1 Participants

The study involved 311 participants (43.1 % male, 56.9 % female) recruited through the assistance of student among undergraduate and graduate Italian students of Arts and Sciences schools. For her master's degree thesis, a graduate student in Psychology contacted other students attending courses of all the faculties of the University. Their average age was 22.71 years (SD = 2.79).

2.2 Measures

Data were gathered by means of a self-report questionnaire including different sets of indicators. The variables used in our analysis were:

1. Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al. 1988) composed by three subscales each one including 4 items (e.g. "I can talk about my problems with my family"; "My friends really try to help me"; "I have a special person who is a real source of comfort to me"). Items were rated on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The first subscale measures perceived support from Family (Cronbach's α = .90) the second from friends (α = .94) and the third one from a significant other (α = .96).

2. The Need Inventory of Sensation Seeking (NISS; Roth & Hammelstein, 2012) including 17 items rated on a 5-point Likert-type scale ranging from 1 (almost never) to 7 (almost always) belonging to two subscales measuring the Need for Stimulation (e.g. "I like to test my body's limits") (α = .84) and the Avoidance of Rest (e.g. "I like to take time out to relax") (α = .61).

3. The Italian version of the Drinking Motive Questionnaire Revised Short Form (DMQ-R SF; Kuntsche & Kuntsche, 2009; Mazzardis et. al, 2010), including 12 items. The instructions for participants were "In the last 12 months, how often did you drink . . .". Items belong to four subscales measuring different motives, Enhancement (e.g. "to get high?") (α = .80), Social (e.g. "because it helps you enjoy a party?") (α = .83), Coping (e.g. "to forget about

your problems?") ($\alpha = .84$), and Conformity (e.g. "to fit in with a group you like?") ($\alpha = .80$). Items were rated on a 5-point Likert-type scale ranging from 1 (almost never) to 5 (almost always).

4. A set of alcohol consumption indicators. Two items investigating the frequency of consumption of Beer[2] (a drink with a low alcohol content) and Spirits (drinks with a high alcohol content) on a 5-point Likert-type scale (1 = never; 5 = everyday) and one item investigating how many times the participants got drunk in the last year.

5. A brief list of socio-demographic items (i.e gender, age).

To test the influence of different groups of predictors on the alcohol consumption indicators we performed hierarchical regression analyses. Analyses were conducted using SPSS 20.

3 Results

3.1 Descriptive Statistics

Before regression analyses we performed descriptive statistics of dependent and independent variables. Concerning alcohol consumption on a 5-point scale participants have average values for both Beer (Mean = 2.99; SD = 1.17) and Spirits (Mean = 2.67; SD = 1.03). 37.4 % of the participants never got drunk in the last year whereas just 10.9% had been intoxicated at least 10 times (See figure 1). Concerning drinking behaviours the only significant gender difference (t = 2.46; p <.05) is on Beer consumption: males (Mean = 3.18; SD = 1.14) drink more beer than females (Mean = 2.85; SD = 1.18). Table 1 shows means and standard deviations of the subscales of MSPSS, NISS, and DMQ-R SF divided by gender. The differences between males and females were tested by mean of t test, the t values are reported in the same table. Females perceive more support from friends and from a significant other whereas males have higher Need for stimulation and Enhancement drinking motive. Table 2 presents the Pearson's correlation indices among scales. As expected all the subscales are significantly correlated with the other dimensions of the same scale. The two drinking motives with positive valence (Enhancement and Social) are correlated with

perceived support from friends whereas all the motives are correlated with Need for stimulation. The other dimension of the NISS (i.e. Avoidance of the rest) is correlated only with Conformity.

3.2 Hierarchical regression analyses

To test the influences of different predictors on alcohol consumption we performed three multiple regression analyses in which the consumption of Beer, Spirits, and the frequency of alcohol intoxication were regressed onto different groups of predictors. In all the models the predictors were entered in the analysis in four steps. In the first step we entered socio-demographic characteristics: gender (0 = male; 1 = female) and age. In the second step perceived social support was entered using the three subscale of MSPSS. Then in the third step the two Sensation seeking subscales (Need for Stimulation and Avoidance of Rest) were entered. Finally were entered the Drinking Motives.

The Beer consumption (see table 3) was positively influenced by perceived social support from Friends (β = .12) and by Enhancement drink motive (β = .38). Two predictors had a negative impact on Beer consumption: being female (β = -.11) and perceived social support from Significant Other (β = -.12). The regression model explained a good proportion of the variance of beer consumption (R^2 = .22). The Spirits consumption (see table 4) was positively influenced by perceived social support from Friends (β = .21), Need for Stimulation (β = .20), and Enhancement drink motive (β = .39). Perceived social support from Significant Other (β = -.12) and Conformity drink motive (β = -.17) had a negative impact on Spirits consumption. The model explained more than a third of the variance of Spirits consumption (R^2 = .37). Finally the Frequency of alcohol intoxication (see table 5) was positively influenced by perceived social support from Friends (β = .16), Enhancement (β = .32) and Social (β = .22) drink motives. The explained variance of the model was R^2 = .36.

4 Discussion

The present study aimed at comparing different predictors of alcohol consumption of university students in Italy. Participants in this study do not drink frequently. The consumption of both beer and spirits is not frequent and more than a third of the sample has never been intoxicated in the year preceding the research. In a study on an British sample of university students 56.1% of the participants binge-drank weekly (Atwell et. al., 2011). The main drinking motivations for participants are the ones based on the expectation to obtain positive outcomes from alcohol. The mean values of Enhancement and Social drink motives are higher compared to Coping and Conformity motives justifying the use of alcoholic drinks in order to avoid negative consequences. Participants do not use alcohol to deal with difficulties. Concerning predictors of alcohol consumption, gender only influences the consumption of beer. This result is consistent with a trend already reported in studies on university students conducted in the USA (Johnston et al. 2007; O'Malley & Johnston, 2002). Traditionally men drink more than women but in the last decades women have increased their consumption and that trend is more relevant among adolescents and college students. In the sample of the present study to be male is a predictor of a higher consumption of beer but not of spirits, nor of the frequency of alcohol intoxication. Concerning the quality of social relations, family support is not important for alcoholic behaviours whereas support from friends and from a special other have different impacts. The support from a special close relation, which in many case means a partner, has a negative effect on the frequency of consumption of both beer and spirits. On the contrary positive relations with friends are a predictor of all the alcoholic behaviours here investigated. The negative effect of close relations on alcohol consumption is interpretable as a consequence of their role in increasing individuals well-being and reducing stress, both variables are related to substance abuse (Simon & Barrett, 2010). Instead the more one's own social network is perceived as supportive the more alcohol consumption increases. The social interactions of young adults often take place in places such as pubs,night-clubs and parties where the alcohol consumption and the development of peer relations combine (Træen & Nordlund, 1993). In these settings social norms are strongly associated with drinking (LaBrie et. al.,

2009). It is possible that people more involved in social relations, which perceive them as more supportive, are also the ones more used to alcoholic behaviours. American and British studies (Borsari & Carey, 2001; Atwell et. al., 2011) maintain that normative beliefs influence alcohol consumption of university students. "The more students perceive other students to drink (descriptive norm) and approve of drinking (subjective norm), the higher their own reported usage." (Atwell et. al., 2010, page 254). We think that this interpretation could be used also for our Italian sample, but in any case further research is needed.

Drinking motives confirmed their role of most proximal antecedents of alcohol use (Cox & Klinger, 1988) being the strongest predictors of alcohol consumption. Entering them in the regression models predicting Beer consumption and Frequency of alcohol intoxication cancelled the effects of Need for stimulation confirming for these dependent variables the assumption of Cox and Klinger (1988) that personality factors influence alcohol consumption by way of their associations with drinking motives. Enhancement influences all the alcoholic behaviours here investigated and has always the strongest impact compared to all predictors. The Social drinking motive influences the frequency of intoxication whereas Conformity has a negative impact on Spirits consumption. This last result is difficult to interpret because usually drinking motives have a positive influence on alcohol consumption or do not have any influence at all. Maybe people motivated to drink for not feeling apart from the others do not think that spirits are useful for this aim but damaging. The age has no effect on the dependent variables but this is probably due to the homogeneity of the sample that has a low standard deviation.

The present study has some limitations. Social relations have been investigated indirectly (subjective perceptions), to make stronger interpretation about their relation with alcohol behaviours further research should use direct indicators of the characteristics of the participants' social networks. Also social norms deserve to be investigated with specific indicators that were not present in our study. These limitations are the starting points for further researches.

In general in our sample alcohol consumption is of social value, it is linked to positive social relations and is moved by positive rather than negative valence motivations. For university students alcohol is not a dysfunctional coping resource. The distinction between internal versus external motivations is not relevant. Alcohol consumption is not the response to relational problems. Nevertheless we should remember the particularity of the population investigated. Participants showed a moderate consumption of alcoholic drinks and in general university students have quite high socioeconomic level and quality of life. Further research is needed to test the same predictors on more disadvantaged and problematic young adults.

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Footnotes

[1] It is possible to consult the data on alcohol consumption in Europe using the Health in Europe Information and Data Interface (HEIDI) available on the website of the European Commission. http://ec.europa.eu/health-eu/my_lifestyle/alcohol/index_en.htm

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TABLES

Table 1. Scales descriptive statistics by gender: means, standard deviations, and t values.

	MALES		FEMALES		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**t**
MSPSS					
Family	5.49	1.42	5.69	1.39	-1.29
Friends	5.45	1.56	5.90	1.21	-2.86**
Significant Other	5.40	1.85	6.04	1.35	-3.51**
NISS					
Need for stimulation	2.91	.70	2.72	.61	2.46*
Avoidance of Rest	3.04	.66	3.09	.57	-.64
DMQ-R SF					
Enhancement	2.69	1.10	2.45	.99	2.05*
Social	2.63	1.07	2.43	.94	1.78
Coping	1.61	.73	1.66	.80	-.75
Conformity	1.44	.68	1.32	.58	1.63

** $p < .01$; * $p < .05$

MSPSS = Multidimensional Scale of Perceived Social Support ; NISS = Need Inventory of Sensation Seeking; DMQ-R SF = Drinking Motive Questionnaire Revised Short Form.

Table 2. Correlations among scales. Pearson's correlation indices.

	MSPSS			NISS		DMQ-R SF		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
MSPSS								
1. Family								
2. Friends	.29**							
3. Significant Other	.15**	.34**						
NISS								
4. Need for stimulation	-.08	-.02	.00					
5. Avoidance of Rest	-.01	-.06	.09	.26**				
DMQ-R SF								
6. Enhancement	-.05	.25**	.01	.27**	-.01			
7. Social	.02	.20**	-.03	.24**	.00	.69**		
8. Coping	-.03	.03	.00	.14*	.06	.37**	.38**	
9. Conformity	-.07	.01	-.09	.13*	.12*	.20**	.31**	.34**

** $p < .01$; * $p < .05$

MSPSS = Multidimensional Scale of Perceived Social Support ; NISS = Need Inventory of Sensation Seeking; DMQ-R SF = Drinking Motive Questionnaire Revised Short Form.

Table 3. Hierarchical regression analysis on frequency of Beer Consumption.

Predictors	Step 1	Step 2	Step 3	Step 4
Gender (1= Female)	-.17**	-.18**	-.16**	-.11*
Age	-.10	-.07	-.06	-.02
MSPSS				
Perceived support from Family		-.02	-.01	.02
Perceived support from Friends		.25**	.25**	.12*
Perceived support from Significant Other		-.13*	-.14*	-.12*
NISS				
Need for Stimulation			.14*	.04
Avoidance of Rest			.02	.05
DMQ-R SF				
Enhancement				.38**
Social				.08
Coping				-.08
Conformity				-.06
R^2 (corrected)	.03	.08	.09	.22

** $p < .01$; * $p < .05$

MSPSS = Multidimensional Scale of Perceived Social Support ; NISS = Need Inventory of Sensation Seeking; DMQ-R SF = Drinking Motive Questionnaire Revised Short Form.

Table 4. Hierarchical regression analysis on frequency of Spirits Consumption.

Predictors	Step 1	Step 2	Step 3	Step 4
Gender (1= Female)	-.13*	-.15*	-.11*	-.07
Age	-.18**	-.13*	-.11*	-.06
MSPSS				
Perceived support from Family		-.04	-.02	.01
Perceived support from Friends		.35**	.34**	.21**
Perceived support from Significant Other		-.12*	-.13*	-.12*
NISS				
Need for Stimulation			.30**	.20**
Avoidance of Rest			.06	.02
DMQ-R SF				
Enhancement				.39**
Social				.05
Coping				.06
Conformity				-.17**
R^2 (corrected)	.04	.13	.21	.37

** $p < .01$; * $p < .05$

MSPSS = Multidimensional Scale of Perceived Social Support ; NISS = Need Inventory of Sensation Seeking; DMQ-R SF = Drinking Motive Questionnaire Revised Short Form.

Table 5. Hierarchical regression analysis on Frequency of alcohol intoxication.

Predictors	Step 1	Step 2	Step 3	Step 4
Gender (1= Female)	-.13*	-.16**	-.13*	-.07
Age	-.15**	-.11*	-.10	-.03
MSPSS				
Perceived support from Family		-.14*	-.12*	-.09
Perceived support from Friends		.31**	.30**	.16**
Perceived support from Significant Other		-.01	-.02	.02
NISS				
Need for Stimulation			.22**	.08
Avoidance of Rest			-.01	.01
DMQ-R SF				
Enhancement				.32**
Social				.22**
Coping				.04
Conformity				.03
R^2 (corrected)	.03	.11	.15	.36

** $p < .01$; * $p < .05$

MSPSS = Multidimensional Scale of Perceived Social Support ; NISS = Need Inventory of Sensation Seeking; DMQ-R SF = Drinking Motive Questionnaire Revised Short Form.
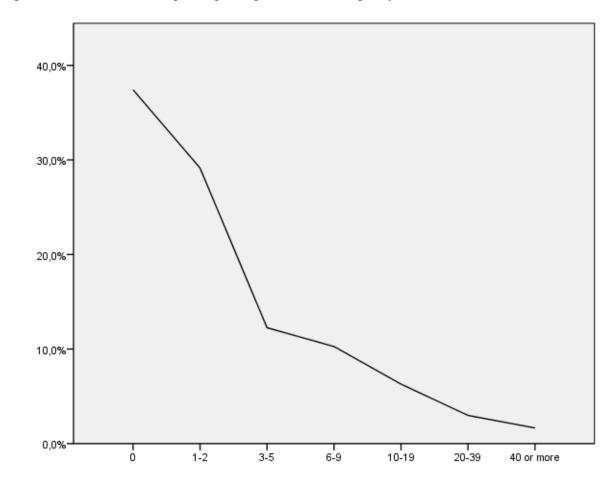
Figure 1. Number of times participants got drunk in the past year.