

Spanish adaptation of the Expectancy Questionnaire (EQ) about alcohol effects in adolescents

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Abstract

Background: Alcohol-related expectancies are especially relevant in relation to alcohol consumption during adolescence. The main aim of this study was to adapt and translate into Spanish (Castilian) the Expectancy Questionnaire (EQ), and to study its psychometric properties in adolescents. **Method:** The sample was composed of 514 adolescents (57.20% female, mean age = 15.21; SD = .63) who completed the EQ and the alcohol consumption questionnaire AIS-UJI. **Results:** Confirmatory factor analysis indicated that an eight-factor model, grouped into two general factors of positive and negative expectancies, had acceptable fit indices. Cronbach's alphas ranged from .75 to .96. Finally, the structural equation model showed that positive expectancies were positively related to alcohol use, whereas negative expectancies were negatively related to drinking. **Conclusions:** Results showed that the Spanish version of the EQ for adolescents is a valid and reliable questionnaire to measure expectancies about alcohol effects.

Keywords: expectancies, alcohol, adolescents, EQ.

Resumen

Adaptación española del Cuestionario de Expectativas (EQ) sobre los efectos del alcohol en adolescentes. **Antecedentes:** las expectativas sobre los efectos del alcohol es un factor especialmente relevante en el consumo de alcohol en la adolescencia. El objetivo del presente trabajo fue adaptar y traducir al castellano el Cuestionario de Expectativas (EQ), y estudiar sus propiedades psicométricas en adolescentes. **Método:** la muestra estuvo compuesta por 514 adolescentes (57,20% chicas, edad media 15,21; DT = .63) que cumplimentaron la versión española del EQ y el cuestionario de consumo de alcohol AIS-UJI. **Resultados:** el análisis factorial confirmatorio mostró que un modelo jerárquico de ocho factores agrupados en dos factores generales de expectativas positivas y negativas presentaba índices de ajuste aceptables. Los alfas de Cronbach de las escalas fueron de .75 a .96. Finalmente, el modelo de ecuaciones estructurales mostró que las expectativas positivas se relacionaron positivamente con el consumo de alcohol y las expectativas negativas lo hicieron en sentido opuesto. **Conclusiones:** los resultados del presente trabajo indican que la versión española del EQ es un cuestionario fiable y válido para la evaluación de las expectativas sobre los efectos del alcohol en adolescentes.

Palabras clave: expectativas, alcohol, adolescentes, EQ.

Alcohol outcome expectancies refer to beliefs about the positive and negative effects that this substance produces at emotional, motivational, and behavioural level (Jones, Corbin, & Fromme, 2001). These beliefs develop fundamentally through vicarious learning and by means of direct contact with alcohol (Zucker, Donovan, Masten, Mattson, & Moss, 2008). Therefore, it is possible to have expectancies about alcohol before trying it, although they may be modified as one comes into contact with this substance. In turn, alcohol consumption would be modified by one's own expectancies (Read, Lau-Barraco, Dunn, & Borsari, 2009). Consequently, it has been proposed that the decision to drink alcohol may be guided, in part, by the belief that its consumption results in positive consequences (i.e., "If I drink alcohol, I will be

friendlier"). In contrast, beliefs about the negative consequences of alcohol (i.e., "If I drink alcohol, I will have a hangover") would reduce its use (Jones et al., 2001). Accordingly, several alcohol abuse prevention programmes for youngsters have incorporated expectancy modification as an important component, with positive results, at least in the short term (Scott-Sheldon, Terry, Carey, Garey, & Carey, 2012).

Although alcohol outcome expectancies are relevant in any age group, they tend to peak during adolescence, especially the positive ones (Pabst, Baumeister, & Kraus, 2010; Leigh & Stacy, 2004). Thus, positive expectancies about alcohol effects in adolescence have been associated with its consumption, the frequency of alcohol intoxication, abuse, alcohol-derived problems, or poly drug use, both in cross-sectional (Catanzaro & Laurent, 2004; Greenfield, Harford, & Tam, 2009; Pabst et al., 2010; Leigh & Stacy, 2004; Urbán, Kökönyei, & Demetrovics, 2008) and longitudinal studies (Patrick, Wray-Lake, Finlay, & Maggs, 2010; Corbin, Iwamoto, & Fromme, 2011; Cranford, Zucker, Jester, Puttler, & Fitzgerald, 2010). Results on negative expectancies are less conclusive. Whereas some cross-sectional studies have

related negative expectancies to lower alcohol consumption (Leigh & Stacy, 2004; Urbán et al., 2008), others have found a positive relationship (Pabst et al., 2010; Greenfield et al., 2009). Moreover, longitudinal studies indicate that negative expectancies either may not be relevant (Patrick et al., 2009) or may play a protective role (Corbin et al., 2011; Cranford et al., 2010). Although the function of negative expectancies is far from clear, it has been suggested that positive expectancies may motivate the initiation and maintenance of drinking, whereas negative expectancies could influence its cessation (Jones et al., 2001; Leigh & Stacy, 2004). Nonetheless, negative expectancies have received less research attention than positive ones. Consequently, more studies are required on negative expectancies (Jones et al., 2001; Patrick et al., 2009).

One of the main reasons why less attention has been paid to negative expectancies was the predominance of the Alcohol Expectancy Questionnaire (AEQ, Brown, Goldman, Inn, & Anderson, 1980), which was designed to assess only positive expectancies (Jones et al., 2001). This limitation, together with other conceptual and psychometric considerations, led to the elaboration of more comprehensive scales that include both positive and negative expectancies (Leigh & Stacy, 1993; Fromme, Stroot, & Kaplan, 1993). Accordingly, Leigh and Stacy (1993) developed the Expectancy Questionnaire (EQ), a relatively brief test that describes positive and negative expectancies. The exploratory and confirmatory factor analyses performed in two independent samples of undergraduate students showed a hierarchical structure, in which the 34 items were grouped into eight specific expectancies that, in turn, were grouped into two general factors of positive and negative expectancies. The positive factor comprised expectancies about social facilitation (social positive), positive affect potentiation (fun), sexual disinhibition (sex) and stress relief (tension reduction); the negative factor included expectancies about the antisocial effects of alcohol (social negative), negative emotional states (emotional negative), undesirable physical effects (negative physical effects) and cognitive impairments (negative cognitive effects). In addition, the authors found that positive expectancies were related to alcohol use, especially the positive affect potentiation narrow factor, whereas negative expectancies were inversely associated with alcohol consumption.

Although the EQ was developed for young adults, it has been successfully used in adolescents (Catanaro & Laurent, 2004; Leigh & Stacy, 2004; Urbán et al., 2008). However, Schafer and Leigh (1996) used 27 out of the 34 EQ items and found a three-factor structure in adolescents, with sexual expectancies emerging as an independent factor beyond positive and negative expectancies. In contrast, Urbán et al. (2008) found a good fit to the original structure when they performed a confirmatory factor analysis in Hungarian adolescents. Other studies with different expectancy questionnaires have reported factor structures in adolescents very similar to those described with the EQ. For example, Fromme et al. (1993) found that the Comprehensive Effects of Alcohol (CEOA) questionnaire had a hierarchical structure of seven narrower factors, grouped into two factors of positive and negative expectancies. The more specific expectancies were practically the same as those assessed by the EQ, with some minor differences: physical and cognitive negative expectancies were grouped into a single factor, and a new factor of “liquid courage” was found instead of the “positive affect potentiation” factor. Recently, Pilatti, Godoy, & Brussino (2010) developed a Spanish expectancy questionnaire in Argentinian adolescents, the “Cuestionario de expectativas hacia

el alcohol para adolescentes” (CEA-A). They found a structure of six narrower factors that were grouped into two positive and negative factors. These specific expectancies were the same as those described in the EQ, but the questionnaire did not include expectancies of positive affect potentiation, and physical and cognitive negative expectancies were grouped into a single scale. As positive affect regulation is one of the main etiological pathways involved in alcohol use and abuse (Ibáñez, Ruipérez, Villa, Moya, & Ortet, 2008; Sher, Grekin, & Williams, 2005), we consider that its measurement gives the EQ an advantage over other expectancy questionnaires in the comprehensive study of the mechanisms implied in alcohol consumption.

The main aim of the present study was to develop a Spanish version of the Expectancy Questionnaire (EQ; Leigh & Stacy, 1993). The EQ is a comprehensive but relatively brief questionnaire that assesses different positive and negative expectancies, including expectancies about positive affect potentiation, which is not usually assessed in other questionnaires. Affect potentiation refers to one of the most relevant etiological mechanisms involved in alcohol use and abuse. We examined the EQ’s reliability and validity in a sample of Spanish adolescents.

Method

Participants

A sample of 514 adolescents (57.20% female) answered the EQ (Leigh & Stacy, 1993). The age range was from 14 to 17 years (mean age = 15.21; SD = .63). A total of 81.1% were born in Spain, 11.3% were foreigners, and 7.6% did not complete the questionnaire. A subsample of 428 participants (183 males and 245 females, mean age = 15.18; SD = .61) also completed a self-report on alcohol consumption (AIS-UJI, Grau & Ortet, 1999). Although this subsample showed slight differences from the total sample in age ($t = 2.63$; $p = .01$) and gender ($\chi^2 = 10.65$; $p = .00$), they did not show significant differences in the EQ expectancy scores.

Procedure

In order to translate and adapt the EQ to the Spanish context, various experts on expectancies wrote the Spanish EQ items from the original English scale. A back-translation was then carried out by a native English speaker and compared to the original questionnaire. This process resulted in a Spanish version that could be considered comparable to the original. Afterwards, the questionnaire was administered to participants in seven high schools in both urban and rural areas. A trained psychologist administered the EQ in a first session. Approximately one week later, the AIS-UJI scale was administered in six of the initial seven centres in a second session. This is why not all of the participants that answered the EQ completed the AIS-UJI.

Instruments

Expectancy Questionnaire (EQ, Leigh & Stacy, 1993). The scale consists of 34 items in a 6-point Likert format (endpoints 0 = *no chance* and 5 = *certain to happen*) measuring positive and negative expectancies about alcohol consumption. Items take the form of short phrases prefaced by *When I drink alcohol...* Respondents were instructed to indicate the likelihood that the indicated effects

or consequences would happen to them when they drink. Abstainers were told to answer according to what they thought would happen if they were to drink. The original questionnaire presented adequate reliability indices, ranging from .73 for the tension-reduction scale to .91 for the sex scale; as well as .94 for positive expectancies and .88 for negative expectancies.

Alcohol Intake Scale - UJI (AIS-UJI, Grau & Ortet, 1999). This is a self-report scale comprised of 21 items that assesses alcohol consumption. Participants had to indicate the frequency in which they drink alcohol on a 5-point scale (from 0 = *never* to 5 = *daily*). Respondents also specified the quantity of drinks (units) of beer and wine (10 grams of alcohol) and liquors and mixed drinks (20 grams of alcohol).

Data analyses

We conducted a Confirmatory Factor Analysis (CFA) to examine the structure of the EQ. The Satorra-Bentler (2001) robust method was used, due to the non-normally distributed data. CFI, IFI, and NFI indices $\geq .95$ and RMSEA $\leq .05$ indicate an adequate data fit to the model, while CFI, IFI, and NFI values between .90 and .95 show an acceptable fit. RMSEA lower than .08 is also acceptable. We used the AIC to compare the different models to each other. Lower AIC values indicate higher parsimony (Byrne, 2006).

Cronbach's alpha was used to assess the internal consistency of the EQ scales. In addition, we compared EQ scores between genders and between alcohol users and abstainers.

Finally, in order to explore the relationship between expectancies and alcohol use, correlation and structural equation modelling (SEM) analyses were carried out in the subsample that answered both the EQ and the AIS-UJI questionnaires. We used version 21 of the SPSS (IBM, 2012) for the correlation analyses, mean comparisons and alpha coefficients; and the EQS 6.1 (Bentler, 2006) for the SEMs.

Results

Confirmatory factor analysis

First, an eight-factor hierarchical model was proposed (initial model, Leigh & Stacy, 1993), in which items were loaded in the corresponding scales (social positive, fun, sex, tension reduction, social negative, emotional negative, physical negative and cognitive negative) and these scales were grouped into two second-order factors: positive expectancies (social positive, fun, sex and tension reduction) and negative expectancies (social negative, emotional negative, physical negative and cognitive negative). Loadings of each item on the factor-scale that they were assigned were adequate, as were the eight first-order factors loaded on the intended second-order factor (Brown, 2006) (see Table 1). Furthermore, we tested the goodness of fit of the three-factor model proposed by Schafer & Leigh (1996). In both models, the higher-order factor variances were fixed to 1. Moreover, in the hierarchical model, the first item path to each first-order factor was fixed to 1. The goodness of fit indices showed that the hierarchical model of two higher-order factors had a better fit to the data (χ^2_{S-B} (518, N = 514) = 1325.33, $p < .001$; NFI = .89; CFI = .93; IFI = .93; RMSEA = .06; AIC = 289.33) than the three-factor model (χ^2_{S-B} (524, N = 514) = 3881.78, $p < .001$; NFI = .71; CFI = .74; IFI = .73; RMSEA = .11; AIC = 2833.78), with similar indices to those found in the original

study in adults (Leigh & Stacy, 1993). Moreover, this hierarchical structure showed configural and factorial invariance of the EQ between genders (multi-group analyses will be provided by the authors upon request).

Reliability analysis

Cronbach's alpha reliability coefficients of positive (total = .95, females = .95, males = .96) and negative (total = .91, female = .91, male = .92) expectancy second-order domains and the eight primary EQ scales were adequate (ranging from .75 to .93, see Table 1) (Kaplan & Saccuzzo, 2009), and slightly better than those obtained in the original study.

Comparison between groups

The EQ scale mean scores, *SDs*, and *t*-tests are presented in Table 2. In the total sample, the mean scores showed that positive expectancies were informed more frequently than negative ones. At the level of first order factors, expectancies about alcohol's effects on sex and socially negative (associated with antisocial behaviours) factors were informed less frequently by women. In relation to alcohol consumption, alcohol users were informed of a higher number of positive expectancies in general, especially positive affect potentiation (fun). There were no significant differences in negative expectancies, except in the cognitive negative factor, for which alcohol users had higher expectancies.

Criterion validity

Finally, we analysed the relationship between expectancies and alcohol consumption. Bivariate correlations between EQ scales and AIS-UJI are presented in Table 3. Positive expectancies were associated with frequency and quantity of alcohol use, especially expectancies of positive affect potentiation (fun), whereas negative expectancies were not related to alcohol use, with the exception of social negative and cognitive negative expectancies, which were slightly but significantly positively correlated to alcohol use.

We proposed a structural equation model in which the eight EQ subscales were grouped into two positive and negative expectancies, which in turn predicted alcohol consumption. As predicted, the results indicated that positive expectancies were positively related to drinking, whereas negative expectancies prevented alcohol use (see Figure 1), in line with the original EQ study (Leigh & Stacy, 1993). The goodness of fit indices were acceptable (χ^2_{S-B} (582, N = 428) = 1244.83, $p < .001$; NFI = .87; CFI = .93; IFI = .93; RMSEA = .05). The structural model accounted for 16.7% of the alcohol consumption variance.

Discussion

The main aim of this study was to adapt the EQ (Leigh & Stacy, 1993) to the Spanish sociocultural context, and to analyse its psychometric properties in adolescents. The CFA goodness of fit indices indicated that the eight primary-factor structure, which in turn was grouped into two higher-order factors of positive and negative expectancies, fitted the data better than a model with three factors. Moreover, the internal consistency reliability coefficients of the eight subscales, and the broad positive and negative expectancies, were adequate. These findings are in accordance with

Table 1
Standardized Factor Loadings (SL) and Standard Errors (SE) of the Hierarchical 8-Factor Model

Items	S+		F+		Sex		T+		S-		E-		P-		C-	
	SL	SE	SL	SE	SL	SE	SL	SE	SL	SE	SL	SE	SL	SE	SL	ES
1. I am more accepted socially (Soy más aceptado socialmente)	.58	.05														
9. I am more outgoing (Soy más extrvertido/a)	.72	.06														
16. It is easier for me to socialize (Me es más fácil socializarme)	.81	.05														
23. I am able to talk more freely (Puedo hablar con más libertad)	.80	.05														
28. I am friendlier (Soy más amigable)	.87	.04														
32. I feel more social (Me siento más social)	.85	.04														
3. I enjoy the buzz (Disfruto de la sensación de animación)			.78	.05												
10. I feel happy (Me siento feliz)			.82	.05												
18. I have a good time (Me lo paso bien)			.88	.05												
25. It is fun (Es divertido)			.84	.05												
30. I feel pleasant physical effects (Siento efectos físicos agradables)			.58	.05												
33. I feel good (Me siento bien)			.88	.04												
5. I have more desire for sex (Tengo más deseo sexual)					.87	.04										
12. I become more sexually active (Me hace más activo sexualmente)					.83	.05										
19. I am more sexually responsive (Muestro más interés por el sexo)					.89	.04										
27. I am more sexually assertive (Soy más asertivo/a sexualmente)					.88	.04										
7. It takes away my negative moods and feelings (Elimina mis sentimientos y estados de ánimo negativos)							.72	.05								
14. I feel less stressed (Me siento menos estresado)							.78	.05								
21. I am able to take my mind off my problems (Soy capaz de evadirme de los problemas)							.77	.05								
2. I become aggressive (Me vuelvo agresivo/a)									.69	.06						
11. I get into a fights (Me meto en peleas)									.76	.06						
20. I get mean (Me vuelvo egoísta)									.85	.04						
4. I feel ashamed of myself (Me siento avergonzado/a de mi mismo/a)											.64	.06				
13. I feel guilty (Me siento culpable)											.76	.05				
22. I feel sad or depressed (Me siento triste o deprimido/a)											.73	.05				
6. I feel sick (Siento náuseas)													.68	.05		
15. I get a hangover (Tengo resaca)													.66	.06		
24. I experience unpleasant physical effects (Experimento efectos físicos desagradables)													.72	.04		
29. I get a headache (Tengo dolor de cabeza)													.72	.05		
8. I am less alert (Estoy menos alerta)															.70	.06
17. I become clumsy or uncoordinated (Me vuelvo torpe o descoordinado/a)															.78	.04
26. I have problems driving (Tengo problemas para caminar derecho)															.78	.04
31. I can't concentrate (No puedo concentrarme)															.80	.04
34. I have problems with memory and concentration (Tengo problemas de memoria y concentración)															.75	.05
Positive expectancies	.94	.05	.90	.06	.69	.05	.96	.05								
Negative expectancies									.72	.05	.74	.05	.93	.05	.92	.06
α total sample	.90		.91		.93		.78		.82		.76		.79		.88	
α males	.90		.92		.91		.81		.82		.75		.78		.89	
α females	.90		.90		.93		.79		.79		.77		.80		.86	

Note: S+ = Social positive; F+ = Fun; Sex; T+ = Tension reduction; S- = Social negative; E- = Emotional negative; P- = Physical negative; and C- = Cognitive negative

the original study by Leigh and Stacy (1993) in university students, and that of Urban et al. (2008) in adolescents. However, the results do not support a three-factor structure of positive, negative, and sexual expectancies, as found by Schafer and Leigh (1996). Other factorial studies using different expectancy questionnaires obtained very similar results (Fromme et al., 1993; Pillati et al., 2010).

Regarding the association between expectancies and alcohol consumption in adolescents, we found that positive expectancies were clearly related to drinking. Therefore, participants who had higher positive expectancies drank more alcohol, in line with previous research (Catanzaro & Laurent, 2004; Corbin et al., 2011; Cranford et al., 2010; Greenfield et al., 2009; Pabst et al., 2010; Leigh & Stacy, 1993, 2004; Patrick et al., 2009; Urbán et al., 2008). Furthermore, positive affect potentiation expectancies were the most closely related to alcohol consumption, and also showed significant differences between alcohol users and abstainers. This

confirms the idea that alcohol's effects associated with positive affect potentiation are an etiological pathway that is especially relevant in alcohol use and abuse (Ibáñez et al., 2008; Sher et al., 2005).

The results for negative expectancies are contradictory. On the one hand, drinkers were informed of a higher number of specific negative expectancies than abstainers, i.e. *more* expectancies about cognitive impairment. In addition, this scale, together with the social negative scale, showed a modest, albeit significant association with *greater* alcohol use. This positive relationship has been found in other studies (Pabst et al., 2010; Greenfield et al., 2009), and suggests that drinkers tend to experience more positive and negative effects, so they are informed of a higher number of both expectancies (Hasking, Lyvers, & Carpio, 2011). On the other hand, the structural equation modelling showed that negative expectancies had a low but significant *inverse* relationship to

Table 2
Means, standard deviations, and t-tests associated with gender and drinkers-abstainers

EQ Scales	Total (N = 514)	Males (N = 220)	Females (N = 294)	t	Drinkers (N = 250)	Abstainers (N = 178)	t
Social+	2.18(1.20)	2.13(1.20)	2.23(1.20)	-.94	15.27(6.33)	10.10(7.03)	7.96***
Fun+	2.49(1.24)	2.47(1.31)	2.51(1.20)	-.36	17.71(5.86)	10.92(7.48)	10.53***
Sex+	1.62(1.32)	1.94(1.36)	1.37(1.23)	4.90***	7.78(5.18)	4.48(4.50)	6.83***
Tension-reduction	2.06(1.23)	2.06(1.28)	2.08(1.19)	-.44	7.06(3.37)	4.88(3.66)	6.37***
Social-	.97(1.05)	1.20(1.11)	.79(.96)	4.35***	2.76(2.83)	2.83(3.32)	-.21
Emotional-	1.14(1.01)	1.11(1.01)	1.16(1.00)	-.62	3.36(2.73)	3.64(3.38)	-.98
Physical-	1.76(1.16)	1.71(1.15)	1.80(1.17)	-.87	7.01(3.97)	7.02(5.41)	-.03
Cognitive-	2.05(1.21)	2.10(1.26)	2.00(1.17)	.95	11.00(5.35)	8.99(6.39)	3.54**
Exp +	8.37(4.36)	8.59(4.61)	8.20(4.17)	1.02	47.82(17.48)	30.38(20.11)	9.56***
Exp -	5.91(3.62)	6.12(3.73)	5.76(3.54)	1.10	24.14(11.78)	22.49(16.12)	1.22

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; Exp+ = Positive expectancies; Exp- = Negative expectancies

Table 3
Bivariate correlations among all scales

	S+	F+	Sex	T+	S-	E-	P-	C-	Exp+	Exp-	Qn	Freq
S+	-											
F+	.80***	-										
Sex	.60***	.61***	-									
T+	.75***	.76***	.55***	-								
S-	.33***	.27***	.49***	.34***	-							
E-	.32***	.19***	.35***	.32***	.50***	-						
P-	.40***	.39***	.41***	.44***	.55***	.55***	-					
C-	.62***	.60***	.51***	.66***	.52***	.48***	.72***	-				
Exp+	.92***	.93***	.78***	.85***	.39***	.32***	.46***	.68***	-			
Exp-	.54***	.49***	.54***	.57***	.74***	.72***	.89***	.89***	.60***	-		
Qn	.24***	.32***	.27***	.27***	.10*	-.09	.04	.15**	.32***	.08	-	
Freq	.23***	.33***	.28***	.25***	.13**	-.07	.02	.14**	.31***	.08	.77***	-

Note: * $p < .05$; ** $p < .01$; *** $p < .001$. S+ = Social positive; F+ = Fun; Sex; T+ = Tension reduction; S- = Social negative; E- = Emotional negative; P- = Physical negative, and C- = Cognitive negative. Exp+ = Positive expectancies; Exp- = Negative expectancies; Qn = Alcohol quantity; Freq = Alcohol frequency

alcohol consumption. This may suggest a certain protective role of negative expectancies when the effects of positive ones are controlled, in accordance with other research (Corbin et al.,

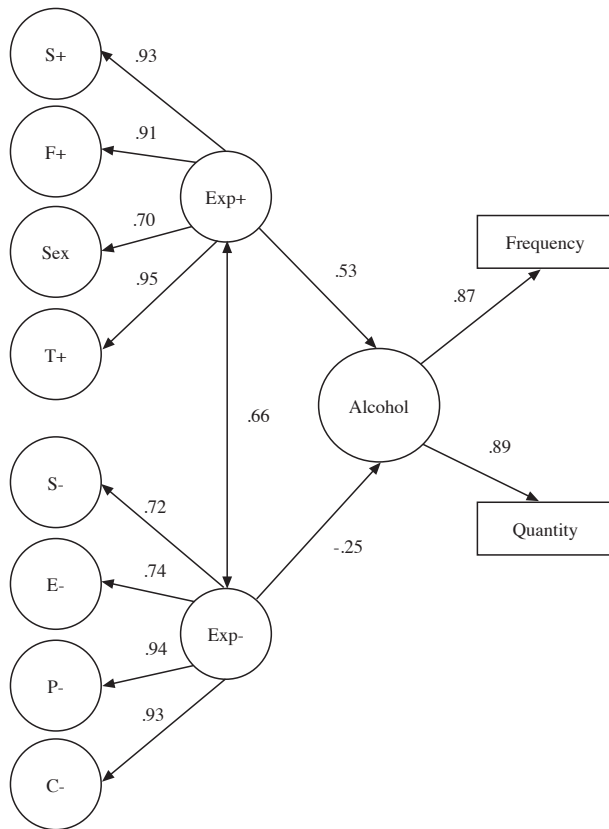


Figure 1. Structural equation model. Note: Circles represent first- and second-order factors. All parameters were significant at $p < .001$. Standardized betas are presented. Items and estimation errors are not shown due to restricted space. S+ = Social positive; F+ = Fun; Sex; T+ = Tension reduction; S- = Social negative; E- = Emotional negative; P- = Physical negative; and C- = Cognitive negative; Exp+ = Positive expectancies; Exp- = Negative expectancies

2011; Cranford et al., 2010; Leigh & Stacy, 2004; Urbán et al., 2008). Alternatively, the results could be attributed to a statistical suppression effect (Leigh & Stacy, 2004). The suppression effect is a situation in which a predictor variable that is uncorrelated with the outcome variable can nonetheless improve prediction when it is added to the equation. This pattern occurred in cases in which the new apparently invalid predictor (i.e., negative expectancies) was correlated with a predictor (i.e. positive expectancies) that were already in the equation (for a detailed discussion of suppression effects, see Paulhus, Robins, Tzresniewski, & Tracy, 2004).

In short, our data suggest that positive expectancies may play a relevant role in alcohol use in adolescents, whereas negative expectancies may be less important and have an unclear impact. Given that our research is cross-sectional, which is one of its limitations, we cannot determine whether negative expectancies increase after experiencing alcohol's effects, or are a protective factor for drinking. Hence, prospective longitudinal studies should be carried out to clarify the nature of relationships between expectancies and alcohol consumption, especially with respect to negative expectancies. Moreover, the percentage of variance accounted for by expectancies is low. That is, other variables contribute to drinking behaviour in youngsters, which is another limitation of the study. A comprehensive approach to the causal, mediator and modulator variables of alcohol consumption in adolescents should also include other relevant psychological and social variables, such as personality, motives for drinking, peers' consumption and parental rearing styles, among others (Ibáñez et al., 2008; Sher et al., 2005).

In conclusion, this study presents the psychometric properties of the EQ in Spanish adolescents. It provides researchers and applied psychologists with a reliable and valid scale in Spanish for the assessment of one of the most relevant factors in alcohol consumption in adolescence: expectancies about alcohol's effects.

Acknowledgements

This study was supported by research projects PNSD2009-019 from the Spanish Ministry of Health, P1-1B2010-40 and P1-1B2011-47 from Bancaixa-Universitat Jaume I.

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