CIENT PERIODIQUE

Development of an Evaluation Scale On the Reasons for Drug Use: Validation for Portuguese Youth and Their Relation to Risk Behaviours

Marta Reis[1,2,3*], Gina Tomé[1,2,4], Lúcia Ramiro[1,2], Fábio Botelho Guedes[1,2], Filipa Coelhoso[1,2,5] & Margarida Gaspar de Matos[1,2]

[1]*University of Lisbon, Faculty of Human Motricity (Social Adventure Team), Portugal*

[2]*Institute of Environmental Health, Faculty of Medicine, University of Lisbon, Portugal*

[3]*Bolseira Pós Doutoramento FCT SFRH/BPD/110905/2015*

[4]*Bolseira Pós Doutoramento FCT SFRH/BPD/108637/2015*

[5]*ISCE – Instituto Superior de Lisboa e Vale do Tejo, Portugal*

***Correspondence to:** Dr. Marta Reis, University of Lisbon, Faculty of Human Motricity (Social Adventure Team), Institute of Environmental Health, Faculty of Medicine, University of Lisbon & Bolseira Pós Doutoramento, Portugal.*

Copyright

Abstract

The main objective of this study was to validate a construct, the scale of 11 items on the reasons for consuming drugs for a sample of young people in Portugal. It intends to reflect on the main reasons why young people use drugs, as well as whether these are associated with characteristics of youth groups and risk behaviours, such as gender, attendance of higher education, sexual intercourse with occasional partners, sexual intercourse under the influence of alcohol and/or drugs, and self-harm

behaviour. The study includes 1166 young people, with an average age of 21.1 years, 72.3% being female. More than one third of the participants reported having had sexual intercourse under the influence of alcohol or other drugs (39.2%) and 23.5% reported having occasional sexual partners. 16.9% of the participants reported having drug use and 10.6% reported having self-harm behaviours. Three main reasons for drug use were identified, namely personal satisfaction with social reasons, social integration, and reasons for dealing with uneasy situations or to overcome difficulties and relieve feelings that generate unease (coping). Regarding risk behaviours, a significant relationship was found between the reasons for drug use, suggesting the need for the development of public policies aimed at education and health promotion.

Introduction

Late adolescence and young adulthood have often been characterized as a time of increased experimentation and exploration with a range of risk behaviours, including substance use [1,2].

It is important to understand why young people might choose to use drugs and to consider this in the context of youth and youth culture. Life can be difficult for many young people as they work to define their identities and deal with many of the pressures of adolescence. While adolescence is a period of discovery, fun and achievement, it can sometimes be a confusing time for some young people. Frustration, anger and trauma can result from environmental and individual circumstances. It is therefore, important to consider that drug use may be due to certain aspects of a young person's situation, and may be used as a mechanism for coping with such pressures [2,3], argues that the greater the coping strategies of adolescents, the lower the consumption of illegal substances, as well as the very intention to come to consume / experiment one day.

It is also important to understand that adolescence is also a time of happiness, experimentation, celebration and fun and just as adults derive pleasure from using drugs, so can young people. Sharing a drunk time with friends can be a bonding experience. It can heighten a sense of group membership and belonging [4,5]. Risk-taking is also a normal part of development and experimenting with psycho-active drugs is just one of the many risks that some young people will take during this time of great change.

A wide range of literature supports the assumption that substance use behaviours are driven by different needs, such as socializing with friends or escaping negative mood, that result in diverse consequences [6,7]. Although for most people, using drugs is just another way of altering consciousness that is not so different from many other recreational activities. However, for the relatively small number of people who develop more compulsive drug-using patterns, drug use is not just about having fun, relaxing or for 'partying'. It usually serves a deeper purpose (such as helping enhance identity, acceptance, and reducing psychological distress or a sense of alienation) [6,7].

In turn, substance use has been implicated in increasing the likelihood for participation in risk behaviours. Substance use among adolescents and young adults has been shown to co-occur with a range of other risk behaviours including drinking, sexual activity, violence, self-harm and suicide [8-12].

International [13] and national [14,15] studies with adolescents and young people on the reasons for drinking alcohol, reiterate this association of substance use with other risk behaviours, and which jeopardize well-being and health.

According to the national study Health Behaviour in School-Aged Children (HBSC), carried out in 2018 in Portugal with young people from the 6th, 8th and 10th year, at least 3.9% of the young people reported having used illegal drugs at least once in the last month, and the prevalence of drug use in the last month, more than once, is higher in boys (5.5%), compared to girls (1.6%). It is the older youths who present the greatest drug consumption habits. Regarding the self-harm behaviour 19.6% reported having done so. An as for having sexual intercourse associated with the consumption of substances, it was found that 15.7% of young people said they had this risk behaviour [16].

In another study on health behaviours, conducted nationally with university students in Portugal, between 18 and 35 years old, it was found of the 10.2% young people who report using drugs in the last month, more than a quarter mention doing it regularly (26.2%). It is men who report more frequent consumption than women. Regarding self-harm behaviour, 7.9% reported having done so. And as for having sexual intercourse associated with the consumption of alcohol or drugs, 12.2% reported having done so. No differences were found between men and women regarding having self-harm behaviour and sexual intercourse associated with the consumption of alcohol or drugs [17].

Thus, on the one hand, there is a need to reflect on the reasons that lead young people to experiment and consume drugs, and on the other hand, it becomes relevant to know the relationship between the consumption of drugs and some risk behaviours of young people and their consequences for the implementation of public policies to prevent and intervention the consumption of drugs in this stage of growth and development.

The main objective of this study was to validate a construct, the scale of 11 items on the reasons for consuming drugs for a sample of young people in Portugal. It intends to reflect on the main reasons why young people use drugs, as well as whether these are associated with characteristics of youth groups and risk behaviours, such as gender, attendance of higher education, sexual intercourse with occasional partners, sexual intercourse under the influence of alcohol and/or drugs, and self-harm behaviour.

Methodology

Procedure

The national survey "Life without AIDS" aimed to ascertain knowledge, attitudes, beliefs, skills and behaviours of young people regarding HIV/AIDS.

This cross-sectional study was carried out between April and June 2017 with an evaluation protocol that was administered to young people. All Portuguese universities, both public and private, were invited to participate and the partners of this study - SCHOOL and IPDJ - also invited all young people between the ages 18 and 24 to participate in it. In a first phase, and responding to a first contact by e-mail to 21 public and private universities of mainland Portugal and islands; to all university student associations; and contacts

made by partners (SCHOOL and IPDJ), 816 young people participated. The contacts were repeated, this time directed directly to university professors, to the Presidents of the Student Associations, and to the partners of the study (SCHOOL and IPDJ) who were responsible for disseminating the study to the young people. In order to protect participants and their anonymity, no information regarding identity was put on the questionnaires. Confidentiality of the data was also guaranteed.

The data collection protocol complied with the ethical guidelines and the consent of the participants was obtained. The study was submitted to the Ethics Committee of Santa Maria Hospital and followed all the guidelines and ethical norms of human research. Because the study preserves anonymity, it does not need the approval of the data protection commission in Portugal. A convenience sample of young people aged between 18 and 24 years was used.

The instrument included sociodemographic variables, have used drugs in the last 12 months, reasons for drug use, having sexual intercourse, having sexual intercourse with occasional partners, having sexual intercourse under the influence of alcohol and/or drugs, self-harm behaviour and other issues related to knowledge, attitudes, and behaviours in relation to HIV/AIDS, outside the scope of this study.

Participants

The study involved 1166 young people, with a mean age of 21.1 years old (SD = 1.92), ranging from 18 to 24 years old, broken down into two groups: the group of young university students (N=914; 78.4%), consisting mostly of young people from the university network (N=875), which also included 30 young people from the SCHOOL network together with 9 from the IPDJ network; and the group of young non-university students (N=252; 21.6%), consisting mostly of young people from the SCHOOL network (N=220), along with 32 young people from the IPDJ network. The majority of the participants are Portuguese (96.2%), female (72.3%) and having had sexual intercourse (89.6%) in the last 12 months. More than one third of the participants reported having had sexual intercourse under the influence of alcohol or other drugs (39.2%) and 23.5% reported having occasional sexual partners. 16.9% of the participants (N=130) reported having drug use and 10.6% reported having self-harm behaviour in the last 12 months (see table 1).

Table 1: Sample description (n=1166)

	N	*%*	*M*	*SD*	*Range.*
Sample					
Gender					
Male	323	27.7			
Female	843	72.3			
Age	1166	100	21.14	1.92	18-24
Group					
University	914	78.4			
Non-university	252	21.6			

Nationality						
Portuguese	1122	96.2				
Other	44	3.8				
Had drug in the last 12 months[1]						
Yes	130	16.9				
No	637	83.1				
Had sexual intercourse						
Yes	562	89.6				
No	65	10.4				
Had occasional sexual partners[2]						
Yes	131	23.5				
No	427	76.5				
Had sexual intercourse under the effect of alcohol and/or drugs[2]						
Yes	220	39.2				
No	341	60.8				
Self-harm behviour						
Yes	81	10.6				
No	685	89.4				

[1]The total numbers differ considering that some participants have not replied to some variables.
[2]Only those who admitted having had sexual intercourse

Measures

The scale on the reasons for drug use is an instrument that has been reduced and adapted from the scale DMQ-R SF (Drinking Motives Questionnaire - Revised Short Form) [13] and from Portuguese validation of the adolescent scale version [15] adapted to young people by Reis, *et al.* (2020) [12] which measures the main reasons why alcohol is consumed in the context of consumption in adolescents and young people. The reduced and adapted version has 11 items (see table 2), which must be answered using a Likert scale of five points, ranging from 1 (never) to 5 (always). The total scale results obtained can vary between 11 and 55 points, with the highest value as an indicator of higher consumption.

Table 2: *Factor analysis of the Scale Reasons for drug use*

	Factors		
Factor analysis	**Enjoyment/ Socialization**	**Peer pressure**	*Coping*
Q44.2a. Because it helped you to have fun in a party	.824		
Q44.2d. Because it gives you a good feeling	.750		

Q44.2e. P To feel stoned	.772		
Q44.2g. Because it promoted fun and parties	.852		
Q44.2i. Because it was fun	.845		
Q44.2f. In order to make part of a group you like		.886	
Q44.2j. For people to like you		.904	
Q44.2k. So that you do not feel put aside		.883	
Q44.2b. Because it helped you when you felt de-pressed or uptight			.926
Q44.2c. In order to cheer yourself up when you were feeling down			.897
Q44.2h. In order to forget your problems			.812
Explained variance	47.16	19.05	14.14

Through an exploratory factor analysis, the existence of three dimensions was obtained, namely the dimension of consuming drugs for enjoyment/ socialization (consisting of 5 items, in which the values can vary from 5 to 25 points), the dimension of consuming drugs by peer pressure (consisting of 3 items, in which the values can vary from 3 to 15 points) and the dimension of consuming drugs to deal with situations / coping (consisting of 3 items, in which the values can vary from 3 to 15 points), explaining 80.4% of variance (see table 2).

The first dimension, enjoyment/socialization, expresses reasons for personal and social satisfaction in relating to the environment, and includes items that describe this purpose of self-pleasure and fun (for example items: "Because it gives you a good feeling"; and "Because it was fun") (Cronbach's alpha = 0.89).

The second dimension, peer pressure, expresses reasons related to social integration, and includes items that describe social acceptance (example items: "So that you do not feel put aside"; and "For people to like you") (Cronbach's alpha = 0.93).

The third dimension, coping, enunciates people's reasons when dealing with situations such as overcoming difficulties and relieving feelings that generate unease and includes items like: "In order to forget your problems" and "In order to cheer yourself up when you were feeling down" (Cronbach's alpha = 0.91).

Risk behaviours have been assessed through three issues - having had occasional sexual partners (yes/no), having had sexual intercourse under the influence of alcohol and/or drugs (yes/no) and having self-harm behaviour (yes/no) in the past 12 months.

Data Analysis

The data was analysed using SPSS version 24. For data analysis, exploratory factorial analysis, internal consistency was assessed by a Cronbach's Alpha test, a correlation analysis, a comparison of means between gender, groups and sexual risk behaviours, using the ANOVA test. To perform the confirmatory factor

analysis, we used the structural equation modelling (SEM), through the statistical program EQS, Structural Equation Modeling Software, version 6.1.

Results

Analysis of Internal Consistency

A factorial structure of 3 dimensions was obtained for the scale reasons to consume drugs, with good internal consistency for all 3 factors, with values between α = .89 in Enjoyment/Socialization and α = .91 in Coping, as well as for the total of the scale (α = .89).

Table 3: Scale Reasons for drug use – Internal factors consistency

Factor	Items	N[1]	M	SD	Cronbach
Total Scale	11	120	24,53	9.085	.89
Enjoyment/ Socialization	5	120	14,15	5.560	.89
Peer pressure	3	120	4,33	2.641	.93
Coping	3	120	6,05	3.466	.91

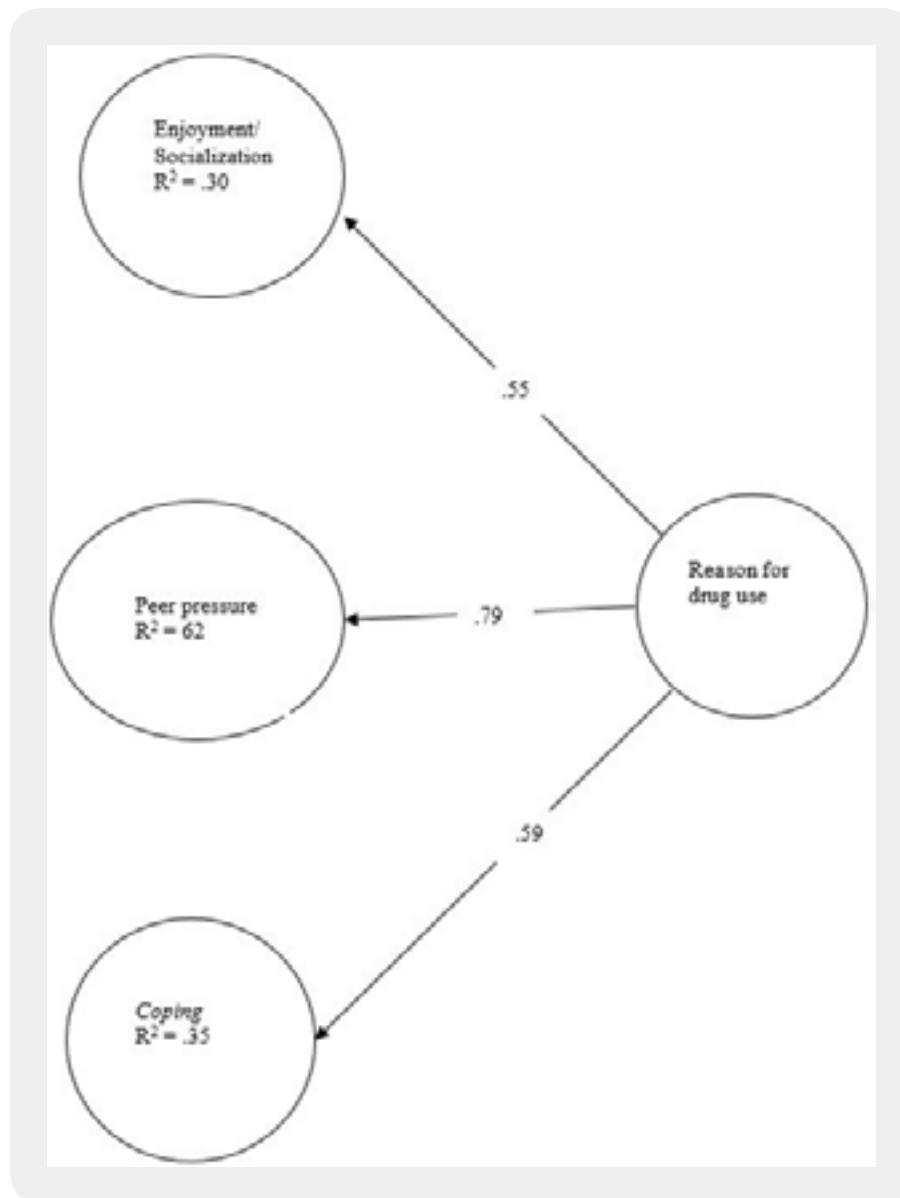[1]Only young people who admitted that they had used drugs in the last 12 months (n=121)

Confirmatory Factorial Analysis

A confirmatory factorial analysis indicated that the model that was proposed for the scale was good levels of adequacy (see table 4). The results obtained in the Wald test did not reveal the existence of non-significant relations (Bentler, 1995). Therefore, no changes were made to the initial model, which showed good levels of adjustment and good adequacy (see table 4).

Table 4: Scale Reasons for drug use – Adjusted values of the confirmatory factor analysis

	χ^2 (g.l.)	CFI	NNFI	RMSEA (90% I.C.)[2]	SRMR
Step 1	1031,13 (55)	0,97	0,96	0,105 (0,077-0,132)	0,068

The standardized solution obtained in the confirmatory factor analysis model (Figure 1) shows that, in general, the independent factor has a good saturation in the dependent factors that vary between β=.55 and β=.79.

Figure 1: Confirmatory factor analysis

The explained variance of the factors, as well as the residuals, regarding the confirmatory factor analysis model are presented in Table 5. As one can see, these values are equally adequate and vary between $R^2 = .30$ and $R^2 = .62$.

Table 5: *Scale Reasons for drug use – Explained variance (R²) and Residual error (Disturbance) of dependent factors – Confirmatory factor analysis*

Confirmatory Factor Analysis I		
Factor	**R²**	**Disturbance**
Enjoyment/Socialization	.30	.83
Peer pressure	.62	.62
Coping	.35	.81

Correlations

The correlations between the three dimensions of the reason for consuming drugs range from 0.33 to 0.44.

Table 6: *Correlation between factors of the reasons for drug use*

	Enjoyment/ Socialization	Peer pressure	*Coping*
Enjoyment/Socialization	--	0,39**	0,33**
Peer pressure	--	--	0,44**
Coping	--	--	--

**p<.010

Differences Between Averages

We analysed the gender and group differences (university vs. non-university students; having had sexual intercourse with occasional partners vs. not having had sexual intercourse with occasional partners; having had sexual intercourse under the influence of alcohol and/or drugs vs not having had sexual intercourse under the influence of alcohol and/or drugs; having had self-harm behaviour vs not having had self-harm behaviour) in the total scale and in the three factors (enjoyment/socialization, peer pressure and coping) by means of the ANOVA tests. In Tables 7, 8 and 9 the highest average values (with statistical significance) are highlighted in bold.

Significant gender differences were found for the dimension peer pressure ($F_{(1, 118)}$ = 8.438; p=.004), in which men (*M*= 5.27; *SD*=3.26) had higher averages than women (*M*= 3.84; *SD*= 2.12).

Significant differences were found between groups (university vs. non-university students) in two dimensions [peer pressure ($F_{(1, 118)}$ = 17.851; p=.000) and coping ($F_{(1, 118)}$ = 16.062; p=.000)] and for the total scale ($F_{(1, 118)}$ = 15.417; p=.000). In all cases, non-university young people (*M*= 5.91; *SD*= 3.68; *M*= 8.03; *SD*= 3.44; *M*= 29.63; *SD*= 10.85, respectively) had higher averages in all reasons for drug use than non-university young people (*M*= 3.75; *SD*= 1.86; *M*= 5.33; *SD*= 3.20; *M*= 22.67; *SD*= 7.61, respectively).

Significant group differences were found having had sexual intercourse with occasional partners Vs. not having had sexual intercourse with occasional partners for the total scale ($F_{(1, 99)}$ = 10.517, p=.002) and for the two dimensions - enjoyment/ socialization ($F_{(1, 99)}$ = 7.257, p=.008) and peer pressure ($F_{(1, 99)}$ = 7.151, p=.009).

In all cases, young people who reported having had sexual intercourse with occasional partners (*M*= 28.40; *SD*= 11.26; *M*= 16.40; *SD*= 5.88; *M*= 5.09; *SD*= 3.43, respectively) had higher averages in all reasons for drug use than those who had not had sexual intercourse with occasional partners (*M*= 22.74; *SD*= 6.30; *M*= 13.45; *SD*= 4.85; *M*= 3.70; *SD*= 1.79, respectively).

Significant group differences were found having had sexual intercourse under the influence of alcohol and/ or drugs Vs. not having had sexual intercourse under the influence of alcohol and/or drugs for the total scale ($F_{(1, 99)}$ = 4.767, p=.031) and for the dimension peer pressure ($F_{(1, 99)}$ = 8.533, p=.004).

In which young people who reported having had sexual intercourse under the influence of alcohol and/or drugs (*M*= 25.97; *SD*= 9.29; *M*= 4.67; *SD*= 2.95, respectively) had higher averages of reasons to consume than those who had not had sexual intercourse under the influence of alcohol and/or drugs (*M*= 21.97; *SD*= 6.72; *M*= 3.13; *SD*= 0.55, respectively).

Significant group differences were found having had self-harm behaviour vs not having had self-harm behaviour) for the total scale ($F_{(1, 118)}$ = 6.164, p=.014) and for the two dimensions - peer pressure ($F_{(1, 118)}$ = 11.713, p=.001) and coping ($F_{(1, 118)}$ = 9.502, p=.003).

In all cases, young people who reported having had self-harm behaviour (*M*= 30.07; *SD*= 13.01; *M*= 6.50; *SD*= 4.03; *M*= 4.01; *SD*= 1.07, respectively) had higher averages in all reasons for drug use than those who had not had self-harm behaviour (*M*= 23.79; *SD*= 8.24; *M*= 4.04; *SD*= 2.27; *M*= 3.46; *SD*= 0.31, respectively).

Table 7: *Scale Reasons for drug use – ANOVAS– Differences between Gender and the Group University Vs. Non–university students*

	Gender[1]	Minimum	Maximum	Mean	Standard Deviation	F	p
Total scale	Female	11	50	23.44	8.144	3.344	.070
	Male	11	50	26.61	10.462		
Subscale Enjoyment/Socialization	Female	5	25	13.96	5.464	.263	.609
	Male	5	25	14.51	5.793		
Subscale Peer pressure	Female	3	13	3.84	2.121	8.438	.004
	Male	3	13	5.27	3.256		
Subscale *Coping*	Female	3	15	5.65	3.370	3.206	.076
	Male	3	15	6.83	3.556		

[1]Only young people who admitted that they had used drugs in the last 12 months (n=121) * p≤ .05; ** p≤ .01; *** p≤ .001

Marta Reis, *et al.* (2021). Development of an Evaluation Scale On the Reasons for Drug Use: Validation for Portuguese Youth and Their Relation to Risk Behaviours. *CPQ Women and Child Health, 3*(2), 01-16.

	Group[1]	Minimum	Maximum	Mean	Standard Deviation	F	p
Total scale	University students	11	50	22.67	7.609	15.417	.000
	Non-university students	11	50	29.63	10.850		
Subscale Enjoyment /Socialization	University students	5	25	13.56	5.470	3.404	.068
	Non-university students	5	25	15.69	5.602		
Subscale Peer pressure	University students	3	13	3.75	1.859	17.851	.000
	Non-university students	3	13	5.91	3.684		
Subscale Coping	University students	3	15	5.33	3.201	16.062	.000
	Non-university students	3	15	**8.03**	3.441		

[1]Only young people who admitted that they had used drugs in the last 12 months (n=121) * p≤ .05; ** p≤ .01; *** p≤ .001

Table 8: *Scale Reasons for drug use – ANOVAS – Group differences – Having had sexual intercourse with occasional partners Vs. Not having had sexual intercourse with occasional partners; Having had sexual intercourse under the effect of alcohol and/or drugs Vs. Not having had sexual intercourse under the effect of alcohol and/or drugs*

	Group[1,2]	Minimum	Maximum	Mean	Standard Deviation	F	p
Total scale	Yes	11	50	28.40	11.260	10.517	.002
	No	11	50	22.74	6.301		
Subscale Enjoyment /Socialization	Yes	5	25	16.40	5.882	7.257	.008
	No	5	25	13.45	4.852		
Subscale Peer pressure	Yes	3	15	5.09	3.433	7.151	.009
	No	3	15	3.70	1.797		
Subscale *Coping*	Yes	3	15	6.91	4.104	3.364	.070
	No	3	15	5.59	3.053		

[1]Only young people who admitted that they had used drugs and having had sexual intercourse in the last 12 months (n=101); [2]Group= Having had sexual intercourse with occasional partners Vs. Not having had sexual intercourse with occasional partners | * p≤ .05; ** p≤ .01; *** p≤ .001

	Group[1,2]	Minimum	Maximum	Mean	Standard Deviation	F	p
Total scale	Yes	11	50	25.97	9.293	4.767	.031
	No	11	50	21.97	6.723		
Subscale Enjoyment /Socialization	Yes	5	25	15.10	5.242	2.998	.086
	No	5	25	13.13	5.540		
Subscale Peer pressure	Yes	3	15	4.67	2.954	8.533	.004
	No	3	15	3.13	0.554		
Subscale Coping	Yes	3	15	6.20	3.604	0.418	.519
	No	3	15	5.72	3.265		

[1]Only young people who admitted that they had used drugs and having had sexual intercourse in the last 12 months (n=101); [2]Group= Having had sexual intercourse under the effect of alcohol and/or drugs Vs. Not having had sexual intercourse under the effect of alcohol and/or drugs | * p≤ .05; ** p≤ .01; *** p≤ .001

Table 9: *Scale Reasons for drug use – ANOVAS – Group differences – Having had self-harm behaviour Vs. Not having had self-harm behaviour*

	Group[1]	Minimum	Maximum	Mean	Standard Deviation	F	p
Total scale	Yes	11	50	**30.07**	13.018	6.164	.014
	No	11	50	23.79	8.241		
Subscale Enjoyment /Socialization	Yes	5	25	14.93	6.281	.309	.579
	No	5	25	14.05	5.483		
Subscale Peer pressure	Yes	3	15	**6.50**	4.034	11.713	.001
	No	3	15	4.04	2.276		
Subscale *Coping*	Yes	3	15	**4.01**	1.072	9.502	.003
	No	3	15	3.46	0.316		

[1]Only young people who admitted that they had used drugs in the last 12 months (n=120) * p≤ .05; ** p≤ .01; *** p≤ .001

Discussion

Regarding the main reasons for drug use among young people, three reasons are identified, namely personal satisfaction with social reasons (enjoyment/ socialization), social integration (peer pressure), and reasons for dealing with uneasy situations or to overcome difficulties and relieve feelings that generate unease (coping).

The Portuguese version of Reasons for drug use scale (2020) obtained through the principal components analysis with oblique rotation (oblimin), revealed the presence of a concise factorial structure, composed by

three components. Results concluded that the scale showed good internal consistency for the total (alpha=.89) and for the three dimensions, namely the enjoyment/socialization subscale (alpha=.89), the peer pressure subscale (alpha=.93), and the coping subscale (alpha=.91), the dimension most referred to by the participants being Socialization, and the one less referred to is Coping.

In the performance of the factor analysis model, the results obtained regarding the adequacy of the proposed explanatory model showed good levels of adjustment, and therefore, good levels of adequacy.

The sample in this study included 1166 young people. The total sample, in which 72.3% are women; the majority referred having had sexual intercourse. More than one third of the participants reported having had sexual intercourse under the influence of alcohol or other drugs (39.2%) and 23.5% reported having occasional sexual partners. 16.9% of the participants reported having drug use and 10.6% reported having self-harm behaviour in the last 12 months. These tendencies are consistent with other research studies, namely those of Matos and equipa Aventura Social (2018) [16] and Reis and Matos (2017) [17].

Gender and group differences were found (university and non-university students; whether or not they had sexual intercourse with occasional partners; whether or not they had sexual intercourse under the influence of alcohol and/or drugs; having had self-harm behaviour vs not having had self-harm behaviour), and the reasons for drug use scale.

Regarding gender differences and reasons for drug use, significant differences were found for the dimension - peer pressure, in which men had higher averages than women.

As for the differences between university and non-university subjects, significant differences were found in two dimensions (peer pressure and coping) and for the total scale. In all cases, non-university youth had higher averages in all reasons for drug use than university youth. And the reason with a higher average for both non-university and college students was socialization.

With respect to group differences (having had sexual intercourse with occasional partners or not) and reasons for drug use, significant differences were found for the total scale and the two dimensions - enjoyment/ socialization and peer pressure. In all cases, young people who reported having had sexual intercourse with occasional partners s had higher averages for all reasons for drug use than those who had not had sexual intercourse either with occasional partners or under the influence of alcohol and/or drugs.

Regarding group differences (having had sexual intercourse under the influence of alcohol and/or drugs or not) and reasons for drug use, significant differences were found for the total scale and the dimensions - peer pressure. In which young people who reported having had sexual intercourse under the influence of alcohol and/or drugs had higher averages of reasons to consume than those who had not had sexual intercourse under the influence of alcohol and/or drugs.

As for the differences between young people who reported having had self-harm behaviour and who reported not having had self-harm behaviour, significant differences were found in two dimensions (peer pressure and coping) and for the total scale. In all cases, who reported having had self-harm behaviour had higher averages in all reasons for drug use than those who had not had self-harm behaviour.

This research has some limitations that should be borne in mind for future research. First of all, the results should be confirmed in a larger sample, in different social contexts, and with different populations. The study of target populations and samples with specific patterns of use (e.g. clubbers, ravers and clinical samples) would lead to a greater validity of the scale also for the other substances. As this aspect is one of the strengths of the Reason for drug use scale, future studies should collect more results on distinct substances.

Notwithstanding these limitations, and although the strength of the scale should be assessed through multiple applications, the results presented in this paper are promising. Specifically, we believe that the Reason for drug use scale could be very useful both for research and in practical interventions, given its briefness and at the same time its complexity. Moreover, the development of a single scale for the analysis of different substances should help to synthesize a literature full of interesting results, which are often difficult to compare. In this sense, the Reason for drug use scale may be a powerful tool to advance research into the understanding of the motives behind substance use and abuse. The study of similarities and differences in use has important implications for prevention strategies. Similarities suggest domains that can be targeted in universal intervention strategies, whereas differences indicate areas that should be addressed by substance specific programming.

Conclusions and Key-Messages

The results clearly show that one of the major reasons for consuming drugs is associated with peer pressure, as this subscale was significant with all the variables analyzed and associated with all other risk behaviours.

On the one hand, these results suggest the influence exercised by the peers can be presents itself as a negative factor; and on the other hand, the importance of well-being, reciprocity, safety and comfort with the peers can be presents itself as a protective factor. The collected data are consistent with the literature that associates the drug consumption to the socialization with friends and co-occur with risk behaviours, namely sexual risk behaviours and self-harm behaviour [2,4,14].

Therefore, the results found suggest the need for prevention work to review their approach strategies, focusing on health risk behaviours, especially in relation to the adoption of educational measures for healthy behaviours.

Results also support the need for tailoring preventive programs to the specific needs of young people namely, not only if they use or not drugs but why the use drugs in the context of their own life dynamics.

In addition, an alternative to minimize this problem of drug use by young people would be to try to involve them in healthier activities, such as sports activities or other leisure and relaxation activities (which do not involve the consumption of drugs or alcohol) that are to their liking.

It is fundamental that public health policies rethink alternatives so that young people do not turn to drugs or alcohol to enjoy themselves and socialize. In addition, there is a need for young people to develop personal and socio-emotional skills, linked, for example, to the development of assertiveness, self-esteem, self-regulation and resilience so that they don't consume drugs as a result of yielding to peer pressure or not being able to cope with difficulties.

In the area of drug use and abuse, and while trying to fit as much as possible intervention programs to the specific needs of a population or sub-group, the relevance of including young people themselves in the process of problem identification, and solutions surfaces. Young people know better and have a better access to people and life context where they use drugs and no user or ex-users seem the perfect partners in the implementation of both preventive and promotional programs.

The present results include important messages for public policies, so as to make them friendly and empowering to young people; focusing more on prevention rather than in treatment; focusing more on building personal and social competences than to highlight problems and limitations; focusing more on social cohesion and social participation and engagement than in limitations and interdictions.

Bibliography

1. MacArthur, G. J., Harrison, S., Caldwell, D. M., Hickman, M. & Campbell, R. (2016). Peerled interventions to prevent tobacco, alcohol and/or drug use among young people aged 11-21 years: a systematic review and meta-analysis. *Addiction, 111*(3), 391-407.

2. Cerqueira, A., Gaspar, T., Guedes, F. B., Madeira, S. & Matos, M. G. (2019). Sofrimentos psicológico, consume de tabaco, álcool e outros fatores psicossociais em adolescentes portugueses. *Revista de Psicologia da Criança e do Adolescente, 10*(1), 219-228.

3. McConnell, M. M., Memetovic, J. & Richardson, C. G. (2014). Coping style and substance use intention and behaviour patterns in a cohort of BC adolescents. *Addictive Behaviors, 39*(10), 1394-1397.

4. Tomé, G., Camacho, I., Guedes, F. B., Borges, A., & Matos, M. G. (2019). É bom ter, ou não ter, amigos durante a adolescência? Eis a questão, sempre atual!. *Revista de Psicologia da Criança e do Adolescente, 10*(1), 85-94.

5. Tomé, G., Camacho, I., Matos, M. G. & Simões, C. (2015). Influência da família e amigos no bem-estar e comportamento de risco - Modelo explicativo. *Psicologia, Saúde e Doenças, 16*(1), 23-34.

6. Biolcati, R. & Passini, S. (2019. Development of the Substance Use Motives Measure (SUMM): A comprehensive eight-factor model for alcohol/drugs consumption. *Addictive Behaviors Reports, 10,* 100199.

7. Cooper, M. L., Kuntsche, E., Levitt, A., Barber, L. L. & Wolf, S. (2016). *Motivational models of substance use: A review of theory and research on motives for using alcohol, marijuana, and tobacco.* The Oxford handbook of substance use and substance use disorders, 1, 375-421.

8. Brook, J. S., Brook, D. W., Richter, L. & Whiteman, M. (2003). Risk and protective factors of adolescent drug use: Implications for prevention program. In Z. Sloboda and W.J. Bukoski (eds.), Handbook of Drug Abuse Prevention: Theory, Science and Practice, (Pp. 265-287).

9. Faggiano, F., Vigna-Taglianti, F., Versino, E., Zambon, A., Borraccino, A. & Lemma, P. (2005). School-based prevention for illicit drugs' use. *Cochrane Database of Systematic Reviews, 18*(2), CD003020.

10. Ferreira, M., Matos, M. G. & Diniz, J. A. (2011). Risk Behaviour: substance use among portuguese adolescents. *Procedia– Social and Behavioral Sciences, 29,* 486-492.

11. Reis, M., Ramiro, L., Matos, M. G. & Diniz, J. A. (2013). Nationwide survey on HIV/AIDS knowledge, attitudes and risk behaviour in university students of portugal. *The Spanish Journal of Psychology, 16,* e99, 1-10.

12. Reis, M., Tomé, G., Ramiro, L., Gaspar, S. & Matos, M. G. (2020). Understanding risk factors associated with self-harm behavior in adolescents - HBSC Portuguese Data 2018. *International Journal of Humanities Social Sciences and Education, 3*(1), 79-92.

13. Kuntsche, E. & Kuntsche, S. (2009). 'Development and validation of the drinking motive questionnaire revised short form (DMQ-R SF)'. *Journal of Clinical Child & Adolescent Psychology, 38*(6), 899-908.

14. Reis, M., Tomé, G., Ramiro, L., Guedes, F. & Matos, M. G. (2020, under review). Reasons for drinking alcohol and their relation to sexual behaviours among young Portuguese people. *Health and Addiction.*

15. Simões, C., Branquinho, C., Santos, A. & Matos, M. G. (2017). Motives to use alcohol among adolescents according to their neighbourhood characteristics, gender, age, and drinking patterns. *Journal of Substance Use, 23*(1), 1-6.

16. Matos, M. G. & Equipa Aventura Social (2018). A saúde dos adolescentes portugueses após a recessão. Relatório do estudo Health Behaviour in School Aged Children (HBSC) em 2018.

17. Reis, M., Matos, M. G. & equipa Aventura Social (2017). HBSC/JUnP: Comportamentos de Saúde dos Jovens Universitários Portugueses. Aventura Social / FMH/ ULisboa / FCT.