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Profiles of violence and use of alcohol and tobacco in relation to the impulsivity: sustainable consumption in adolescents

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Abstract: The purpose of this study was to identify different adolescent profiles identified by their use tobacco/alcohol and violent behavior repertoires as well as to analyze the extent to which they show impulsivity traits. Participants were selected by cluster random sampling. There was a total of 822 high school students in the sample aged 13 to 18 years with a mean of 14.84 ($SD=0.87$). A cluster analysis with the following variables was done to form the groups: Use of tobacco, Use of alcohol, Physical aggression, Verbal aggression, Anger and Hostility. Three groups of adolescents resulted from these five variables. The multivariate comparison demonstrated the existence of significant between-group differences, and individual analysis for each of the dependent variables (impulsivity dimensions) showed that the relationship was statistically significant in all cases. In conclusion, analysis of factors possibly associated with adolescent's risk behavior makes possible and orients intervention in different stages of development for sustainable consumption in adolescents.

Keywords: tobacco; alcohol; physical aggression; verbal aggression; impulsivity.

1. Introduction

Adolescence is a period of transition to adult life in which a diversity of changes and stressful experiences combine [1] that could lead to involvement in situations even severely compromising development [2]. Thus issues such as substance use [3,4] or peer relations could become problematic adolescent behavior repertoires.

In Spain, the Survey on the Use of Drugs by High School Students 2014/2015 and Survey on alcohol and drugs in Spain (EDADES) 2017/2018 [5,6] found a considerable improvement in reduction of use habits from previous editions. Although this report contains data on a wide variety of substances, special attention is given alcohol and tobacco which have a wider adolescent use pattern.

In recent years, use of these substances, which are relatively accessible to young people, and their relationship with interpersonal violence have become a public health problem. The specific relationship between youth violence and substance use has been widely documented in recent reports by international organizations [7,8]. Other documents on youth risk behavior offer data that alert to a diversity of problems, such as peer violence at school, especially during adolescence [9-11].

One of the issues that research focuses heavily on is the patterns of motivation for substance use [12,13]. Many of the beliefs that adolescents have about the consequences of using substances like alcohol or tobacco are erroneous [14], which is associated with minimizing derived risks [15]. Thus adolescents with positive attitudes and/or expectations toward use of alcohol, show a higher risk in starting and maintaining use behavior [16-18]. In this line, several studies have associated impulsivity and sensation-seeking with drug use [17,19,20]. Malmberg et al. [21] suggest that impulsivity exerts a fundamental role in maintaining use of alcohol and tobacco during early adolescence. These

relationships could be particularly apparent during adolescence when changes in development occur, and at the same time, more opportunities for substance use appear [22,23]. A study by Pérez-Fuentes et al. [24] analyzing the relationship between impulsivity and use of alcohol and tobacco by adolescents contained data suggesting that students who say they are users have significantly higher scores on impulsivity. Charles et al. [25] found that higher levels of impulsivity and sensation-seeking become more evident in early adolescence and are predictors of higher substance use in mid-adolescence.

Impulsivity is also present as a characteristic trait in aggressors and is a factor predisposing to involvement in violence [26]. Furthermore, in combination with sensation-seeking behavior repertoires, it has been shown that both work as predictors of different types of aggression [27,28]. In addition to individual factors [29-31], adopting certain risk behaviors is also subject to other determinant factors in the construction of self-concept [32,33] and personal wellbeing [34], whether related to family members or peer group [35,36].

In working on preventing use of alcohol and other drugs, it is important to consider the theoretical basis for adolescent decision-making about it. Litt and Lewis [37] applied the model for decision-making in health by Gerrard, Gibbons, Houlihan, Stock & Pomery [38] to adolescent alcohol use, and found that the adolescent alcohol user employs a largely socially-conditioned decision-making process characterized by very little planning. Recent results [39] have shown that the more they use tobacco and alcohol, the stronger their perception of social support from the peer group and less from the family. Data also derived from this study support the relationship of such use with both reactive and proactive aggression.

Precisely because of the relationship which the literature establishes between substance use and violence [40-42], development of new lines of research oriented toward preventive intervention for both problems is considered necessary [43].

The purpose of this study was to identify different adolescent profiles identified by their use tobacco/alcohol and violent behavior repertoires as well as to analyze the extent to which they show impulsivity traits.

2. Materials and Methods

2.1. Participants

Participants were selected by cluster random sampling. Eight high schools were selected at random following the geographic distribution of the city of Almeria. There was a total of 822 high school students in the sample aged 13 to 18 years with a mean of 14.84 ($SD=.87$). Of the whole sample, 51.8% ($N=426$) were men and 48.2% ($N=396$) women, with a mean age of 14.85 ($SD=.87$) and 14.82 years ($DT=.86$), respectively. The distribution of the sample by grade was as follows: 43.7% were students in 3rd year ESO ($N=359$) and the remaining 56.3% were in 4th year ESO ($N=463$).

2.2. Instruments

Sociodemographic data on the sample (age, sex, grade) were collected using an ad hoc questionnaire, and information on use of tobacco and alcohol by two items with a dichotomous answer format (yes/no).

Aggression Questionnaire (AQ) by Buss and Perry [44]. In this study, the Spanish adaptation by Andreu, Peña and Graña was applied [45]. The questionnaire consists of 29 items and attempts to evaluate aggressiveness by means of four factors: physical aggressiveness, verbal aggressiveness, hostility and anger. The 29 items are scored on a five-point Likert-type scale where 1=completely false for me; 2=rather false for me; 3=neither true nor false for me; 4=quite true for me; 5=completely true for me. The reliability coefficients found in the original study by Buss and Perry varied from .72 to .85. For the Spanish adaptation, the authors showed a Cronbach's alpha for the complete scale of .88, while for the scales that make it up, it was from .68 to .86. In this study, the Cronbach's alpha was 0.87 for the complete questionnaire and for each of the scales it was $\alpha=.79$ for physical aggression; $\alpha=.69$ for verbal aggression; $\alpha=.69$ for anger and $\alpha=.68$ for hostility.

State Impulsivity Scale (SIS) by Iribarren, Jiménez-Giménez, García-de Cecilia and Rubio-Valladolid [46]. This scale is designed to evaluate impulsive behavior defined as a state, that is, impulsivity as a behavior manifestation that may vary in the short term. It consists of 20 items distributed in three subscales, gratification (evaluating the urgency in satisfying impulses, the preference for immediate reward, intolerance of frustration and the tendency to act without caring about possible negative consequences), automatism (refers to behaviors expressed rigidly and repetitively, without attention to contextual variables), and attentional (evaluates the presence of unplanned behavior which takes place because of acting too soon and without considering all available information). Subjects are asked to evaluate the frequency with which each statement is true for them and answer on a four-point Likert scale. The authors [46] found high reliability, both for the complete scale ($\alpha=.88$), and for each of its dimensions, Gratification ($\alpha=.84$), Automatism ($\alpha=.80$) and Attentional ($\alpha=.75$). In our study, alpha was .73 (Gratification), .76 (Automatism) and .80 (Attentional); coinciding with Iribarren et al [46], with an $\alpha=.88$ for the total scale.

2.3. Procedure

First, the principal of each school was informed of the objectives, procedure and use of research data. The pertinent permissions were requested on an informed consent sheet addressed to the parents/guardians, and before the tests were implemented, only students who had paternal authorization, the participants were provided with instructions for filling them out as well as guaranteeing their privacy in data processing. The study was approved by the Bioethics Committee at the University of Almería. Then two members of the research group went to the high school to give the tests. The database was built up and analyzed with the SPSS v.22 statistics program.

2.4. Data analysis

First, a two-stage cluster analysis was done to form the groups of adolescents based on their tobacco and alcohol use variables with a dichotomous (yes/no) response, and the continuous quantitative variables related to violence (Physical aggression, Verbal aggression, Anger and Hostility).

When the groups or clusters had been identified, a MANOVA was done to find any significant differences between groups with respect to the dependent variables (Gratification, Automatism and Attentional). To determine the means which were significantly different, the Scheffé post hoc method for comparisons was applied.

3. Results

A cluster analysis with the following variables was done to form the groups: Use of tobacco, Use of alcohol, Physical aggression, Verbal aggression, Anger and Hostility. Three groups of adolescents resulted from these five variables (Figure 1) with the following distribution: 31.8% ($n=261$) were in Cluster 1, 29.8% ($n=245$) to Cluster 2, and the remaining 38.4% ($n=316$) in Cluster 3.

The first group resulting from the cluster analysis (Cluster 1) was characterized by 100% not using either tobacco or alcohol and scoring below the mean for the total sample on violence variables, specifically: Physical aggression ($M=2.19$), Verbal aggression ($M=2.46$), Anger ($M=2.63$) and Hostility ($M=2.81$). Whereas for the total sample ($N=822$) scores were: Physical aggression ($M=2.47$), Verbal aggression ($M=2.68$), Anger ($M=2.91$) and Hostilidad ($M=2.93$).

The second group (Cluster 2), identified adolescents as tobacco (100%) and alcohol users (95.1%) with scores on violence variables over the mean for the total sample with scores in Physical aggression ($M=2.79$), Verbal aggression ($M=2.83$), Anger ($M=3.16$), and Hostility ($M=3.04$).

The third group (Cluster 3) combines adolescents who do not smoke (100%), but who do drink alcohol (100%). Their mean scores on violence variables were near those of the total sample: Physical aggression ($M=2.45$), Verbal aggression ($M=2.74$), Anger ($M=2.94$) and Hostility ($M=2.96$).

Cluster

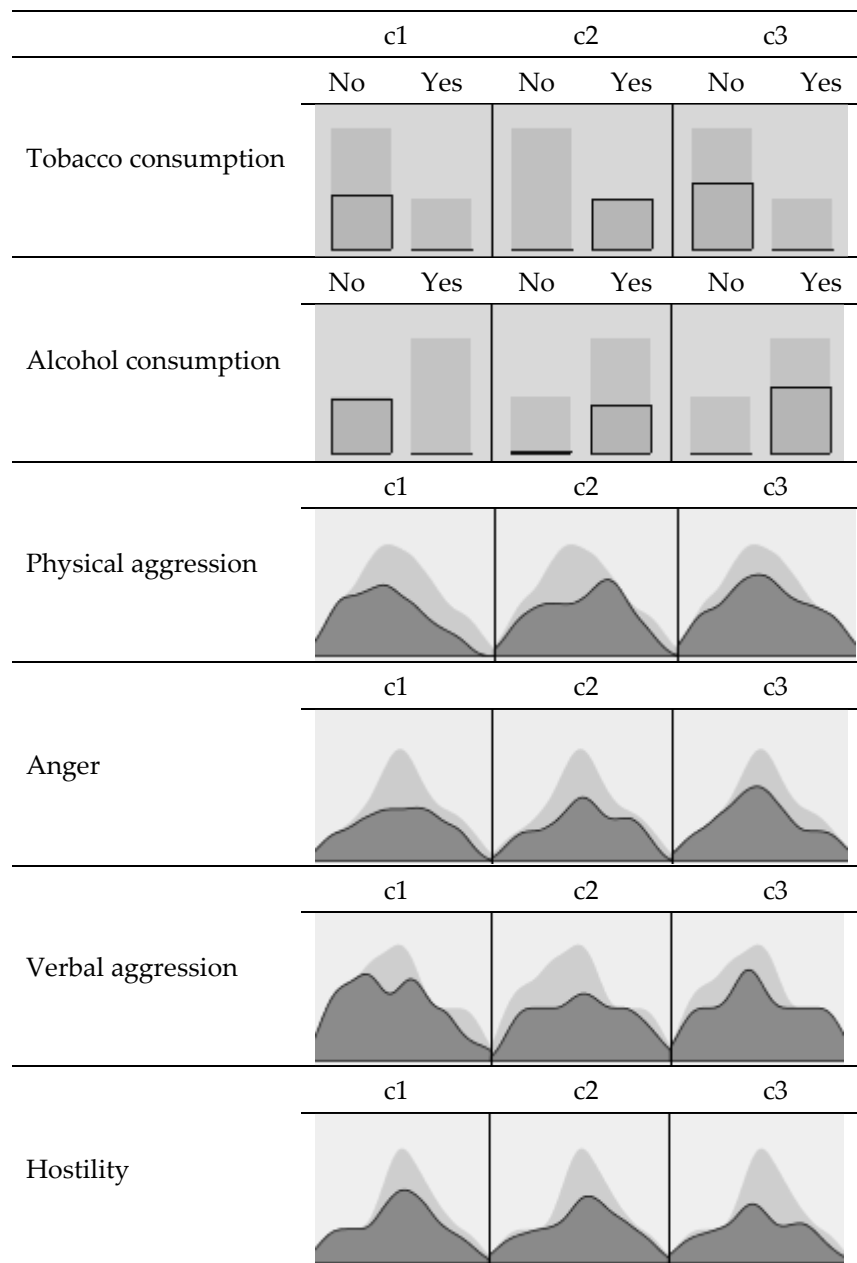


Figure 1. Cluster composition. Note. Variables presented according to input importance (predictor).

The table 1 shows a summary of frequency (use of tobacco and alcohol) and mean scores (Physical aggression, Verbal aggression, Anger and Hostility) on the variables analyzed for both total sample and by cluster.

After group classification based on the three-cluster solution, a MANOVA was done to find out whether there were any differences between clusters in the impulsivity dependent variables (Gratification, Automatism, Attentional).

Homogeneity of covariance was examined using the Box's M test and the null hypothesis of data fit was rejected ($M_{Box}=25.54$; $F=2.11$; $p<.05$). The multivariate comparison demonstrated the existence of significant between-group differences (Wilks Lambda =.907; $F_{(6, 822)}=13.592$; $p<.001$; $\eta_p^2=.048$).

Table 1. Frequency/mean scores for total sample and by cluster

	Total sample (N=822)	Cluster		
		1 (Group 1) (n=261)	2 (Group 2) (n=245)	3 (Group 3) (n=316)
Use tobacco	Yes 29.8% No 70.2%	No 100%	Yes 100%	No 100%

Use alcohol	Yes 66.8% No 33.2%	No 100%	Yes 95.1%	Yes 100%
Physical aggression	<i>M</i> =2.47	<i>M</i> =2.19	<i>M</i> =2.79	<i>M</i> =2.45
Verbal aggression	<i>M</i> =2.68	<i>M</i> =2.46	<i>M</i> =2.83	<i>M</i> =2.74
Anger	<i>M</i> =2.91	<i>M</i> =2.63	<i>M</i> =3.16	<i>M</i> =2.94
Hostility	<i>M</i> =2.93	<i>M</i> =2.81	<i>M</i> =3.04	<i>M</i> =2.96

The Levene test [Gratification: $F_{(2, 819)}=2.379$; $p=.093$; Automatism: $F_{(2, 819)}=2.552$; $p=.079$; Attentional: $F_{(2, 819)}=1.735$; $p=.177$] showed that the groups were homogeneous (the null hypothesis of equality of variance was accepted), so ANOVAs were done without applying any type of correction, and the Scheffé method was used for post hoc comparison.

Individual analysis for each of the dependent variables (impulsivity dimensions) showed that the relationship was statistically significant in all cases (Table 2).

In Gratification, there are significant differences between the three groups ($F_{(2, 819)}=39.754$; $p<.001$; $\eta_p^2=.088$). Post hoc comparisons show that Group 2 (tobacco and alcohol users with violence scores over the mean of the total sample) had a significantly higher score ($M=14.77$) than the rest of the groups. Furthermore, Group 3 ($M=13.19$) had a significantly higher score than Group 1 ($M=11.67$).

Table 2. Means and standard deviations of the groups (clusters) and eta squared for each of the dependent variables

	Group 1		Group 2		Group 3		η^2
	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	<i>M</i>	<i>DT</i>	
Gratification	11.67	.24	14.77	.25	13.19	.22	.088
Automatism	10.82	.23	12.79	.24	11.99	.21	.039
Attentional	12.90	.26	15.34	.27	14.21	.23	.049

Significant differences were also found between groups in Automatism ($F_{(2,819)}=16.824$; $p<.001$; $\eta_p^2=.039$). The results of post hoc comparisons show that both Group 2 ($M=12.79$) and Group 3 ($M=11.99$) scored significantly higher than Group 1 ($M=10.82$).

Finally, on the attentional impulsivity factor, there were also significant between-group differences ($F_{(2, 819)}=20.907$; $p<.001$; $\eta_p^2=.049$). Post hoc comparisons show that Group 2 had a significantly higher score ($M=15.34$) than the rest of the groups. The Group 3 ($M=14.21$) score was in turn significantly higher than Group 1 ($M=14.21$), is significantly higher than Group 1 ($M=12.90$).

4. Discussion

Based on the results, three groups or profiles were identified from the combination of tobacco and/or alcohol use and the scores on violent behavior repertoires: (1) Adolescents who do not use alcohol or tobacco and have lower scores on violence than the mean of the total sample, (2) adolescents who use alcohol and tobacco, with violence scores above the mean, and (3) adolescents who use alcohol, but not tobacco, and with violence scores similar to the mean. In this distribution, it may be observed how the subjects grouped by their affirmative answers on use of either of the two substances coincide with the cluster where subjects have the highest scores on the different types of aggression and vice versa. Thus, the relationship found between violence and use of accessible substances like alcohol and tobacco is in line with recent reports on the topic [7,8]. Moreover, except for the consensus of studies which support an association between both problems in one way or another [39-41], it is also in agreement on the influence (as a predictor) of impulsivity on risk behaviors, whether during early [21] or mid-adolescence [25].

Thus, there is no doubt about the presence of certain variables related to impulsivity and sensation-seeking during adolescent decision-making about substance use [17,19,20] or their expression of aggression [26,28,39]. In this study, statistically significant differences were found between the profiles identified for all the impulsivity factors, where the group of adolescents who

used alcohol, tobacco and the highest aggression scores were also the most impulsive. It must also be considered that drinking alcohol is characterized by little reflection and planning in decision-making [17,37].

These practical implications should be considered with caution in view of the limitations derived from errors associated with the measurement method. In this case, there could be certain sources of error such as malingering [47] and / or denying consumption [48], which do not have the capacity to respond intentionally consumption in adolescents. However, there is no doubt that any case is related to the honesty of the responses of the adolescents in the sample.

5. Conclusions

Analysis of factors possibly associated with adolescent's risk behavior makes possible and orients intervention in different stages of development. In other words, from a public healthcare standpoint, it was attempted to identify those factors which place adolescent health and wellbeing in its widest sense at risk through a combined approach to both problems [43]. Therefore, having these data is going to enable preventive programs to be designed for implementing, not only adequately, but also at the right time for them to be effective. From this approach, considering the variability of factors that intervene in both problems [29,31-36], they should be included in future lines of research.

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References

1. Otis, K.L.; Huebner, E.S.; Hills, K.J. Origins of Early Adolescents' Hope: Personality, Parental Attachment, and Stressful Life Events. *Can J Sch Psychol* **2016**, *31*(2), 102-121.
2. Bermúdez, M.P.; Teva, I.; Buela-Casal, G. Influencia de variables sociodemográficas sobre los estilos de afrontamiento, el estrés social y la búsqueda de sensaciones sexuales en adolescentes [Influence of sociodemographic variables on coping styles, social stress, and sexual sensation seeking in Adolescent]. *Psicothema* **2009**, *21*(2), 220-226.
3. Espada, J.P.; González, M.T.; Orgilés, M.; Lloret, D.; Guillén-Riquelme, A. Meta-analysis of the Effectiveness of School Substance Abuse Prevention Programs in Spain. *Psicothema* **2015**, *27*(1), 5-12. doi:10.7334/psicothema2014.106.
4. Oliva, A.; Parra, A.; Sánchez-Queija, I. Consumo de sustancias durante la adolescencia: trayectorias evolutivas y consecuencias para el ajuste psicológico [Consumption of substances during adolescence: evolutionary trajectories and consequences for psychological adjustment]. *Int J Clin Hlth Psyc* **2008**, *8*(1), 153-169.
5. Ministerio de Sanidad, Servicios Sociales e Igualdad. *Encuesta sobre Uso de Drogas en Estudiantes de Enseñanzas Secundarias (ESTUDES) 2014/2015 [Survey on Drug Use in Secondary Education Students (ESTUDES) 2014/2015]*. Ministerio de Sanidad, Servicios Sociales e Igualdad: Madrid, España, 2016.
6. Ministerio de Sanidad, Servicios Sociales e Igualdad. *Encuesta sobre alcohol y drogas en España (EDADES) 2017/2018 [Survey on alcohol and drugs in Spain (EDADES) 2017/2018]*. Ministerio de Sanidad, Consumo y Bienestar Social: Madrid, España, 2018.
7. Bushman, B.J.; Newman, K.; Calvert, S.L.; Downey, G.; Dredze, M.; Gottfredson, M.;... Romer, D. Youth violence: What we know and what we need to know. *Am Psychol* **2016**, *71*(1), 17.

8. World Health Organization. *Health for the World's Adolescents. A second chance in the second decade*. World Health Organization: Ginebra, Switzerland, 2014.
9. Calmaestra, J.; Escorial, A.; García, P.; del Moral, C.; Perazzo, C.; Ubrich, T. *Yo a eso no juego: Bullying y ciberbullying en la infancia [I do not play that: Bullying and cyberbullying in childhood]*, Save the Children: Madrid, España, 2016.
10. Estévez, E.; Jiménez, T.I.; Moreno, D. Aggressive behavior in adolescence as a predictor of personal, family, and school adjustment problems. *Psicothema* **2018**, *30*(1), 66-73. doi:10.7334/psicothema2016.294.
11. Nieto, B.; Portela, I.; López, E.; Domínguez, V. Violencia verbal en el alumnado de Educación Secundaria Obligatoria [Verbal violence in the students of Compulsory Secondary Education]. *Eur J Investing Health Psycho* **2018**, *8*(1), 5-14. doi:10.30552/ejihpe.v8i1.221.
12. Marín-Navarrete, R.; Horigian, V.E.; Medina-Mora, M.E.; Verdeja, R.E.; Alonso, E.; Feaster, D.J.;... de la Fuente-Martín, A. Intervención de incremento motivacional en centros ambulatorios para las adicciones: un ensayo aleatorizado multi-céntrico [Motivational enhancement treatment in outpatient addiction centers: A multisite randomized trial]. *Int J Clin Hlth Psyc* **2017**, *17*(1), 9-19. doi:10.1016/j.ijchp.2016.05.001.
13. Serafini, K.; Shipley, L.; Stewart, D.G. Motivation and substance use outcomes among adolescents in a school-based intervention. *Addict Behav* **2016**, *53*, 74-79. doi:10.1016/j.addbeh.2015.10.004.
14. Hincapié, C.; Corredor, S.; Barbosa, C.; Méndez, M.; Muñoz, L. Evaluación de un producto sonoro en las creencias referidas al consumo de alcohol en jóvenes universitarios [Evaluation of a sound product in beliefs related to alcohol consumption in university students]. *Horizontes Pedagógicos* **2013**, *15*(1), 83-95.
15. Suárez, C.; Del Moral, G.; Martínez, B.; John, B.; Musitu, G. El patrón de consumo de alcohol en adultos desde la perspectiva de los adolescentes [Adult pattern of alcohol use as perceived by adolescents]. *Gac Sanit* **2016**, *30*(1), 11-17. doi:10.1016/j.gaceta.2015.06.004.
16. Almeida, L.; Pérez-Fuentes, M.C.; Casanova, J.R.; Gázquez, J.J.; Molero, M.M. Alcohol expectancy-adolescent questionnaire (AEQ-AB): Validation for Portuguese college students. *Health and Addictions* **2018**, *18*(2), 155-163. <http://dx.doi.org/10.21134/haaj.v18i2.389>.
17. Gázquez, J.J.; Pérez-Fuentes, M.C.; Molero, M.M.; Martos, A.; Cardila, F.; Barragán, A.B.; Carrión, J.J.; Garzón, A.; Mercader, I. Adaptación española del Cuestionario de Expectativas del Alcohol en adolescentes [Spanish adaptation of the Alcohol Expectancy-Adolescent Questionnaire, Brief]. *Eur J Investing Health Psycho* **2015**, *5*(3), 357-369. doi:<http://dx.doi.org/10.1989/ejihpe.v5i3.138>.
18. Pérez-Fuentes, M.C.; Molero, M.M.; Gázquez, J.J. Expectations and Sensation-Seeking as predictors of *Binge Drinking* in adolescents. *An Psicol* **2019**, *35*(1), 124-130. <http://dx.doi.org/10.6018/analesps.35.1.308511>.
19. Leeman, R.F.; Hoff, R.A.; Krishnan-Sarin, S.; Patock-Peckhan, J.A.; Potenza, M.N. Impulsivity, Sensation-Seeking, and Part-Time Job Status in Relation to Substance Use and Gambling in Adolescents. *J Adolescent Health* **2014**, *54*(4), 460-466. <http://dx.doi.org/10.1016/j.jadohealth.2013.09.014>.
20. Neumann, A.; Barker, E.; Koot, H.; Maughan, B. The Role of Contextual Risk, Impulsivity, and Parental Knowledge in the Development of Adolescent Antisocial Behavior. *J Abnorm Psychol* **2010**, *119*(3), 534-545. doi:10.1037/a0019860.
21. Malmberg, M.; Kleinjan, M.; Overbeek, G.; Vermulst, A.A.; Lammers, J.; Engels, R. Are There Reciprocal Relationships Between Substance Use Risk Personality Profiles and Alcohol or Tobacco Use in Early Adolescence? *Addict Behav* **2013**, *38*(12), 2851-2859. doi:10.1016/j.addbeh.2013.08.003.
22. Alcázar, M.A.; Verdejo, A.; Bouso, J.C.; Ortega, J. Búsqueda de sensaciones y conducta antisocial [Sensation seeking and antisocial behaviour]. *Anuario de Psicología Jurídica* **2015**, *25*, 75-80. doi:10.1016/j.apj.2015.01.003.
23. Alarcón, P.A.; Pérez-Luco, R.X.; Wenger, L.S.; Salvo, S.I.; Chesta, S.A. Personality and offense severity in adolescents with persistent antisocial behavior. *Revista Iberoamericana de Psicología y Salud* **2018**, *9*(1), 58-74.
24. Pérez-Fuentes, M.C.; Gázquez, J.J.; Molero, M.M.; Cardila, F.; Martos, A.; Barragán, A.B.; Garzón, A.; Carrión, J.J.; Mercader, I. Impulsividad y consumo de alcohol y tabaco en adolescentes [Adolescent impulsiveness and use of alcohol and tobacco]. *Eur J Investing Health Psycho* **2015**, *5*(3), 371-382. <http://dx.doi.org/10.1989/ejihpe.v5i3.139>.
25. Charles, N.E.; Ryan, S.R.; Bray, B.C.; Mathias, C.W.; Acheson, A.; Dougherty, D.M. Altered Developmental Trajectories for Impulsivity and Sensation Seeking among Adolescent Substance Users. *Addict Behav* **2016**, *60*, 235-241. doi:10.1016/j.addbeh.2016.04.016.
26. Pichardo, M.C.; Arco, J.L.; Fernández-Martín, F.D. La relación entre la impulsividad cognitiva (R-I) y el maltrato entre iguales o "bullying" en educación primaria [The relationship between cognitive impulsivity (R-I) and peer abuse or "bullying" in primary education]. *Anál Modif Conducta* **2005**, *31*(138), 359-377.

27. Gázquez, J.J.; Pérez-Fuentes, M.C.; Molero, M.M.; Simón, M.M. Búsqueda de sensaciones e impulsividad como predictores de la agresión en adolescentes [Sensation seeking and impulsivity as predictors of aggression in adolescents]. *Psychol Soc Educ* **2016**, *8*(3), 243-255.
28. Pérez-Fuentes, M.C.; Molero, M.M.; Carrión, J.J.; Mercader, I.; Gázquez, J.J. Sensation-Seeking and Impulsivity as Predictors of Reactive and Proactive Aggression in Adolescents. *Front Psychol* **2016**, *7*, 1447. doi:10.3389/fpsyg.2016.01447.
29. Gázquez, J.J.; Pérez-Fuentes, M.C.; Carrión, J.J.; Luque, A.; Molero, M.M. Interpersonal Value Profiles and Analysis to Adolescent Behavior and Social Attitudes. *Rev Psicodidact* **2015**, *20*(2), 321-337. doi:http://dx.doi.org/10.1387/RevPsicodidact.12978.
30. Guo, S. A meta-analysis of the predictors of cyberbullying perpetration and victimization. *Psychol Schools* **2016**, *53*(4), 432-453.
31. Molero, M.M.; Pérez-Fuentes, M.C.; Luque, A.; Martos, A.; Barragán, A.B.; Simón, M.M. Interpersonal Values and Academic Performance Related to Delinquent Behaviors. *Front Psychol* **2016**, *7*, 1480. doi:10.3389/fpsyg.2016.01480.
32. Álvaro, J.I.; Zurita, F.; Castro, M.; Martínez, A.; García, S. Relación entre consumo de tabaco y alcohol y el autoconcepto en adolescentes españoles [The relationship between consumption of tobacco and alcohol and self-concept in Spanish adolescents]. *Revista Complutense de Educación* **2016**, *27*(2), 533-550.
33. Morales, F.M. Relaciones entre afrontamiento del estrés cotidiano, autoconcepto, habilidades sociales e inteligencia emocional [Relationships between coping with daily stress, self-concept, social skills and emotional intelligence]. *Eur J Educ Psychol* **2017**, *10*(2), 41-48. http://dx.doi.org/10.1016/j.ejeps.2017.04.001.
34. Goñi, E.; Esnaola, I.; Rodríguez, A.; Camino, I. Personal self-concept and satisfaction with life in adolescence, youth and adulthood. *Psicothema* **2015**, *27*(1), 52-58. doi:10.7334/psicothema2014.105.
35. Cutrín, O.; Gómez-Fraguela, J.A.; Maneiro, L.; Sobral, J. Effects of parenting practices through deviant peers on nonviolent and violent antisocial behaviours in middle- and late-adolescence. *Eur J Psychol Appl Legal Context* **2017**, *9*(2), 75-82. doi:10.1016/j.ejpal.2017.02.001.
36. Rodríguez-Fernández, A.; Ramos-Díaz, E.; Madariaga, J.M.; Arrivillaga, A.; Galende, N. Steps in the construction and verification of an explanatory model of psychosocial adjustment. *Eur J Educ Psychol* **2016**, *9*(1), 20-28. doi:10.1016/j.ejeps.2015.11.002.
37. Litt, D.M.; Lewis, M.A. Examining a social reaction model in the prediction of adolescent alcohol use. *Addict Behav* **2016**, *60*, 160-164. doi:10.1016/j.addbeh.2016.04.009.
38. Gerrard, M.; Gibbons, F.X.; Houlihan, A.E.; Stock, M.L.; Pomery, E.A. A Dual-Process approach to health risk decision making: The prototype willingness model. *Developmental Review* **2008**, *28*(1), 29-61. doi:http://dx.doi.org/10.1016/j.dr.2007.10.001.
39. Gázquez, J.J.; Pérez-Fuentes, M.C.; Molero, M.M.; Barragán, A.B.; Martos, A.; Sánchez-Marchán, C. Drug use in adolescents in relation to social support and reactive and proactive aggressive behavior. *Psicothema* **2016**, *28*(3), 318-322. doi:10.7334/psicothema2015.327.
40. David-Ferdon, C.; Simon, T.R. *Preventing youth violence: Opportunities for action*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention: Atlanta, GA, United States, 2014.
41. Green, K.M.; Doherty, E.E.; Zebrak, K.A.; Ensminger, M.E. Association Between Adolescent Drinking and Adult Violence: Evidence From a Longitudinal Study of Urban African Americans. *J Stud Alcohol Drugs* **2011**, *72*(5), 701-710.
42. Maldonado-Molina, M.M.; Reingle, J.M.; Jennings, W.G. Does alcohol use predict violent behaviors? The relationship between alcohol use and violence in a nationally representative longitudinal sample. *Youth Violence Juv J* **2011**, *9*(2), 99-111. doi:10.1177/1541204010384492.
43. Gómez-Acosta, C.A.; Londoño, C. Modelo predictor del consumo responsable de alcohol y el comportamiento típicamente no violento en adolescentes [Predictive model of responsible consumption of alcohol and Typically not violent behavior in adolescents]. *Health and Addictions* **2013**, *13*(1), 23-33.
44. Buss, A.H.; Perry, M. The Aggression Questionnaire. *J Pers Soc Psychol* **1992**, *63*(3), 452-459.
45. Andreu, J.M.; Peña, M.E.; Graña, J.L. Adaptación psicométrica de la versión española del Cuestionario de Agresión [Psychometric adaptation of the Spanish version of the Aggression Questionnaire]. *Psicothema* **2002**, *14*(2), 476-482.
46. Iribarren, M.M.; Jiménez-Giménez, M.; García-de Cecilia, J.M.; Rubio-Valladolid, G. Validación y Propiedades psicométricas de la escala de impulsividad estado (EIE) [Validation and Psychometric Properties of the State Impulsivity Scale (EIE)]. *Actas Españolas de Psiquiatría* **2011**, *39*(1), 49-60.

47. Arce, R.; Fariña, F.; Vilariño, M. Daño psicológico en casos de víctimas de violencia de género: Un estudio comparativo de las evaluaciones forenses [Psychological injury in intimate partner violence cases: A contrastive analysis of forensic measures]. *Revista Iberoamericana de Psicología y Salud* **2015**, *6*(2), 72-80. <http://dx.doi.org/10.1016/j.rips.2015.04.002>.
48. Fariña, F.; Redondo, L.; Seijo, D.; Novo, M.; Arce, R. A meta-analytic review of the MMPI validity scales and indexes to detect defensiveness in custody evaluations. *Int J Clin Hlth Psyc* **2017**, *17*, 128-138. <http://dx.doi.org/10.1016/j.ijchp.2017.02.002>.