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Group self-identification, drug use and psychosocial correlates among Spanish adolescents

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Abstract

Teens tend to identify with social groups that characterize their lifestyles, interest in different musical styles and preference in specific activities. Previous studies conclude that group identification is a significant prospective predictor of drug use and other problematic behaviors but may not operate the same way in all cultures. There are no such studies that have been conducted in Spanish adolescents. This study examines the prevalence of self-identified group name research among Spanish adolescents, and its relationship between substance use and psychosocial constructs. The sample consisted of 791 Spanish adolescents from six secondary schools, aged between 14 to 18 years ($M = 15.03$; $SD = 1.01$). The results support the existence of group self-identification by youth. The High risk group reported significantly higher monthly cigarette and alcohol use, and the Others group reported higher monthly marijuana use. Regarding psychosocial correlates, youth with higher drug use report greater sensation seeking preference and higher levels of depression. Group self-identification is a consistent phenomenon among teens in different countries but, contrary to previous work, those youth not falling into a clearly defined group ("Others") were the most likely to use marijuana.
Keywords: self-identification; drug use; depression; sensation seeking; adolescents.

Resumen

Grupo de autoidentificación, consumo de drogas y correlatos psicosociales en adolescentes españoles. Los adolescentes tienden a identificarse con diferentes grupos sociales que caracterizan sus estilos de vida. Estudios previos concluyen que la identificación grupal es un predictor del consumo de drogas y otros comportamientos problemáticos, pero puede no funcionar de la misma manera en todos los países y en España no existen estudios al respecto con adolescentes. Este estudio examina la prevalencia de grupos de referencia entre los adolescentes españoles y su relación con el consumo de sustancias y otras variables psicológicas. La muestra estuvo compuesta por 791 adolescentes de nueve centros de educación secundaria, con edades comprendidas entre los 14 y 19 años ($M = 15.03$; $DT = 1.01$). Los resultados apoyan la existencia de grupos de identificación grupal por parte de los jóvenes. El grupo de alto riesgo informó de un consumo mensual significativamente mayor de cigarros y alcohol, y el grupo Otros informó de un consumo mensual más elevado de marihuana, en comparación con los otros grupos. En cuanto a las variables psicológicas, los jóvenes con mayor consumo de drogas informan de una mayor preferencia por la búsqueda de sensaciones y niveles más altos de depresión. La autoidentificación grupal es un fenómeno constante en los adolescentes entre los diferentes países, pero, contrariamente a lo encontrado en estudios previos, los jóvenes que no pertenecen claramente a un grupo definido son los más propensos al consumo de cannabis.
Palabras clave: autoidentificación; consumo de sustancias; depresión; búsqueda de sensaciones; adolescentes.

During adolescence individuals begin to develop their own codes of ethics (e.g., acceptable and unacceptable behaviors) and to spend more time with their peers (Balabanian & Lemos, 2018; Chen, Balan, & Price, 2012). Adolescents tend to name themselves into different peer group types, delineating their lifestyle characteristics, such as interest in clothes and music, and preference for specific activities (Ashmore, Del Boca, & Beebe, 2002). Adolescent friendship networks influence behavior often depends on the norms within the group or community, and on the perception of these norms, whether accurate or not (Eisenbert & Forster, 2003; Tankard & Paluck, 2016). Uncertainty-identity theory evidences that self-uncertainty motivates group identification, and uncertainty people identify more strongly with high than low entitativity groups because the former provide a more clearly defined social identity (Hogg, 2007; 2012).

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A social hierarchy exists among adolescent groups with Elites or Athletes at the top, and that this hierarchy is associated with the level of one's social involvement, self- esteem, or social acceptance (Prinstein & La Greca, 2002). Moderately high agreement regarding placement of specific names into the general categories – the Elites, Athletes, Academics, Deviants, and Others – have been achieved. In the United States, reputation-based peer groups have been in existence in the adolescent social culture for over 40 years and are represented by names such as "Goths", "Brains", and "Jocks" (Sussman, Pokhrel, Ashmore, & Brown, 2007). These groups tend to represent certain subcultural norms that the group members exhibit in practice. For example, "Jocks" tend to participate more in school activities and wear expensive clothes (Pokhrel, Sussman, Black, & Sun, 2010).

Several studies have found that peer group identification is related to problem prone behaviors, such as substance use and risk-taking (Lataster et al., 2006; Sussman et al., 2007), and may conclude that group self-identification is a significant prospective predictor of drug use and other problem behavior (Sussman, Dent, & McCullar, 2000). Fuqua et al. (2012) found in a sample of middle school students in Los Angeles that as adolescents endorsed more high-risk groups, the greater their risk of tobacco use. A recent study by Lee, Jordan, Djakaria, and Ling (2014) concludes that youth who identify with the hip hop peer crowd were more likely to smoke, whereas the norms associated with the Goth subculture are known to encourage depressed feelings (Rutledge, Rimer, & Scott, 2008). While these studies have been performed worldwide (Australia, Scotland, and England/Wales; Sussman et al., 2007), most group self-identification studies were completed in the United States (Sussman et al., 2010). Furhtermore, adolescent's sensation seeking has been shown to partly explain this disconnect between perceived risk and continued engagement in risk behaviors (Byck, Swann, Schalet, Bolland, & Mustanski, 2015).

Although the few studies conducted worldwide, we cannot be sure that group self-identification operates the same way in all countries, given the fact that countries trend to vary on a variety of cultural dimensions and that adolescents in different countries may differ in media use, which impacts the development of identity (Slater, 2007). Group self-identification has proven to be a valuable construct for understanding adolescent health behavior in the United States, so it is interesting to understand the extent to which this construct translates across borders. Knowing which adolescent peer groups are most likely to engage in problem-prone behavior can help better target preventive efforts. Some work has indicated that one's group identification predicts one's lifestyle 5 years later (Sussman, Unger, & Dent, 2004). The aim of the current study is to examine whether self-identification in a group is related to greater substance use in the context of a specific Spanish region. In the present study, we assessed the universality of group self-identification. Next, the relationship between substance use (tobacco, marijuana, and other drug use) and psychosocial correlates among Spanish adolescents were examined. We expected that high risk youth would show the highest prevalence of drug use behavior among the groups. Also, we expected that the Others, not falling into a clearly defined group, perhaps lacking peer support to boost their sense of self-worth, would also show higher drug use (Sussman et al., 2007), but not as high as at-risk groups, give findings of international previous work (Sussman et al., 2007). Consistent with previous work, we expected that groups having more substance use will report a higher mean score on sensation seeking and depression than the other groups (Gonzálvez, Espada, & Orgilés, 2015), since in Spain there are no studies regarding adolescents' group self-identification.

Method

Data collection and Measure

Before proceeding with the recruitment of the sample, the study was approved by the IRB at Miguel Hernandez University, involving informed consent. A total of six high schools from three cities in southeastern Spain (Elche [n = 4], Crevillente [n =1] and San Vicente [n =1]), were recruited. Attempts were made to help maintain confidentiality of the responses by placing completed questionnaire into sealed envelopes, relaying to youth that only the data analyst at UMH would see their responses and telling youth that their data would be entered via a code number rather than by name.

Questionnaires measured demographic characteristics, drug use behavior, and psychosocial constructs, and took approximately 20 minutes to complete. Demographic items included age (in years), gender, nationality (born in Spain, or immigrated to Spain from another country), current living situation (with parents, live alone, other situation), and parents' education (mean response across father's [or stepfather's] and mother's [or stepmother's] educational levels) based on categories derived from Hollingshead and Redlich (1958). The drug use measures included self-reported past 30-days cigarette, alcohol, and marijuana, behaviors that were assessed on 12-point scales (0, 1-10, 11-20, …, 91-100, over 100 times; e.g., Simon, Stacy, Sussman, & Dent, 1994; Sussman & Ames, 2008; Sussman et al., 2007). The drug use items were binary coded into any 30-day use for the analyses. Psychosocial construct measures included sensation seeking (impulsivity sensation seeking subscale; six items, measured on "true-false" binary scales such as "I sometimes do 'crazy' things just for fun"; alpha coefficient = .79; see Simon et al., 1994), and depression (five items of short CES-D scale, measured on 4-point scales from "less than 1 day" to "5-7 days" in last week, such as "How often did you feel depressed" [in the last 7 days]; alpha coefficient = .73; see Radloff, 1977).

The group self-identification item was used was the same as in Sussman et al. (1990). In addition to language adaptations, few changes were made in the specific self-identified groups to adapt it to Spanish culture (Grunge and Rappers groups were added in accordance with emerging Spanish youth groups). Subjects are instructed on this item that "People often hang out in different groups at school (for example, 'nerds', 'populars'). What is the name of the one group that you feel you're most a part of?". Specific categories were provided: (a) High risk group, (b) Populars (social, preppies), (c) Nerds, (d) Jocks (athletes), (e) Grunges, (f) Rappers (rap club), (g) Regular group (average), or (h) Others (open-ended response). The raw group names provided by youths are shown in the Appendix.

Participants

After the first in-person meeting with the school board of each school to present the objectives of the investigation, a total of six high schools from three cities were recruited (intentional sample, for convenience). An average of 12 classes was selected per school, with a range of 8 to 19 classes. Data were collected from 791 youths from 14 to 20 years of age (M = 15.03; SD = 1.01). The sample was 50.6% male; 91.7% Spanish, and 8.3% other nationality (e.g., South America, Morocco, Eastern Europe). Further, 81.3% of the students lived with both parents, and 36.1% of youths' fathers and 36.6% of youths' mothers completed high school (see Table 1).

Table 1. Demographic Characteristics of the Sample

Gender (% females)		49.4%
Age (M, SD)		15.03 (1.01)
Nationality	Spanish	91.7%
	Other	8.3%
Live with	Both parents	81.3%
	Mother only	9.7%
	Father only	1.3%
	Other	7.7%
Parents education	Primary education	23.1%
	Secondary education	36.1%
	Higher education	40.8%
Sensation seeking		8.57 (1.67)
Depression		8.70 (4.26)
Cigarette in the last month (%)		13.6%
Alcohol in the last month (%)		46.9%
Marijuana in the last month (%)		11.6%

Data analysis

A mixed model regression analysis with Least Square Mean (LSM) comparisons was used to assess mean differences across groups as a function of each of the drug use measures (cigarettes, alcohol, marijuana), except for drug use, because there were no data. Grunge group was removed because was not a significant group. Least Squares Means were controlled for age, gender, nationality, current living situation, and parent's education level. The use of mixed modeling has made it possible to calculate the standard errors of the estimates with the possible intra-school clustering for the outcomes modeled. Significance was set at $p < .05$, two-tailed.

Results

Self-group identification

The group that most teenagers are identified is Regulars (35.3%), followed by Athletes (25.15%), and Popular (12.1%). Groups with the least identified are Grunges (0.5%) and Rappers (2.9%). Grunge group was removed due its small sample size (n = 4). Frequencies are shown in Table 2.

Table 2. Group self-identification Descriptives

Group name	Frequency
High risk group	69 (8.7%)
Popular	96 (12.1%)
Nerds	46 (5.9%)
Jocks/athletes	199 (25.1%)
Grunge	4 (0.5%)
Rappers	23 (2.9%)
Regulars	279 (35.3%)
Others	75 (9.5)

Drug use

Table 3 shows the levels of drug use-related variables. The High risk group reported higher monthly marginally significant cigarette use ($M = 0.81$; $SD = 0.05$) compared to the other six groups (but only different from Nerds; $p < .1$, two-tailed). High risk group reported higher marginally significant monthly alcohol ($M = 0.74$; $SD = 0.06$) compared to the all other groups, and different from each other ($p < .1$). "Others" reported marginally significant higher monthly marijuana use ($M = 0.87$; $SD = 0.03$) compared with the Nerds, but not the remaining groups. Lower consumption occurred in Nerds for monthly cigarette ($M = 0.28$; $SD = 0.02$) and marijuana use ($M = 0.12$; $SD = 0.03$) and Rappers for monthly alcohol use ($M = 0.14$; $SD = 0.06$).

Table 3. Levels[1] of Drug Use-related Variables

Group Name	Drug Use Means[2]		
	Cigarettes	Alcohol	Marijuana
High risk group	0.81 (0.05) [a]	0.74 (0.06) [a]	0.67 (0.02) [ab]
Popular	0.64 (0.03) [b]	0.49 (0.05) [b]	0.56 (0.03) [ab]
Nerds	0.28 (0.02) [ab]	0.36 (0.04) [b]	0.12 (0.03) [b]
Jocks/athletes	0.63 (0.02) [b]	0.34 (0.03) [b]	0.41 (0.02) [ab]
Rappers	0.36 (0.07) [b]	0.14 (0.06) [b]	0.28 (0.03) [ab]
Regulars	0.43 (0.03) [b]	0.29 (0.02) [b]	0.61 (0.02) [ab]
Others	0.47 (0.01) [b]	0.53 (0.02) [b]	0.87 (0.03) [a]

Notes:

*Data for drug use are not reported in the table because the number was much lower than required to be analyzed.

[1]Mean (se) is reported in the table. The levels were adjusted for age, gender, nationality, current living situation, and parent's education level; possible intra-school correlations were modeled in mixed models.

[2]Denotes dichotomous variables (0 for No, and 1 for Yes).

[a,b]For each of the variables, the same superscript letters after the mean (se) numbers for the level designate that the levels were statistically non-significant (p > .05), different letters indicate significant differences across group comparisons.

*p < .05

**p < .001

Psychosocial constructs

Table 4. Levels[1] of Psychosocial Constructs-related Variables

Group Name	Psychosocial Constructs Means	
	Sensation Seeking[2]	Depression
High risk group	0.79 (0.03) [a]	1.81 (0.07) [a]
Popular	0.58 (0.06) [b]	1.58 (0.23) [ab]
Nerds	0.13 (0.04) [bc]	1.57 (0.35) [b]
Jocks/athletes	0.19 (0.06) [bc]	1.26 (0.48) [ab]
Rappers	0.22 (0.03) [bc]	1.63 (0.28) [ab]
Regulars	0.29 (0.03) [bc]	1.68 (0.62) [ab]
Others	0.61 (0.02) [b]	1.69 (0.04) [ab]

Notes:

[1]Mean (se) is reported in the table. The levels were adjusted for age, gender, nationality, current living situation, and parent's education level; possible intra-school correlations were modeled in mixed models.

[2]Denotes sensation seeking aligned for directionality, in which 1 is true and 0 is false regarding reporting a sensation seeking preference.

[a,b,c] For each of the variables, the same superscript letters after the mean (se) numbers for the level designate that the levels were statistically non-significant (p > .05), different letters indicate significant differences across group comparisons.

*p < .05

**p < .001

Table 4 shows the levels of psychosocial constructs-related variables. High risk group reported a greater marginally significant propensity toward sensation seeking behavior ($M = 0.79$; $SD = 0.03$) compared to all other groups. Populars ($M = 0.58$; $SD = 0.06$) and Others ($M = 0.61$; $SD = 0.02$) reported marginally significant greater sensation seeking than the other groups. The High risk group also reported higher scores on depression ($M = 1.81$; $SD = 0.07$) than the Nerds ($M = 1.57$; $SD = 0.35$), and was marginally higher than the other groups ($p < .1$). Nerds reported a relatively lower level of sensation seeking ($M = 0.13$; $SD = 0.04$) and Athletes a lower level of depression ($M = 1.26$; $SD = 0.48$).

Discussion

The aim of the present study was to assess the universality of group self-identification among Spanish adolescents, and to examine the relationship between substance use and psychosocial correlates, as in the high risk groups it was found higher scores in this variables (Sussman et al., 2010).

Adolescence is an important life phase that leads to attainment of new behaviors and capabilities enable transitions in different social environments, as peer group (Dahl, Allen, Wilbrecht, & Suleiman, 2018; Viner et al., 2012). During adolescence social transitions, such as changes in peer groups and increases in time spent with friends, extend adolescents' networks and relationships with others (Chen et al., 2012). Establishing meaningful social relationships with peers is one of the developmental tasks during adolescence (Prinstein & Dodge, 2010, Rageliené, 2016). Problem behaviors are often escalated in the group setting, and youth are more likely to commit negative behaviors with peers than when alone (Rubin, Bukowski, & Parker, 2006), socializing with them that share their attitudes and behaviors (Brown, 2004).

In the Spanish sample of the present study, most teenagers are identified as Regulars, followed by Athletes and Populars. Nerds show the lowest prevalence of marijuana, as youth that there are involved in school activities, and the Others, not falling into a clearly defined group, and perhaps lacking peer support to boost their sense of self-worth, show higher marijuana use. These results are consistent with other previous studies (see Sussman et al., 2007).

Adolescents identified as High risk group show the higher cigarette use, followed by Populars. Popular students have a need to embrace the norms of their community to remain popular and so they may have felt subtle pressure to be among the first to experiment with smoking (Valente, Unger, & Johnson, 2005). Popular students are more visible and, thus, contribute disproportionately to the establishment of social norms and, in this case, one that favors tobacco use. A study published by Verkooijen, de Vries, and Nielsen (2007) among Danish youth found that identification with risk groups was more strongly associated with substance use. A recent study of Moran and Sussman (2014) conclude that adolescents who strongly identified with the crowd targeted by the ad reported stronger antismoking attitudes and lower levels of smoking susceptibility. Those who disidentified with the crowd targeted in the ad exhibited not statistically significant increases in smoking susceptibility and weaker antismoking attitudes at posttest. When popular adolescents start to smoke, it sends a signal to other adolescents that smoking is acceptable and even desirable. Popular students are connected socially to a larger number of students and so might contribute disproportionately to the process of peer influence on smoking (Kreitzberg, Herrera, Loukas, & Pasch, 2018). If true, Populars will be among the first to experiment

with other illegal substances, although in the present study students at High risk group show the higher alcohol use. Greater exposure to drinking peers would increase adolescents' likelihood of using alcohol and other drugs (Floyd, Alexandre, Hedden, Lawson, & Latimer, 2010). A study carried by HeavyRunner-Rioux and Hollist (2010) found that adolescents' associations with drinking peers' attitudes were the strongest predictors of most of the six substance abuse outcomes they measured in their research. College students often drink when socializing in groups and overrate their peers' alcohol use (Chen et al., 2012).

Regarding psychosocial constructs, our hypothesis is confirmed. The groups having more substance use report a higher mean score on sensation seeking and depression than the other groups. In a study by Espada, Sussman, Huedo-Medina, and Alfonso (2011) increased consumption of tobacco, alcohol, and marijuana was observed among depressed adolescents than their peers. Quinn and Harden (2013) found that sensation seeking is not a stable risk factor for substance use among adolescents, but rather undergo significant developmental maturation and change. In the present study, High risk group have a higher mean score on sensation seeking and depression, being the group that shows the higher cigarette and alcohol use. That confirms previous studies about the relationship between mood and tobacco use (Gonzálvez et al., 2015). High risk group psychosocial constructs are followed by Others, which is the group with a higher mean score in marijuana use. Regardless of the association between substance use and psychosocial constructs, Rutledge et al. (2008) stated that the Goth subculture was known to encourage depressed feelings.

The data suggest that group self-identification is a consistent phenomenon among teens in different countries (Sussman et al., 2010), the same type of general groups exist, but the pattern of differences across these groups on drug use and psychosocial variables differs across countries. These findings have implications for prevention interventions, particularly media-based. The finding in our study that similar youth types were at higher risk for drug use suggests that similar drug abuse prevention campaign ads might be developed and attempted specifically for each group.

Still, there are several notable limitations. First, only cross-sectional data were collected, so statements regarding order of precedence could not be made. Youth's identification with discrete social types in the culture suggests that as teens transition to adulthood, they explore certain social roles that place themselves within a location in the society (Sussman et al., 2010). Because the data were cross-sectional, the social type in which they place themselves might at first glance seem obvious. In other work of Sussman et al. (2007), group identification predicts later drug use, controlling for baseline drug use, and has been found to predict drug use and several other types of social behavior as long as 5 years later in emerging adulthood. In this study, therefore, it is difficult to establish causal relationships. Second, there were few adolescents identified in Grunge group and it had to be removed from the analysis. Rappers group was remained, but future work is needed with larger samples in Spain. Thirdly, future research on tobacco use cessation programming in Spain is needed in other regions of the country, with the aim of generalizing the results.

This study, in addiction to compare the results differences with what has been done in other countries (Australia, Scotland, and England/Wales), is the first study that examined Spanish adolescents' group self-identification. It would appear that group self-identification is a universal phenomenon, but more research is needed. The majority of current school-based programs targeting drug use and psychosocial constructs seem to involve behavioral and psychosocial

components, as social skills training and cognitive-behavioral skills training. However, few such programs seem to consider the effects of peer group norms in exacerbating adolescents' drug use and other problem behavior, as depression or sensation seeking. This study supports the use of group self-identification as a construct for understanding adolescent risky behavior in Spanish adolescents and will be useful for the targeting and design of interventions.

Fundings

Conflict of interest

There are no conflicts of interest to report.

Appendix: List of specific names used in each general category

High risk group:

Emos*:* punk, rockabilly, skateboard, indie rock, gothic rock
Gothics*:* dark, sinister, death rock, Satanists, dark ambient, dark wave
Rockers*:* manes, long hair, Harley, black clothes, boots, drunkenness,
Hippies*:* brightly colored/ faded clothing, flares, smoking marijuana
Heavy metals: metal heads, stoners, rock, crazy loud-mouths, leather
Skaters: rapper, rollerblade, punk, street
Popular: leader, pretty ones, principal, the best, the top, glamour, glam youth, the best people, blondies group, super outgoing, handsome, number one, stars, VIP
Nerds: philosophers, authors, geeks, brains
Jocks/athletes: sportsman, soccer players
Grunge: rockers, crunch, hair/ glam-metal, indie
Rappers: hip hop, hardcore rap, chains, baggy clothes, graffiti
Regulars: normal schoolboys and schoolgirls, moderates, usual people, band, average
Others: indolent, slangy, brave ones, happy boys, funny, not in a group, I don't know, casual, gamers, musicians, immigrant, hipster

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