anales de psicología / annals of psychology
2018, vol. 34, nº 3 (october), 536-544
http://dx.doi.org/10.6018/analesps.34.3.315201

ISSN print edition: 0212-9728. ISSN on line edition (http://revistas.um.es/analesps): 1695-2294.

Psychosocial maladjustment in adolescence: Parental socialization, self-esteem, and substance use

María Riquelme, Oscar F. García, and Emilia Serra*

Department of Developmental and Educational Psychology, Faculty of Psychology, University of Valencia (Spain).

Título: Desajuste psicosocial en la adolescencia: socialización parental, autoestima y uso de sustancias.
Resumen: Este estudio analiza la vulnerabilidad de los adolescentes a partir de la autoestima y el consumo de sustancias, y la protección o riesgo del estilo de socialización. La muestra fue de 1445 adolescentes españoles (59.4% mujeres), 600 tempranos de 12 a 15 años (41.5%) y 845 tardíos de 16 a 17 años (58.5%). Las familias se clasificaron en una de las cuatro tipologías: indulgente, autorizativa, autoritaria y negligente. El ajuste de los hijos se midió con autoestima (emocional, familiar y física) y consumo de sustancias (alcohol, tabaco, cannabis y drogas de síntesis). Los resultados mostraron que en la adolescencia tardía la vulnerabilidad fue mayor que en la temprana. Se encontró una interacción entre la etapa de la adolescencia y el sexo. Los adolescentes tardíos presentaron mayor consumo de sustancias (aunque no las adolescentes) en cannabis y drogas de síntesis. La menor autoestima emocional correspondió a las adolescentes tardías y la menor autoestima familiar a los adolescentes tardíos. El estilo parental no interactuó con la etapa de la adolescencia ni con el sexo. El estilo indulgente igualó, o incluso mejoró, la protección respecto del autorizativo, mientras que los estilos parentales autoritario y negligente actuaron como factores de riesgo.
Palabras clave: Estilos de Socialización; Adolescencia Temprana y Tardía; Desajuste Psicosocial; Autoestima; Drogas.

Abstract: This study analyzes adolescents' vulnerability based on self-esteem and substance use, with parenting style as a protective or risk factor. The sample was composed of 1445 Spanish adolescents (59.4% females), 600 early (41.5%, from 12 to 15 years old) and 845 late (58.5%, from 16 to 17 years old) adolescents. Families were classified in one of four typologies: Indulgent, authoritative, authoritarian, and neglectful. Adolescents' adjustment was captured through self-esteem (emotional, family, and physical) and substance use (alcohol, tobacco, cannabis, and synthetic drugs). Results showed that vulnerability was greater in late adolescence than in early adolescence. An interaction was found between the adolescent stage and gender. Male late adolescents had higher substance use of cannabis and synthetic drugs. The lowest emotional self-esteem corresponded to female late adolescents, and the lowest family self-esteem corresponded to male late adolescents. The parenting style did not interact with the stage of adolescence or gender. The indulgent parenting style was associated with equal or even greater protection than the authoritative parenting style against psychosocial maladjustment problems in adolescence, whereas the authoritarian and neglectful parenting styles acted as risk factors.
Keywords: Parenting Styles; Early and Late Adolescence; Psychosocial Maladjustment; Self-esteem; Drugs.

Introduction

An important psychosocial maladjustment has been described in adolescence through the analysis of a wide range of criteria, including self-esteem (Rodrigues, Veiga, Fuentes & García, 2013), drug use (Calafat, García, Juan, Becoña & Fernández-Hermida, 2014), motivation in school (Veiga, García, Reeve, Wentzel, & García, 2015), academic performance (Fuentes, Alarcón, Gracia & García, 2015), or adolescent behavioral problems (Martínez, Fuentes, García & Madrid, 2013). The decrease in psychosocial competence from early to late adolescence has been related to the increase in the influence of the peer group (Calafat et al., 2014; Dohnt & Tiggemann, 2006; Gardner & Steinberg, 2005; Smith, Chein & Steinberg, 2014; Veiga et al., 2015). Despite the increase in peer group influence, parental socialization continues to function as a fundamental source of protection from this psychosocial vulnerability (Baumrind, 1991; Calafat et al., 2014; Cerezo, Ruiz-Esteban, Lacasa & Gonzalo, 2018; Chan, Kelly, Carroll & Williams, 2017; García & Gracia, 2009; Martínez-González, Rodríguez-Ruiza, Álvarez-Blancoa, & Becedóniz-Vázquez, 2016). After numerous studies, there is still debate in the specialized literature about the best parenting strategy to preserve psychosocial competence throughout the adolescent period.

*** Correspondence address [Dirección para correspondencia]:**
Emilia Serra. Department of Developmental and Educational Psychology, Faculty of Psychology, University of Valencia. Av. Blasco Ibáñez, 21. 46010 Valencia (Spain). E-mail: emilia.serra@uv.es

The life cycle stage of adolescence is characterized by greater psychosocial vulnerability. An increase has been observed in the need to regulate affect and behavior through personal goals, which are frequently different from the goals adults provided during childhood (Steinberg, 2005, 2007). The increasing risks the adolescent assumes have been explained by the fragile balance between thrill-seeking and novelty, especially from early adolescence, and the capacity for self-regulation, which is still immature and does not develop completely until early adulthood (Alonso-Stuyck, Zacarés & Ferreres, 2018; Steinberg, 2001, 2004; Steinberg & Morris, 2001;). The search for autonomy and personal identity has been related to an important emotional vulnerability. Several studies have found variations in self-esteem throughout adolescence, with early adolescents presenting higher self-esteem than late adolescents.

Likewise, it has been pointed out that the vulnerability is different depending on the adolescent's gender. Some one-dimensional measures show greater self-esteem in male adolescents (Martín-Albo, Nuñez, Navarro & Grijalvo, 2007), despite considerable differences among the distinct cultural versions (Calafat et al., 2014). In addition, some multidimensional measures consistently differentiate male and female self-esteem by domains based on the gender stereotypes of western culture (García & Gracia, 2009; Torres, Mohand & Mohand, 2017). Whereas male adolescents present greater emotional and physical self-esteem, female adolescents present greater family self-esteem (García & Gracia, 2009; Swaim & Wayman, 2004; Wild, Flisher, Bhana & Lombard, 2004).

Along the same lines, experimentation with alcohol, tobacco, and other drugs during early adolescence is a firm and consistent predictor of future drug use in adulthood (Kandel, Kessler & Margulies, 1978; Newcomb, Maddahian, Skager & Bentler, 1987; Osgood, Johnston, O'Malley & Bachman, 1988; Vega, Zimmerman, Warheit & Apospori, 1993; Zacarés, Serra, Torres, 2015). Alcohol use and tobacco consumption increase from early to late adolescence (Jackson, Sher, Cooper & Wood, 2002; Melchior, Chastang, Goldberg & Fombonne, 2008). Differences in alcohol abuse have been associated with a lower perception of risk (Barnes, Reifman, Farrell & Dintcheff, 2000; Jackson et al., 2002; Melchior et al., 2008). For example, Jackson et al. (2002), in a longitudinal study with more than 4000 teenagers, found that alcohol abuse increased during adolescence in male adolescents, but not in female adolescents. Moreover, an increase has been found in cannabis and synthetic drug use in late adolescence, although this tendency has only been observed in male adolescents because they seem to perceive less risk associated with these illegal substances (Garcia & Gracia, 2009; Newcomb et al., 1987).

Parental socialization has been identified as a main source of influence on psychosocial vulnerability in adolescence (Adalbjarnardottir & Hafsteinsson, 2001; Calafat et al., 2014; García & Gracia, 2009, 2010; Hummel, Shelton, Heron, Moore & van den Bree, 2013; Valente, Cogo-Moreira & Sanchez, 2017). Research examining relationships between parental socialization and effects on children's development traditionally uses a two-dimensional model with four typologies of parenting styles. Through the combination of acceptation/involvement and strictness/imposition, both theoretically orthogonal dimensions, four family typologies are obtained: authoritative (acceptance/ involvement and strictness/imposition), authoritarian (without acceptation/involvement but with strictness/imposition), indulgent (acceptation/involvement but without strictness/imposition), and neglectful (without acceptance/involvement or strictness/imposition) (Baumrind, 1991; Darling & Steinberg, 1993; Lamborn, Mounts, Steinberg & Dornbusch, 1991; Maccoby & Martin, 1983; Martínez, Cruise, García, & Murgui, 2017; Steinberg, Lamborn, Darling, Mounts & Dornbusch, 1994).

Although parents are normally considered a protective factor against adolescent psychosocial risks, parents' behavior has been related to important variations in both self-esteem and the use of alcohol, tobacco, and illegal drugs during adolescence (Darling & Steinberg, 1993, Lamborn et al., 1991; Steinberg et al., 1994). Research carried out mainly in English-speaking contexts with European-American samples has systematically identified the authoritative parenting style as a factor providing greater protection against psychosocial vulnerability. In the same way, adolescents from authoritarian families, also characterized by strictness/imposition, present a lower risk of consuming alcohol and other drugs than adolescents from families that are not characterized by strictness/imposition (indulgent and neglectful) (Bahr & Hoffmann, 2010; Darling & Steinberg, 1993, Steinberg et al., 1994). However, studies agree that adolescents from authoritarian families present a greater risk of self-esteem problems than those from families characterized by acceptance/involvement (authoritative and indulgent) (Bahr & Hoffmann, 2010; Hoffmann & Bahr, 2014; Lamborn et al., 1991). Likewise, research conducted mainly in English-speaking contexts with European-American samples has also consistently found that indulgent and neglectful parenting styles, both characterized by low strictness/imposition, constitute the main risk factor for adolescent vulnerability (Bahr & Hoffmann, 2010; Baumrind, 1991; Lamborn et al., 1991).

Although firm control and rigor are equally present in authoritative and authoritarian parents, there are important conceptual differences between the behaviors in these two parenting styles that have not always been taken into account in the literature (see Calafat et al., 2014; García et al., 2015; Kerr & Stattin, 2000; Stattin & Kerr, 2000). For example, monitoring (active parental supervision) was initially ambiguously conceptualized as a parenting practice that involves active attempts by the parents to watch over their children. However, several researchers have pointed out that, although parental monitoring is clearly related to a wide range of indicator variables of psychosocial adjustment, most of this positive relationship with the adjustment criteria corresponded to the importance of spontaneously revealing information to the parents (typical of the authoritative style), but not to the parents' intrusive attempts to extract information (typical of the authoritarian style) (Ahn & Lee, 2016; Calafat et al., 2014; Carroll et al., 2016; Holdsworth, Laverty & Robinson, 2017; Kerr & Stattin, 2000; McLaughlin, Campbell & McColgan, 2016; Stattin & Kerr, 2000).

However, although the authoritative style is associated with important benefits for White, middle class, American adolescents, studies in other cultural and ethnic contexts pose serious concerns about whether the authoritative parenting style is always associated with the greatest protection against adolescent psychosocial vulnerability. On the one hand, the authoritarian parenting style, characterized by strictness/imposition but without acceptance/involvement, is related to optimal adjustment in ethnic minorities in the United States (Chao, 2001; Deater-Deckard & Dodge, 1997, Wang & Phinney, 1998). For example, Chao (2001) found that the authoritarian style was related to the higher academic performance of Chinese-American children. Moreover, research conducted in the Middle East and Asia has suggested benefits of the authoritarian style. Thus, the authoritarian parenting style has been associated with Chinese children's satisfaction with their father-son relationship (Quoss & Zhao, 1995), and it has not been associated with mental health issues in adolescents from Arabic societies (Dwairy, Achoui, Abouserfe & Farah, 2006).

On the other hand, the indulgent parenting style, characterized by acceptance/involvement, but without the strictness/imposition component, provides extensive benefits

and protection against psychosocial vulnerability in European and South American adolescents (DiMaggio & Zappulla, 2014; Fuentes, Alarcón, García, & Gracia, 2015; García et al., 2015; García & Gracia, 2009, 2010; Gracia, Fuentes, García, & Lila, 2012; Martínez, García, & Yubero, 2007). For Spanish adolescents, the indulgent parenting style appears to provide a key protection factor against drug and alcohol use that is just as efficacious as the authoritative style (Calafat et al., 2014; Garcia & Gracia, 2009, 2010; Martínez et al., 2013), or even more so, with children from indulgent families obtaining better adjustment than children from authoritative families on criteria such as self-esteem, psychosocial maladjustment, personal competence, and a wide range of behavioral problems (Fuentes, García, Gracia & Alarcón, 2015; Fuentes, García, Gracia & Lila, 2011; Martínez & García, 2007, 2008). Recently, research conducted with a large sample of European adolescents from Sweden, Slovenia, the Czech Republic, the United Kingdom, Spain, and Portugal (Calafat et al., 2014) thoroughly examined which parenting style is more efficient in protecting against emotional vulnerability, substance use, and other psychosocial adjustment problems in adolescence. The results of the study indicated that, in all the countries analyzed, the indulgent style was the best protection factor and as effective as the authoritative style against substance abuse and behavioral problems, and even more effective than the authoritative style for self-esteem and academic performance.

The current study is based on the assumption that there is a psychosocial maladjustment in self-esteem (emotional, family, and physical) in adolescence that is accompanied by early initiation into substance use (alcohol, tobacco, cannabis, and synthetic drugs). This maladjustment increases with age, such that late adolescents present lower self-esteem and greater drug use than younger adolescents. Variations in self-esteem associated with the adolescents' gender have been related to the gender stereotypes of the social context; greater emotional and physical self-esteem are expected in male adolescents, whereas greater family self-esteem is expected in female adolescents. Because the use of cannabis and synthetic drugs is associated with greater acceptance of risks, less use of these substances is expected in female adolescents because they perceive their risk to a greater degree. Although adolescence is associated with an important psychosocial vulnerability, in this key stage the indulgent parental socialization will be associated with equal or greater protection than the authoritative style. On the other hand, the authoritarian and neglectful parenting styles will be risk factors.

Method

Participants and procedure

The study sample was composed of 1445 adolescents from 12 to 17 years old (M = 15.54; SD = 1.95), of which 858 were female (59.4%) and 587 male. An a priori calculation was performed of the statistical power to detect a low-medium effect size (f = 0.110), fixing Type I and Type II errors, α = .05 and β = .95, for the univariate F tests among the four parenting styles, obtaining a minimum sample size of 1424 participants. The final study sample was slightly larger than the minimum size calculated. The sensitivity analysis for the final sample of 1445 participants, fixing the conventional Type I and Type II errors, α = .05 and β = .95, indicated that a slightly reduced low-medium effect size could be detected (f = 0.109) (Faul, Erdfelder, Buchner & Lang, 2009; García, Pascual, Frías, Van Krunckelsven & Murgui, 2008; Pérez, Navarro & Llobell, 1999).

This study was carried out following the research protocol approved by the Ethical Committee of the Scientific Research Development Program, Technological and Innovation Development of the Valencian Region, which supported this research. Twelve schools were chosen randomly from a complete official list of schools (public, private, and subsidized) in a Spanish Autonomic Region, until reaching the minimum sample size required to guarantee the statistical power. When the groups (schools) are chosen randomly, the elements that form the groups (students) will be equivalent to those that a random system would provide (Gracia, García, & Musitu, 1995; Kalton, 1983). The principals of each school were contacted and informed about the objectives of the study (the rejection rate was below 10%). The participants were students from 7th to 12th grades, corresponding to the age group from 12 to 17 years old. To participate in the study, the parents' consent was required, and the confidentiality of the students' answers was guaranteed. The students filled out the questionnaires in a classroom during the school day.

Measurement

Parental Socialization. To measure the acceptance/involvement dimension, 20 items from the WAS scale (*Warmth/Affection Scale*, Rohner, Saavedra & Granum, 1978) were used from the PARQ/C questionnaire (*Parenting Acceptance-Rejection/Control Questionnaire*, Rohner, 1989), which has been validated in Spanish (Fernández-García, Rodríguez-Menéndez & Peña-Calvo, 2017; Lila, García & Gracia, 2007). This scale offers a reliable measure of adolescents' perception of the degree to which their parents are involved and respond in a loving and sensitive way to their needs (example items: "Make me feel proud when I do well"; and "Talk to me in a warm and loving way"). The *alpha* coefficient was .924. In order to measure the strictness/imposition dimension, the 13 elements from the *PCS* (*Parenting Control Scale*, Rohner, 1989; Rohner & Khaleque, 2003) were used from the PARQ/C questionnaire (*Parenting Control Scale*, Rohner, 1989). This scale offers a reliable measure of adolescents' perception of the degree to which their parents exercise imposing, firm, and demanding control over their behavior (example items: "It make sure that I know exactly what I can and cannot do"; and "Insist that I

do exactly as I am told"), with an *alpha* value of .847. Both questionnaires use Likert-type scales ranging from 1 "Almost never true" to 4 "Almost always true". High scores on each factor imply greater acceptance/involvement and/or strictness/imposition by the parents.

Self-esteem. It was measured with three scales from the AF5 (García & Musitu, 1999), each composed of six items: emotional (example of an inverted item: "I am afraid of some things", alpha = .709), family (example item: "I am happy at home", alpha= .845), and physical (example item: "People ask me to participate in sports", alpha = .760) self-esteem. The response scale for the 18 elements was a Likert-type scale ranging from 1 "Strongly disagree" to 99 "Strongly agree". The AF5 multidimensional self-esteem questionnaire is one of the most widely used Spanish measures (*e.g.*, Fernández-Zabala, Rodríguez-Fernández & Goñi, 2016; Martín-Albo et al., 2007; Torregrosa-Ruiz, Molpeceres & Tomás, 2017; Torres et al., 2017). The dimensional structure has been empirically confirmed through exploratory (*e.g.*, García & Musitu, 1999) and confirmatory factorial analyses (*e.g.*, García, Gracia & Zeleznova, 2013; García, Musitu, Riquelme & Riquelme, 2011; García, Musitu & Veiga, 2006; Murgui, García, García & García, 2012; Tomás & Oliver, 2004), and no methodological problems have been found with negatively worded items (García et al., 2011; Tomás & Oliver, 2004).

Substance use. The frequency with which the adolescent had consumed tobacco, alcohol, and synthetic drugs in the past few weeks was measured (Calafat et al., 2014; Fuentes et al., 2015a, b; García & Gracia, 2009, 2010). A Likert-type response scale was used, ranging from 1 "nothing at all" to 4 "a lot". The alpha value was .665.

Analytical Plan

A multivariate MANOVA (4 × 2 × 2) factorial design was applied, where the dependent variables were the adolescents' adjustment criteria (emotional, family, and physical self-esteem; and substance use: alcohol, tobacco, cannabis, and synthetic drugs), and the independent variables were the parenting styles (indulgent, authoritative, authoritarian, and neglectful), gender (female vs. male), and age group (12 to 15 years old vs. 16 to 17 years old). Afterwards, univariate tests were applied to analyze the sources of significant variation in the multivariate analysis, and the Bonferroni test to analyze the significant univariate sources, maintaining the *alpha* per study at 5%.

Results

Parental educational styles

The participants were 1445 adolescents classified as indulgent, authoritative, authoritarian, or neglectful (Table 1): Indulgent, 383 adolescents (26.5%), with high scores on acceptance/involvement, M = 73.42, SD = 4.00, and low scores on strictness/imposition, M = 27.99, SD = 4.90; authoritative, 340 adolescents (23.5%), with high scores on acceptance/involvement, M = 72.82, SD = 3.57, and strictness/imposition, M = 38.47, SD = 4.69; authoritarian, 385 adolescents (26.6%), with low scores on acceptance/involvement, M = 56.44, SD = 8.86, and high scores on strictness/imposition, M = 39.43, SD = 5.09; and neglectful, 337 (23.3%) adolescents, with low scores on acceptance/involvement, M = 57.83, SD = 9.16, and strictness/imposition, M = 28.16, SD = 5.37. Likewise, the two main dimensions of parental socialization, acceptance/involvement and strictness/imposition, presented low correlations, r = -.111, R^2 = .01 (1%), p <.01. These results agreed with the orthogonality assumption of the two-dimensional socialization model.

Table 1. Distribution of the Family Parenting Style, and Mean and Standard Deviation of Dimensions of Acceptance/Involvement and Strictness/Imposition.

	Total	Indulgent	Authoritative	Authoritarian	Neglectful
Frequency	1445	383	340	385	337
Percentage	100.0	26.5	23.5	26.6	23.3
Acceptance/Involvement					
Mean	65.12	73.42	72.82	56.44	57.83
SD	10.60	4.00	3.57	8.86	9.16
Strictness/Imposition					
Mean	33.55	27.99	38.47	39.43	28.16
SD	7.42	4.91	4.69	5.09	5.37

Multivariate Analysis

The multivariate analyses indicated statistically significant differences (α = .05) in the age and gender interaction effects, Λ = .977, F(7.0, 1423.0) = 4.74, p < .001, and the main effects of parenting style, Λ = .749, F(21.0, 4086.6) = 20.56, p < .001, gender, Λ = .901, F(7.0, 1423.0) = 22.25, p < .001, and age, Λ = .806, F(7.0, 1423.0) = 48.94, p < .001 (Table 2).

Table 2. Factorial MANOVA ($4^a \times 2^b \times 2^c$) on Emotional Self-Esteem, Family Self-Esteem, and Physical Self-Esteem.

Source of Variation	Λ	*F*	$gl_{numerator}$	$gl_{denominaoor}$	*p*
(A) Parenting Style[a]	.749	20.56	21.0	4086.6	< .001
(B) Sex[b]	.901	22.25	7.0	1423.0	< .001
(C) Age[c]	.806	48.94	7.0	1423.0	< .001
A × B	.984	1.09	21.0	4086.6	.346
A × C	.980	1.40	21.0	4086.6	.105
B × C	.977	4.74	7.0	1423.0	< .001
A × B × C	.984	1.08	21.0	4086.6	.364

Note: [a]a_1, indulgent, a_2, authoritative, a_3, authoritarian, a_4, neglectful; [b]b_1, male, b_2, female; [c]c_1, 12-15 years, c_2, 16-17 years.

Psychosocial maladjustment in adolescence

On emotional, family, and physical self-esteem, the scores of the 16 to 17-year-old adolescents were lower than those of the 12 to 15-year-old adolescents (Table 3). On physical self-esteem, male adolescents presented higher scores than female adolescents. There was an interactive effect of gender by age on emotional self-esteem, $F(1, 1429) = 6.23$, $p = .013$ (Figure 1) and family self-esteem, $F(1, 1429) = 8.85$, $p = .003$ (Figure 2). On emotional self-esteem, the 16 to 17-year-old adolescents obtained lower scores than the 12 to 15-year-old adolescents, but this tendency was only found in males, whereas on family self-esteem, the 16 to 17-year-old adolescents also obtained lower scores than the 12 to 15-year-old adolescents, but this tendency was only observed in females.

Table 3. Means, (Standard Deviations), F Values, and Post-Hoc Procedure of Bonferroni for the Four Parenting Style Groups on Self-Esteem Dimensions and Drugs Use.

	Parenting Style					Sex			Age		
	Indul-gent	Autho-ritative	Autho-ritarian	Negli-gente	*F* (3, 1429)	Fem-ale	Male	*F* (1, 1429)	12-15 years	16-17 years	*F* (1, 1429)
Self-Esteem											
Emotional	5.74[1]	5.34[2]	5.23[2]	5.50	6.76***	5.13	5.93	62.90***	5.66	5.31	9.08***
	(1.77)	(1.76	(1.84)	(1.79)		1.83	1.65		1.83	1.77	
Family	8.94[1]	8.76[1]	6.85[3]	7.54[2]	145.06***	8.14	7.83	13.43***	8.19	7.89	16.34***
	(0.97)	(1.07)	(1.98)	(1.79)		1.74	1.75		1.68	1.80	
Physical	6.17[1]	6.19[1]	5.48[2]	5.69[2]	11.11***	5.60	6.28	41.02***	6.06	5.75	6.67***
	(1.80)	(1.91)	(1.96)	(1.91)		1.91	1.85		1.95	1.89	
Drugs Use											
Alcohol	17.13[2]	16.74[2]	18.65[1]	18.58[1]	4.18*	17.90	17.60	0.01	13.42	20.88	327.13***
	(7.49)	(7.81)	(9.20)	(8.95)		(8.41)	(8.46)		(6.32)	(8.37)	
Tobacco	13.52[2]	13.47[2]	15.48[1]	15.28[1]	4.43*	14.74	14.00	2.15	1233	15.94	66.18***
	(7.72)	(7.62)	(9.43)	(8.69)		(8.61)	(8.21)		(6.32)	(9.41)	
Cannabis	11.54[2]	11.53[2]	12.91[1]	13.23[1]	7.71***	11.97	12.78	5.79*	1113	13.12	48.41***
	(04.85)	(4.55)	(6.36)	(7.44)		(5.48)	(6.53)		(4.48)	(6.67)	
Synthetic drugs	10,05[2]	10.21[b]	10.60[1]	10.98[1a]	8.17***	10.28	10.70	6.71*	1020	10.63	13.79***
	(0.72)	(1.42)	(3.13)	(4.15)		(2.03)	(3.46)		(1.72)	(3.22)	

Note: Post-hoc procedure of Bonferroni $\alpha = .05$; *1 > 2, a > b.*
** p < .05, ** p < .01, *** p < .001.*

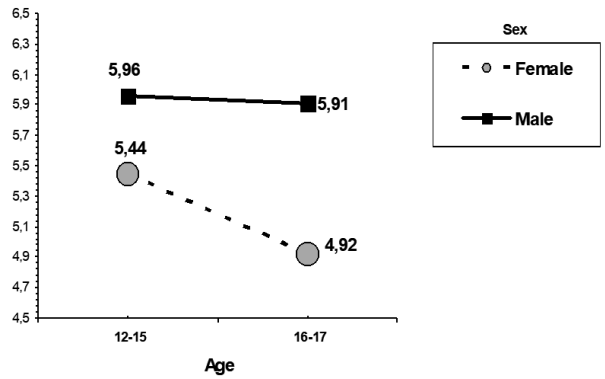

Figure 1. Means of Sex by Age Group in Emotional Self-Esteem.

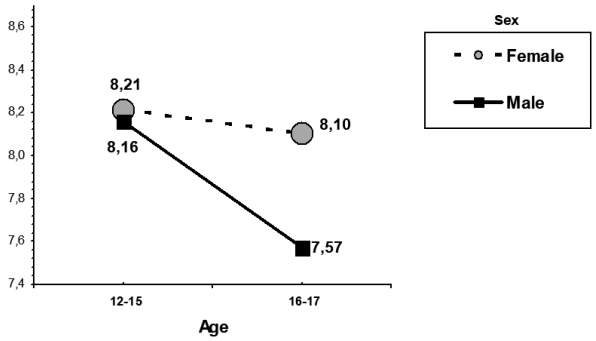

Figure 2. Means of Sex by Age Group in Family Self-Esteem

For alcohol, tobacco, cannabis, and synthetic drug use, the 16 to 17-year old adolescents obtained higher scores than the 12 to 15 years old (Table 3). Interactive effects were found for gender by age on cannabis use, $F(1, 1429) = 6.70$, $p = .010$ (Figure 3) and synthetic drug use, $F(1, 1429) =$

9.64, p = .002 (Figure 4). For cannabis use, 16 to 17-year-old adolescents obtained higher scores than 12 to 15-year-old adolescents, although 16 to 17-year-old late adolescent males used more cannabis than females. For synthetic drug use, basically the same pattern is shown, with higher use in male adolescents from 16 to 17 years old, who are basically the participants showing the increasing tendency.

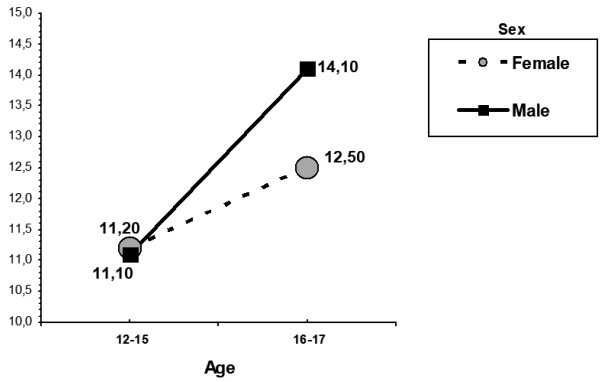

Figure 3. Means of Sex by Age Group in Cannabis Use

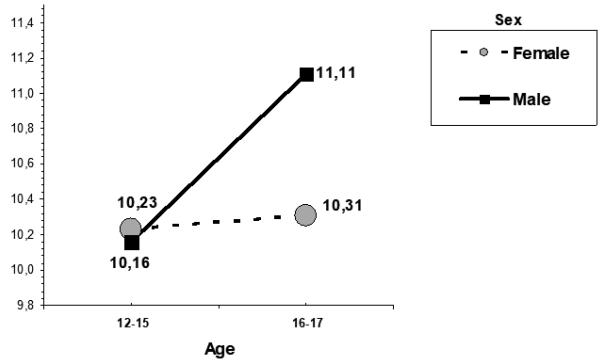

Figure 4. Means of Sex by Age Group in Synthetic Drugs Use

Parenting styles: protection from or risk of psychosocial maladjustment in adolescence

The results showed that the most protective parenting style was the indulgent style, related to equal or even greater protection against risks in adolescence than the authoritative style, whereas the authoritarian and neglectful parenting styles were related to greater vulnerability (Table 3). On the self-esteem criteria, children from indulgent homes obtained equal (on family and physical self-esteem) or even higher scores than those from authoritative families (on emotional self-esteem); the lowest scores pertained to children from authoritarian and neglectful families. For the use of drugs criteria, children who characterized their parents as indulgent and authoritative showed the lowest alcohol, tobacco, cannabis, and synthetic drug use, whereas the highest scores were observed in children from authoritarian and neglectful families.

Discussion

This study evaluated the adolescents' progressive psychosocial maladjustment through self-esteem and drug use criteria and the protection or risk provided by the parents' socialization style. As expected, the study analyses confirmed the adolescents' psychosocial maladjustment and their resulting vulnerability. The main effects of the age group indicated a persistent pattern that was congruent with what was expected, across all the variables analyzed. During late adolescence (16-17 years old), self-esteem (emotional, family, and physical) was lower, whereas substance use (alcohol, tobacco, cannabis, and synthetic drugs) was higher. Even though these effects are recognized throughout the literature (e.g., Jackson et al., 2002; Kandel et al., 1978; Melchior et al., 2008; Swaim & Wayman, 2004; Wild et al., 2004), in our study we found important aspects related to the period of adolescence when the vulnerability occurs, and that it depends on gender.

We have to point out that, along with the main effects, interaction effects were found between gender by age on physical and family self-esteem, and on cannabis and synthetic drug use, and these interactions are important aspects to take into account in prevention. For emotional self-esteem, the decrease associated with the two analyzed groups (early and late adolescents) only affected female adolescents. On the other hand, the decrease in family self-esteem at the age of 16 to 17 years old (late stage) mainly affected 16 to 17-year-old (late stage) males. These data from our study indicated that the psychosocial maladjustment in these two criteria differentially affected both genders. Male adolescents' vulnerability lies in family self-esteem, whereas female adolescents' vulnerability lies in emotional self-esteem, in addition to the main effect of physical self-esteem, which equally affects adolescents of both genders. The different vulnerability in the two genders is consistent with studies that have especially addressed this problem (e.g., Swaim & Wayman, 2004; Wild et al., 2004;), and it has not always been sufficiently taken into account due to the partial analysis of this vulnerability in samples, without considering the change from early to late adolescence (e.g., García & Gracia, 2010). These results reveal the need to introduce family conflict resolution for male adolescents and emotional self-regulation for female adolescents in prevention and intervention programs in educational contexts.

In addition, interaction effects of gender by age were found in adolescents' vulnerability to substance use. We should especially point out that two factors involve a greater health risk: cannabis and synthetic drugs. The common pattern for both substances (although it is clearer for the most dangerous one, synthetic drugs) is that the increase in use between early and late adolescence corresponds mainly to male adolescents, whereas female adolescents hardly initiate their use. These results correspond to the different perceptions of risk in the two genders (Jackson et al., 2002; Melchior et al., 2008). These aspects have not always been con-

sidered when designing prevention programs that focus mainly on drug problems (Calafat et al., 2014; Valente et al., 2017). These results reveal the need to emphasize the short- and long-term risks generally involved in the use of substances, and especially illegal ones such as cannabis and synthetic drugs. The relevance of including this risk perception variable in prevention programs becomes clear beyond early adolescence, especially in male adolescent groups.

The results found for the protection or risk contributed by parental socialization styles to adolescents' psychosocial vulnerability indicate that the parenting style does not interact with age or gender because only main effects were found (García & Gracia, 2009, 2010; Lamborn et al., 1991; Rodrigues et al., 2013; Steinberg et al., 1994). This finding indicates that the parenting style is a protective or risk factor regardless of the adolescent's age (throughout adolescence) or gender (it influences both genders equally). Higher risk corresponded to adolescents from authoritarian and neglectful families, who were characterized as being the most vulnerable adolescents, with the lowest scores on self-esteem (emotional, family, and physical) and the highest on substance use (alcohol, tobacco, cannabis, and synthetic drugs) criteria. The greatest family protection corresponded to parents with indulgent and authoritative socialization styles. The children of these styles were less vulnerable, obtaining higher scores on self-esteem and lower scores on substance use. However, the scores of the children from indulgent families were generally higher on all the self-esteem criteria, and significantly higher on emotional self-esteem. We should point out the lower emotional vulnerability of adolescents from indulgent families, and the higher emotional vulnerability of adolescents from authoritative families. The latter obtained worse scores on emotional self-esteem than the children from indulgent families, and their scores did not differ from those obtained by adolescents from authoritarian homes. This main effect confirms findings from other studies, even though the trajectory of vulnerabilities throughout adolescence has generally not been considered (Fuentes et al., 2015a; Garcia & Gracia, 2009, 2010; Martínez et al., 2013; Rodrigues et al., 2013).

One of the most significant contributions of this study is the systematic analysis of the protection and risk implications of family socialization on the vulnerability experienced in the critical stage of late adolescence (Jackson et al., 2002; Melchior et al., 2008). The results of this study confirm other previous findings on the change in personal adjustment, where indulgent parents provide greater protection to their children, followed by authoritative parents (García & Gracia, 2009, 2010; Rodrigues et al., 2013), and on vulnerability to the use of drugs, where indulgent and authoritative styles best protect their children (Calafat et al., 2014; Fuentes et al., 2015a; Garcia & Gracia, 2009, 2010; Martínez et al., 2013). These results clearly differ from other studies carried out in other cultural contexts, where, for example, the greatest protection against drug use corresponded to the authoritative and authoritarian styles (Bahr & Hoffmann, 2010; Baumrind, 1991, Hoffmann & Bahr, 2014, Lamborn et al., 1991, Steinberg et al., 1994).

This study has positive aspects and some limitations. A positive aspect is that it studied psychosocial vulnerability in Spanish adolescents, analyzing the early and late stages, although the composition in Spain is currently multi-ethnic and multi-cultural. Future studies should analyze whether the optimal parenting style is different in other ethnic and cultural minorities (Chao, 2001; Dwairy et al., 2006). Another limitation is that the answers come from adolescent children, even though there is evidence that children tend to present less social desirability than their parents (Barry, Frick, & Grafeman, 2008). Finally, this study is limited by a non-experimental methodology that does not allow us to categorically rule out the effects of third variables (Ato & Vallejo, 2007), and by its cross-sectional design, which does not allow us to draw definitive conclusions about intra-individual changes in psychosocial vulnerability. Future studies should use longitudinal data collection designs to analyze both the intra-individual changes in maladjustment throughout adolescence (from 12 to 17 years old) and the effects of intervention programs on groups, considering the adolescent period (early and late) and gender differences. Despite these limitations, this study provides a vision of adolescents' vulnerability, contextualized within the critical stage and gender, where the parents' role is essential in protecting them from the risks associated with this critical stage.

Acknowledgements.- The research reported in this article has been partially supported by Grants ACIF/2016/431 and BEFPI/2017/058 (Valencian Regional Government, and European Social Fund), and FPU16/00988 (Ministry of Education, Culture and Sports, Government of Spain).

References

Adalbjarnardottir, S., & Hafsteinsson, L. G. (2001). Adolescents' perceived parenting styles and their substance use: Concurrent and longitudinal analyses. *Journal of Research on Adolescence, 11*, 401-423. doi:10.1111/1532-7795.00018

Ahn, J., & Lee, S. (2016). Peer attachment, perceived parenting style, self-concept, and school adjustments in adolescents with chronic illness. *Asian Nursing Research, 10*, 300-304. doi:10.1016/j.anr.2016.10.003

Alonso-Stuyck, P., Zacarés, J. J., & Ferreres, A. (2017). Emotional Separation, Autonomy in Decision-Making, and Psychosocial Adjustment in Adolescence: A Proposed Typology. *Journal of Child and Family Studies*, 1-11. doi:10.1007/s10826-017-0980-5

Ato, M. & Vallejo, G. (2007). *Diseños experimentales en psicología*. Madrid: Pirámide.

Bahr, S. J., & Hoffmann, J. P. (2010). Parenting style, religiosity, peers, and adolescent heavy drinking. *Journal of Studies on Alcohol and Drugs*, *71*, 539-543. doi:10.15288/jsad.2010.71.539

Barnes, G. M., Reifman, A. S., Farrell, M. P., & Dintcheff, B. A. (2000). The effects of parenting on the development of adolescent alcohol misuse: A Six-Wave latent growth model. *Journal of Marriage and Family*, *62*, 175-186. doi:10.1111/j.1741-3737.2000.00175.x

Barry, C. T., Frick, P. J., & Grafeman, S. J. (2008). Child versus parent reports of parenting practices: Implications for the conceptualization of child behavioral and emotional problems. *Assessment, 15*, 294-303. doi:10.1177/1073191107312212

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence,* 11, 56-95. doi:10.1177/0272431691111004

Calafat, A., García, F., Juan, M., Becoña, E., & Fernández-Hermida, J.R. (2014). Which parenting style is more protective against adolescent substance use? Evidence within the European context. *Drug and Alcohol Dependence, 138*, 185-192. doi:10.1016/j.drugalcdep.2014.02.705

Carroll, H. A., Heleniak, C., Witkiewitz, K., Lewis, M., Eakins, D., Staples, J., … & Larimer, M. E. (2016). Effects of parental monitoring on alcohol use in the US and Sweden: A brief report. *Addictive Behaviors, 63*, 89-92. doi:10.1016/j.addbeh.2016.07.014

Cerezo, F., Ruiz-Esteban, C., Lacasa, C. S., & Gonzalo, J. J. A. (2018). Dimensions of parenting styles, social climate, and bullying victims in primary and secondary education. *Psicothema, 30*, 59-65. doi:10.7334/psicothema2016.360

Chan, G. C., Kelly, A. B., Carroll, A., & Williams, J. W. (2017). Peer drug use and adolescent polysubstance use: Do parenting and school factors moderate this association? *Addictive behaviors*, 64, 78-81. doi:10.1016/j.addbeh.2016.08.004

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*, 1832-1843. doi:10.1111/1467-8624.00381

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*, 487-496. doi:10.1037/0033-2909.113.3.487

Deater-Deckard, K., & Dodge, K. A. (1997). Externalizing behavior problems and discipline revisited: Nonlinear effects and variation by culture, context, and gender. *Psychological Inquiry, 8*, 161-175. doi:10.1207/s15327965pli0803_1

DiMaggio, R., & Zappulla, C. (2014). Mothering, fathering, and Italian adolescents' problem behaviors and life satisfaction: Dimensional and typological approach. *Journal of Child and Family Studies, 23*, 567-580. doi:10.1007/s10826-013-9721-6

Dohnt, H., & Tiggemann, M. (2006). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology, 42*, 929-936. doi:10.1037/0012-1649.42.5.929

Dwairy, M., Achoui, M., Abouserfe, R., & Farah, A. (2006). Parenting styles, individuation, and mental health of Arab adolescents: A third cross-regional research study. *Journal of Cross-Cultural Psychology, 37*, 262-272. doi:10.1177/0022022106286924

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analysess. *Behavior Research Methods, 41*, 1149-1160. doi:10.3758/BRM.41.4.1149

Fernández-García, C., Rodríguez-Menéndez, C., & Peña-Calvo, J. (2017). Parental control in interpersonal acceptance-rejection theory: a study with a Spanish sample using Parents' Version of Parental Acceptation-Rejection/Control Questionnaire. *Anales de Psicología, 33*, 1695-2294. doi:10.6018/analesps.33.3.260591

Fernández-Zabala, A., Rodríguez-Fernández, A., & Goñi, A. (2016). The structure of the Social Self-Concept (SSC) Questionnaire. *Anales de Psicología, 32*, 199-205. doi:10.6018/analesps.32.1.193931

Fuentes, M. C., Alarcón, A., García, F., & Gracia, E. (2015a). Use of alcohol, tobacco, cannabis and other drugs in adolescence: Effects of family and neighborhood. *Anales de Psicología, 31*, 1000-1007. doi:10.6018/analesps.31.3.183491

Fuentes, M. C., Alarcón, A., Gracia, E., & García, F. (2015b). School adjustment among Spanish adolescents: Influence of parental socialization. *Cultura y Educación, 27*, 1-32. doi:10.1080/11356405.2015.1006847

Fuentes, M. C., García, F., Gracia, E., & Alarcón, A. (2015). Parental socialization styles and psychological adjustment. A study in Spanish adolescents. *Revista de Psicodidactica, 20*, 117-138. doi:10.1387/RevPsicodidact.10876

Fuentes, M. C., García, F., Gracia, E., & Lila, M. (2011). Self-concept and drug use in adolescence. *Adicciones, 23*, 237-248. doi:10.20882/adicciones.148

Garcia, F., & Gracia, E. (2009). Is always authoritative the optimum parenting style? Evidence from Spanish families. *Adolescence, 44*(173), 101-131.

García, F., & Gracia, E. (2010). What is the optimum parental socialization style in Spain? A study with children and adolescents aged 10-14 years. *Infancia y Aprendizaje, 33*, 365-384. doi:10.1174/021037010792215118

Garcia, F., & Musitu, G. (1999). *AF5: Self-concept form 5*. Madrid, Spain: TEA.

García, F., Fernández-Doménech, L., Veiga, F. H., Bono, R., Serra, E., & Musitu, G. (2015). Parenting styles and parenting practices: Analyzing current relationships in the Spanish context. In F. Garcia (Ed.), *Parenting: Cultural influences and impact on childhood health and well-being* (pp. 17-31). Hauppauge, NY: Nova Science Publishers, Inc

García, F., Gracia, E., & Zeleznova, A. (2013). Validation of the English version of the Five-Factor Self-Concept Questionnaire. *Psicothema, 25*, 549-555. doi:10.7334/psicothema2013.33

García, J. F., Musitu, G., & Veiga, F. (2006). Self-concept in adults from Spain and Portugal. *Psicothema, 18*, 551-556.

García, J. F., Musitu, G., Riquelme, E., & Riquelme, P. (2011). A confirmatory factor analysis of the "Autoconcepto Forma 5" questionnaire in young adults from Spain and Chile. *Spanish Journal of Psychology, 14*, 648-658. doi:10.5209/rev_SJOP.2011.v14.n2.13

García, J. F., Pascual, J., Frías, M. D., Van Krunckelsven, D., & Murgui, S. (2008). Design and power analysis: n and confidence intervals of means. *Psicothema, 20*, 933-938.

Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. *Developmental Psychology*, *41*, 625. doi:10.1037/0012-1649.41.4.625

Gracia, E., Fuentes, M. C., García, F., & Lila, M. (2012). Perceived neighborhood violence, parenting styles, and developmental outcomes among Spanish adolescents. *Journal of Community Psychology, 40*, 1004-1021. doi:10.1002/jcop.21512

Gracia, E., García, F., & Musitu, G. (1995). Macrosocial determinants of social integration: Social class and area effect. *Journal of Community and Applied Social Psychology, 5*, 105-119. doi:10.1002/casp.2450050204

Hoffmann, J. P., & Bahr, S. J. (2014). Parenting style, religiosity, peer alcohol use, and adolescent heavy drinking. *Journal of Studies on Alcohol and Drugs, 75*, 222-227. doi:10.15288/jsad.2014.75.222

Holdsworth, C., Laverty, L., & Robinson, J. (2017). "Drinking definitely wasn`t something that we`d seen anybody do": The relevance of childhood experiences of family drinking for parenting strategies of alcohol socialisation. *Families, Relationships and Societies*, *6*, 37-52. doi:10.1332/204674315X14359059952709

Hummel, A., Shelton, K. H., Heron, J., Moore, L., & van den Bree, M. B. M. (2013). A systematic review of the relationships between family functioning, pubertal timing and adolescent substance use. *Addiction, 108*, 487-496. doi:10.1111/add.12055

Jackson, K. M., Sher, K. J., Cooper, M. L., & Wood, P. K. (2002). Adolescent alcohol and tobacco use: onset, persistence and trajectories of use across two samples. *Addiction*, *97*, 517-531. doi:10.1046/j.1360-0443.2002.00082.x

Kandel, D. B., Kessler, R. C., & Margulies, R. Z. (1978). Antecedents of adolescent initiation into stages of drug use: A developmental analysis. *Journal of Youth and Adolescence*, *7*, 13-40. doi:10.1007/BF01538684

Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: further support for a reinterpretation of monitoring. *Developmental Psychology*, *36*, 366-380. doi:10.1037/0012-1649.36.3.366

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*, 1049-1065. doi:10.2307/1131151

Lila, M., García, F., & Gracia, E. (2007). Perceived paternal and maternal acceptance and children's outcomes in Colombia. *Social Behavior and Personality, 35*, 115-124. doi:10.2224/sbp.2007.35.1.115

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P.H. Mussen (Ed.), *Handbook of child psychology* (Vol. 4, pp. 1-101). NY: Wiley.

Martín-Albo, J., Nuñez, J. L., Navarro, J. G., & Grijalvo, F. (2007). The Rosenberg self-esteem scale: Translation and validation in university

students. *Spanish Journal of Psychology, 10*, 458-467. doi:10.1017/S1138741600006727

Martínez, I., & García, J. F. (2007). Impact of parenting styles on adolescents' self-esteem and internalization of values in Spain. *Spanish Journal of Psychology, 10*, 338-348. doi:10.1017/S1138741600006600

Martínez, I., & García, J. F. (2008). Internalization of values and self-esteem among Brazilian teenagers from authoritative, indulgent, authoritarian, and neglectful homes. *Adolescence, 43*(169), 13-29.

Martínez, I., Cruise, E., García, Ó. F., & Murgui, S. (2017). English validation of the Parental Socialization Scale - ESPA29. *Frontiers in Psychology, 8*(865), 1-10. doi:10.3389/fpsyg.2017.00865

Martínez, I., Fuentes, M. C., García, F., & Madrid, I. (2013). The parenting style as protective or risk factor for substance use and other behavior problems among Spanish adolescents. *Adicciones, 25*, 235-242. doi:10.20882/adicciones.51

Martínez, I., García, J. F., & Yubero, S. (2007). Parenting styles and adolescents' self-esteem in Brazil. *Psychological Reports, 100*, 731-745. doi:10.2466/pr0.100.3.731-745

Martínez-González, R., Rodríguez-Ruiza, B., Álvarez-Blancoa, L., & Becedóniz-Vázquez, C. (2016). Evidence in promoting positive parenting through the Program-Guide to Develop Emotional Competences. *Psychosocial Intervention, 25*, 111-117. doi:10.1016/j.psi.2016.04.001

McLaughlin, A., Campbell, A., & McColgan, M. (2016). Adolescent substance use in the context of the family: A qualitative study of young people´s views on parent-child attachments, parenting style and parental substance use. *Substance Use and Misuse, 51*, 1846-1855. doi:10.1080/10826084.2016.1197941

Melchior, M., Chastang, J. F., Goldberg, P., & Fombonne, E. (2008). High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: results from the GAZEL Youth study. *Addictive behaviors, 33*, 122-133. doi:10.1016/j.addbeh.2007.09.009

Murgui, S., García, C., García, Á., & García, F. (2012). Self-concept in young dancers and non-practitioners: Confirmatory factor analysis of the AF5 scale. *Revista de Psicología del Deporte, 21*, 263-269.

Newcomb, M. D., Maddahian, E., Skager, R., & Bentler, P. M. (1987). Substance abuse and psychosocial risk factors among teenagers: Associations with sex, age, ethnicity, and type of school. *The American journal of drug and alcohol abuse, 13*, 413-433. doi:10.3109/00952998709001525

Osgood, D. W., Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (1988). The generality of deviance in late adolescence and early adulthood. *American Sociological Review*, 81-93. doi:10.2307/2095734

Pérez, J. F. G., Navarro, D. F., & Llobell, J. P. (1999). Statistical power of Solomon design. *Psicothema, 11*, 431-436.

Quoss, B., & Zhao, W. (1995). Parenting styles and children's satisfaction with parenting in China and the United States. *Journal of Comparative Family Studies, 26*, 265-280.

Rodrigues, Y., Veiga, F., Fuentes, M. C., & García, F. (2013). Parenting and adolescents' self-esteem: The Portuguese context. *Revista de Psicodidáctica, 18*, 395-416. doi:10.1387/RevPsicodidact.6842

Rohner, R. P. (1989). Parental Acceptance-Rejection/Control Questionnaire (PARQ/Control). In R. Rohner, & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (pp. 137-186). Storrs, CT: Rohner Research Publications.

Rohner, R. P., & Khaleque, A. (2003). Reliability and validity of the parental control scale: A meta-analysis of cross-cultural and intracultural studies. *Journal of Cross-Cultural Psychology, 34*, 643-649. doi:10.1177/0022022103255650

Rohner, R. P., Saavedra, J., & Granum, E. O. (1978). Development and validation of the Parental Acceptance Rejection Questionnaire: Test manual. *Catalog of Selected Documents in Psychology, 8*, 7-8.

Smith, A. R., Chein, J., & Steinberg, L. (2014). Peers increase adolescent risk taking even when the probabilities of negative outcomes are known. *Developmental psychology, 50*, 1564-1568. doi:10.1037/a0035696

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development, 71*, 1072-1085. doi:10.1111/1467-8624.00210

Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11*, 1-19. doi:10.1111/1532-7795.00001

Steinberg, L. (2004). Risk taking in adolescence: what changes, and why?. *Annals of the New York Academy of Sciences, 1021*, 51-58. doi:10.1196/annals.1308.005

Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in cognitive sciences, 9*, 69-74. doi:10.1016/j.tics.2004.12.005

Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current directions in psychological science, 16*, 55-59. doi:10.1111/j.1467-8721.2007.00475.x

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual review of psychology, 52*, 83-110. doi:10.1146/annurev.psych.52.1.83

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-Time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*, 754-770. doi:10.2307/1131416

Swaim, R. C., & Wayman, J. C. (2004). Multidimensional self-esteem and alcohol use among Mexican American and White non-Latino adolescents: Concurrent and prospective effects. *American Journal of Orthopsychiatry, 74*, 559-570. doi:*10.1037/0002-9432.74.4.559*

Tomás, J. M., & Oliver, A. (2004). Confirmatory factor analysis of a Spanish multidimensional scale of self-concept. *Interamerican Journal of Psychology, 38*, 285-293.

Torregrosa-Ruiz, M., Molpeceres, M. A., & Tomás, J. M. (2017). The relationship of sexism and gender ideology to self-concept and self-esteem in persons with spinal cord injury. *Anales de Psicología, 33*, 225-234. doi:10.6018/analesps.33.2.232371

Torres, L. H., Mohand, M. A., & Mohand, L. M. (2017). School achievement and self-concept in primary education. Relationship and analysis by gender. *International Journal of Developmental and Educational Psychology, 3*, 315-326. doi:10.17060/ijodaep.2017.n1.v3.1000

Valente, J. Y., Cogo-Moreira, H., & Sanchez, Z. M. (2017). Gradient of association between parenting styles and patterns of drug use in adolescence: A latent class analysis. *Drug and Alcohol Dependence, 180*, 272-278. doi:10.1016/j.drugalcdep.2017.08.015

Vega, W. A., Zimmerman, R. S., Warheit, G. J., Apospori, E., & Gil, A. G. (1993). Risk factors for early adolescent drug use in four ethnic and racial groups. *American Journal of Public Health, 83*, 185-189. doi:10.2105/AJPH.83.2.185

Veiga, F. H., García, F., Reeve, J., Wentzel, K., & García, O. (2015). When adolescents with high self-concept lose their engagement in school. *Revista de Psicodidáctica, 20*, 305-320. doi:10.1387/RevPsicodidact.12671

Wang, C. H. C., & Phinney, J. S. (1998). Differences in child rearing attitudes between immigrant Chinese mothers and Anglo-American mothers. *Early Development and Parenting, 7*, 181-189. doi:10.1002/(SICI)1099-0917(199812)7:4<181::AID-EDP169>3.3.CO;2-P

Wild, L. G., Flisher, A. J., Bhana, A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of child psychology and psychiatry, 45*, 1454-1467. doi:10.1111/j.1469-7610.2004.00330.x

Zacarés, J. J., Serra, E., & Torres, F. (2015). Becoming an adult: A proposed typology of adult status based on a study of Spanish youths. *Scandinavian Journal of Psychology, 56*, 273-282. doi:10.1111/sjop.12205

(Article received: 20-12-2017; revised: 28-12-2017; accepted: 01-02-2018)