



Which is the optimum parenting for adolescents with low vs. high self-efficacy? Self-concept, psychological maladjustment and academic performance of adolescents in the Spanish context

Maria Reyes¹, Oscar F. García^{1*}, A. Fernando Pérez-Gramaje², Emilia Serra¹, Juan C. Melendez¹, Marta Alcaide², and Fernando García²

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

2 Department of Methodology of the Behavioral Sciences, Faculty of Psychology, University of Valencia (Spain)

Título: ¿Cuál es el estilo parental óptimo para adolescentes con baja vs. alta autoeficacia? Autoconcepto, desajuste psicológico y rendimiento académico de los adolescentes en el contexto español.

Resumen: El objetivo de este estudio es identificar qué estilo parental se asocia con resultados óptimos entre los adolescentes de familias españolas considerando aquellos con baja vs. alta autoeficacia. Los participantes fueron 1029 adolescentes españoles, 453 varones (44%), de 12 a 17 años. Aunque los estudios clásicos identifican el estilo autorizativo (basado en el afecto y la severidad) como la mejor estrategia socializadora, las investigaciones emergentes cuestionan seriamente los beneficios de la severidad parental. Además, el impacto de la socialización parental en la competencia psicosocial del adolescente se ha estudiado durante años, pero se sabe menos sobre si podría variar en función de las características individuales del adolescente (e.g., la autoeficacia). Las familias fueron clasificadas por estilo parental (autorizativo, autoritario, indulgente o negligente), y los adolescentes por baja vs. alta autoeficacia. La competencia psicosocial se examinó a través del autoconcepto emocional y académico, el desajuste psicológico (hostilidad/agresión, autoestima negativa, irresponsividad emocional, inestabilidad emocional y visión negativa del mundo) y el rendimiento académico (nota media y número de cursos repetidos). Se comprobaron los efectos principales y de interacción de estilo parental y autoeficacia. Los resultados de los efectos principales indicaron que los adolescentes con baja autoeficacia presentaban siempre la peor competencia psicosocial. También que los adolescentes de familias indulgentes y autorizativas presentaron mejores resultados que los de familias negligentes y autoritarias. Sin embargo, el estilo parental indulgente se asoció a los mejores resultados. El impacto de la socialización parental podría no ser igual en todos los contextos culturales. Frente a los resultados de los estudios clásicos, la severidad parental parece ser innecesaria o incluso perjudicial para los adolescentes con baja y alta autoeficacia.

Palabras clave: Socialización familiar. Estilos parentales. Autoeficacia. Autoconcepto. Rendimiento académico.

Abstract: The aim of this paper is to establish which parenting style is associated with optimum outcomes among adolescents of Spanish families considering adolescents with low vs. high self-efficacy. Although classical studies identify the authoritative parenting style (based on warmth and strictness) as the best parental strategy, emerging research seriously questions the benefits of parental strictness. Additionally, the impact of parenting on the adolescent's psychosocial competence has been studied for years, but less is known about whether it might vary depending on individual characteristics of the adolescent (e.g., self-efficacy). Participants were 1029 Spanish adolescents, 453 males (44%), aged 12-17 years. Families were classified in one of the parenting styles groups (authoritative, authoritarian, indulgent, or neglectful), and adolescents were grouped by low vs. high self-efficacy. Adolescent psychosocial competence was examined through emotional and academic self-concept, psychological maladjustment (hostility/aggression, negative self-esteem, emotional reactivity, instability, and negative view of the world), and academic performance (grade point average and number of failing grades). Main and interaction effects of parenting style and adolescent self-efficacy were tested. Main effect results indicated that adolescents with low self-efficacy were always associated with the worst psychosocial competence. Consistently, the main effect findings indicated that adolescents from indulgent and authoritative families were associated with better results than those from neglectful and authoritarian families. However, the indulgent parenting style yielded the best results. The impact of parenting might not be the same for adolescents in all cultural contexts. Contrary to findings from classical studies, parental strictness seems to be unnecessary or even detrimental for adolescents with low and high self-efficacy.

Keywords: Family socialization. Parenting styles. Self-efficacy. Self-concept. School performance.

Introduction

Adolescents with low self-efficacy tend to develop a cognitive style characterized by an increased probability of interpreting or processing subsequent events as being out of their control. This tendency may represent a psychological vulnerability to poor psychosocial competence in different domains, including low self-perceptions, emotional maladjustment, or worse school adjustment (Chorpita & Barlow, 1998; Turner et al., 2009). In spite of these difficulties, parents can help their adolescent children, but they can also hinder their psychosocial competence. Many studies have examined the impact of parenting (based on warmth and strictness) on children's competence, but few studies have

examined whether these findings are the same for adolescents with low vs. high self-efficacy. The available evidence is inconclusive, and it has been hypothesized that adolescents growing up with more disadvantages and difficulties may especially profit from parenting that is firm and strict (Furstenberg et al., 1999). As explicative mechanism, it is possible that adolescents with low self-efficacy, who have poor coping skills experiencing reduced control over their environment, may benefit from that of firm parenting based on surveillance and monitoring to develop a greater sense of control over events.

Theoretical framework

For many decades, the theoretical framework based on two theoretically orthogonal dimensions (i.e., warmth and strictness) and four parenting styles (i.e., authoritative, indul-

* Correspondence address [Dirección para correspondencia]:

Oscar F. García. E-mail: oscar.f.garcia@uv.es

(Article received: 01-04-2022; revised: 20-09-2022; accepted: 21-10-2022)

gent, authoritarian, and neglectful) (Maccoby & Martin, 1983) has been used in many studies to examine parental socialization and its impact on child and adolescent psychosocial competence (e.g., Climent-Galarza et al., 2022; Darling & Steinberg, 1993; Garcia & Gracia, 2009; Garcia et al., 2019). Warmth represents the degree to which parents show their child and adolescent care and acceptance, support them, and communicate by reasoning with them (Darling & Steinberg, 1993; Martínez et al., 2019a; Martínez-Escudero et al., 2020). Other labels used in the literature to refer to warmth include love (Schaefer, 1959), acceptance, (Symonds, 1939), assurance (Baldwin, 1955), or responsiveness (Baumrind, 1991a). By contrast, strictness represents the degree to which parents impose standards, use supervision, and tend to have an assertive position of authority over their child and adolescent (Maccoby & Martin, 1983; Martínez et al., 2017; Queiroz et al., 2020). Moreover, other labels used in the literature to refer to strictness include domination (Symonds, 1939), control (Schaefer, 1959), restriction (Becker, 1964) or demandingness (Baumrind, 1991b). The four parenting styles are defined by the two parental dimensions: authoritative (warmth and strictness), indulgent (warmth but not strictness), authoritarian (strictness but not warmth), and neglectful (neither warmth nor strictness) (Maccoby & Martin, 1983).

Research examines the link between parenting and differences in psychosocial competence among children and adolescents to identify the optimal parenting and the harmful parenting. Psychosocial competence has been given different labels by scholars, but with a common meaning to refer to child and adolescent adaptation to the environment (Darling & Steinberg, 1993; Garcia et al., 2019; Maccoby & Martin, 1983), for example, development (Maccoby & Martin, 1983), developmental outcomes (Gracia et al., 2012), psychosocial adjustment (Beyers & Goossens, 1999), adjustment and competence (Steinberg et al., 1994), or instrumental competence (Baumrind, 1971). So, these attributes of children and adolescents, regardless of the label (e.g., development or competence) are always examined through specific indicators, such as self-perceptions, internal distress, academic performance or aggressive behaviors (Darling & Steinberg, 1993; Garcia et al., 2019; Maccoby & Martin, 1983).

Overall, according to studies mainly conducted with European-American families, the parenting characterized by warmth combined with strictness (the authoritative style) is usually identified as the only parenting style consistently related to the highest psychosocial competence of children (Lamborn et al., 1991; Steinberg et al., 1994). Nevertheless, the benefits of the authoritative parenting are not always identified in all cultural contexts. The optimal parenting could not be always the same. There are some discrepant findings in the literature about which is the optimal parenting, so it has been suggested that the relationship between parenting and psychosocial competence of children may vary according to the cultural context in which parental socializa-

tion takes place (see Darling & Steinberg, 1993; Garcia et al., 2019; Piquart & Kauser, 2018).

Traditionally, findings from studies with European-American samples that have examined parenting in middle-class families have widely identified the authoritative style (i.e., warmth and strictness) as the optimal parenting style to promote the adolescent's psychosocial competence and school success (Baumrind, 1991a; Baumrind, 1991b; Darling & Steinberg, 1993; Maccoby & Martin, 1983). Adolescents from authoritative homes tend to report higher self-concept (Baumrind, 1991a), more maturity (Steinberg et al., 1989), less drug use (Baumrind, 1991a) and less internalized stress (Lamborn et al., 1991). Additionally, adolescents with authoritative parents are more likely to do better in school than their peers from the other households (Baumrind, 1991a; Steinberg et al., 1989). They get good grades, are less involved in school misconduct, (Lamborn et al., 1991; Steinberg et al., 1994), and develop optimal achievement strategies, such as using self-enhancing attributions but avoiding task irrelevant behavior (Aunola et al., 2000). Nevertheless, the impact of parenting might not be the same for adolescents in all cultural contexts (Garcia et al., 2019; Lila et al., 2007; Martínez et al., 2020; Piquart & Kauser, 2018; Ridao et al., 2021; Yeung, 2021). Parenting research has identified some benefits of authoritarian parenting in studies with ethnic minority samples, such as Chinese-American (Chao, 1994; Chao, 2001) or African-American families (Baumrind, 1972; Deater-Deckard et al., 1996). Along the same lines, other studies with Arab families found that authoritarian parenting might offer some benefits for competence (Dwairy, Achoui, Abouserfe et al., 2006; Dwairy, Achoui, Abouserie, & Farah, 2006; Dwairy, Achoui, Abouserie, Farah, Sakhleh et al., 2006).

Additionally, a growing set of studies reveal that the indulgent style (i.e., warmth but not strictness) is the only parenting style consistently related to the highest psychosocial competence (Calafat et al., 2014; Garcia et al., 2018; Garcia & Serra, 2019; Garcia et al., 2020a; Gimenez-Serrano et al., 2022a; Palacios et al., 2022). Most of them are conducted in South-American countries and Europe, especially in Spain (Garcia et al., 2020b; Perez-Gramaje et al., 2020; Riquelme et al., 2018). Adolescents from indulgent households (i.e., warmth but not strictness) report equal or even better scores than their peers from authoritative homes (i.e., warmth and strictness). In contrast, non-warmth parenting styles (i.e., authoritative and authoritarian) are related to worse scores. These findings about the benefits of indulgent parenting for psychosocial competence are obtained by examining self-concept (Riquelme et al., 2018), internalization of social values (Garcia et al., 2018), personal adjustment (Perez-Gramaje et al., 2020), protection against alcohol and motivations for drinking and non-drinking (Garcia et al., 2020b) and traditional bullying and cyberbullying victimization (Martínez et al., 2019b). Furthermore, adolescents with indulgent parents do well in school, get good grades, are less involved in school misconduct (Garcia & Gracia, 2010), de-

velop self-regulated learning, and are less likely to report academic stress (Fuentes et al., 2019).

Different studies in recent years suggest that the indulgent style has equal or even more benefits than the authoritative style. The Spanish context has served as a testing ground to study the relationship between parental socialization and children's psychosocial competence on different indicators. A seminal study analyzed the consequences of family socialization in Spanish families (Musitu & Garcia, 2004); the findings suggested that the effects of the different parenting styles cannot be directly generalized to different cultures because the authoritative style was related to equal or less scores than the indulgent style. Another study analyzed especially the effect of the family on self-esteem and internalization of values, identifying the benefits of the indulgent parenting (Martínez & Garcia, 2007). In two subsequent studies, one in middle childhood and early adolescence (García & Gracia, 2010) and another during adolescence (García & Gracia, 2009), the benefits parenting characterized by warmth without strictness (indulgent style) were identified using indicators similar to those used in studies with European-American families. Another series of studies extended the analysis of family socialization during adolescence, for example, examining substance abuse (Riquelme et al., 2018) and alcohol use and abuse (García et al., 2020b), as well as school adjustment (Fuentes et al., 2015) and self-regulated learning (Fuentes et al., 2019). The most current studies have continued this same research agenda, extending the evidence to other adolescent problems and challenges such as reactive and proactive violence (Moreno-Ruiz et al., 2018), environmental values (Queiroz et al., 2020) and connectedness with nature (Musitu-Ferrer, León-Moreno et al., 2019), aggressiveness (Gallarín et al., 2021), dating violence (Muñiz-Rivas et al., 2019), and emotional symptoms (Bully et al., 2019). Additionally, emergent studies have examined parenting beyond adolescence, identifying the benefits of the indulgent parenting (García et al., 2018; García et al., 2020a; Gimenez-Serrano et al., 2022b).

Present study

The impact of parenting styles on adolescent adjustment has not been thoroughly examined in adolescents who are at greater risk for problematic development due to their poor self-efficacy. For years, scholars have implicitly assumed that the impact of parenting on child and adolescent competence would always be the same, regardless of the individual characteristics of the child. Some studies have empirically tested whether the correlates of parenting styles (authoritative, indulgent, authoritarian, and neglectful) are the same in normative adolescents as they are in those with serious conduct problems, including serious juvenile offenders (Steinberg et al., 2006), adolescents with antisocial tendencies (García et al., 2021) or aggressive adolescents (Perez-Gramaje et al., 2020). Nevertheless, these studies with non-normative adolescents have not focused on the increasingly frequent situa-

tion of having a child who has not developed good self-efficacy.

Only a few studies have examined whether the impact of parenting and its correlates depends on the child's self-efficacy, and the evidence is inconclusive (Niditch & Varela, 2012; Turner et al., 2009). A study conducted by Turner and colleagues (2009) tested whether the impact of parenting styles on school outcomes (academic performance and academic motivation) is the same or different depending on the adolescent's academic self-efficacy. The findings revealed that the impact of parenting styles is the same regardless of the adolescent's academic self-efficacy. However, most of the empirical evidence seems to suggest a different impact of parenting on adolescent outcomes depending on the child's level of self-efficacy (Llorca et al., 2017; Niditch & Varela, 2012; Yap & Baharudin, 2016).

For example, Niditch and Varela (2012) examined whether the impact of two practices (over-control and rejection) used by parents (mothers or fathers) has the same or a different impact on social anxiety depending on the adolescent's self-efficacy. The results revealed that the impact of rejection on social anxiety was different depending on the adolescent's emotional self-efficacy. In addition, rejection (by mothers, but not by fathers) has a more negative impact on adolescents with low self-efficacy than on those with high self-efficacy. By contrast, the impact of the parental practices of rejection (used by fathers) and over-control (used by both fathers and mothers) was always just as negative for social anxiety, regardless of the levels of adolescent self-efficacy. In general, as noted by the researchers who find these mixed results (Llorca et al., 2017; Niditch & Varela, 2012), it is not clear what underlying mechanism could explain why the impact of parenting on psychosocial competence might be different depending on adolescent self-efficacy for some parental practices but not for others, or depending on whether the parental practices are applied by mothers or fathers.

The present study examines whether parenting styles (i.e., indulgent, authoritative, authoritarian, and neglectful) and their impact on self-concept, psychological maladjustment, and academic performance might be the same or different depending on adolescents' self-efficacy (low vs. high). The global dimension of self-efficacy has received less attention in parenting studies, compared to studies on multidimensional domains (e.g., emotional or academic), even though it is also quite relevant for adolescents to be successful in school or develop good psychosocial competence (Chen et al., 2001; Frank et al., 2010; Scholz et al., 2002). According to previous research, it is expected that adolescents with low self-efficacy will report the poorest scores in self-concept, psychological maladjustment, and academic performance. Additionally, the indulgent and authoritative parenting styles will be related to greater self-concept and academic performance, and less psychological maladjustment, whereas the neglectful and authoritarian parenting styles will be related to lower scores.

Method

Sample and procedure

An a priori estimate of the statistical power was made to determine the sample-size necessary for to have a statistical power of .95, setting the statistical error rates for statistical inference in the conventional limits ($\alpha = \beta = .05$), to detecting a medium-low effect size (i.e., $f = .13$) in the univariate F tests among the four parenting styles (Lamborn et al., 1991). The results of a priori power analysis showed that the sample-size would have a minimum of 1020 participants (Faul et al., 2009; Garcia et al., 2008; Pérez et al., 1999). From a complete list of secondary schools from a Spanish largest metropolitan area, twelve schools were randomly selected. The heads of the twelve public and private secondary schools were contacted (only one refused to participate), parental permission was obtained (98% participation), and the instruments were administered during class time with an online form. Only teenagers with four Spanish grandparents were included in the study sample. Finally study sample were 1029 Spanish adolescents, 453 men (44.0%) and 576 women (56.0%), with ages ranging from 12 to 17 years ($M = 14.90$ years old, $SD = 1.75$ years old). With the final sample-size of 1029 adolescents, the sensitivity power analysis indicated that we could detect an effect size close to 0.13 (i.e., $f = .129$; $\alpha = .05$; $1 - \beta = .95$).

Anonymity and confidentiality of participants and ethical approval of the research were ensured, and research ethics approvals. The research project was approved by College Research Ethics Committee (CREC) of the Nottingham Trent University for studies involving humans.

Statistical power was calculated with G-power 3.1. The IBM SPSS 28.0.1.1 statistical program was used for the MANOVAs, ANOVAs and differences between pairs of means with Bonferroni correction for rate of Type I error. Reliability was calculated with JASP 0.16.4.0.

Measures

Parenting styles

Parental warmth was captured through the 20-item Warmth/Affection Scale (Rohner et al., 1978). The WAS scale has been used in near 500 studies over the past five decades on all continents. A meta-analysis has been published based on 66 studies reviewing worldwide research and including European (Khaleque & Rohner, 2012; Rohner & Khaleque, 2005). Additionally, the Spanish version have been applied in numerous studies (Gimenez-Serrano et al., 2022a; Martinez-Escudero et al., 2020; Villarejo et al., 2020). The Warmth/Affection Scale measures parents' tendencies to be loving, responsive, and involved. Sample items are "Let me know they love me" and "Treat me gently and with kindness". Adolescents are asked to rate on a 4-point scale ranging from 1 (never) to 4 (always). Greater scores repre-

sent higher levels of parental warmth. Cronbach's alpha was .918 (95% CI .910 - .925) and McDonald's omega was .919 (95% CI .911 - .926). Parental strictness was captured through the 13-item Parental Control Scale (Rohner et al., 1978). The Parental Control Scale assesses parents' tendencies toward strict parental control of their children's behaviour. The PCS Scale has been applied in five culturally distinct contexts (Rohner & Khaleque, 2003), in different European countries (Calafat et al., 2014) and with numerous Spanish samples (Gimenez-Serrano et al., 2022b; Martinez-Escudero et al., 2020; Villarejo et al., 2020). Sample items are "Give me certain jobs to do and will not let me do anything else until I am done" and "Are always telling me how I should behave". Adolescents are asked to rate on a 4-point scale ranging from 1 (never) to 4 (always). Greater scores represent higher levels of parental strictness. Cronbach's alpha was .803 (95% CI .785 - .821) and McDonald's omega was .803 (95% CI .785 - .821).

The four parenting households were defined with a median split (50th percentile), examining each family parenting dimension (i.e., warmth and strictness) at the same time (Lamborn et al., 1991; Steinberg et al., 1994). Authoritative parents were those who had scores above the median on both measures of warmth and strictness, whereas neglectful parents had scores below the median on both parenting dimensions. Authoritarian parents reported scores above the median on strictness, but below the median on warmth, whereas indulgent parents scored above the median on warmth, but below the median on strictness.

Self-Efficacy

Self-Efficacy was captured with the six items on negative self-adequacy included in the Personality Assessment Questionnaire (Rohner, 1978). PAQ subscales assesses contrasted indices of psychological maladjustment among children, adolescents, and adults regardless of sample differences in gender, race, geography, language, or culture (Ali et al., 2015; Khaleque & Rohner, 2002). Numerous Spanish studies have applied the PAQ subscales (Garcia & Gracia, 2009; Garcia & Gracia, 2010; Perez-Gramaje et al., 2020). Sample items are: "I feel I cannot do things well" and "I feel I cannot do many of the things I try to do". Cronbach's alpha was .576 (95% CI .534 - .615) and McDonald's omega was .592 (95% CI .554 - .630). Although higher scores in negative self-adequacy scale represent worse self-efficacy, the scores were reversed so that higher scores represent greater self-efficacy. Adolescents were grouped by the median split (50th percentile) into low vs. high self-efficacy (Garcia et al., 2021).

Self-concept

Self-concept was captured through two 6-item subscales of the Multidimensional Self-Concept Scale (Form 5) (Chen et al., 2020; Garcia & Musitu, 1999; Garcia et al., 2018). The AF5 factorial structure is invariant for sex and age (Fuentes

et al., 2020), and it has been validated in different cultural contexts, such as Portugal and Brazil (Garcia et al., 2018) or, more recently, in China (Chen et al., 2020). An example of a reverse-scored academic self-concept item is “I work very hard in class (at work)”, and an emotional self-concept reverse-scored item is, “I am a happy person”. Adolescents are asked to rate on a 99-point scale ranging from 1 (complete disagreement) to 99 (complete agreement). Higher scale scores represent a greater sense of the self-concept in its respective dimension. Cronbach’s alpha was .884 in academic self-concept (95% CI .873 - .895) and .697 in emotional self-concept (95% CI .667 - .725). McDonald’s omega was .886 in academic self-concept (95% CI .876 - .897) and .698 in emotional self-concept (95% CI .669 - .726).

Psychological maladjustment

Psychological maladjustment was captured through five 6-item subscales of the PAQ (Personality Assessment Questionnaire) (Rohner, 1978). A sample item for Hostility/aggression is “I make fun of people who do dumb things”; a sample item for negative self-esteem is “I get unhappy with myself”; an emotional irresponsiveness item is “It is easy to show my friends that I really like them”; an emotional instability item is “I easily get upset when I encounter difficult problems”; and a negative worldview item is “I see the world as a dangerous place”. Adolescents are asked to rate on a 4-point scale ranging from 1 (never) to 4 (always). Higher scale scores represent a greater sense of psychological maladjustment in its respective dimension. Cronbach’s alpha was .586 in hostility/aggression (95% CI .545 - .623), .729 in negative self-esteem (95% CI .703 - .754), .628 in emotional irresponsiveness (95% CI .591 - .662), .627 in emotional instability (95% CI .591 - .661), and .720 in negative worldview (95% CI .692 - .746). McDonald’s omega was .578 in hostility/aggression (95% CI .539 - .617), .733 in negative self-esteem (95% CI .708 - .758), .608 in emotional irresponsiveness (95% CI .572 - .643), .629 in emotional instability (95% CI .594 - .664), and .709 in negative worldview (95% CI .682 - .736).

Academic performance

Academic performance was measured with two indices, overall grade point average and number of failing grades (Garcia & Gracia, 2009; Steinberg et al., 1994). Respondents provided information about their current high school grades in a range from 0 (all *F*'s) to 4 (all *A*'s). The number of failing grades was calculated from the participant's birth date, test date, and adolescent grade.

Data analysis

A MANOVA was applied. The dependent variables were the outcomes of self-concept (academic and emotional), those of psychological maladjustment (hostility/aggression, negative

self-esteem, negative self-efficacy, emotional irresponsibility, emotional instability, and negative worldview), and those academic performance (grade point average and number of failing grades). Independent variables shaped a factorial design in form $4 \times 2 \times 2 \times 2$. Specifically, the factors were parenting styles (indulgent, authoritarian, neglectful and authoritative), self-efficacy (low vs. high), sex (female vs. male), and age (12-15 vs. 16-17 years). Then, it was applied several univariate *F*-tests to examine the sources of variation that were significant in the MANOVA. Finally, a post-hoc Bonferroni procedure was applied to control the rate of Type I errors (Maxwell & Delaney, 2004).

Results

Parenting style groups

The distribution of participants by parenting styles can be found in Table 1, which provides complete information about the size of each of the four parenting households and the statistics (mean and standard deviation) for each of the four parenting households on the two main parental dimension measures (i.e., warmth and strictness). Furthermore, results revealed that, in line with the assumptions of parenting model, the two measures of parental dimensions (i.e., warmth and strictness) were modestly correlated, $r = -.066$, $R^2 = .004$, $p = .034$, the distribution of families by parenting styles was quite similar, $\chi^2(3) = 5.40$, $p = .145$, and the interaction between parenting style and sex not reached statistical significance, $\chi^2(3) = .28$, $p = .963$.

Table 1
Distribution of Adolescents by Parenting Style Groups and Statistics (Mean Scores and Standard Deviations) on Measures of Parental Dimensions (N = 1029).

	Indulgent	Authoritarian	Neglectful	Authoritative
Frequency	285	263	244	237
Percent	27.7	25.6	23.7	23.0
Warmth				
Mean	72.62	56.35	54.45	72.63
SD	3.93	8.90	9.18	3.60
Strictness				
Mean	29.50	39.95	29.34	38.95
SD	4.23	3.90	4.71	3.90

Multivariate analyses

None of the interactions in the four-way MANOVA were significant: the main effect of parenting styles, $\Lambda = .845$, $F(30.0, 2900.6) = 5.70$, $p < .001$, self-efficacy, $\Lambda = .387$, $F(8.0, 988.0) = 156.30$, $p < .001$, sex, $\Lambda = .836$, $F(8.0, 988.0) = 19.44$, $p < .001$, age, $\Lambda = .919$, $F(8.0, 988.0) = 8.73$, $p < .001$ (see Table 2).

Table 2Four-way MANOVA Factorial $4 \times 2 \times 2 \times 2$ for Outcome Measures of Self-concept, Psychological Maladjustment, and Academic Performance.

Source of variation	Λ	F	df between	df error	p
Parenting Styles (A)	.845	5.698	30.0	2900.651	<.001
Self-Efficacy (B)	.387	156.30	8.0	988.000	<.001
Sex (C)	.836	19.440	8.0	988.000	<.001
Age (D)	.919	8.728	8.0	988.000	<.001
A \times B	.970	1.008	24.0	2900.651	.455
A \times C	.967	1.119	24.0	2900.651	.300
A \times D	.977	.773	24.0	2900.651	.806
B \times C	.988	1.200	8.00	988.000	.287
B \times D	.991	.903	8.00	988.000	.530
C \times D	.991	.882	8.00	988.000	.550
A \times B \times C	.977	.770	24.0	2900.651	.810
A \times B \times D	.966	1.133	24.0	2900.651	.283
A \times C \times D	.965	1.166	24.0	2900.651	.245
B \times C \times D	.997	.866	8.00	988.000	.565
A \times B \times C \times D	.958	1.4515	24.0	2900.651	.067

^a a_1 , indulgent, a_2 , authoritarian, a_3 , neglectful, a_4 , authoritative. ^b b_1 , low, b_2 , high. ^c c_1 , male, c_2 , female. ^d d_1 , 12-15 years, d_2 , 16-17 years.

Main univariate effects for self-efficacy

Adolescents with low self-efficacy were associated with the worst scores (see Table 3). Adolescents with low self-efficacy reported less emotional and family self-concept, and they scored lower on all the psychological maladjustment problems (more hostility/aggression, negative self-esteem, emotional irresponsiveness, emotional instability, and more negative worldview problems) and had worse academic performance (low grade point average, but a higher number of failing grades) than the adolescents with high self-efficacy.

Main univariate effects for parenting styles

Overall, results showed that parenting styles based on warmth (i.e., indulgent and authoritative) were related to better self-concept and academic performance and less psychological maladjustment than non-warmth parenting styles (i.e., authoritarian and neglectful). However, indulgent parenting (warmth without strictness) was the only parenting style consistently associated with the highest scores (see Table 3).

Table 3Means and (Standard Deviations), Main Univariate F Values, Probabilities of Type I Error, and Bonferroni Test[#] for Outcome Measures of Self-concept, Psychological Maladjustment, and Academic Performance among four Parenting Styles, Self-Efficacy, Sex, and Age groups.

	Parenting style				$F(3, 1013)$	Self-Efficacy		$F(1, 1013)$
	Neglectful	Indulgent	Authoritarian	Authoritative		Low	High	
Self-concept								
Academic	5.95 ² (2.07)	7.02 ¹ (1.82)	5.93 ² (1.99)	6.94 ¹ (1.81)	17.62 ***	6.94 (2.00)	7.02 (1.82)	61.37 ***
Emotional	5.84 ¹ (1.74)	5.87 ¹ (1.87)	5.48 ² (1.77)	5.30 ² (1.90)	4.49 **	5.25 (1.80)	6.02 (1.79)	45.28 ***
Psychological maladjustment								
Hostility/ Aggression	11.33 ¹ (3.00)	10.30 ² (2.52)	11.86 ^{1a} (3.05)	10.70 ^b (2.55)	9.35 ***	11.56 (2.89)	11.47 (2.70)	26.14 ***
Negative self-esteem	11.32 ¹ (3.06)	9.61 ³ (2.82)	11.87 ¹ (3.34)	10.29 ² (2.78)	14.66 ***	12.33 (3.11)	9.09 (2.15)	317.03 ***
Emotional irresponsiveness	15.37 ¹ (3.26)	11.43 ³ (3.06)	14.06 ² (3.24)	11.85 ³ (3.01)	23.73 ***	13.48 (3.26)	11.94 (3.20)	36.52 ***
Emotional instability	12.20 (3.30)	15.16 (3.25)	16.02 (3.10)	15.60 (2.90)	1.01 n.s.	16.15 (3.09)	14.88 (3.09)	41.21 ***
Negative worldview	12.29 ¹ (3.30)	10.84 ² (3.03)	12.80 ¹ (3.32)	11.27 ² (3.12)	10.84 ***	12.76 (3.27)	10.71 (2.94)	82.27 ***
Academic Performance								
Grade point average	1.97 ² (1.17)	2.56 ¹ (1.13)	2.05 ² (1.12)	2.41 ¹ (1.17)	11.42 ***	2.04 (1.17)	2.48 (1.13)	26.91 ***
Number of failing grades	0.29 (0.80)	0.24 (0.80)	0.36 (0.74)	0.25 (0.64)	0.57 n.s.	0.35 (0.79)	0.22 (0.69)	8.98 **

* $p < .05$; ** $p < .01$; *** $p < .001$; n.s. $p > .05$

[#] $\alpha = .05$; 1 > 2 > 3 > 4; a > b

Self-concept

On the academic dimension of self-concept, adolescents with indulgent and authoritative parents had the greatest scores, whereas their peers from neglectful and authoritarian homes obtained the lowest scores. On the emotional dimension of self-concept, adolescents from indulgent homes indicated higher scores than their counterparts from authoritarian and authoritative households. Additionally, adolescents

from neglectful homes reported higher scores than their counterparts from authoritarian and authoritative families.

Psychological maladjustment

Adolescents from authoritarian and neglectful households reported the highest scores on hostility/aggression maladjustment. Although adolescents from an authoritative parenting style scored close to those from an indulgent parenting style, the indulgent style had better scores. On nega-

tive self-esteem, only the indulgent parenting style was associated with the lowest scores. Adolescents from authoritative homes reported less optimal scores than their peers from indulgent homes, but better than those from authoritarian and neglectful families. On emotional irresponsiveness problems, adolescents from authoritative and indulgent households obtained better scores than their counterparts from authoritarian and neglectful homes; additionally, adolescents with neglectful parents had even worse scores than their counterparts with authoritarian parents. On negative worldview problems, adolescents from authoritative and indulgent households obtained better scores than their counterparts from authoritarian and neglectful households.

Academic performance

Only the grade point average showed significant differences between the parenting styles ($p < .05$). Specifically, the grade point average of adolescents from authoritative and indulgent homes was higher than that of their peers from authoritarian and neglectful families.

Main univariate effects for sex and age

Despite sex and age differences in the outcomes are considered not central to the topic of parenting studies, the results indicate that different sex-and-age related differences reached statistical significance (see Table 4). On self-concept measures, the results showed that academic self-concept were greater among females, while males reported higher emotional self-concept. Additionally, academic self-concept scores were greater for the youngest adolescents from 12-15 years old. On the psychological maladjustment measures, boys reported more negative self-esteem and emotional irresponsiveness, but less emotional instability. Hostility/aggression, negative self-esteem, emotional irresponsiveness, and emotional instability scores were always higher for the oldest adolescents from 16-17 years old. With regard to the academic performance measures, females reported higher grade point averages and fewer failing grades, and the youngest adolescents ranged 12-15-year-old, reported the highest-grade point averages and the fewest failing grades.

Table 4

Means and (Standard Deviations), Main Univariate F Values, for Outcome Measures of Self-concept, Psychological Maladjustment, and Academic Performance among four Parenting Styles, Self-Efficacy, Sex, and Age groups.

	Sex			Age		
	Female	Male	F(1, 1013)	12-15 years	16-17 years	F(1, 1013)
Self-concept						
Academic	6.75 (1.96)	6.11 (1.98)	28.10 ***	6.61 (1.99)	6.31 (1.97)	7.99 **
Emotional	5.25 (1.87)	6.10 (1.69)	62.12 ***	5.68 (1.82)	5.56 (1.85)	3.34 n.s.
Psychological maladjustment						
Hostility/ Aggression	10.90 (2.75)	11.22 (2.97)	2.52 n.s.	10.86 (2.91)	11.22 (2.78)	5.01 *
Negative self-esteem	11.00 (3.20)	11.22 (2.97)	11.07 ***	10.68 (3.10)	10.82 (3.20)	4.01 *
Emotional irresponsiveness	12.41 (3.35)	13.13 (3.23)	12.41 ***	12.50 (3.30)	13.00 (3.32)	6.45 *
Emotional instability	16.08 (3.10)	14.83 (3.09)	41.71 ***	15.30 (3.25)	15.81 (3.01)	13.06 ***
Negative worldview	11.84 (3.31)	11.66 (3.23)	0.74 n.s.	11.67 (3.30)	11.86 (3.25)	1.06 n.s.
Academic Performance						
Grade point average	2.37 (1.13)	2.11 (1.21)	10.98 **	2.39 (1.17)	2.11 (1.16)	14.58 ***
Number of failing grades	0.22 (0.66)	0.37 (0.84)	5.43 *	2.11 (1.16)	2.26 (1.17)	62.43 ***

* $p < .05$; ** $p < .01$; *** $p < .001$; n.s. $p > .05$

Discussion

In this study is tested whether the relationships between parenting styles (based on warmth and strictness) and socialization outcomes are different depending on adolescents' self-efficacy. Overall, the results revealed that the impact of the parenting style (i.e., indulgent, authoritative, authoritarian, and neglectful) on the socialization outcomes (self-concept, psychological maladjustment, and school performance) is the

same in adolescents with low and high self-efficacy. Nevertheless, the impact of the parenting style can be consistently related to self-concept, psychological maladjustment, and academic performance in adolescents. Overall, indulgent and authoritative parenting (warmth households) were related to better scores than authoritarian and neglectful (non-warmth households) parenting, but indulgent parenting (warmth without strictness) was the only parenting style consistently associated with optimal scores.

The results of the present study revealed that adolescents consistently benefit from having parents who are warm and responsive, whereas parental strictness seems to be unnecessary or even detrimental. Adolescents from indulgent homes reported greater academic self-concept and higher-grade point averages, as well as less emotional irresponsiveness and a less negative worldview (the same pattern found in their peers from authoritative homes). Additionally, examining the warmth parenting profiles (authoritative and indulgent), adolescents from indulgent families (non-strictness) had the highest emotional self-concept and the lowest hostility/aggression and negative self-esteem, whereas their peers from authoritative homes (strictness) failed on these indicators. By contrast, parenting based on lack of warmth (authoritarian and neglectful) tended to be related to lower self-concept and school performance and greater psychological maladjustment.

The results from the present study confirmed those from other studies, mostly conducted in European and South-American countries (Calafat et al., 2014; Garcia et al., 2018; Martínez et al., 2021), where optimal parenting is based on warmth without strictness (i.e., indulgent style) (Fuentes et al., 2022; Riquelme et al., 2018). However, these studies have assumed that the impact of parenting on child and adolescent competence would always be the same, regardless of the individual characteristics of the child (e.g., level of self-efficacy). Thus, the present study also offers crucial evidence by testing this implicit assumption and finding that the impact of the parenting style does not vary depending on adolescent self-efficacy. Nevertheless, results of the present study clearly contradict those from studies with middle-class European American families (Baumrind, 1991a). The findings from these studies revealed that only parental warmth combined with parental strictness (i.e., authoritative style) helped adolescents to achieve the highest psychosocial competence and success in school (Lamborn et al., 1991; Steinberg et al., 1989). Therefore, the impact of parenting on psychosocial competence might not be equal for children from all cultural contexts (Darling & Steinberg, 1993; Garcia & Gracia, 2009; Garcia et al., 2019; Pinquart & Kauser, 2018). For example, previous literature has identified some benefits related to authoritarian parenting in studies with ethnic minorities in the United States, such as Chinese-Americans (Chao, 2001) or African-Americans (Deater-Deckard et al., 1996), or in studies in Arab societies (Dwairy & Achoui, 2006; Dwairy, Achoui, Abouserfe et al., 2006). Hence, it seems important to consider the cultural context where parenting socialization takes place in order to identify the best parenting because the impact of parenting styles on adolescents' competence might not be the same in all cultures.

Along with the question of the best parenting for adolescents, few studies have also considered whether the impact of parental socialization is the same or different depending on adolescent self-efficacy. The assumption that adolescents growing up with more disadvantages and difficulties may especially profit from parenting that is firm and strict (Furst-

enberg et al., 1999) is not supported by the present data. According to the multivariate analysis, non-interaction effect was found on parenting style by self-efficacy. Even for adolescents with low self-efficacy benefit to parenting characterized by warmth, but without strictness. It seems that parents raising children with low self-efficacy should be nurturing and involved with them, so that they can gain the resources and confidence to develop a sense of control over situations. On the contrary, if adolescents have low self-efficacy and their parents are strict or even non-warm, they may develop even less confidence in their abilities because their parents do not encourage their psychological autonomy.

The results of the present study agree with the study conducted by Turner and colleagues (2009), in which the impact of parenting styles on psychosocial competence was the same, regardless of adolescent self-efficacy. However, most of the few studies carried out, contrary to our findings, found that the impact of parenting changes depending on adolescent self-efficacy (Llorca et al., 2017; Niditch & Varela, 2012; Yap & Baharudin, 2016). Specifically, according to their results, the impact of parenting is not the same for adolescents with high and low self-efficacy, although this pattern is only found for some parental practices, but not for others, or even when the parental practice is used by fathers or mothers (Llorca et al., 2017; Niditch & Varela, 2012). These parental practices are studied in isolation, rather than in a more general context where parental practices are grouped by their degree of warmth and strictness, the two main dimensions (identified as theoretically unrelated or independent). By contrast, the present study offers new findings that could clarify the previous inconsistent results. The relationship between parenting and adolescent self-concept, psychological maladjustment, and school performance is theoretically consistent for adolescents from indulgent, authoritative, authoritarian, and neglectful homes, regardless of whether adolescents have better or worse self-efficacy.

Another important finding of the present study is that, although the impact of parenting styles on self-concept, psychological maladjustment, and school performance shares the same pattern in adolescents with low and high self-efficacy, self-efficacy in adolescence could be more important than previously considered. Adolescence represents a transitional period into healthy adulthood that is not guaranteed for all adolescents (Candel, 2022; Hernandez-Serrano et al., 2021). Adolescents who are influenced by family (Sandoval-Obando et al., 2022), peers (Steinberg et al., 1989), and the cultural context (Sacca et al., 2021), might experience some degree of psychosocial vulnerability just in a time when school success become more salient (Eccles et al., 1993; Garcia & Serra, 2019). Previous research has identified the positive impact of different dimensions of self-efficacy (e.g., emotional, social, and academic) on school performance (Caprara et al., 2011; Juang & Silbereisen, 2002; Suldo & Shaffer, 2007). For example, greater academic self-efficacy has been positively related to adolescents' grades in school (Caprara et al., 2011). However, as the present findings sug-

gest, general self-efficacy seems to be as important as the specific domains, not only for school success (adolescents with greater self-efficacy have higher grade point averages and fewer failing grades than their peers with poor self-efficacy), but also for psychosocial competence, because differences depending on self-efficacy were also found for psychological adjustment (in the six indicators) and self-concept (in the two indicators). Therefore, global self-efficacy could be an essential component of healthy development and school success in secondary school and high school (Eccles et al., 1993; Veiga et al., 2021), especially because adolescents are influenced by peer standards that sometimes deviate from social norms (Musitu-Ferrer et al., 2019; Veiga et al., 2015).

Additionally, the sex- and age-related differences found in self-concept, psychological maladjustment, and school performance agree with the evidence reported in some previous studies (Garcia & Gracia, 2009; Perez-Gramaje et al., 2020). Sex-related differences showed that females reported greater academic self-concept, but less emotional self-concept, than males. In terms of psychological maladjustment, negative self-esteem and emotional irresponsiveness were higher among males, whereas emotional instability was greater among females. On academic performance, females had higher grade point averages and fewer failing grades than males. Age-related differences indicated more academic self-concept in adolescents aged 12-15 years than in those aged 16-17 years. The greatest psychological maladjustment (hostility/aggression, negative self-esteem, emotional irresponsiveness, and emotional instability) was found in adolescents aged 16-17 years. On academic performance, adolescents aged 16-17 years reported a higher-grade point average and fewer failing grades than their peers aged 16-17 years.

The findings of the present study have important implications for parenting science and practice. First, parental warmth is beneficial for adolescent self-concept, low psychological maladjustment, and greater academic performance, only if it is combined with low parental strictness (i.e., indulgent parenting). These findings of the present study contrast clearly with those obtained in those with European-American samples (Lamborn et al., 1991; Steinberg et al., 1994) in which the benefits of parental warmth are associated with the combination of high parental strictness (i.e., authoritative style). Second, parental strictness, widely used in prevention science with families (e.g., Triple P—Positive Parenting Program, (Sanders et al., 2022), especially during adolescence, may be unnecessary and even detrimental. In line with the results of the present study and others from European countries (Calafat et al., 2014; Garcia et al., 2020b), prevention with families should be based on programs that promote the use of warmth, but without being accompanied by the use of parental strictness (e.g., the frequent use of punishment as a form of correction). Third, in working with families, it should be considered that those with difficult children (e.g., low self-efficacy) will have more problems (Perez-Gramaje et al., 2020). Differences in children's self-

efficacy, less studied compared to that of parents, should also be considered due to its relevance for families and adolescents. Adolescents with low self-efficacy are more likely to have difficulties in terms of lower self-concept, greater psychological maladjustment, and worse school performance. However, and contrary to some previous evidence (Niditch & Varela, 2012; Yap & Baharudin, 2016), parents should not act in a different way when they are raising children with low self-efficacy compared to raising those with high self-efficacy. Remarkably, the benefits of parental warmth transcend children's individual differences in self-efficacy (high and low self-efficacy), as well as parental strictness is unnecessary and even detrimental regardless of differences in children's degree of self-efficacy. Finally, as an important implication for research and intervention with families, parental socialization in each cultural context should be specifically considered (Garcia et al., 2019; Piquart & Kauser, 2018). Findings based on European-American families may not be generalizable to all cultural contexts (Garcia & Gracia, 2009).

Some strong and weak points of the present study should be kept in mind. This study captures parenting using a theoretical framework based on two orthogonal dimensions (warmth and strictness) and four parenting styles (i.e., indulgent, authoritative, authoritarian, and neglectful), which makes it fairly easy for future research to replicate the results in a variety of cultural contexts to identify the best parenting. However, some cautions in the interpretation of present findings should be considered. The evidence from this study about optimal parenting is obtained from rates offered by adolescents rather than by parents, although previous research on parenting showed that the results tend to be quite similar despite the use of different collection methods (e.g., external observer or self-report). Additionally, the cross-sectional design does not allow us to determine causal directions in the relationships between variables. The findings should be considered preliminary due to they are not based on evidence from longitudinal or experimental design.

Finally, the present study offers crucial evidence that contributes to advancing parenting science. The findings seriously question that parenting strictness (one of the main components of authoritative parenting) always helps adolescents to achieve the best competence in terms of greater self-concept and school performance and less psychological maladjustment. Instead, only the parental strategy based on the use of warmth without strictness (i.e., indulgent parenting) was consistently related to the highest self-concept and school performance and the lowest psychological maladjustment, even in adolescents with low self-efficacy. Future research should continue to test whether parenting and its impact could change as a function of adolescents' individual characteristics, such as self-efficacy, extending the evidence to other indicators.

Conflict of interests: The authors of this article declare no conflict of interest.

Financial support: The research reported in this study has been supported by Grants CIAICO/2021/252 (Conselleria for Innovation, Universities, Science and Digital Society, Generalitat Valenciana), FPU2020/06307 (Ministry of Universities, 423 Government of

Spain), ACIF/2016/431, and BEFPI/2017/058, which provided funding for a research stay at Nottingham Trent University, UK (Generalitat Valenciana and European Social Fund).

References

- Ali, S., Khaleque, A., & Rohner, R. P. (2015). Pancultural gender differences in the relation between perceived parental acceptance and psychological adjustment of children and adult offspring: A meta-analytic review of worldwide research. *Journal of Cross-Cultural Psychology, 46*(8), 1059-1080. <https://doi.org/10.1177/0022022115597754>
- Aunola, K., Stattin, H., & Nurmi, J. E. (2000). Parenting styles and adolescents' achievement strategies. *Journal of Adolescence, 23*, 205-222. <https://doi.org/10.1006/jado.2000.0308>
- Baldwin, A. L. (1955). *Behaviour and development in childhood*. Dryden Press.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology, 4*, 1-103. <https://doi.org/10.1037/h0030372>
- Baumrind, D. (1972). An exploratory study of socialization effects on Black children: Some Black-White comparisons. *Child Development, 43*(1), 261-267. <https://doi.org/10.1111/j.1467-8624.1972.tb01099.x>
- Baumrind, D. (1991a). Effective parenting during the early adolescent transition. In P. A. Cowan, & E. M. Herington (Eds.), *Advances in family research series. Family transitions* (pp. 111-163). Lawrence Erlbaum Associates, Inc.
- Baumrind, D. (1991b). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*(1), 56-95. <https://doi.org/10.1177/0272431691111004>
- Becker, W. C. (1964). Consequences of Different Kinds of Parental Discipline. In M. L. Hoffman, & L. W. Hoffman (Eds.), *Review of Child Development Research* (pp. 169-208). Russell Sage Foundation.
- Beyers, W., & Goossens, L. (1999). Emotional autonomy, psychosocial adjustment and parenting: Interactions, moderating and mediating effects. *Journal of Adolescence, 22*, 753-769. <https://doi.org/10.1006/jado.1999.0268>
- Bully, P., Jaureguizar, J., Bernaras, E., & Redondo, I. (2019). Relationship between parental socialization, emotional symptoms, and academic performance during adolescence: The influence of parents' and teenagers' gender. *International Journal of Environmental Research and Public Health, 16*(12), 2231. <https://doi.org/10.3390/ijerph16122231>
- Calafat, A., García, F., Juan, M., Becona, 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. <https://doi.org/10.1016/j.drugalcdep.2014.02.705>
- Candel, O. (2022). The link between parenting behaviors and emerging adults' relationship outcomes: The mediating role of relational entitlement. *International Journal of Environmental Research and Public Health, 19*(2), 828. <https://doi.org/10.3390/ijerph19020828>
- Caprara, G. V., Vecchione, M., Alessandri, G., Gerbino, M., & Barbaranelli, C. (2011). The contribution of personality traits and self-efficacy beliefs to academic achievement: A longitudinal study. *British Journal of Educational Psychology, 81*(1), 78-96. <https://doi.org/10.1348/2044-8279.002004>
- Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*(4), 1111-1119. <https://doi.org/10.1111/j.1467-8624.1994.tb00806.x>
- Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*, 1832-1843. <https://doi.org/10.1111/1467-8624.00381>
- Chen, F., García, O. F., Fuentes, M. C., García-Ros, R., & García, F. (2020). Self-concept in China: Validation of the Chinese version of the Five-Factor Self-Concept (AF5) Questionnaire. *Symmetry-Basel, 12*(798), 1-13. <https://doi.org/10.3390/sym12050798>
- Chen, G., Gully, S., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods, 4*(1), 62-83. <https://doi.org/10.1177/109442810141004>
- Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: The role of control in the early environment. *Psychological Bulletin, 124*(1), 3-21. <https://doi.org/10.1037/0033-2909.124.1.3>
- Climent-Galarza, S., Alcaide, M., García, O. F., Chen, F., & García, F. (2022). Parental socialization, delinquency during adolescence and adjustment in adolescents and adult children. *Behavioral Sciences, 12*(448), 1-21. <https://doi.org/10.3390/bs12110448>
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487-496. <https://doi.org/10.1037/0033-2909.113.3.487>
- Deater-Deckard, K., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1996). Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology, 32*(6), 1065-1072. <https://doi.org/10.1037/0012-1649.32.6.1065>
- Dwairy, M., & Achoui, M. (2006). Introduction to three cross-regional research studies on parenting styles, individuation, and mental health in Arab societies. *Journal of Cross-Cultural Psychology, 37*, 221-229. <https://doi.org/10.1177/0022022106286921>
- 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*(3), 262-272. <https://doi.org/10.1177/0022022106286924>
- Dwairy, M., Achoui, M., Abouserie, R., & Farah, A. (2006). Adolescent-family connectedness among Arabs: A second cross-regional research study. *Journal of Cross-Cultural Psychology, 37*, 248-261. <https://doi.org/10.1177/0022022106286923>
- Dwairy, M., Achoui, M., Abouserie, R., Farah, A., Sakhleh, A. A., Fayad, M., & Khan, H. K. (2006). Parenting styles in Arab societies: A first cross-regional research study. *Journal of Cross-Cultural Psychology, 37*, 230-247. <https://doi.org/10.1177/0022022106286922>
- Eccles, J., Midgley, C., Wigfield, A., Buchanan, C., Reuman, D., Flanagan, C., & Maciver, D. (1993). Development during Adolescence - the impact of stage-environment fit on young adolescents experiences in schools and in families. *American Psychologist, 48*(2), 90-101. <https://doi.org/10.1037//0003-066X.48.2.90>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Frank, G., Plunkett, S. W., & Otten, M. P. (2010). Perceived parenting, self-esteem, and general self-efficacy of Iranian American adolescents. *Journal of Child and Family Studies, 19*(6), 738-746. <https://doi.org/10.1007/s10826-010-9363-x>
- Fuentes, M. C., Alarcón, A., Gracia, E., & García, F. (2015). School adjustment among Spanish adolescents: Influence of parental socialization. *Cultura y Educación, 27*(1), 1-32. <https://doi.org/10.1080/11356405.2015.1006847>
- Fuentes, M. C., García, O. F., & García, F. (2020). Protective and risk factors for adolescent substance use in Spain: Self-esteem and other indicators of personal well-being and ill-being. *Sustainability, 12*(15), 5967. <https://doi.org/10.3390/su12155967>
- Fuentes, M. C., García, O. F., Alcaide, M., García-Ros, R., & García, F. (2022). Analyzing when parental warmth but without parental strictness leads to more adolescent empathy and self-concept: Evidence from Spanish homes. *Frontiers in Psychology, 13*, 7612. <https://doi.org/10.3389/fpsyg.2022.1060821>
- Fuentes, M. C., García-Ros, R., Perez-Gonzalez, F., & Sancerni, D. (2019). Effects of parenting styles on self-regulated learning and academic stress in Spanish adolescents. *International Journal of Environmental Research and Public Health, 16*(15), 2778. <https://doi.org/10.3390/ijerph16152778>

- Furstenberg, F. F., Cook, T., Eccles, J., Elder Jr., G. H., & Sameroff, A. (1999). *Managing to make it: Urban families and adolescent success*. University of Chicago Press.
- Gallarin, M., Torres-Gomez, B., & Alonso-Arbiol, I. (2021). Aggressiveness in adopted and non-adopted teens: The role of parenting, attachment security, and gender. *International Journal of Environmental Research and Public Health*, *18*(4), 2034. <https://doi.org/10.3390/ijerph18042034>
- García, 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 socialisation style in Spain? A study with children and adolescents aged 10-14 years. *Infancia y Aprendizaje*, *33*(3), 365-384. <https://doi.org/10.1174/021037010792215118>
- García, F., Martínez, I., Balluerka, N., Cruise, E., García, O. F., & Serra, E. (2018). Validation of the five-factor self-concept questionnaire AF5 in Brazil: Testing factor structure and measurement invariance across language (Brazilian and Spanish), gender, and age. *Frontiers in Psychology*, *9*, 2250. <https://doi.org/10.3389/fpsyg.2018.02250>
- García, F., & Musitu, G. (1999). *AF5: Self-concept form 5* [AF5: Autoconcepto Forma 5]. TEA editions.
- García, F., Serra, E., García, O. F., Martínez, I., & Cruise, E. (2019). A third emerging stage for the current digital society? Optimal parenting styles in Spain, the United States, Germany, and Brazil. *International Journal of Environmental Research and Public Health*, *16*(13), 2333. <https://doi.org/10.3390/ijerph16132333>
- García, J. F., Pascual, J., Frias, M. D., Van Krunckelsven, D., & Murgui, S. (2008). Design and power analysis: n and confidence intervals of means. *Psicothema*, *20*(4), 933-938.
- García, O. F., Fuentes, M. C., Gracia, E., Serra, E., & García, F. (2020a). Parenting warmth and strictness across three generations: Parenting styles and psychosocial adjustment. *International Journal of Environmental Research and Public Health*, *17*(20), 7487. <https://doi.org/10.3390/ijerph17207487>
- García, O. F., Lopez-Fernandez, O., & Serra, E. (2021). Raising Spanish children with an antisocial tendency: Do we know what the optimal parenting style is? *Journal of Interpersonal Violence*, *36*(13-14), 6117-6144. <https://doi.org/10.1177/0886260518818426>
- García, O. F., & Serra, E. (2019). Raising children with poor school performance: Parenting styles and short- and long-term consequences for adolescent and adult development. *International Journal of Environmental Research and Public Health*, *16*(7), 1089. <https://doi.org/10.3390/ijerph16071089>
- García, O. F., Serra, E., Zacaes, J. J., Calafat, A., & García, F. (2020b). Alcohol use and abuse and motivations for drinking and non-drinking among Spanish adolescents: Do we know enough when we know parenting style? *Psychology & Health*, *35*(6), 645-654. <https://doi.org/10.1080/08870446.2019.1675660>
- García, O. F., Serra, E., Zacaes, J. J., & García, F. (2018). Parenting styles and short- and long-term socialization outcomes: A study among Spanish adolescents and older adults. *Psychosocial Intervention*, *27*(3), 153-161. <https://doi.org/10.5093/pi2018a21>
- Gimenez-Serrano, S., García, F., & García, O. F. (2022a). Parenting styles and its relations with personal and social adjustment beyond adolescence: Is the current evidence enough? *European Journal of Developmental Psychology*, *19*(5), 749-769. <https://doi.org/10.1080/17405629.2021.1952863>
- Gimenez-Serrano, S., Alcaide, M., Reyes, M., Zacaes, J. J., & Celdrán, M. (2022b). Beyond parenting socialization years: The relationship between parenting dimensions and grandparenting functioning. *International Journal of Environmental Research and Public Health*, *19*(8), 4528. <https://doi.org/10.3390/ijerph19084528>
- 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*(8), 1004-1021. <https://doi.org/10.1002/jcop.21512>
- Hernandez-Serrano, O., Eugenia Gras, M., Gacto, M., Brugarola, A., & Font-Mayolas, S. (2021). Family climate and intention to use cannabis as predictors of cannabis use and cannabis-related problems among young university students. *International Journal of Environmental Research and Public Health*, *18*(17), 9308. <https://doi.org/10.3390/ijerph18179308>
- Juang, L. P., & Silbereisen, R. K. (2002). The relationship between adolescent academic capability beliefs, parenting and school grades. *Journal of Adolescence*, *25*(1), 3-18. <https://doi.org/10.1006/jado.2001.0445>
- Khaleque, A., & Rohner, R. P. (2002). Reliability of measures assessing the pancultural association between perceived parental acceptance-rejection and psychological adjustment: A meta-analysis of cross-cultural and intracultural studies. *Journal of Cross-Cultural Psychology*, *33*(1), 87-99. <https://doi.org/10.1177/0022022102033001006>
- Khaleque, A., & Rohner, R. P. (2012). Pancultural associations between perceived parental acceptance and psychological adjustment of children and adults: A meta-analytic review of worldwide research. *Journal of Cross-Cultural Psychology*, *43*(5), 784-800. <https://doi.org/10.1177/0022022111406120>
- 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*(5), 1049-1065. <https://doi.org/10.1111/j.1467-8624.1991.tb01588.x>
- 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. <https://doi.org/10.2224/sbp.2007.35.1.115>
- Llorca, A., Richaud, M. C., & Malonda, E. (2017). Parenting, peer relationships, academic self-efficacy, and academic achievement: Direct and mediating effects. *Frontiers in Psychology*, *8*, 2120. <https://doi.org/10.3389/fpsyg.2017.02120>
- 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* (pp. 1-101). Wiley.
- Martínez, I., Cruise, E., García, O. F., & Murgui, S. (2017). English validation of the Parental Socialization Scale—ESPA29. *Frontiers in Psychology*, *8*(865), 1-10. <https://doi.org/10.3389/fpsyg.2017.00865>
- Martínez, I., Murgui, S., García, O. F., & García, F. (2021). Parenting and adolescent adjustment: The mediational role of family self-esteem. *Journal of Child and Family Studies*, *30*(5), 1184-1197. <https://doi.org/10.1007/s10826-021-01937-z>
- Martínez, I., García, F., Fuentes, M. C., Veiga, F., García, O. F., Rodrigues, Y., Cruise, E., & Serra, E. (2019a). Researching parental socialization styles across three cultural contexts: Scale ESPA29 bi-dimensional validity in Spain, Portugal, and Brazil. *International Journal of Environmental Research and Public Health*, *16*(2), 197. <https://doi.org/10.3390/ijerph16020197>
- Martínez, I., Murgui, S., García, O. F., & García, F. (2019b). Parenting in the digital era: Protective and risk parenting styles for traditional bullying and cyberbullying victimization. *Computers in Human Behavior*, *90*, 84-92. <https://doi.org/10.1016/j.chb.2018.08.036>
- Martínez, I., García, F., Veiga, F., García, O. F., Rodrigues, Y., & Serra, E. (2020). Parenting styles, internalization of values and self-esteem: A cross-cultural study in Spain, Portugal and Brazil. *International Journal of Environmental Research and Public Health*, *17*(7), 2370. <https://doi.org/10.3390/ijerph17072370>
- 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. <https://doi.org/10.1017/S1138741600006600>
- Martínez-Escudero, J. A., Villarejo, S., García, O. F., & García, F. (2020). Parental socialization and its impact across the lifespan. *Behavioral Sciences*, *10*(6), 101. <https://doi.org/10.3390/bs10060101>
- Maxwell, S. E., & Delaney, H. D. (2004). *Designing experiments and analyzing data: A model comparison perspective* (2nd ed.). Lawrence Erlbaum Associates.
- Moreno-Ruiz, D., Estévez, E., Jiménez, T. I., & Murgui, S. (2018). Parenting style and reactive and proactive adolescent violence: Evidence from Spain. *International Journal of Environmental Research and Public Health*, *15*(12), 2634. <https://doi.org/10.3390/ijerph15122634>
- Muñiz-Rivas, M., Vera, M., & Povedano-Díaz, A. (2019). Parental style, dating violence and gender. *International Journal of Environmental Research and Public Health*, *16*(15), 2722. <https://doi.org/10.3390/ijerph16152722>
- Musitu, G., & García, J. F. (2004). Consequences of the family socialization in the Spanish culture. *Psicothema*, *16*(2), 288-293.

- Musitu-Ferrer, D., Esteban Ibáñez, M., León, C., & García, O. F. (2019). Is school adjustment related to environmental empathy and connectedness to nature? *Psychosocial Intervention*, 28(2), 101-110. <https://doi.org/10.5093/pi2019a8>
- Musitu-Ferrer, D., León-Moreno, C., Callejas-Jerónimo, E. J., Esteban-Ibáñez, M., & Musitu-Ochoa, G. (2019). Relationships between parental socialization styles, empathy and connectedness with nature: Their implications in environmentalism. *International Journal of Environmental Research and Public Health*, 16(2461), 2461. <https://doi.org/10.3390/ijerph16142461>
- Niditch, L. A., & Varela, R. E. (2012). Perceptions of parenting, emotional self-efficacy, and anxiety in youth: Test of a mediational model. *Child & Youth Care Forum*, 41(1), 21-35. <https://doi.org/10.1007/s10566-011-9150-x>
- Palacios, I., García, O. F., Alcaide, M., & García, F. (2022). Positive parenting style and positive health beyond the authoritative: Self, universalism values and protection against emotional vulnerability from Spanish adolescents and adult children. *Frontiers in Psychology*, 13, 7867. <https://doi.org/10.3389/fpsyg.2022.1066282>
- Pérez, J. F. G., Navarro, D. F., & Llobell, J. P. (1999). Statistical power of Solomon design. *Psicothema*, 11(2), 431-436.
- Perez-Gramaje, A. F., García, O. F., Reyes, M., Serra, E., & García, F. (2020). Parenting styles and aggressive adolescents: Relationships with self-esteem and personal maladjustment. *European Journal of Psychology Applied to Legal Context*, 12(1), 1-10. <https://doi.org/10.5093/ejpalc2020a1>
- Pinquart, M., & Kauser, R. (2018). Do the associations of parenting styles with behavior problems and academic achievement vary by culture? Results from a meta-analysis. *Cultural Diversity & Ethnic Minority Psychology*, 24(1), 75-100. <https://doi.org/10.1037/cdp0000149>
- Queiroz, P., García, O. F., García, F., Zacaes, J. J., & Camino, C. (2020). Self and nature: Parental socialization, self-esteem, and environmental values in Spanish adolescents. *International Journal of Environmental Research and Public Health*, 17(10), 3732. <https://doi.org/10.3390/ijerph17103732>
- Ridao, P., López-Verdugo, I., & Reina-Flores, C. (2021). Parental beliefs about childhood and adolescence from a longitudinal perspective. *International Journal of Environmental Research and Public Health*, 18(4), 1760. <https://doi.org/10.3390/ijerph18041760>
- Riquelme, M., García, O. F., & Serra, E. (2018). Psychosocial maladjustment in adolescence: Parental socialization, self-esteem, and substance use. *Anales de Psicología*, 34(3), 536-544. <https://doi.org/10.6018/analesps.34.3.315201>
- Rohner, R. P. (1978). Development and validation of the Personality Assessment Questionnaire: Test manual.
- 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(6), 643-649. <https://doi.org/10.1177/0022022103255650>
- Rohner, R. P., & Khaleque, A. (2005). *Handbook for the study of parental acceptance and rejection* (4th ed.). Rohner Research Publications.
- Rohner, R. P., Saavedra, J., & Granum, E. O. (1978). Development and validation of the Parental Acceptance Rejection Questionnaire: Test manual. *Catalogue of Selected Documents in Psychology*, 8, 17-48.
- Sacca, L., Craig Rushing, S., Markham, C., Shegog, R., Peskin, M., Hernandez, B., Gaston, A., Singer, M., Trevino, N., Correa, C. C., Jessen, C., Williamson, J., & Thomas, J. (2021). Assessment of the reach, usability, and perceived impact of "Talking is Power": A parental sexual health text-messaging service and web-based resource to empower sensitive conversations with American Indian and Alaska native teens. *International Journal of Environmental Research and Public Health*, 18(17), 9126. <https://doi.org/10.3390/ijerph18179126>
- Sanders, M., Hoang, N. T., Hodges, J., Sofronoff, K., Einfeld, S., Tonge, B., Gray, K., & The MHYPEDD Team. (2022). Predictors of change in stepping stones triple interventions: The relationship between parental adjustment, parenting behaviors and child outcomes. *International Journal of Environmental Research and Public Health*, 19(20), 13200. <https://doi.org/10.3390/ijerph192013200>
- Sandoval-Obando, E., Alcaide, M., Salazar-Muñoz, M., Peña-Troncoso, S., Hernández-Mosqueira, C., & Gimenez-Serrano, S. (2022). Raising children in risk neighborhoods from Chile: Examining the relationship between parenting stress and parental adjustment. *International Journal of Environmental Research and Public Health*, 19(1), 45. <https://doi.org/10.3390/ijerph19010045>
- Schaefer, E. S. (1959). A circumplex model for maternal behavior. *Journal of Abnormal and Social Psychology*, 59, 226-235. <https://doi.org/10.1037/h0041114>
- Scholz, U., Dona, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251. <https://doi.org/10.1027//1015-5759.18.3.242>
- Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic-success among adolescents. *Child Development*, 60(6), 1424-1436. <https://doi.org/10.1111/j.1467-8624.1989.tb04014.x>
- Steinberg, L., Blatt-Eisengart, I., & Cauffman, E. (2006). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful homes: A replication in a sample of serious juvenile offenders. *Journal of Research on Adolescence*, 16(1), 47-58. <https://doi.org/10.1111/j.1532-7795.2006.00119.x>
- 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(3), 754-770. <https://doi.org/10.1111/j.1467-8624.1994.tb00781.x>
- Suldo, S. M., & Shaffer, E. J. (2007). Evaluation of the self-efficacy questionnaire for children in two samples of American adolescents. *Journal of Psychoeducational Assessment*, 25(4), 341-355. <https://doi.org/10.1177/0734282907300636>
- Symonds, P. M. (1939). *The psychology of parent-child relationships*. Appleton-Century-Crofts.
- Turner, E. A., Chandler, M., & Heffer, R. W. (2009). The Influence of parenting styles, achievement motivation, and self-efficacy on academic performance in college students. *Journal of College Student Development*, 50(3), 337-346. <https://doi.org/10.1353/csd.0.0073>
- Veiga, F. H., Festas, I., García, O. F., Oliveira, Í. M., Veiga, C. M., Martins, C., Covas, F., & Carvalho, N. A. (2021). Do students with immigrant and native parents perceive themselves as equally engaged in school during adolescence? *Current Psychology*, <https://doi.org/10.1007/s12144-021-02480-2>
- Veiga, F. H., García, F., Reeve, J., Wentzel, K., & García, O. F. (2015). When adolescents with high self-concept lose their engagement in school. *Revista de Psicodidáctica*, 20(2), 305-320. <https://doi.org/10.1387/RevPsicodidact.12671>
- Villarejo, S., Martínez-Escudero, J. A., & García, O. F. (2020). Parenting styles and their contribution to children personal and social adjustment. *Ansiedad y Estrés*, 26(1), 1-8. <https://doi.org/10.1016/j.anyes.2019.12.001>
- Yap, S. T., & Baharudin, R. (2016). The relationship between adolescents' perceived parental involvement, Self-Efficacy beliefs, and subjective well-being: A Multiple mediator model. *Social Indicators Research*, 126(1), 257-278. <https://doi.org/10.1007/s11205-015-0882-0>
- Yeung, J. W. K. (2021). Family processes, parenting practices, and psychosocial maturity of Chinese youths: A latent variable interaction and mediation analysis. *International Journal of Environmental Research and Public Health*, 18(8), 4357. <https://doi.org/10.3390/ijerph18084357>