

Adolescent students' perceptions on parental supervision: Profiles and influences of student gender

Percepciones de los estudiantes adolescentes sobre la supervisión parental: Perfiles e influencias del género de los estudiantes

Itahisa Mulero-Henríquez ^{1,2} 
José Alexis Alonso-Sánchez ¹ 
Samuel Falcón ^{1,2*} 

¹ Universidad de Las Palmas de Gran Canaria, España

² Instituto Universitario de Análisis y Aplicaciones Textuales (IATEXT), España

* Author of correspondence. E-mail: samuel.falcon@ulpgc.es

How to reference this article:

Mulero-Henríquez, I., Alonso-Sánchez, J.A., & Falcón, S. (2025). Adolescent students' perceptions on parental supervision: Profiles and influences of student gender. *Educación XX1*, 28(1), 337-368. <https://doi.org/10.5944/educxx1.39734>

Date received: 30/01/2024
Date accepted: 12/09/2024
Published online: 07/01/2025

ABSTRACT

The relationship between adolescent students and their parents plays a crucial role in the former's development, yet there is a paucity of research exploring adolescents' perceptions of parental supervision, particularly in relation to gender influences. The aim of this study was to adapt and validate a scale examining students' perceptions of parental supervision, differentiating between paternal and maternal supervision. In addition, we aimed to identify different profiles of paternal and maternal supervision and to explore how these profiles are

influenced by the gender of the adolescents and the parents. A cohort of 869 adolescent students participated, providing data through the «Adolescent Perception Scale of Parental Supervision». The validity of the scale was analyzed using exploratory structural equation modelling, and the reliability of the data was tested with McDonald's Omega coefficient. After testing the validity and reliability of the scale, a latent profile analysis was conducted to categorize students into different supervision profiles based on their responses. Finally, the influence of students' gender on the likelihood of belonging to each parental supervision profile was examined for both the paternal and maternal versions of the scale. The analysis revealed three profiles of paternal supervision and four of maternal supervision, each exhibiting unique characteristics in terms of intensity and style. Adolescents' gender was found to significantly influence the likelihood of belonging to one or the other profile, both in paternal and maternal supervision. The findings underscore the need of adopting gender-specific approaches in parental supervision. This approach is crucial for supporting the developmental needs of adolescents. The study also opens avenues for further research and practical applications in educational and family contexts, emphasizing the importance of understanding the nuanced dynamics of parental supervision in relation to gender.

Keywords: parental supervision, adolescent students, gender, latent profile analysis

RESUMEN

La relación entre los estudiantes adolescentes y sus progenitores desempeña un papel crucial en el desarrollo de los primeros; sin embargo, son escasas las investigaciones que exploran las percepciones de los adolescentes sobre la supervisión parental, especialmente en relación con las influencias de género. El objetivo de este estudio fue adaptar y validar una escala que examinara las percepciones de los estudiantes adolescentes sobre la supervisión parental, diferenciando entre supervisión paterna y materna. Además, se buscó identificar diferentes perfiles de supervisión paterna y materna y explorar cómo estos perfiles son influenciados por el género de los estudiantes. Participó una cohorte de 869 estudiantes adolescentes, que proporcionaron datos a través de la «Escala de percepción adolescente de la supervisión parental». Se analizó la validez de la escala mediante un modelo de ecuaciones estructurales exploratorio y la fiabilidad de los datos utilizando el coeficiente Omega de McDonald. Tras comprobar la validez y fiabilidad de la escala, se realizó un análisis de perfiles latentes para categorizar a los estudiantes en distintos perfiles de supervisión en función de las respuestas. Finalmente, se examinó la influencia del género de los estudiantes en las probabilidades de pertenecer a cada perfil de supervisión parental, tanto en la versión paterna como en la materna de la escala. El análisis reveló tres perfiles de supervisión paterna y cuatro de supervisión materna, cada uno con características únicas en términos de intensidad y estilo. Se observó que el género de los adolescentes influía significativamente en la probabilidad de pertenecer a uno u otro perfil, tanto en la supervisión paterna como en la materna. Los resultados subrayan la necesidad de adoptar enfoques específicos de género en la supervisión parental. Este enfoque es crucial para apoyar las necesidades de desarrollo de los adolescentes. El estudio también abre vías para futuras investigaciones y

aplicaciones prácticas en contextos educativos y familiares, destacando la importancia de comprender la dinámica de la supervisión parental en relación con el género.

Palabras clave: supervisión parental, estudiantes adolescentes, género, análisis de perfiles latentes

INTRODUCTION

The transition from childhood to adulthood is a crucial period marked by significant changes and the need to balance adolescent independence with parental control (González-Cámara et al., 2019). During this stage, elements such as trust, oversight, and emotional support from parents are fundamental to young people's well-being (Keijsers et al., 2012; Melton & Deutsch, 2022). Parental supervision, defined as parents' awareness of their children's activities (Ponce-Gómez et al., 2023), plays an essential role in this context. Although autonomy increases in the adolescence, supervision remains vital but must be perceived as an act of care, not control, to foster a positive development (Dou et al., 2020; Harris-McKoy & Cui, 2013; Whitlock, 2006). If executed properly, this practice can be key in preventing risky behaviors in adolescents and enhancing family education.

The influence of the family environment on academic performance, particularly through parental education and supervision, has been a focal interest for the research community for decades (Coleman, 1995; Masud et al., 2015). Research has shown that there are significant differences in supervision styles between fathers and mothers, which have implications in areas such as gender stereotypes and lifestyles (Alemany-Arrebola et al., 2019; Amador & Monreal-Gimeno, 2010; Cantón et al., 2016). However, understanding how adolescents differentially perceive paternal and maternal supervision remains limited.

Our study aims to address this gap, focusing on how adolescent students perceive both paternal and maternal supervision. Specifically, we intend to create profiles based on adolescents' perception of both parental supervision and analyze the influence of the students' gender on these profiles. In doing so, our goal is not only to fill a gap in the literature but also to provide a more detailed view of the role of adolescents' gender in family education dynamics.

PARENTAL SUPERVISION STYLES AND INFLUENCE IN ADOLESCENCE

Parents' awareness of their children's activities is a key factor during adolescence. This supervision acts as a protective shield against risky behaviors such as impulsivity, delinquency, substance use, gambling problems, negative peer influence, and disobedience, as well as contributing to the prevention of emotional issues and

cyber aggression (Elboj-Saso, 2023; Emond et al., 2022; Li et al., 2019; Keogh-Clark et al., 2021; Ruiz-Hernández et al., 2019; Yang et al., 2022). In the educational context, parental supervision positively influences academic performance, learning strategy use, social competence, and reduction of school absenteeism (Brajša-Žganec et al., 2019; Seidu et al., 2022; Top et al., 2017). Furthermore, it contributes to the reduction of stress, anxiety, depression, and improves life satisfaction, self-esteem, and overall development of adolescents (Gentina et al., 2018; Melton & Deutsch, 2022; Villacencio-Aguilar, 2020; Yap et al., 2014). However, the various components of supervision carry varying weight and can lead to different styles of parental supervision with differentiated effects on adolescent development.

A critical aspect of parental supervision involves the control parents exert, which is often divided into behavioural and psychological dimensions (Barber et al., 2005; Shek & Law, 2015; Zhu & Shek, 2021). Behavioral control involves monitoring and regulating children's behavior through rules and standards, essential for internalizing social norms and knowing the daily routines of adolescents (Grodnick & Pomerantz, 2009). This type of control has been associated with positive developmental outcomes, such as improved school performance, individual competence, self-discipline, psychological well-being, and healthy internet use (Martins et al., 2020; Walters, 2018). However, it should be coupled with emotional support to promote healthy development (Baumrind, 1968, 1971). In contrast, psychological control is characterized by intrusive parenting that seeks to manipulate children's thoughts and emotions. This ultimately inhibits their autonomy and leads to negative outcomes such as low self-concept, emotional and behavioral problems (Barber & Harmon, 2002; Costa et al., 2015).

Beyond parental control, another key dimension for parental supervision is the knowledge parents have about their children's activities, which can come from both supervision and adolescents' self-revelation (Stattin & Kerr, 2000). During adolescence, growing needs for autonomy and privacy lead young people to decide what information to share with their parents, setting boundaries around their activities, friendships, and whereabouts (Baudat et al., 2022; Smetana, 2010). Adolescent self-revelation, which includes sharing details about their daily life and free time, is strongly influenced by the quality of the relationship with their parents. Adolescents are more likely to share information in an environment of trust, understanding, and good communication (Álvarez-García et al., 2016; Kerr & Stattin, 2010). Conversely, the perception of controlling or unresponsive parents can reduce the willingness to share information (Soenens et al., 2006; Tokić Milaković et al., 2018). This open communication from adolescents is a key predictor of parental knowledge, surpassing practices such as information solicitation or direct control (Liu et al., 2020) and is also a crucial factor in adolescent development (Darling & Tilton-Weaver, 2019; Estlein, 2021; Maccoby, 1992; Maccoby & Martin, 1983; Romera et al., 2021).

These findings highlight the importance of parental supervision styles in understanding how adolescents manage information (Baudat et al., 2022). However, more recent research has shown that gender also plays a role in how parents exercise this supervision.

Gender influence in parental supervision

Research on the influence of gender on parental supervision, differentiating between father's or mother's supervision and its impact on sons or daughters, has shown mixed results. Some studies indicate that maternal supervision has a stronger effect on sons (Xu et al., 2014). However, other studies suggest that the influence is similar between both parents (Oliva et al., 2008; Parra Jiménez & Oliva, 2006) or that, in certain contexts, paternal influence is greater (Davidov & Grusec, 2006; Hunter et al., 2015; Lansford et al., 2014). In addition, some research indicates that mothers tend to adopt a more affectionate approach, while fathers tend to be more authoritative (McKinney & Renk, 2008; Simons & Conger, 2007). Despite this greater maternal warmth, mothers have also been found to exert greater psychological control compared to fathers (Barber & Xia, 2013; Lansford et al., 2014).

These gender-based differences in parental supervision are not limited to the parents, as the gender of the adolescent has also been observed to influence the response to parental practices (Mastrotheodoros et al., 2019; Wu & Li, 2023). Boys might be more susceptible to negative practices such as punishment and excessive control, possibly due to social expectations of independence. On the other hand, girls, socialized towards more caring and family-oriented roles, might be more receptive to kind practices. This is reflected in reports indicating that boys are more likely to perceive unfavorable parental characteristics (Dou et al., 2020; He et al., 2019). However, Lansford et al. (2014) found that parental control affects girls' externalizing behaviors more. Adolescents' perceptions are also affected, as maternal supervision practices are often perceived as more positive than those of fathers (Bersabé et al., 2001; García et al., 2011). Nevertheless, here again, opposing results are found, as other studies show that children perceive their fathers as more indulgent and positive than mothers (Capano et al., 2016).

The studies presented in this section show that there is no clear consensus on the effect of gender differences on parental supervision practices and perceptions of adolescents. These findings underscore the need for a deeper understanding of how students' gender influences the likelihood of experiencing different types of parental supervision, and how this varies depending on whether the supervision comes from the father or the mother. This need is particularly relevant in the educational context, where the influence of parental supervision is crucial for academic performance and the comprehensive development of adolescents (Hong

et al., 2015; Masud et al., 2015). Consequently, our study will seek to address these complexities, exploring how students' gender impacts on their perceptions of parental supervision of both fathers and mothers.

The present study

This study focuses on understanding how adolescent students perceive parental supervision. In addition, it aims to understand the role of students' gender in their differential perception of paternal and maternal supervision. To achieve this, we will adapt the scale from Stattin and Kerr (2000) to create the «Adolescent Perception Scale of Parental Supervision». After validating the scale, we will conduct a latent profile analysis of students based on their perception of paternal and maternal supervision. Finally, we will analyze the probability of students' belonging to each profile according to their gender, which will allow for the identification of possible patterns in the perception of parental supervision among boys and girls. This work will provide a deeper understanding of how students' gender might influence the perception of both paternal and maternal supervision. Additionally, the study will offer valuable insights for parents, educators, and mental health professionals, thereby supporting the healthy development of adolescent students. Accordingly, the following objectives are established: 1) Validate the «Adolescent Perception Scale of Parental Supervision» for both paternal and maternal supervision versions; 2) Conduct a latent profile analysis to identify different patterns of parental supervision in both versions of the scale; and 3) Investigate the influence of students' gender on their probability of belonging to different paternal and maternal supervision profiles.

METHOD

This section details the participants, procedure, and instrument used in this quantitative and cross-sectional study, which follows an ex-post-facto comparative-causal design. Additionally, it provides a description of the data analysis methods employed.

Participants

The study involved 869 students, aged between 12 and 21 years, with an average age of 14.99 years (standard deviation = 1.85). The gender distribution was balanced, with 50.2% boys and 49.8% girls. These students were enrolled in five secondary

education institutions across Spain, encompassing public, private, and semi-private schools. As for their educational level, the participants ranged from the first year of Compulsory Secondary Education to the last year of High School, including students from Intermediate Vocational Training education (ESO, Bachillerato, and Ciclo de Grado Medio in Spain, respectively). Other sociodemographic variables of interest can be found in Table 1.

Table 1
Sociodemographic variables of the sample

Variable	Category	Percentage
Studies	Grade 7 / 1º ESO	21.4
	Grade 8 / 2º ESO	15.1
	Grade 9 / 3º ESO	18.4
	Grade 10/ 4º ESO	14.8
	Grade 11 / 1º Bachillerato	20.0
	Grade 12/ 2º Bachillerato	5.3
Mothers' studies	Vocational Training / Ciclo de Grado Medio	5.0
	No formal education - Primary School	22.5
	Secondary School	32.1
	Vocational Training – High School	26.5
Fathers' studies	University Degree	18.9
	No formal education - Primary School	26.1
	Secondary School	27.6
	Vocational Training – High School	29.7
Mothers' employment	University Degree	16.6
	Employed	55.5
Fathers' employment	Unemployed	44.5
	Employed	69.8
Type of family	Unemployed	30.2
	Two-parent family	73.4
	Single-parent family	21.0
	Blended family	5.6

Procedure

The contact with educational centers was initiated through emails, phone calls, and in-person visits. The objectives and requirements of the study were clearly explained to the management of the institutions. Initially, we contacted 162 urban and rural centers from various regions of Spain. Of these contacts, many did not respond, and others declined to participate, ultimately resulting in the involvement of only five centers. Classes were then randomly selected to ensure a representative sample of all the ages studied. Parents of the participating students were informed about the questionnaire by the schools, and their written consent was requested. A specific day and time were arranged for administering the questionnaire in each center. The students completed the questionnaire anonymously and individually. The process was conducted on paper, under the supervision of a researcher, without allowing students to take the questionnaire home. No significant incidents were reported throughout the process. After data collection, the information was processed in line with university guidelines for academic research, ensuring confidentiality and ethical handling.

Instrument

We developed the «Adolescent Perception Scale of Parental Supervision» (Appendix A) as an adaptation of the work of Stattin and Kerr (2000) to evaluate both parental and maternal supervision in the Spanish context. The original scale evaluated child revelation, along with parental solicitation and control, together with other factors. In our adaptation, we retained these three core dimensions but refined some of the items to reduce potential redundancy (e.g., items assessing parental control tended to be repetitive in asking about parents' knowledge of the adolescent's outings and activities).

To ensure cultural relevance and clarity, the original items of the scale were translated and backtranslated by bilingual experts. This process was followed by a cultural review by the main researchers where the wording of the items was revised to ensure that they were easily understandable for the Spanish adolescent population.

Therefore, in line with the findings of Stattin and Kerr (2000), the adapted scale was designed to measure both the active role of parents in supervision and the adolescent's willingness to share information using a Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). The factors evaluated were:

- Behavioral control: This factor assesses the degree of daily supervision parents exercise over adolescents' activities. The related items address aspects such

as curfew, places of socialization, and supervision of free time and money usage. High scores on this factor indicate higher levels of supervision.

- Psychological control: This factor measures the intrusive and manipulative control parents have over adolescents' thoughts and feelings. It includes items that reflect behaviors such as cold and distant treatment, guilt induction, and constant sanctioning of adolescents' ways of being and thinking. High scores indicate greater use of control and manipulation tactics.
- Revelation: This factor relates to the extent to which adolescents communicate aspects of their daily life to their parents. Items address topics such as sharing information about daily activities, friends, and school experiences. A high score reflects a greater tendency to share information.

All this resulted in an adapted scale comprising 20 items in two parallel versions, one addressing paternal supervision and the other maternal supervision, thus allowing the assessment of adolescents' perceptions of supervision by both parents.

Data analysis

We conducted two distinct phases of analysis. The first focused on validating both versions of the Adolescent Perception Scale of Parental Supervision. In the second stage, we aimed to identify different profiles of parental supervision based on student responses. In addition, this second phase also examined the influence of the student's gender on the probability of belonging to the identified profiles in both the paternal and maternal versions of the scale. All data analysis was performed using MPlus 8.8 (Muthén & Muthén, 2024). To handle missing data, we employed the full information maximum likelihood (FIML) technique, ensuring that all non-missing data were utilized to estimate model parameters (Graham, 2012).

First, we validated the parental supervision scale using exploratory structural equation modelling (ESEM; Asparouhov & Muthén, 2009) for both fathers' and mothers' versions. This model was chosen for its ability to evaluate a broader range of less restrictive alternative models compared to confirmatory factor analysis. We evaluated solutions from two to five factors, and we checked the suitability of each model in both versions to determine the optimal number of factors. The fit of the models was determined by comparing the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA), following the recommendations of Milton et al. (2018). We used the threshold values recommended by Hu and Bentler (1999): CFI and TLI values were considered adequate if above .90 and excellent if exceeding .95, while RMSEA values were deemed acceptable if below .08 and excellent if below .06.

Additionally, we assessed the internal reliability of each factor in both scale versions using McDonald's Omega. This method was preferred over Cronbach's Alpha due to its greater accuracy (McNeish, 2018). Values above .75 indicated good reliability, and values above .90, excellent reliability.

After analyzing the structure of the parental supervision scale for both fathers and mothers and verifying the internal reliability of the three subscales (behavioral control, psychological control, and revelation), we conducted a latent profile analysis (LPA). This analysis seeks to explain the variability within the sample using the fewest possible number of latent profiles (Korpiää et al., 2020). Like previous studies (Morin & Marsh, 2015; Stanley et al., 2017), the LPA allowed for determining the number of profiles based on fit indices such as the Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and the Likelihood Ratio Test (LRT). Lower AIC and BIC values indicate a better fit, while the LRT determines if a model with k latent profiles fits better than one with $k-1$ profiles. A low p-value suggests that a model with k groups provides a better fit than a model with $k-1$ groups (Lo et al., 2001).

We examined the solutions ranging from one to five profiles for each scale version, and we established the optimum number of profiles by observing significant changes in AIC and BIC values (Morin et al., 2016). Additionally, we used standardized scores of the factors to minimize the impact of measurement errors (Justice et al., 2011).

Lastly, we analyzed the students' gender influence in the probability of belonging to both the paternal and maternal supervision profiles using the Bolck-Croon-Hagenaars (BCH) method (Asparouhov & Muthén, 2014b; Bolck et al., 2004). Unlike traditional ANOVA, this approach considers the probability of each individual belonging to each profile, rather than assuming everyone exclusively belongs to one profile (Asparouhov & Muthén, 2014a). Employing this technique, it is possible to determine whether there are different patterns depending on the student's gender, indicating differences in the perception of supervision exercised by both fathers and mothers.

RESULTS

Out of all participants, 800 responded to the paternal version of the scale, and 843 to the maternal version. This difference in responses occurred because some students only responded to one version of the scale. This could be caused by the fact that these students had only one parent or because they chose not to answer one version, as it was not required to complete both versions of the scale. However, as the discrepancy between the versions was not large, this issue was by using the FIML technique.

The following sections present the results of the validation and reliability analysis for both versions of the «Adolescent Perception Scale of Parental Supervision». Following this, the results related to the latent profile analysis and the influence of students' gender in the likelihood of belonging to each profile are also presented.

Validation and reliability of the «Adolescent Perception Scale of Parental Supervision»

To achieve the objectives of this study we adapted Statin and Kerr's (2000) scale to develop two versions of the Adolescent Perception Scale of Parental Supervision, one focusing on paternal supervision and the other on maternal supervision. Both versions consisted of a total of 20 analogous items, assessing three subscales. The results of the ESEM models used to test the factorial structure of the scale are presented below (Table 2).

Table 2
Fit indices of the different ESEM

Version	Number of factors	X ²	df	CFI	TLI	RMSEA
Fathers	2	1405.960*	151	.934	.917	.102
	3	587.503*	133	.976	.966	.065
	4	267.993*	116	.992	.987	.040
	5	206.449*	100	.994	.989	.036
Mothers	2	1719.893*	151	.904	.880	.111
	3	583.439*	133	.973	.961	.063
	4	280.357*	116	.990	.984	.041
	5	186.649*	100	.995	.990	.032

Note. df = degrees of freedom, CFI = Comparative fit index; TLI = Tucker-Lewis index; RMSEA = Root mean square error of approximation; * = p < .01.

Table 3*Standardized factor loadings of the three-factor ESEM model*

Item	Fathers' version			Mothers' version		
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
Factor 1: Behavioural control						
Item 1	.744	-.016	.091	.709	-.03	.058
Item 2	.916	-.027	-.021	.894	-.016	-.043
Item 3	.854	-.042	.025	.800	-.094	.015
Item 4	.482	.106	.314	.537	.147	.177
Item 5	.743	.040	.027	.733	.016	-.050
Item 6	.559	.105	.162	.547	.115	.119
Factor 2: Psychological control						
Item 7	.288	.619	-.11	.162	.633	-.096
Item 8	.143	.768	.006	.030	.836	.062
Item 9	-.035	.867	.036	-.031	.879	-.013
Item 10	.213	.675	-.038	.136	.637	-.028
Item 11	.001	.698	.082	-.066	.698	.002
Item 12	-.100	.646	.061	-.167	.675	.137
Factor 3: Revelation						
Item 13	-.021	-.003	.851	.086	-.001	.809
Item 14	.001	.041	.888	.135	.019	.811
Item 15	.046	.082	.871	.143	.06	.813
Item 16	.016	-.059	.771	.001	-.032	.764
Item 17	.166	-.064	.575	.198	-.094	.545
Item 18	.037	-.056	.776	.009	-.08	.746
Item 19	-.096	.010	.842	-.030	-.078	.784
Item 20	-.039	-.076	.860	-.034	-.073	.820

The fit indices indicate that two-factor solutions are inadequate in both cases. On the other hand, solutions of three to five factors were found satisfactory, with fit indices ranging from good to excellent. Following the recommendations of Worthington and Whittaker (2006), we retained the three-factor solution as it aligns most closely with our theoretical interpretation. The standardized factorial loadings for each item are presented in Table 3.

The factor loadings were consistent with each factor in most cases. Some items (4 and 6) showed cross-loadings between factors, but as the values of these cross-loadings were not high, it can be stated that the ESEM supported the proposed three-factor structure.

After confirming the factorial structure of both versions of the parental supervision scale, we evaluated the internal reliability of each of the three identified factors: behavioral control, psychological control, and revelation. The results indicated reliability levels ranging from good to excellent for all factors in both versions of the scale. Specifically, the McDonald's Omega values in the behavioral and psychological control factors were above .75, considered indicators of good reliability, and above .90 in the revelation factor, reflecting excellent reliability. These findings confirm the reliability of the scale for both paternal and maternal supervision perception.

Latent profile analysis of parental supervision

After confirming the factorial structure and internal reliability of the scale, we conducted an LPA, testing solutions from one to five profiles (Table 4).

Table 4
Fit indices of the latent profile analysis models

Version	Number of profiles	AIC	BIC	LRT p	% SG
Fathers	1	6822.905	6851.013	-	100
	2	6259.855	6306.701	.000	24.00
	3	6079.751	6145.335	.000	21.40
	4	5999.591	6083.914	.000	10.76
	5	5920.136	6023.198	.000	5.60
Mothers	1	7188.991	7217.413	-	100
	2	6790.273	6837.642	.000	15.70
	3	6622.798	6689.115	.000	14.70
	4	6508.15	6593.416	.000	8.30
	5	6458.377	6562.59	.000	1.50

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion; LRT p = p value of the likelihood ratio test; % SG = Percentage of subjects in the smallest group.

The analysis revealed that the five-profile results in both versions of the scales were not satisfactory. This was due to the profile with the fewest subjects containing a very low percentage in both cases, and solutions with a very small number of participants in a profile may not be representative of a unique latent profile (Marsh et al., 2009). To decide between the remaining solutions, we relied on a visual comparison of the AIC and BIC indices, as all showed a low p-value in the likelihood ratio test. Upon plotting these indices, we opted for a three-profile model in the case of the paternal supervision version and a four-profile model for the maternal supervision version. These models marked the point where the elbow plot's slope (Figure 1) began to level off, indicating an optimal solution.

Figure 1
Elbow plot

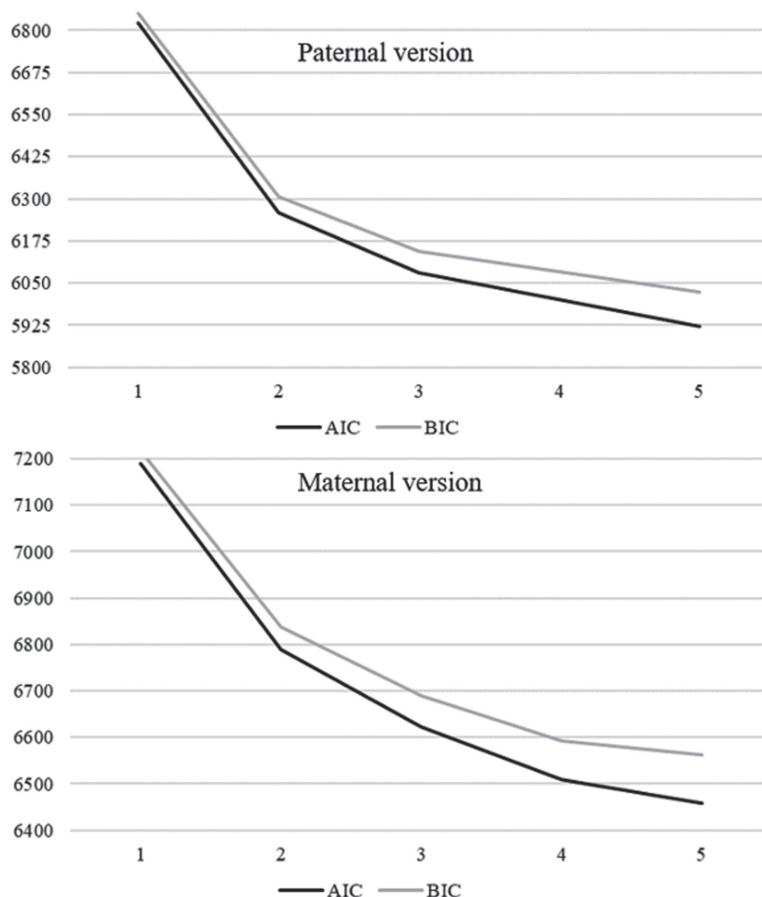
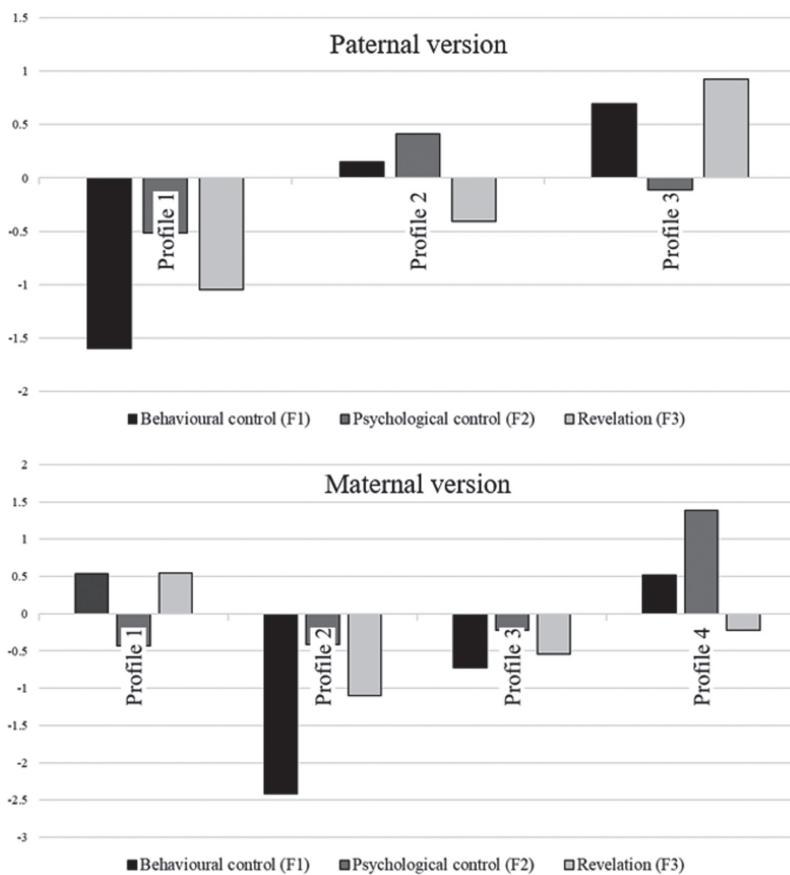


Figure 2

Means of each factor for each profile identified in latent profile analysis



Regarding differences between the profiles (Figure 2), in the paternal supervision scale version, Profile 1 grouped 21.40% of the students. This profile was characterized by students who perceived less behavioral and psychological control compared to the average, but these students also showed a lesser tendency for revelation towards their parents. In contrast, Profile 2, which included 38.50% of the sample, was distinguished by perceptions of higher behavioral and psychological control compared to the average and a reduced tendency for revelation. Finally, Profile 3, comprising 40.10% of the sample, was formed by students who perceived high behavioral control, low psychological control, and a high tendency for revelation.

In the maternal supervision scale version, the profile trends were similar, except for an additional profile. Profile 1, which grouped 48.60% of the sample, turned out to be analogous to Profile 3 of the paternal version. That is, in this group, students perceived high behavioral control and low psychological control, and were prone to reveal information. Meanwhile, Profiles 2 (8.30%) and 3 (22.70%) were analogous to Profile 1 found in the paternal supervision version, finding students with low levels of perception in all factors. However, it can be observed that, in the case of maternal supervision, students are distributed in a profile where this perception is more pronounced (Profile 2) and another where the negative perception of these factors is more moderate (Profile 3). Lastly, Profile 4 (21.20%) stood out for including students with high values in the factors of behavioral and psychological control, and low values in the revelation factor, similar to Profile 2 found in the case of paternal supervision.

Student gender influence in perceived parental supervision

Finally, we tested whether the students' gender influenced their likelihood of belonging to both the paternal and maternal supervision profiles (Table 5).

Table 5 shows that, for the paternal supervision version, the influence of students' gender on the probability of belonging to one profile or another was statistically significant in all cases. Conversely, in the maternal supervision version, gender did not significantly influence the likelihood of belonging to a particular profile when comparing Profiles 1 and 4, as well as Profiles 2 and 3, but it did influence the probability of belonging in the rest of the cases.

Table 5*Results of the analysis of gender differences in profile belonging*

Profile	Student gender	Probability of belonging to the profile
Fathers' version		
1	Boy	.668
1	Girl	.332
2	Boy	.523
2	Girl	.477
3	Boy	.402
3	Girl	.598
<hr/>		
Overall test: $X^2 = 30.038^*$, df = 2		
profile 1 vs. profile 2: $X^2 = 7.047^*$, df = 1		
profile 1 vs. profile 3: $X^2 = 29.994^*$, df = 1		
profile 2 vs. profile 3: $X^2 = 5.717^*$, df = 1		
<hr/>		
Mothers' version		
1	Boy	.425
1	Girl	.575
2	Boy	.784
2	Girl	.216
3	Boy	.640
3	Girl	.360
4	Boy	.413
4	Girl	.587
<hr/>		
Overall test: $X^2 = 43.953^*$, df = 3		
profile 1 vs. profile 2: $X^2 = 35.203^*$, df = 1		
profile 1 vs. profile 3: $X^2 = 10.262^*$, df = 1		
profile 1 vs. profile 4: $X^2 = 0.050$, df = 1		
profile 2 vs. profile 3: $X^2 = 3.590$, df = 1		
profile 2 vs. profile 4: $X^2 = 28.960^*$, df = 1		
profile 3 vs. profile 4: $X^2 = 9.821^*$, df = 1		

Note. df = degrees of freedom, * = p < .05.

DISCUSSION AND CONCLUSIONS

The main aim of this research was to understand how adolescent students perceive parental supervision. For this, we established the following three specific objectives: 1) Validate the «Adolescent Perception Scale of Parental Supervision» for both paternal and maternal supervision; 2) Conduct a latent profile analysis to identify different patterns of parental supervision in both versions of the scale; and 3) Investigate the influence of students' gender on their probability of belonging to different paternal and maternal supervision profiles.

Regarding the first specific objective, our results confirm both the validity and reliability of the scale. The ESEM models showed that the three-factor solution was the most suitable and coherent with the theoretical interpretation. In addition, McDonald's Omega analysis revealed values above .75 in behavioral and psychological control values, and above .90 in the revelation factor, showing the reliability to the instrument.

To address the second objective, we performed a latent profile analysis, resulting in three profiles for paternal supervision and four profiles in the case of the maternal supervision. As for the profiles of the paternal version, we can say there are two profiles of «poor paternal supervision». Profile 1 is characterized by low behavioral control and low psychological control; while Profile 2 is characterised by some behavioral control, but mainly by psychological control, with both profiles coinciding in low revelation. On the contrary, Profile 3 is characterized by high behavioral control, low psychological control, and high revelation, so we could say that it represents a profile of «good paternal supervision».

Regarding the profiles for maternal supervision, we identified Profile 1 as exhibiting «good maternal supervision», characterized by behavioral control and revelation, with low psychological control. However, the remaining three profiles reflect «poor maternal supervision». Profile 2 is characterized by low levels of behavioral control, psychological control, and revelation; Profile 3 also has this tendency, but to a lesser degree in all three factors; and Profile 4 has high psychological control and some behavioral control, but low revelation.

Comparing the profiles between the maternal and paternal versions, we find that Profile 2 and Profile 3 of the maternal version coincide with Profile 1 of the paternal version; and Profile 4 of the maternal version coincides with Profile 2 of the paternal version. All these profiles, with their varying tendencies, can fall under the category of «poor supervision». Conversely, Profile 1 of the maternal version coincides with Profile 3 of the paternal version, and they would be classified under the category of «good supervision».

The «good parental supervision» profiles from both paternal and maternal supervision provide promising results, as most students were classified in these

profiles. This is a positive sign as prior work indicate that parental behavioral control is positively associated with the well-being, self-discipline, and individual competence (Martins et al., 2020; Walters, 2018) of adolescents, in such a way that it makes the adolescent feel well enough for disclosure to occur.

However, the results also reveal an alarming finding, as almost half of the students were classified within the «poor parental supervision» profiles. These profiles, characterized by either low behavioral control and low revelation, or by a dominance of psychological control coupled with low revelation, present serious concerns. Students in these profiles might feel an inhibition of their autonomy, which can lead to detrimental outcomes such as low self-concept, emotional and behavioral problems (Barber & Harmon, 2002; Costa et al., 2015). Furthermore, these profiles might be associated with minimal communication and supervision, factors that have been linked to an increased risk of school dropout (Afia et al., 2019). Given the high proportion of students in these profiles, this issue demands urgent attention due to its potential long-term implications on the well-being and development of adolescents. As Stattin and Kerr (2000) suggest, improving the parent-child relationship, particularly by fostering open communication and trust, could lead to more positive parental supervision.

Another interesting result supported by the literature is that profiles with higher means on revelation also have higher scores on behavioral control and lower scores on psychological control. This assertion aligns with the research of Barber and his colleagues (Barber & Harmon, 2002; Barber & Xia, 2013; Barber et al., 2005), which found that both styles of control had opposite effects. Notably, our results also coincide with the observation that mothers, despite being warmer in their communication, tend to exercise more psychological control (Barber & Xia, 2013), as seen in Profile 4 of the maternal supervision version. In contrast, none of the paternal profiles show high values in this factor. Furthermore, Soenens and colleagues (2006) demonstrate that high psychological control impacts school and academic functioning and social relationships, making adolescents more vulnerable to externalization problems. Following these findings and Baudat et al.'s (2022) results, we emphasize that parents can best foster revelation from adolescent students by initiating conversations with them, but not by adopting intrusive behaviors.

Lastly, regarding the third objective, we analyzed the impact of students' gender in the probability of belonging to the profiles of parental supervision and found significant differences in both versions. For paternal supervision, results indicate that boys are more likely to belong to Profile 1 (66.8%) and Profile 2 (52.3%), both of which are characterized by «poor supervision». In contrast, girls are more likely to belong to Profile 3 (59.8%), which represents «good supervision». Additionally,

significant differences were observed across all profile combinations when analyzed individually.

In the maternal supervision version, findings suggest that boys are more likely to belong to Profiles 2 (78.4%) and 3 (64.0%), which are both categorized as «poor supervision». Girls, on the other hand, are more likely to belong to Profile 1 (57.5%), which is the «good supervision» profile for the maternal supervision, but also to profile 4 (58.7%), another «poor supervision» profile. Significant differences were also found when comparing the likelihood of belonging to Profiles 1 and 2, Profiles 1 and 3, Profile 2 and 4, and Profile 3 and 4. However, no significant differences emerged when comparing the likelihood of belonging to Profiles 1 and 4 or Profiles 2 and 3, indicating that gender is not a distinguishing variable in these cases.

The existing literature on parental supervision and gender differences, particularly during adolescence, indicates that girls often experience greater restriction and supervision compared to boys (Álvarez-García et al., 2018; Svensson, 2003). These findings align with our research, where Profile 3 in the paternal version and Profile 1 in the maternal version—both associated with «good parental supervision»—are more likely to include female students. Additionally, Profile 4 in the maternal version, characterized by high psychological control, also shows a high likelihood of girls' belonging, suggesting a tendency for mothers to exert more psychological control over daughters.

The significant role of students' gender in their likelihood of belonging to different profiles of both paternal and maternal supervision suggest that supervision strategies may be influenced by gender stereotypes, where boys are often granted more autonomy and less stringent oversight (Endendijk et al., 2016). This differential treatment could be influenced by societal beliefs that view boys as needing to develop independence, while girls are seen as requiring protection and guidance (Endendijk et al., 2017; Ramaci et al., 2017). However, the lack of significant differences when comparing Profiles 1 and 4 or Profiles 2 and 3 in the maternal supervision version indicates that while gender does play a role, it is not the sole factor determining the type of supervision perceived. This suggest that other factors, such as the adolescent's behavior, personality, and family dynamics, may also significantly influence supervision styles (Crick, 2003; Devore & Ginsburg, 2005; Rueger & Malecki, 2011).

These findings underscore the importance of considering gender-sensitive approaches in parenting interventions aimed at modifying the supervision style. It is crucial to recognize that while protective behaviors may have good intentions, they can also lead to overcontrol, potentially limiting the development of autonomy and self-regulation in children.

In conclusion, this research contributes to a better understanding of adolescents' perception of paternal and maternal supervision styles and the impact of students'

gender on this perception. The most notable findings were the identification of several «poor parental supervision» profiles for both fathers and mothers, and two «good parental supervision» profiles, one for each parent. In addition, it is worth noting the influence of students' gender found when examining the likelihood of belonging to each profile. This finding is key, as it highlights the potential for gender-sensitive approaches to changing the supervision style of parent. Furthermore, the delineation of «good» and «poor» supervision profiles based on behavioral control, psychological control and revelation provides a clear framework for researchers, parents and educators to better understand and address the needs of adolescents.

LIMITATIONS

In this research, we encountered several limitations that limit the generalizability of our results. Firstly, the information was collected from students aged 12 to 21 years, but only their perception of parental supervision was gathered, without contrasting it with other sources such as the parents of these students. This reliance on self-reporting as the only data collection strategy is vulnerable to biases such as social desirability. Gathering data from different sources could improve the reliability of the findings (Thurmond, 2001).

Secondly, while there is evidence from longitudinal studies suggesting that parenting practices remain stable throughout adolescence (Parra Jiménez & Oliva, 2006; Van Heel et al., 2019), other research indicates potential variations with age (Spera, 2005; Wang et al., 2011). We acknowledge that these differences may influence the outcomes of our research and recommend that future studies consider a differentiated analysis by age groups to explore these variations in greater detail.

Thirdly, only relevant variables from the questionnaire (behavioural control, psychological control, and revelation) and the gender were studied, leaving out other potential covariates that could directly or indirectly affect the results. For instance, family status could be an interesting variable to study, as adolescents' family type has been shown to influence their well-being and their perceptions of parenting practices (Mupinga et al., 2002; Nahkur & Kutsar, 2022). Additionally, other important factors such as the country context, the type of educational institution, the educational level of the parents, and the type of family were not analysed. These variables can significantly influence parental supervision practices and the adolescents' perceptions of the types of supervision exercised by their mothers and fathers (Devore & Ginsburg, 2005; McFarlane et al., 1995; Rueger & Malecki, 2011). It is crucial for future research to incorporate these variables to gain a more comprehensive understanding of the dynamics of parental supervision.

Lastly, longitudinal research would allow for a more nuanced understanding of how parenting practices and adolescents' perceptions of these practices may change

over time, providing deeper insights into the dynamics of parental supervision across different developmental stages.

FUTURE DIRECTIONS

The results of this study suggest the need for further research to develop intervention programs aimed at improving parental supervision of adolescent students. Such programs should aim to improve and promote revelation, reduce psychological control, and enhance aspects of behavioral control in daily practices. This approach would foster bidirectional communication where, in any case, if the adolescent faces difficulties in any aspect of their life, they can spontaneously reveal it to their parents. Consequently, parents can assist in resolving issues that cause worry or discomfort to their children.

ACKNOWLEDGEMENTS

This work has been funded by the University of Las Palmas de Gran Canaria, Cabildo de Gran Canaria, and Banco Santander through the pre-doctoral training program for research personnel.

REFERENCES

Afia, K., Dion, E., Dupéré, V., Archambault, I., & Toste, J. (2019). Parenting practices during middle adolescence and high school dropout. *Journal of adolescence*, 76, 55-64. <https://doi.org/10.1016/j.adolescence.2019.08.012>

Alemany-Arrebola, I., González-Gijón, G., Ruiz-Garzón, F., & Del Mar Ortiz-Gómez, M. (2019). Adolescents' Perception of Parental Practices from the Gender Perspective. *Pedagogía Social*, 33, 125–136. https://doi.org/10.7179/PSRI_2019.33.09

Álvarez-García, D., García, T., Cueli, M., & Núñez, J. C. (2018). Control parental del uso de internet durante la adolescencia: evolución, & diferencia de género. *Revista Iberoamericana de Diagnóstico y Evaluación*, 51(7), 19-31. <https://doi.org/10.21865/RIDEP51.2.02>

Álvarez-García, D., García, T., Barreiro-Collazo, A., Dobarro, A., & Antúnez, A. (2016). Parenting style dimensions as predictors of adolescent antisocial behavior. *Frontiers in Psychology*, 7, 1383. <https://doi.org/10.3389/fpsyg.2016.01383>

Amador, L., & Monreal-Gimeno, C. (coords). (2010). *Intervención social y género*. Narcea.

Asparouhov, T., & Muthén, B. (2009). Exploratory structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 16(3), 397–438. <https://doi.org/10.1080/10705510903008204>

Asparouhov, T., & Muthén, B. (2014a). Auxiliary Variables in Mixture Modeling: Three-Step Approaches Using Mplus. *Structural Equation Modeling: A Multidisciplinary Journal*, 21(3), 329–341. <https://doi.org/10.1080/10705511.2014.915181>

Asparouhov, T., & Muthén, B. O. (2014b). Auxiliary variables in mixture modeling: Using the BCH method in Mplus to estimate a distal outcome model and an arbitrary second model. *Mplus Web Notes*. https://www.statmodel.com/download/asparouhov_muthen_2014.pdf

Baumrind, D. (1968). Authoritarian vs. authoritative parental control. *Adolescence*, 3(11), 255–272.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4(1), 1-103. <https://doi.org/10.1037/h0030372>

Bolck, A., Croon, M., & Hagenaars, J. (2004). Estimating latent structure models with categorical variables: One-step versus three-step estimators. *Political Analysis*, 12(1), 3–27. <https://doi.org/10.1093/pan/mph001>

Barber, B. K., & Harmon, E. L. (2002). Violating the self: Parental psychological control of children and adolescents. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 15–52). American Psychological Association. <https://doi.org/10.1037/10422-002>

Barber, B. K., & Xia, M. (2013). The centrality of control to parenting and its effects. In R. E. Larzelere, A. S. Morris, & A. W. Harrist (Eds.), *Authoritative parenting: Synthesizing nurturance and discipline for optimal child development* (pp. 61–87). American Psychological Association. <https://doi.org/10.1037/13948-004>

Barber, B. K., Stoltz, H., & Olsen, J. A. (2005). Parent support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, 70, 1-13. <https://doi.org/10.1111/j.1540-5834.2005.00365.x>

Baudat, S., Mantzouranis, G., Van Petegem, S., & Zimmermann, G. (2022). How Do Adolescents Manage Information in the Relationship with Their Parents? A Latent Class Analysis of Disclosure, Keeping Secrets, and Lying. *Journal of Youth and Adolescence*, 51(6), 1134–1152. <https://doi.org/10.1007/s10964-022-01599-0>

Bersabé Morán, R., Fuentes, M. J., & Motrico, E. (2001). Psychometric analysis of two scales to evaluate parents' educational styles. *Psicothema*, 13(4), 678–684.

Brajša-Žganec, A., Merkaš, M., & Velić, M. S. (2019). The relations of parental supervision, parental school involvement, and child's social competence with school achievement in primary school. *Psychology in the Schools*, 56(8), 1246–1258. <https://doi.org/10.1002/pits.22273>

Cantón, D., Ramírez, M. A., & Cantón, J. (2016). Papel moderador del sexo en las prácticas de crianza / Moderator role of sex in rearing practices. *International Journal of Developmental and Educational Psychology. Revista INFAD de Psicología*, 1(1), 275-284. <https://doi.org/10.17060/ijodaep.2014.n1.v1.373>

Capano, A., del Luján González, M., & Massonnier, N. (2016). Estilos parentales: estudio con adolescentes y sus padres. *Revista de Psicología*, 34(2), 413-444. <https://doi.org/10.18800/psico.201602.008>

Coleman, J. S. (1995). Equality of Educational Opportunity (COLEMAN) Study (EEOS). In *ICPSR Data Holdings. Inter-university Consortium for Political and Social Research (ICPSR)*. <https://doi.org/10.3886/icpsr06389.v3>

Costa, S., Soenens, B., Gugliandolo, M. C., Cuzzocrea, F., & Larcan, R. (2015). The mediating role of experiences of need satisfaction in associations between parental psychological control and internalizing problems: A study among Italian college students. *Journal of Child and Family Studies*, 24(4), 1106–1116. <https://doi.org/10.1007/s10826-014-9919-2>

Crick, N. R. (2003). A gender-balanced approach to the study of childhood aggression and reciprocal family influences. In A. C. Crouter & A. Booth (Eds.), *Children's influence on family dynamics: The neglected side of family relationships* (pp. 237–252). Lawrence Erlbaum Associates Publishers.

Darling, N., & Tilton-Weaver, L. (2019). All in the family: Within-family differences in parental monitoring and adolescent information management. *Developmental Psychology, 55*(2), 390–402. <https://doi.org/10.1037/dev000064>

Davidov M., & Grusec J.E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Development, 77*, 44–58. <https://doi.org/10.1111/j.1467-8624.2006.00855.x>

Devore, E., & Ginsburg, K. (2005). The protective effects of good parenting on adolescents. *Current Opinion in Pediatrics, 17*, 460-465. <https://doi.org/10.1097/01.mop.0000170514.27649.c9>.

Dou D., Shek D.T., & Kwok K.H. (2020). Perceived paternal and maternal parenting attributes among Chinese adolescents: a meta-analysis. *International Journal of Environmental Research and Public Health, 17*, 8741. <https://doi.org/10.3390/ijerph17238741>

Elboj-Saso, C., Íñiguez-Berrozpe, T., Cebollero Salinas, A., & Bautista Alcaine, P. (2023). «Listen to me!» The role of family supervision and parental phubbing in youth cyberbullying. *Family Relations, 73*(3), 1568-1587. <https://doi.org/10.1111/fare.12968>

Emond, A., Griffiths, M. D., & Hollén, L. (2022). Problem Gambling in Early Adulthood: a Population-Based Study. *International Journal of Mental Health and Addiction, 20*(2), 754–770. <https://doi.org/10.1007/s11469-020-00401-1>

Endendijk, J. J., Groeneveld, M. G., Bakermans-Kranenburg, M. J., & Mesman, J. (2016). Gender-differentiated parenting revisited: Meta-analysis reveals very few differences in parental control of boys and girls. *PloS one, 11*(7), e0159193. <https://doi.org/10.1371/journal.pone.0159193>

Endendijk, J.J., Groeneveld, M.G., Pol, L., Berkel, S., Hallers-Haalboom, E., Bakermans-Kranenburg, M.J., & Mesman, J. (2017). Gender Differences in child aggression: relations with gender-differentiated parenting and parents' gender-role stereotypes. *Child development, 88*(1), 299-316. <https://doi.org/10.1111/cdev.12589>.

Estlein, R. (2021). Parenting as a communication process: Integrating interpersonal communication theory and parenting styles conceptualization. *Journal of Family Theory and Review, 13*(1), 21–33. <https://doi.org/10.1111/jftr.12407>

García, M., Cerezo, M., De la Torre, M., Villa, M., & Casanova, P. (2011). Prácticas educativas paternas y problemas internalizantes y externalizantes en adolescentes españoles. *Psicothema, 23*(4), 654-659.

Gentina, E., Shrum, L. J., Lowrey, T., Vitell, S., & Rose, G. (2018). An integrative model of the influence of parental and peer support on consumer ethical beliefs: The mediating role of self-esteem, power, and materialism. *Journal of Business Ethics, 150*, 1173–1186. <https://doi.org/10.1007/s10551-016-3137-3>

González-Cámarra, M., Osorio, A., & Reparaz, C. (2019). Measurement and function of the control dimension in parenting styles: A systematic review. *International Journal of Environmental Research and Public Health*, 16(17), 3157. <https://doi.org/10.3390/ijerph16173157>

Graham, J. W. (2012). *Missing data: Analysis and design*. Springer Science & Business Media.

Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives*, 2, 165–171. <https://doi.org/10.1111/j.1750-8606.2009.00099.x>

Harris-McKoy, D., & Cui, M. (2013). Parental control, adolescent delinquency, and young adult criminal behavior. *Journal of Child and Family Studies*, 22(6), 836–843. <https://doi.org/10.1007/s10826-012-9641-x>

He Y., Yuan K., Sun L., & Bian Y. (2019). A cross-lagged model of the link between parental psychological control and adolescent aggression. *Journal of Adolescence*, 74, 103–112. <https://doi.org/10.1016/j.adolescence.2019.05.007>

Hong, J. C., Hwang, M. Y., Kuo, Y. C., & Hsu, W. Y. (2015). Parental monitoring and helicopter parenting relevant to vocational student's procrastination and self-regulated learning. *Learning and Individual Differences*, 42, 139-146. <https://doi.org/10.1016/j.lindif.2015.08.003>

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>

Hunter S., Barber B., & Stoltz, H. (2015). Extending knowledge of parents' role in adolescent development: the mediating effect of self-esteem. *Journal of Child and Family Studies*, 24, 2474–2484. <https://doi.org/10.1007/s10826-014-0050-1>

Justice, L. M., Petscher, Y., & Schatschneider, C. (2011). Peer Effects in Preschool Classrooms: Is Children's Language Growth Associated with Their Classmates' Skills? *Child Development*, 82(6), 1768–1777. <https://doi.org/10.1111/j.1467-8624.2011.01665.x>

Keijsers, L., Branje, S., Hawk, S. T., Schwartz, S. J., Frijns, T., Koot, H. M., Van Lier, P., & Meeus, W. (2012). Forbidden friends as forbidden fruit: parental supervision of friendships, contact with deviant peers, and adolescent delinquency. *Child development*, 83(2), 651–666. <https://doi.org/10.1111/j.1467-8624.2011.01701.x>

Keogh-Clark, F., Whaley, R. C., Leventhal, A. M., & Krueger, E. A. (2021). Sex differences in the association between parental monitoring and substance use initiation among adolescents. *Addictive Behaviors*, 122, 107024. <https://doi.org/10.1016/j.addbeh.2021.107024>

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. <https://doi.org/10.1037/0012-1649.36.3.366>

Kerr, M., Stattin, H., & Burk, W. J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence, 20*, 39–64. <https://doi.org/10.1111/j.1532-7795.2009.00623.x>

Korpipää, H., Moll, K., Aunola, K., Tolvanen, A., Koponen, T., Aro, M., & Lerkkanen, M. K. (2020). Early cognitive profiles predicting reading and arithmetic skills in grades 1 and 7. *Contemporary Educational Psychology, 60*, 101830. <https://doi.org/10.1016/j.cedpsych.2019.101830>

Lansford, J.E., Laird, R.D., Pettit, G.S., Bates, J.E., & Dodge, K.A. (2014). Mothers' and fathers' autonomy-relevant parenting: longitudinal links with adolescents' externalizing and internalizing behavior. *Journal of Youth and Adolescence, 43*, 1877–89. <https://doi.org/10.1007/s10964-013-0079-2>

Li, J. B., Willems, Y. E., Stok, F. M., Dekovic, M., Bartels, M., & Finkenauer, C. (2019). Parenting and self-control across early to late adolescence: A three level meta-analysis. *Perspectives on Psychological Science, 14*(6), 967–1005. <https://doi.org/10.1177/1745691619863046>

Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika, 88*(3), 767–778. <https://doi.org/10.1093/biomet/88.3.767>

Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology, 28*(6), 1006–1017. <https://doi.org/10.1037/0012-1649.28.6.1006>

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the Context of the Family: Parent-Child Interaction. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of Child Psychology: Vol. 4. Socialization, Personality, and Social Development* (pp. 1–101). Wiley.

Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. S. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling: A Multidisciplinary Journal, 16*(2), 191–225. <https://doi.org/10.1080/10705510902751010>

Martins, M. V., Formiga, A., Santos, C., Sousa, D., Resende, C., Campos, R., Nogueira, N., Carvalho, P., & Ferreira, S. (2020). Adolescent internet addiction – role of parental control and adolescent behaviours. *International Journal of Pediatrics and Adolescent Medicine, 7*(3), 116–120. <https://doi.org/10.1016/j.ijpam.2019.12.003>

Mastrotheodoros, S., Van der Graaff, J., Deković, M., Meeus, W.H.J. & Branje, S.J.T. (2019). Coming Closer in Adolescence: Convergence in Mother, Father, and Adolescent Reports of Parenting. *Journal of Research on Adolescence*, 29, 846-862. <https://doi.org/10.1111/jora.12417>

Masud, H., Thurasamy, R., & Ahmad, M. S. (2015). Parenting styles and academic achievement of young adolescents: A systematic literature review. *Quality & Quantity*, 49(6), 2411–2433. <https://doi.org/10.1007/s11135-014-0120-x>

McFarlane, A., Bellissimo, A., & Norman, G. (1995). Family structure, family functioning and adolescent well-being: the transcendent influence of parental style. *Journal of child psychology and psychiatry, and allied disciplines*, 36(5), 847-864. <https://doi.org/10.1111/J.1469-7610.1995.TB01333.X>.

McKinney, C., & Renk, K. (2008). Differential parenting between mothers and fathers: Implications for late adolescents. *Journal of Family Issues*, 29(6), 806–827. <https://doi.org/10.1177/0192513X07311222>

McNeish, D. (2018). Thanks coefficient alpha, We'll take it from here. *Psychological Methods*, 23(3), 412–433. <https://doi.org/10.1037/met0000144>

Melton, T. N., & Deutsch, N. L. (2022). Putting Parental Supervision into Context: Taking an Assets-Based Approach in Examining the Role of Parental Supervision During Adolescence. *Youth and Society*, 54(3), 442–461. <https://doi.org/10.1177/0044118X20980471>

Milton, D., Appleton, P. R., Bryant, A., & Duda, J. L. (2018). Initial validation of the teacher-created empowering and disempowering motivational climate questionnaire in physical education. *Journal of Teaching in Physical Education*, 37(4), 340–351. <https://doi.org/10.1123/jtpe.2018-0119>

Morin, A. J. S., & Marsh, H. W. (2015). Disentangling Shape from Level Effects in Person-Centered Analyses: An Illustration Based on University Teachers' Multidimensional Profiles of Effectiveness. *Structural Equation Modeling: A Multidisciplinary Journal*, 22(1), 39–59. <https://doi.org/10.1080/10705511.2014.919825>

Morin, A. J. S., Meyer, J. P., Creusier, J., & Biétry, F. (2016). Multiple-Group Analysis of Similarity in Latent Profile Solutions. *Organizational Research Methods*, 19(2), 231–2. <https://doi.org/10.1177/1094428115621148>

Mupinga, E.E., Garrison, M.E.B., & Pierce, S.H. (2002). An exploratory study of the relationships between family functioning and parenting styles: The perceptions of mothers of young grade school children. *Family and Consumer Sciences Research Journal*, 31, 112-129. <https://doi.org/10.1177/1077727X02031001005>

Muthén, L. K., & Muthén, B. O. (2024). *Mplus user's guide* (8th ed.). Muthén & Muthén.

Nahkur, O., Kutsar, D. (2022). Family type differences in children's satisfaction with people they live with and perceptions about their (step)parents' parenting practices. *Social Sciences*, 11(5), 223. <https://doi.org/10.3390/socsci11050223>

Oliva, A., Parra, Á., Enrique Arranz, Y., Oliva Delgado, A., & Arranz Freijo, E. (2008). Estilos relacionales parentales y ajuste adolescente. *Journal for the Study of Education and Development, Infancia y Aprendizaje*, 31(1), 93–106.

Parra Jiménez, Á., & Oliva, A. (2006). Un análisis longitudinal sobre las dimensiones relevantes del estilo parental durante la adolescencia. *Journal for the Study of Education and Development, Infancia y Aprendizaje*, 29(4), 453–470. <https://doi.org/10.1174/021037006778849594>

Ponce-Gómez, J., Zych, I., & Rodríguez-Ruiz, J. (2023). Uso problemático de Internet por parte de los menores desde la perspectiva parental antes y después del confinamiento general por COVID-19. *Society & Education*, 15(1), 11–19. <https://doi.org/10.21071/psye.v15i1.15324>

Ramaci, T., Pellerone, M., Ledda, C., Presti, G., Squatrito, V., & Rapisarda, V. (2017). Gender stereotypes in occupational choice: a cross-sectional study on a group of Italian adolescents. *Psychology Research and Behavior Management*, 10, 109 - 117. <https://doi.org/10.2147/PRBM.S134132>.

Romera, E., Camacho, A., Ortega-Ruiz, R., & Falla, D. (2021). Cibercotilleo, ciberagresión, uso problemático de Internet y comunicación con la familia. *Comunicar*, 67(29), 61-71. <https://doi.org/10.3916/C67-2021-05>

Rueger, S., & Malecki, C. (2011). Effects of stress, attributional style and perceived parental support on depressive symptoms in early adolescence: A prospective analysis. *Journal of Clinical Child & Adolescent Psychology*, 40, 347-359. <https://doi.org/10.1080/15374416.2011.563461>.

Ruiz-Hernández, J. A., Moral-Zafra, E., Llor-Esteban, B., & Jiménez-Barbero, J. A. (2019). Influence of parental styles and other psychosocial variables on the development of externalizing behaviors in adolescents: a systematic review. *The European Journal of Psychology Applied to Legal Context*, 11, 9–21. <https://doi:10.5093/ejpalc2018a1154>

Seidu, A. A., Arthur-Holmes, F., Agbaglo, E., & Ahinkorah, B. O. (2022). Truancy: How food insecurity, parental supervision, and other factors influence school attendance of adolescents in Seychelles. *Children and Youth Services Review*, 135, 106377. <https://doi.org/10.1016/j.childyouth.2022.106377>

Shek, D. T. L., & Law, M. Y. M. (2015). Assessment of parent-child subsystem qualities in Chinese adolescents: Behavioral control, psychological control and parent-child relational qualities. *International Journal of Child Health and Human Development*, 8(2), 207–217.

Simons, L. G., & Conger, R. D. (2007). Linking mother–father differences in parenting to a typology of family parenting styles and adolescent outcomes. *Journal of Family Issues*, 28(2), 212–241. <https://doi.org/10.1177/0192513X06294593>

Smetana, J. G. (2010). *Adolescents, Families, and Social Development*. Wiley. <https://doi.org/10.1002/9781444390896>

Soenens, B., Vansteenkiste, M., Duriez, B., & Goossens, L. (2006). In Search of the Sources of Psychologically Controlling Parenting: The Role of Parental Separation Anxiety and Parental Maladaptive Perfectionism. *Journal of Research on Adolescence*, 16(4), 539–559. <https://doi.org/10.1111/j.1532-7795.2006.00507.x>

Spera, C. (2005). A Review of the Relationship Among Parenting Practices, Parenting Styles, and Adolescent School Achievement. *Educational Psychology Review*, 17, 125–146. <https://doi.org/10.1007/S10648-005-3950-1>.

Stanley, L., Kellermanns, F. W., & Zellweger, T. M. (2017). Latent Profile Analysis: Understanding Family Firm Profiles. *Family Business Review*, 30(1), 84–102. <https://doi.org/10.1177/0894486516677426>

Svensson, R. (2003). Gender differences in adolescent drug use. *Youth & Society*, 34, 300 - 329. <https://doi.org/10.1177/0044118X02250095>.

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71(4), 1072–1085. <https://doi.org/10.1111/1467-8624.00210>

Tokić Milaković, A., Glatz, T., & Pećnik, N. (2018). How do parents facilitate or inhibit adolescent disclosure? The role of adolescents' psychological needs satisfaction. *Journal of Social and Personal Relationships*, 35(8), 1118–1138. <https://doi.org/10.1177/0265407517705228>

Top, N., Liew, J., & Luo, W. (2017). Family and school influences on youths' behavioral and academic outcomes: Cross-level interactions between parental monitoring and character development curriculum. *The Journal of Genetic Psychology*, 178, 108-118. <https://doi.org/10.1080/00221325.2017.1279118>

Thurmond, V. A. (2001). The Point of Triangulation. *Journal of Nursing Scholarship*, 33(3), 253-258. <https://doi.org/10.1111/j.1547-5069.2001.00253.x>

Van Heel, M., Bijnbeker, P., Claes, S., Colpin, H., Goossens, L., Van Den Noortgate, W., Verschueren, K., & Leeuwen, K. Van. (2019). Measuring parenting throughout adolescence: Measurement invariance across informants, mean-level and differential continuity. *Assessment*, 26, 111–124. <https://doi.org/10.1177/1073191116686827>

Villavicencio-Aguilar, C. E., Armijos Piedra, T. R., & Castro Ponce, M. C. (2020). Conductas disruptivas infantiles y estilos de crianza. *Revista Iberoamericana de psicología*, 13(1), 139–150. <https://doi.org/10.33881/2027-1786.rip.13113>

Walters, G. D. (2017). Mediating the Relationship Between Parental Control/Support and Offspring Delinquency: Self-Efficacy for a Conventional Lifestyle

Versus Self-Efficacy for Deviance. *Crime & Delinquency*, 64(5), 606–624. <https://doi.org/10.1177/0011128716686357>

Wang, M., Dishion, T., Stormshak, E., & Willett, J. (2011). Trajectories of family management practices and early adolescent behavioral outcomes. *Developmental psychology*, 47(5), 1324-1341. <https://doi.org/10.1037/a0024026>.

Whitlock, J. L. (2006). Youth perceptions of life at school: Contextual correlates of school connectedness in adolescence. *Applied Developmental Science*, 10(1), 13–29. https://doi.org/10.1207/s1532480xads1001_2

Worthington, R. L., & Whittaker, T. A. (2006). Scale Development Research: A Content Analysis and Recommendations for Best Practices. *The Counseling Psychologist*, 34(6), 806–838. <https://doi.org/10.1177/001100006288127>

Wu, K., & Li, S.D. (2023). Coercive parenting and juvenile delinquency in China: Assessing gender differences in the moderating effect of empathic concern. *Journal of Youth and Adolescence*, 52, 826–39. <https://doi.org/10.1007/s10964-023-01742-5>

Xu, Y., Zhang, L., & Hee, P. (2014). Parenting Practices and Shyness in Chinese Children. In: Selin, H. (eds) *Parenting Across Cultures. Science Across Cultures: The History of Non-Western Science*. (Vol. 7). Springer. https://doi.org/10.1007/978-94-007-7503-9_2

Yang, Y., Li, M., & Lin, H. C. (2022). Parental psychological control, social capital, substance use, and driving under the influence among college students: Sex differences. *Journal of Child and Family Studies*, 31, 1207–1219. <https://doi.org/10.1007/s10826-021-02036-9>

Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2014). Parental factors associated with depression and anxiety in young people: A systematic review and meta-analysis. *Journal of Affective Disorders*, 156, 8–23. <https://doi.org/10.1016/j.jad.2013.11.007>

Zhu, X., & Shek, D. T. L. (2021). Parental control and adolescent delinquency based on parallel process latent growth curve modeling. *International Journal of Environmental Research and Public Health*, 18(17), 8916. <https://doi.org/10.3390/ijerph18178916>

APPENDICES

Appendix A

Adolescent Perception Scale of Parental Supervision (Spanish version)

Number	Item	Factor
1	Intenta saber a dónde voy cuando salgo.	Behavioural control
2	Si vuelvo tarde a casa me pregunta por qué y con quién estuve.	Behavioural control
3	Cuando salgo un sábado noche debo decirle antes dónde voy y cuando volveré.	Behavioural control
4	Intenta saber qué hago en mi tiempo libre.	Behavioural control
5	Pone límites a la hora que debo volver a casa.	Behavioural control
6	Me pregunta en qué gasto el dinero.	Behavioural control
7	Es menos amable conmigo cuando no hago las cosas a su manera.	Behavioural control
8	Me hace sentir culpable cuando no hago lo que quiere.	Behavioural control
9	Me trata de forma fría y distante si hago algo que no le gusta.	Psychological control
10	Me dice que él/ella tiene razón y no debo llevarle la contraria.	Psychological control
11	Me castiga y sanciona continuamente mi forma de ser y pensar.	Psychological control
12	Deja de hablarme cuando se enfada conmigo.	Psychological control
13	Le cuento lo que hago en mi tiempo libre.	Revelation
14	Le cuento lo que hago cuando salgo.	Revelation
15	Le cuento dónde estoy en mi tiempo libre.	Revelation
16	Le hablo sobre los problemas que tengo con mis amigos y amigas.	Revelation
17	Conoce quiénes son mis amigos/as.	Revelation
18	Cuando llego de las clases le cuento cómo me ha ido el día.	Revelation
19	Aunque no me pregunte, le cuento cómo me va en las diferentes asignaturas.	Revelation
20	Te gusta contarte lo que haces y dónde vas a él/ella.	Revelation

Note. Both versions have the same items, but the formulation changes to refer to paternal or maternal supervision