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DEVELOPMENTS



## Psychometric properties of the Portuguese version of the Alabama Parenting Questionnaire parent form

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### ABSTRACT

The Alabama Parenting Questionnaire parent form (APQ-P) is one of the most commonly used measures to assess parenting practices. The current study evaluated the psychometric properties of the APQ-P using a community sample of 499 Portuguese mothers of children and adolescents aged 10 to 17 years. Confirmatory factor analysis revealed adequate psychometric properties of a three-factor model (positive parenting, ineffective parenting, and poor monitoring) in a solution of 20-items. After comparing the three-factor model across children's age groups ( $\leq 13$  vs.  $\geq 14$ ), partial metric and partial scalar invariance were found. Items loadings were similar between groups for ineffective parenting and poor monitoring, and factor scores were similar between groups for positive parenting. The 20-item version can be an appropriate measure of parenting, relevant for research and intervention purposes. Future studies should validate the current findings in independent samples, and devote particular attention to different parenting practices across different children's age groups.

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**KEYWORDS** Alabama Parenting Questionnaire parent form; parenting practices; mothers; children and adolescents; confirmatory factor analysis

### Introduction

Ineffective parenting is a well-documented risk factor for youth behaviour problems (Pinquart, 2017). Researchers have developed different measures to assess parenting practices, such as the Alabama Parenting Questionnaire. This multimethod assessment system (with parent and child forms) is an alternative to observational measures, addressing relevant parenting practices, namely involvement, positive parenting strategies, poor monitoring/

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 Supplemental data for this article can be accessed [here](#).

supervision, inconsistent discipline, corporal punishment, and other parenting practices, in a 42-items version (Shelton, Frick, & Wootton, 1996).

This paper addresses the parent global form (APQ-P), a behaviourally focused measure found to be developmentally appropriate to the original sample of 6-to-13-year-old children (Shelton et al., 1996). Like most of the studies conducted with this measure, the 35 items version was used, not including the seven additional items that assess other parenting practices (e.g., Maguin, Nochajski, Wit, & Safyer, 2016).

The APQ-P has been widely used, even though its factor structure is not always consistent across studies. Most of the studies performed modifications, namely by discarding items. Some studies discarded over 10 items (Molinuevo, Pardo, & Torrubia, 2011), whereas others just one or two items (Hawes & Dadds, 2006; Zlomke, Lampion, Bauman, Garland, & Talbot, 2014). The most commonly discarded are items 5 (positive parenting), 25 (inconsistent discipline), 24 and 32 (poor monitoring), 26 (involvement), and 38 (corporal punishment), as they tend to present an extreme response which endorsed high frequency (e.g., never or always) and/or low loadings (Molinuevo et al., 2011; Zlomke et al., 2014).

A five- (Hawes & Dadds, 2006; Scott, Briskman, & Dadds, 2011), four- (Zlomke et al., 2014) or three-factor model (Clerkin, Marks, Policaro, & Halperin, 2007; Molinuevo et al., 2011) has been described as the factor structure of APQ-P. The three-factor model merges involvement and positive parenting into one factor (positive parenting), inconsistent discipline and corporal punishment into a second factor (inconsistent parenting or negative/ineffective discipline) and includes poor monitoring/supervision as a third factor (Molinuevo et al., 2011; Wells et al., 2000).

Studies on the APQ-P psychometric properties included samples of parents with children of different ages, focusing preschoolers (Clerkin et al., 2007; Cova et al., 2017), school-aged children (Maguin et al., 2016), and teenagers (Molinuevo et al., 2011; Zlomke et al., 2014). Other studies addressed the parenting practices regarding children from different developmental stages, such as 4- to 8- or 9- to 17-year-olds (Hawes & Dadds, 2006; Scott et al., 2011). The diversity in children's age range, and the different statistical procedures for data analysis, namely exploratory or confirmatory factor analyses, can contribute to explaining the various factor structures of the APQ-P identified in the literature.

Frick, Christian, and Wootton (1999) studied parenting practices across children's ages, revealing that parents' involvement, monitoring, and corporal punishment decreased as children got older. Similarly, Shelton

et al. (1996) found that involvement and positive discipline decreased as children grew older and became more independent.

It is essential to have valid and reliable measures to assess parenting practices, and to inform on the effects and adequacy of parenting interventions. In Portugal, empirically validated instruments to assess parenting practices are scarce (e.g., Portuguese version of the instrument Parenting Styles and Dimensions Questionnaire – Short form; Miguel, Valentim, & Carugati, 2009). The APQ seems to be a relevant measure, as was found to discriminate between clinical and normative samples, to be unaffected by social desirability (Shelton et al., 1996), and sensitive to the effects of parenting interventions (August, Lee, Bloomquist, Realmuto, & Hektner, 2003).

In the current study, we assessed the psychometric properties of the APQ-P in a community sample of Portuguese mothers with children aged 10–17. The five-factor structure was tested and compared to a three-factor structure. We also tested measurement invariance for the final factor structure comparing different age groups (10- to 13- vs. 14- to 17-year-olds). The age groups were established as 10- to 13-year-olds given that the APQ was developed in a sample of parents of 6- to 13-year-old children (Shelton et al., 1996), and 14- to 17-year-olds given that the oldest sample where APQ-P psychometric properties were assessed included parents of children up to 17 years old (Scott et al., 2011).

## Method

### Participants

Data were collected in two sets of public schools in the Metropolitan Area of Porto, Portugal. The sets of schools were randomly selected from the official list, one from a semi-rural ( $n = 232$ ) and another from an urban ( $n = 267$ ) context. The sample included 499 mothers of 10- to 17-year-olds children ( $M_{age} = 12.53$ ,  $SD = 1.82$ ). Most of the mothers were single parents, and their age did not differ between the two contexts. Mothers from the urban context had a higher education level (Table 1). Children from the semi-rural context were older and with more years of schooling.

### Measures

The APQ-P is a measure of parent's report with 35-items fitting into five factors: involvement, positive parenting, poor monitoring, inconsistent discipline, and corporal punishment. It also includes seven additional

**Table 1.** Sociodemographic characteristics of the participants.

	Urban school <i>n</i> = 267	Semi-rural school <i>n</i> = 232	Total <i>N</i> = 499
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
Mother's age	41.77 (5.6)	41.35 (5.9)	41.58 (5.70)
	$t(480.61) = .81, p = .42$		
Children age	11.90 (1.6)	13.26 (1.8)	12.53 (1.82)
	$t(468.00) = -8.87, p = .000$		
Children education (years)	6.42 (1.39)	7.70 (1.78)	7.01 (1.71)
	$t(497) = -9.01, p = .000$		
	%	%	%
Children's age (years old)			
10	19.5	9.2	14.8
11	27.4	11.4	20.0
12	24.4	12.7	19.0
13	9.8	17.5	13.4
14	12.0	21.9	16.6
15	4.5	16.2	9.9
16	1.9	8.8	5.1
17	0.4	2.2	1.2
Mothers school level			<i>Tests of Association</i>
Basic school	2%	21%	$\chi^2(3) = 159.36,$ $p < .000$
Elementary school	24%	59%	
High school	34%	14%	
Superior level	40%	6%	<i>Fisher's Exact Test</i>
Professional Status			
Employed	86%	91%	.18
Unemployed	14%	9%	
Family structure			
Single parent	76%	75%	.83
Two parent	24%	25%	
Families with social support	40%	50%	
			.04

items that measure other discipline practices. Items are rated on a 5-point scale according to parents' assessment of their frequency, ranging from 1 (never) to 5 (always). Previous research shows that the reliability for the five subscales ranges from low to high ( $\alpha = .63$  to  $.80$ ; Shelton et al., 1996).

### Procedure

Upon permission from the author, the APQ was translated into Portuguese (Items description and translation are available in Appendix 1, and details of the translation procedure are described in Appendix 2). School principals were informed about the aims and methods of the study and parents' consent requested. Those who agreed to participate completed a brief demographic survey and the APQ-P, in groups, at the school context.

A research assistant was present to explain the purpose of the study and to provide support if necessary. Participation was anonymous, and no monetary compensation was provided.

### *Analytic plan*

First, we explored the items' descriptive statistics (the dataset is available in Appendix 3). Using the 35-items, we performed Confirmatory Factor Analyses (CFA) to examine and compare the model fit of the five-factor structure, with the model fit of a three-factor structure composed of positive parenting, ineffective discipline, and poor monitoring. We used the Robust Maximum Likelihood estimator (RML), robust to non-normality distribution data, and the Full Information Maximum Likelihood (FIML) to address missing data using an auxiliary variable in a saturated correlates model (Beaujean, 2014). Categorical estimation methods could have been used in data analysis; however, to address missing data as previously described, we applied ML estimation methods. According to Rhemtulla, Brosseau-Liard, and Savalei (2012), when testing models with five categories both methods produce estimates within the range of acceptable bias.

We considered an adequate model fit according to  $CFI \geq .95$ ,  $TLI \geq 0.95$ ,  $SRMR \leq 0.08$ , and  $RMSEA \leq 0.06$  (Kline, 2016; Williams & O'Boyle, 2011). For each factor, we estimated the Cronbach alpha considering .70 as adequate reliability (Kline, 2016). Model comparison was performed using information criteria (AIC, BIC, and SABIC).

When model misfit was found, CFA were performed to assess single-factor models. Model modification was performed allowing item residual covariance when the modification indices were higher than 10. Additionally, items with standardized factor loadings (SLF) inferior to .35 were discarded (DeVellis, 2003). After achieving an adequate fit for each one of the single factors, new CFA were performed for the five- and three-factor structures.

Measurement invariance of the final model was then tested by performing a multigroup comparison of the CFA according to children's age (13 or younger,  $n = 335$ , vs. 14 or older,  $n = 164$ ). We set cross-group constraints and compared the more restricted models with the less restricted ones (Chen, 2007), namely for configural, metric, and scalar invariance. Invariance was considered when  $\Delta CFI \leq .01$  and  $\Delta RMSEA \leq 0.015$  (Chen, 2007; Cheung & Rensvold, 2002). When invariance was not found, partial invariance was tested by removing the imposed equality constraints. Analyses were performed using the package lavaan, version 0.6–3, in R (Rosseel, 2012).

## Results

### Descriptive statistics

The items descriptive statistics are presented in Table 2. Data presented 2.41% missing values, 28.26% incomplete cases and an 83% range of missing data of all variables ( $min = 0\%$ ,  $max = 83\%$ ,  $M = 0.02$ ,  $SD = 0.08$ ). According to Rubin and Little (2002), data is assumed to be MAR if missingness is related to measured variables, but not to the underlying values of unmeasured variables. Our results appear to be MAR because the results of a multiple regression analysis, including the socio-demographic variables as predictors of the percentage of missing values per participant, suggest that participants who lived with their partner (two-parent family) were more likely to have a higher percentage of missing values,  $\beta = -.16$ ,  $t = -3.33$ ,  $p = .001$ . Accordingly, we

**Table 2.** Descriptive statistics for each APQ-P item.

Item	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis
1	4.44	0.66	1-5	-0.93	0.75
2	4.43	0.73	2-5	-0.97	-0.17
3	2.74	0.90	1-5	-0.16	0.46
4	3.70	1.14	1-5	-0.61	-0.25
5	2.99	1.03	1-5	0.06	-0.06
6	1.82	1.45	1-5	1.52	0.60
7	3.82	0.77	2-5	0.08	-0.85
8	2.24	1.08	1-5	0.58	-0.09
9	4.62	0.68	1-5	-2.09	5.29
10	1.35	0.71	1-5	2.64	8.39
11	3.08	1.12	1-5	-0.04	-0.50
12	1.63	1.20	1-5	1.86	2.22
13	4.45	0.77	1-5	-1.27	1.09
14	3.61	0.91	1-5	-0.11	-0.19
15	3.42	1.17	1-5	-0.39	-0.41
16	4.33	0.84	1-5	-1.16	0.93
17	2.44	1.78	1-5	0.59	-1.50
18	4.36	0.84	1-5	-1.17	0.84
19	2.33	1.80	1-5	0.70	-1.41
20	4.30	0.79	1-5	-1.11	1.47
21	1.25	0.68	1-5	3.31	11.97
22	2.22	0.95	1-5	0.19	-0.55
23	3.60	0.90	1-5	-0.19	0.06
24	1.24	0.70	1-5	3.57	13.74
25	2.47	1.26	1-5	0.61	-0.47
26	4.76	0.60	1-5	-3.37	13.98
27	4.48	0.77	1-5	-1.79	4.11
28	2.65	1.88	1-5	0.35	-1.80
29	2.61	1.74	1-5	0.42	-1.58
30	1.25	0.76	1-5	3.52	12.61
31	1.85	1.01	1-5	0.90	0.05
32	2.28	1.17	1-5	0.48	-0.66
33	2.46	1.02	1-5	0.29	0.01
35	1.95	1.05	1-5	0.94	0.36
38	1.05	0.33	1-5	7.66	66.36

Mean (*M*), Standard Deviations (*SD*), Range, Skewness and Kurtosis

used RML, and FIML estimation methods, along with the variable describing the family structure (single-parent vs. two-parent family) in saturated correlates models.

### Factor structure

The five-factor structure revealed poor fit to the data,  $\chi^2(550) = 1132.22$ ,  $CFI = .83$ ,  $TLI = 0.81$ ,  $RMSEA = 0.05$ ,  $SRMR = 0.07$ ,  $AIC = 43,716$ ,  $BIC = 44,357$ ,  $SABIC = 43,874.10$ , as did the three-factor structure,  $\chi^2(557) = 1473.17$ ,  $CFI = .74$ ,  $TLI = 0.70$ ,  $RMSEA = 0.06$ ,  $SRMR = 0.08$ ,  $AIC = 44,087$ ,  $BIC = 44,698$ ,  $SABIC = 44,238.02$ . Despite both models revealing poor fit to the data, model comparison using information criteria suggests that the five-factor structure is better.

We then tested single-factor models for each one of the factors in the five-factor structure (except for corporal punishment). The single-factor models' involvement and positive parenting revealed good fit, whereas poor monitoring and inconsistent discipline revealed poor fit to the data (Table 3). In the poor monitoring factor, after allowing residual covariances and discarding items with SFL below .35 (items 10, 21, 24, and 32, see Poor monitoring model 2), the model fit improved. Likewise, in the inconsistent discipline model, after allowing residual covariances (Inconsistent discipline model 2) the model fit improved.

Finally, we tested the five-factor structure, including the modified single models instead of the original ones. The model revealed poor fit,  $\chi^2(421) = 837.13$ ,  $CFI = .88$ ,  $TLI = 0.88$ ,  $RMSEA = 0.05$ ,  $SRMR = 0.06$ . To improve model fit, residual covariances were allowed in each factor, and items with SFL below .35 discarded (26 in involvement, 5 in positive parenting, 3, 22 and 31 in inconsistent discipline and 38 in corporal punishment). By doing so, we also discarded items 33 and 35, because the factor corporal punishment could not be composed of only two items. The four-factor model revealed good fit to the data,  $\chi^2(217) = 355.21$ ,  $CFI = .95$ ,  $TLI = 0.94$ ,  $RMSEA = 0.04$ ,

**Table 3.** Fit indexes, standard factor loading minimum and maximum, and cronbach alpha for single-factor models.

	$\chi^2$	df	CFI	TLI	RMSEA	SRMR	SFL		$\alpha$
							min-max		
Involvement	51.85	35.00	.97	0.95	0.04	0.03	.23 – .62	.76	
Positive parenting	11.26	9.00	1	0.99	0.03	0.02	.22 – .82	.75	
Inconsistent discipline – model 1	46.14	9.00	.87	0.70	0.09	0.05	.35 – .64	.60	
Inconsistent Discipline – model 2	0	0.00	1	1.0	0	0.02	.30 – .71	.60	
Poor monitoring – model 1	119.98	35.00	.89	0.83	0.09	0.07	.05 – .79	.77	
Poor monitoring – model 2	16.28	5.00	.98	0.95	0.07	0.03	.34 – .79	.80	

$SRMR = 0.05$ . However, the model revealed a low-reliability value for the factor inconsistent discipline ( $\alpha = .54$ ) and high correlations between the factors inconsistent discipline and poor monitoring ( $\alpha = .83$ ),  $r = .74$ ,  $p < .001$ , and between involvement ( $\alpha = .77$ ) and positive parenting ( $\alpha = .81$ ),  $r = .71$ ,  $p < .001$  (Figure 1).

We also tested single-factor models for each one of the factors in the three-factor structure. All single-factor models revealed poor fit (Table 4). After allowing residual covariances in each model, and after discarding items with SFL below .35 (5 and 26 in positive parenting, 12, 22, 25, 38 in ineffective discipline, and 10 and 32 in poor monitoring), each model fit improved.

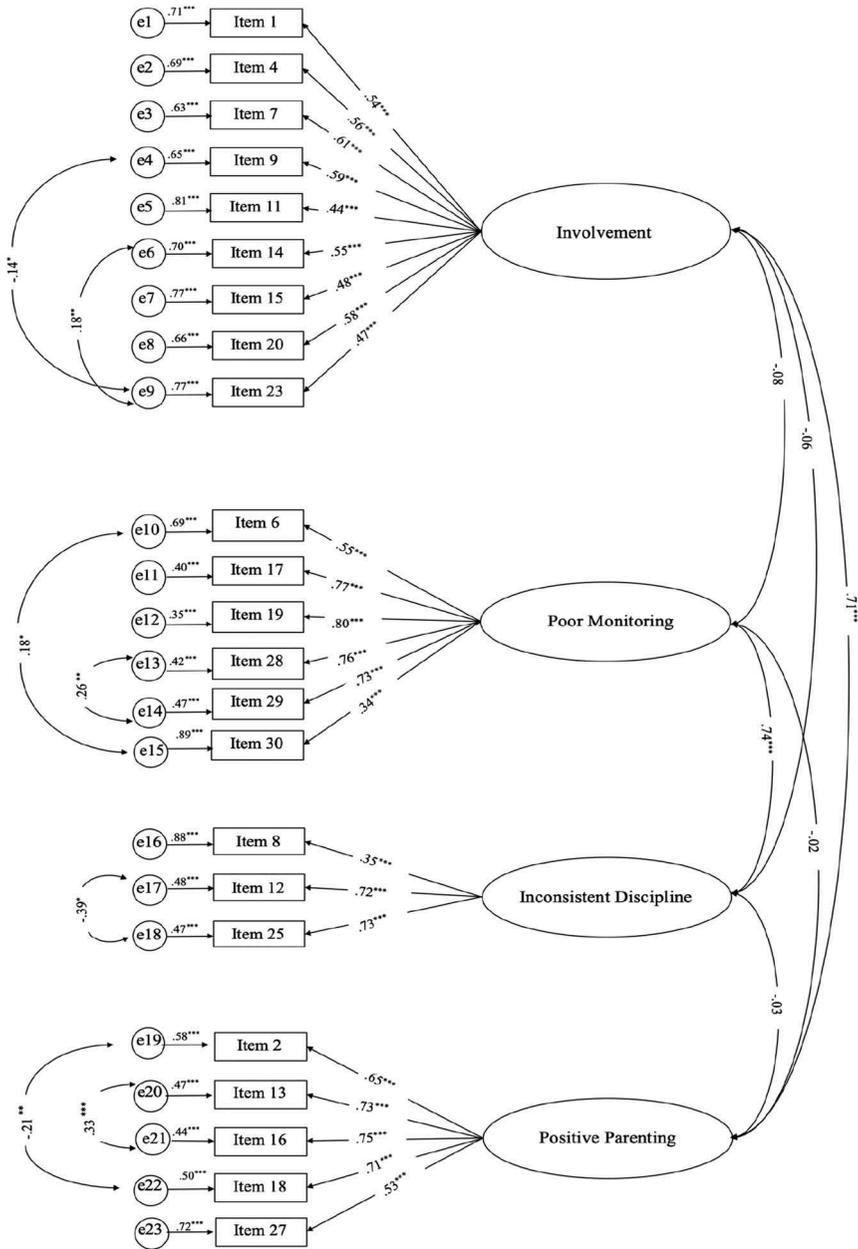
At last, we tested the three-factor structure with the modified single models. The model revealed poor fit,  $\chi^2(272) = 698.86$ ,  $CFI = .85$ ,  $TLI = 0.82$ ,  $RMSEA = 0.06$ ,  $SRMR = 0.07$ . To improve model fit, we further discarded items with SFL below .35 (items 11, 15, 23 in positive parenting, 3 in ineffective discipline and 21, 24, and 30 in poor monitoring). The final structure revealed good fit to the data,  $\chi^2(162) = 286.52$ ,  $CFI = .95$ ,  $TLI = 0.93$ ,  $RMSEA = 0.04$ ,  $SRMR = 0.05$ . Moderate correlations were found between ineffective discipline ( $\alpha = .63$ ) and poor monitoring ( $\alpha = .85$ ),  $r = .33$ ,  $p < .001$ , and non-significant correlations between positive parenting ( $\alpha = .84$ ) and ineffective discipline, and between poor monitoring and positive parenting (Figure 2).

### Measurement invariance

Configural invariance was found, but not metric or scalar invariance (Table 5). Partial metric invariance was obtained by removing the imposed equality constraints on the item loading that most differed across groups, item 20 (presented a higher loading in the older age group, Table 6). Likewise, partial scalar invariance was obtained, by removing the imposed equality constraints on the two-item intercepts that most differed across groups (Table 6), items 6 (presented a higher intercept in the older age group), and 33 (presented a higher intercept in the younger age group).

### Discussion

The APQ-P psychometric properties were evaluated in a community sample of Portuguese mothers of children aged 10–17. Both five- and three-factor models revealed poor fit to the data. Using an exploratory approach, single-factor models were tested, and model modifications performed. The best fit to the data was found in a three-factor model



**Figure 1.** Confirmatory factor analysis of 4-factor model of the APQ-parent report version, standardized factor loadings, residual variance, residuals' correlations and latent factors' correlations.

Note. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . The model includes the variable family structure (single parent vs two-parent family) as a covariate.

**Table 4.** Fit indexes, standard factor loading minimum and maximum, and cronbach alpha for single-factor models.

	$\chi^2$	<i>df</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>SRMR</i>	<i>SFL</i>		<i>a</i>
							<i>min</i>	<i>max</i>	
Positive parenting – model 1	374.30	104.00	.82	0.77	0.08	0.06	.22	.72	.83
Positive parenting – model 2	165.40	68.00	.94	0.90	0.07	0.04	.44	.70	.84
Ineffective discipline – model 1	442.79	44.00	.63	0.38	0.12	0.08	.25	.67	.65
Ineffective discipline – model 2	421.50	15.00	1	0.97	0.03	0.01	.37	.59	.62
Poor monitoring – model 1	425.41	20.00	.89	0.83	0.09	0.07	.05	.79	.77
Poor monitoring – model 2	6.54	6.00	1	0.99	0.04	0.01	.33	.80	.83

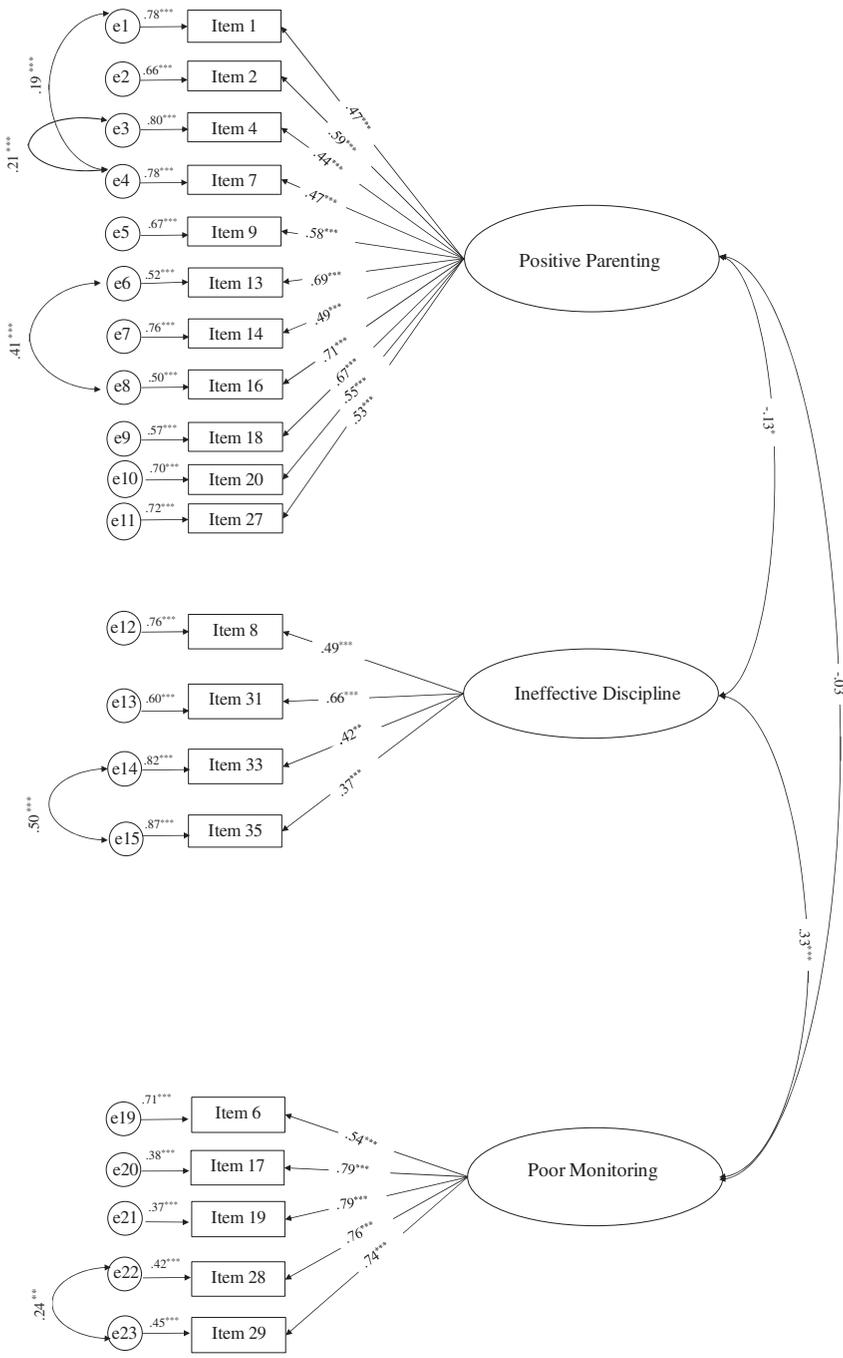
after allowing residual covariances between items within the same factor, and after discarding 15 items with low SFL. The final model included 20-items in a three-factor structure composed of positive parenting (items 1, 2, 4, 7, 9, 13, 14, 16, 18, 20, and 27), ineffective discipline (items 8, 31, 33 and 35), and poor monitoring (6, 17, 19, 28, and 29).

The current findings are in line with previous literature revealing that the APQ-P factor structure is inconsistent across studies (e.g., Clerkin et al., 2007; Scott et al., 2011; Zlomke et al., 2014). A few studies, such as the present one, reveal a three-factor model with good fit to the data (Clerkin et al., 2007; Maguin et al., 2016; Molinuevo et al., 2011; Osa, Granero, Penelo, Domènech, & Ezpeleta, 2014; Wells et al., 2000). However, some of the results in the literature are not comparable to those reported herein, as consider different samples. Some studies include community samples of parents of preschool children (Clerkin et al., 2007; Osa et al., 2014), others clinical samples of parents of elementary school children with ADHD (Wells et al., 2000), and one study regards a clinical sample of parents (Maguin et al., 2016).

Even though the current study presents fewer items in the factor structure, the factors described herein are quite similar to the ones reported by Molinuevo et al. (2011). Such may be due to the children's age ranges, similar in both studies, and to the proximity between the Portuguese and Spanish cultural backgrounds, as well as to common values and beliefs about parenting practices or behaviours.

Results also revealed adequate reliability values for all factors, except for ineffective discipline. This suggests that the set of behaviours in ineffective discipline may not capture the complexity of the construct, as includes only four items, two regarding inconsistent discipline and two regarding corporal punishment.

When comparing the factor structure across children's age groups, partial metric and partial scalar invariance were found, after removing



**Figure 2.** Confirmatory factor analysis of the three-factor model of the APQ-parent report version, standardized factor loadings, residual variance, residuals' correlations and latent factors' correlations.

Note. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . The model includes the variable family structure (single parent vs two-parent family) as a covariate.

**Table 5.** Global fit indexes for the multigroup confirmatory factor analyses.

Measurement Invariance	$\chi^2(df)$	CFI	RMSEA	Model comparison	$\Delta CFI$	$\Delta RMSEA$
Model 1: Configural	477.70(324)	.939	.044			
Model 2: Metric	533.71(344)	.923	.048	1 vs. 2	-.016	.004
Model 3: Partial metric	516.14(343)	.931	.045	1 vs. 3	-.008	.001
Model 4: Scalar	576.72(363)	.915	.049	3 vs. 4	-.016	.004
Model 5: Partial scalar	548.32(361)	.925	.046	3 vs. 5	-.006	.001

the imposed equality constraints on the item 20 loadings, and item 6 and 33 intercepts. These results suggest that mothers endorsed different frequencies to the behaviours described in items 6, 20, and 33 according to their child's age, and, as such, constructs should not be compared across age groups using these items. Differences related to item 33 corroborate previous findings reporting that corporal punishment decreases as children grow older (Frick et al., 1999), whereas differences regarding items 6 and 20 reflect different parenting behaviours as children grow older and become more independent (Shelton et al., 1996).

The current study found the best model for a three-factor structure of the APQ-P, after discarding 15-items. Even though other studies also discarded numerous items, most of them corresponding to the items that were discarded (e.g., Molinuevo et al., 2011), we acknowledge the limitations of such an approach, whereby a statistic criterion is followed. Therefore, the current findings need to be considered as exploratory and should be validated in independent samples.

Additionally, future studies should include fathers' and children's reports, in multi-trait multi-method designs, to identify the best informant and assess the convergent and discriminant validities of the APQ-P.

The sample size and children's age range are strengths of this study. However, bearing in mind that much social and emotional development occurs during these ages, and that parenting practices accommodate to these changes, future research would benefit from comparing among children of different ages.

The 20-item Portuguese version of the APQ-P can be an appropriate measure of parenting, relevant for research and intervention purposes. The measure informs on parents' behaviours considering the factor structure, and each item itself, which may be useful in assisting practitioners to understand parents' practices better, and contributing to the adjustment of the intervention plans according to parents' needs and strengths.

**Table 6.** Unstandardized and standardized factor loadings and unstandardized intercepts for both age groups.

	Factor loadings (US/S)			Item intercepts (US)		
	Ineffective discipline	Poor monitoring	Positive parenting	Ineffective discipline	Poor monitoring	Positive parenting
<i>Children age ≤ 13</i>						
Item 8	0.45/.43	–	–	2.23	–	–
Item 31	0.63/.64	–	–	1.86	–	–
Item 33	0.36/.37	–	–	2.57	–	–
Item 35	0.29/.29	–	–	1.94	–	–
Item 6	–	0.65/.52	–	–	1.58	–
Item 17	–	1.44/.82	–	–	2.30	–
Item 19	–	1.47/.83	–	–	2.14	–
Item 28	–	1.54/.81	–	–	2.50	–
Item 29	–	1.30/.76	–	–	2.51	–
Item 1	–	–	0.26/.42	–	–	4.48
Item 4	–	–	0.38/.36	–	–	3.81
Item 7	–	–	0.32/.43	–	–	3.88
Item 9	–	–	0.28/.44	–	–	4.69
Item 14	–	–	0.37/.44	–	–	3.65
Item 20	–	–	0.25/.36	–	–	4.37
Item 2	–	–	0.43/.63	–	–	4.50
Item 13	–	–	0.52/.70	–	–	4.50
Item 16	–	–	0.58/.72	–	–	4.36
Item 18	–	–	0.47/.64	–	–	4.45
Item 27	–	–	0.35/.48	–	–	4.50
<i>Children age ≥ 14</i>						
Item 8	0.63/.56	–	–	2.24	–	–
Item 31	0.68/.64	–	–	1.83	–	–
Item 33	0.58/.53	–	–	2.27	–	–
Item 35	0.54/.48	–	–	1.93	–	–
Item 6	–	0.96/.57	–	–	2.33	–
Item 17	–	1.33/.74	–	–	2.79	–
Item 19	–	1.21/.68	–	–	2.72	–
Item 28	–	1.13/.62	–	–	2.96	–
Item 29	–	1.21/.68	–	–	2.91	–
Item 1	–	–	0.38/.52	–	–	4.38
Item 4	–	–	0.63/.51	–	–	3.55
Item 7	–	–	0.41/.50	–	–	3.72
Item 9	–	–	0.55/.71	–	–	4.48
Item 14	–	–	0.57/.55	–	–	3.54
Item 20	–	–	0.69/.74	–	–	4.18
Item 2	–	–	0.40/.51	–	–	4.33
Item 13	–	–	0.56/.70	–	–	4.36
Item 16	–	–	0.64/.71	–	–	4.26
Item 18	–	–	0.66/.67	–	–	4.18
Item 27	–	–	0.48/.57	–	–	4.43

US, unstandardized; S, standardized.

### Data Availability Statement

The authors confirm that the data supporting the findings of this study are available within the article’s supplementary materials.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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