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The Factorial Structure of the Quality of Relationships Inventory-Parents Perception (QRI-PP)

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Abstract

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Literature reports that the quality of family relationships, particularly with parents, is associated with psychopathology, namely depression, in adolescents. QRI was developed by Pierce, Sarason and Sarason (1991) and adapted to the Portuguese population by Neves and Pinheiro (2006), and the QRI-PP was created from QRI for adolescents. The present study intends to analyse the factorial structure and reliability of the Quality of Relationships Inventory - Parents Perception (QRI-PP). The sample was composed by 456 parents of adolescents with ages between 12 to 17 years. Similarly to QRI, the QRI-PP assesses the parents' perceptions of social support, depth and conflict in the relationships with their children. The aims of the study were to conduct an exploratory factor analysis, followed by a confirmatory factor analysis to identify the factorial structure of IQRI-PP. The results obtained showed that the instrument is composed by 16 items, distributed in two factors: support/depth and conflict, with adequate Cronbach's alphas, indicating that QRI-PP is a valid instrument to analyse the parents/children quality of relationships, from the perspective of parents.
A bi-factorial structure was also obtained in previous researches, conducted in Portuguese population, of the father and mother versions of QRI for adolescents (Matos, Pinheiro, Costa, & Mónico, 2015; Matos, Pinheiro, & Marques, 2013; Pinheiro, Matos, & Marques, 2013). Future studies should explore other validity indices of QRI-PP.

Keywords: IQRI-PP, quality of relationships, factorial structure.

1. Introduction

The existence of social support is usually defined by the presence of trusted people who care about us, value and like us (Sarason, Levine, Basham, & Sarason, 1983). Therefore, it implies a

persistent pattern of ties that have an important role in maintaining both physical and psychological integrity of the person (Caplan, 1974). This process, involving transactions with significant people, allows us to deal with stress and responsibilities of life in an easier way (Reis & Collins, 2000).

Social support seems to have two basic components, the perception that there are enough people to turn to in case of need, and the existence of a significant degree of satisfaction regarding the available support (Sarason et al., 1983). According to Cutrona (1989), the perception of support that a person has in a specific relationship reflects unique experiences with the other person. That originates a set of different expectations about the likelihood of receiving assistance and emotional support from that individual (Pierce, Sarason, & Sarason, 1991). In this sense, Pierce, Sarason and Sarason (1992) believe that these support expectations, related to the specific relationship or availability shown by the other, play an essential role in social interactions.

Many authors (e.g. Chandola, Marmot, & Siegrist, 2007; Cohen & Wills, 1985; Cousson-Gélie, Chalvron, Zozaya, & Lafaye, 2013; Coyne & DeLongis, 1986; House, Landis, & Umberson, 1988; Schwarzer & Knoll, 2007) make reference to the existence of an association between perception of support and health or well-being; mentioning the existence of negative correlations between physical and mental illness and social support. Cousson-Gélie et al. (2013) also refer that a greater perception of social support availability is linked to a better psychological adjustment.

Similarly, many studies report, more specifically, that less support and more conflict in family relationships, particularly with the father and the mother, are associated with psychopathology (e.g., depression) in adolescence (e.g. Cheng et al., 2014; Cole & McPherson, 1993; Hops, Lewinsohn, & Roberts, 1990; McFarlane, Bellissimo, Norman, & Lange, 1994; Sheeber, Hops, Alpert, Davis, & Andrews, 1997). This relationship between the lack of family support and depression seems to affect particularly female adolescents (Gore, Aseltine, & Colten, 1993; Slavin & Rainer, 1990).

However, until 1991, most research focused on general support perceptions, being given little attention to evaluation of specific relationships (Pierce et al., 1991). In order to solve this issue, Pierce et al. (1991), developed a tool to assess perceptions of social support specifically for each relationship, creating the Quality of Relationships Inventory (QRI). This instrument is based on the interactional-cognitive model of social support developed by Pierce, Sarason and Sarason (1990) and analyses the relationship of the adolescent with the mother, father and a friend (Pierce et al., 1991).

Authors of the original study of the QRI (Pierce et al., 1991) generated 39 items in order to evaluate the following areas: support, depth and conflict. However, 10 items were eliminated as 50% of participants' responses revealed extreme values, which compromised the variability of results. Subsequently, an exploratory factor analysis was held, using the *Maximum Likelihood* with oblique rotation, since previous research suggested that depth and social support could be moderately or highly correlated. This resulted in a factorial structure with 3 factors and 29 items. Subsequently, 4 of these items were eliminated for having factor loadings smaller than 0.4 or that correlated with more than one factor (presented values greater than .29 in at least 2 factors). Thus, the QRI ended up with 25 items, where 12 corresponded to the Conflict factor, 7 to the Support factor and 6 to the Depth factor. These are evaluated through a 4-point Likert scale. Each factor corresponds to the mean of the score obtained by the items that constitute it.

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Subscale Conflict is intended to measure if specific relationships are ambivalent or conflicting – e.g., item 6: "*How much does your educate make you feel guilty?*"; the subscale Support assesses the degree of availability of the other perceived by the individual - e.g., item 3: "*To what extent could you count on this person for help with a problem?*"; finally, the Depth subscale is intended to measure whether the relationship is regarded as safe, important and positive – e.g., item 11: "*How significant is this relationship in your life?*" (Neves, 2006; Pierce et al., 1991).

In his study, Pierce et al. (1991) obtained good values of Cronbach's Alpha in the dimensions of the QRI - Conflict, Support and Depth – for the mother (.88, .83 and .83), the father (.88, .88 and .86) and for the friend (.91, .85 and .84).

The Portuguese version of the QRI is named "Inventory of Quality of Interpersonal Relationships" (IQRI) and was adapted and validated by Neves and Pinheiro (2006). In this version, specific relationships (mother, father, friend and boyfriend/girlfriend) were evaluated in college students. A similar factorial structure to that of the original authors was obtained (Pierce et al., 1991) and good Cronbach's alpha coefficients were also found (Neves, 2006).

In 2013 in Portugal, exploratory factor analyses were conducted by Matos, Pinheiro and Marques on a sample of 164 adolescents. For the relationship with the mother and the father, a factorial structure of 2 factors was found, with the elimination of item 24, and good values of Cronbach's alpha were obtained (.94 for support/depth and .88 for conflict). The same authors, on a sample of 312 adolescents, performed confirmatory factor analyses to test the model proposed by the authors of the original study (Pierce et al., 1991), which demonstrated the relevance of maintaining the 3 factors in the relations with the father and the mother, having, however, deleted some items (2, 7, 8, 9, 14, 15, 19, 24, 25 – total of 16 items; father: 2, 14, 19, 24, 25 - 20 items) (Marques, Matos, & Pinheiro, 2014; Marques, Pinheiro, Matos, & Marques, 2015). Later, in 2015, Matos, Pinheiro, Costa and Mónico, made a new exploratory and confirmatory analysis, which revealed a bi-factorial structure (support/depth and conflict) for the QRI, in father and mother versions, with the removal of items 2 and 25.

The QRI has also been translated and adapted in other countries. Nakano et al. (2002) found in a small sample of the Japanese population (40 couples), a factorial structure of 2 factors, where the depth and social support subscales were combined; Verhofstadt, Buysse, Rossel and Peene (2006) conducted a study with 286 Belgian couples and concluded that the original three-factor structure was the most suitable; Reiner, Beautel, Skaletz, Brahler and Stobel-Richter (2012), with a sample of 1494 adults, conducted the German validation of this scale, that also confirmed the tri-factorial structure of the QRI; Cousson-Gélie et al. (2013) performed a confirmatory factor analysis, in France, with 388 cancer patients, which also corroborated the original factorial structure.

2. Problem Statement, research question and purpose of the current study

In the present investigation, a version for parents (QRI-PP) was studied, which was developed from the IQRI, to evaluate parental perception about the relationships they maintain with their children. In this version, the items of IQRI (Neves & Pinheiro, 2006) were adapted and thus the

content of items 1, 3, 5, 15, 17, 18 and 22 was reformulated so it adapted to the parents' role. For example, in item 3 of the IQRI, adolescents evaluate their relationship with their father or their mother, regarding the following content: "To what extent could you count on this person for help with a problem?". Therefore, in QRI-PP, this item was reformulated: "To what extent could your child count on you to help him when he has a problem". In the reformulation of the remaining items, instead of the question being referred to the father or the mother, asking, for example, in item 14, "How critical of you is this person?", in the version of the QRI-PP it is asked "How critical of you is your child?". The initial QRI-PP instructions are as follows: "To answer the following questions, think of the interpersonal relationship that you currently have with your child. Please tick the type of relationship you have with your child: father, mother, grandmother, grandfather, uncle or another degree of relationship. Then, thinking always in the relationship with your child, please answer every question using a scale of 1 (never or not at all) to 4 (always or very much). There are no right or wrong answers, what matters is to answer according to what you think or feel".

We intend to study the internal consistency and the factorial structure of the QRI-PP, which is a version of the QRI for parents (Neves & Pinheiro, 2006) and that assesses Parents' Perception of the Quality of Interpersonal Relationships they maintain with their children.

3. Research Methods

3.1. Participants

The sample comprised 456 parents and was divided into two groups: 35% (n = 160) of the participants constituted the sample for the exploratory factor analysis (EFA) and 65% (n = 296) integrated the sample of the confirmatory factor analysis (AFC). In the first sample, 133 parents were females (83.1%) and 27 were males (16.9%); ages ranged between 28 and 64 years (M = 43.05, SD = 6.01) and men (M = 46.26, SD = 7.71) were significantly older [$t_{(31,373)}$ = -2.484, p < .05] than women (M = 42.39, SD = 5.40). In the second sample, 235 parents were females (79.4%) and 61 were males (20.6%); ages ranged between 29 and 69 years (M = 43.02, SD = 6.06) and there were also statistically significant differences for gender in function of age [$t_{(286)}$ = -3.116, p < .05; men: M = 45.24, SD = 6.40; women: M = 42.50, SD = 5.92].

3.2. Instrument

Quality of Relationships Inventory - Parents Perception (QRI-PP; Matos, Pinheiro, Costa & Mota, 2015). The QRI-PP was developed from the IQRI and intends to evaluate the perception of social support in relationships between parents and children. Originally created by Pierce et al. (1991), and translated and adapted by Neves and Pinheiro (2006), the IQRI is a self-report instrument constituted by 25 items. These items are classified in a 4-point Likert scale (1 "never or not at all" – 4 "always or very much") and scores are obtained through their factors, by calculating the means of the items that constitute each factor (Pierce et al., 1991). In the study of Pierce et al. (1991), good Cronbach's alpha values were obtained in the dimensions of the QRI Conflict, Support and Depth - for the mother (.88, .83. e .83), father (.88, .88 and .86) and friend (.91, .85 and .84). In the Portuguese

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version of Neves and Pinheiro (2006), good Cronbach's alpha values were also found (mother – .87, .84 and .80; father – .89, .91 and .89; friend – .88, .84 and .84; and boyfriend – .84, .78 and .74) and the structure also proved to be tri-factorial. In this study, some psychometric properties of the version for parents, the QRI-PP, will be studied for the first time.

3.3. Procedure

Portuguese national entities, that regulate scientific research, authorized this study for students and their parents, who agreed to participate in the investigation. Confidentiality was assured and informed consents were signed. Parents' assessment protocol was sent home to be completed and students were assessed in school.

3.4. Analytical Strategy

In order to achieve the proposed aims, a cross-sectional study was developed. Data insertion, descriptive analyses and the respective statistical procedures to carry out the exploratory factor analysis were studied through the Statistical Package for Social Sciences (SPSS), version 22.0 for Windows (IMB Corp, Armonk, NY, USA).

The QRI-PP was analysed using an Exploratory Factor Analysis (EFA) that allows the identification of a latent structure, which explains intercorrelations observed in original variables (Marôco, 2014). An extraction of factors was made through a principal components analysis, followed by an orthogonal Varimax rotation. This rotation seeks to maximize the variance of loads within the factors, trying to get factors which strongly correlate with some variables and correlate less with others, resulting in more easily interpretable factors (Field, 2009).

Firstly, the statistical assumptions to perform this analysis were studied. According to Hair, Black, Babin, and Anderson (2009), the sample must contain, at least, five times more observations than the number of variables in study (which in this case would make a minimum of 125 observations). Regarding communalities, values greater than .40 were accepted (Field, 2009). The retention of the factors was carried out taking into account the analysis of the *Scree Plot* and the Kaiser criterion – *eigenvalues* above 1. We also analysed the Kaiser-Meyer-Olkin (KMO), Bartlett's Sphericity test and the reliability of the scale through the Cronbach's alpha. The association between the 2 subscales was analysed through the Pearson correlation coefficient.

The presence of gender differences was also studied using Student's *t*-tests and differences were considered significant when values of $p \leq .05$ (Marôco, 2010).

All statistical procedures for the confirmatory factor analysis (CFA) were carried out through the SPSS Analysis of Moments Structures (AMOS), version 22 for Windows (IMB Corp, Meadville, PA, USA).

A confirmatory factor analysis was conducted with the purpose of confirming the structural patterns (Marôco, 2010), in order to confirm the pattern obtained in the exploratory factor analysis. Therefore, in order to check the correct adjustment of the model, the following values were considered as indicative of good adjustment: $\chi 2$ / df inferior to 2 is good; TLI e CFI good if superior .90 and very good if superior to .95; PNFI good if superior to .60, and very good if superior to .80; values of

RMSEA between .05 e .10 are considered good and inferior to .05 very good; scores below .05 in RSMR are indicative of good adjustment, however, the smaller the values, the better (Marôco, 2010; Meyers, Gamst, & Guarino, 2013). Factorial validation of the items was analysed through the standardized values of the weights and individual reliability ($\lambda \geq 0.5$ e $R^2 \geq .25$, respectively) (Marôco, 2010).

4. Findings

4.1. Exploratory factor analysis

A principal components analysis was computed, where a value of KMO of 0.851 was observed - value that is considered good since it lies between 0.8 and 0.9 (Sharma, 1996 cited in Marôco, 2014). Bartlett's Sphericity test [$\chi^2_{(120)} = 1304.913$; $p < .001$] proved to be significant, which is also an indicator of adequacy of the data to perform the factor analysis.

Analysis of the *Scree Plot* demonstrated a great inflection of the factor 2 to the 3. Four exploratory factorial analyses were conducted until arriving the final solution that demonstrated to be more appropriate, constituted by 2 factors with 16 items. Firstly, it was observed how items behaved in a factorial solution without forcing the number of factors and later the tri-factorial structure of the original authors was tested (Pierce et al., 1991). However, it was found that the third factor was not interpretable. Thus, we chose a bi-factorial structure. Subsequently, taking into consideration the values of communalities, items 1, 2, 5, 7, 15, 17, 22, 24 and 25 were eliminated, because their values were less than .40. Thus, all factorials weights were above .60 [above .40 – minimum recommended by Stevens (2012) and Field (2009)] and there was no record of items loading simultaneously more than .29 in 2 factors - criterion used by Pierce et al. (1991). In table 1 the factorials weights of each item for the respective factors are described, as well as their communalities.

It might be noted that eigenvalues are 5.34 for the first factor and 3.71 for the second one, and explain, respectively, 33.40% and 23.22% of the total variance. So, the solution obtained explains 56.62% of the total variance. The 8 items that constitute factor 1 have a content characterized by emotional support and proximity in the relationship. Using the names of the original study (Pierce et al., 1991), it was decided that this factor would evaluate the support/depth dimension. The remaining items loaded on factor 2, which evaluates, in accordance to the original study, the conflict dimension.

Posteriorly, we analysed the correlation between the factors of QRI-PP, which was found to be negative, low and significant ($r = .174$, $p < .05$).

With regard to descriptive statistics, means, standard deviations, maximum and minimum for the 2 factors under study were analysed. In the support/depth factor the observed mean was 3.84 ($SD = 0.35$), with a minimum of 1 and a maximum of 4. In the conflict factor the mean was 2.06 (SD = 0.51), with the minimum score of 1 and maximum of 4. Therefore, in this sample, there was a mean value of conflict lower than the support/depth.

The properties of the items and internal consistency were studied, through the means and standard deviations of the item, and item-total correlations and Cronbach's alpha value if the item was to be deleted were verified. For the support/depth subscale alpha value was .89, and for the conflict subscale

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.86. In this last factor, item-total correlations ranged between .56 and .71; in the support/depth factor these correlations ranged from .61 and .77. The reliability of the factors did not increase with the withdrawal of any of the items, so none was eliminated (cf. Table 2).

Table 1. Factorial weights and Communalities (h^2) (N = 160)

Item	F1 (*S/D*)	F2 (*C*)	h^2
11. How significant is the relationship with your child in your life?	.85		.73
13. How much would you miss your child if the two of you could not see or talk with each other for a month?	.80		.65
8. To what extent can your child count on you to help you if a family member very close to you died?	.78		.62
16. How responsible do you feel for your child well-being?	.76		.57
18. To what extent can your child count on you to listen to him/her when he/she is very angry at someone else?	.73		.63
3. To what extent could your child count on you to help him when he has a problem?	.71		.51
10. How positive a role does your child play in your life?	.69		.49
12. How close will your relationship be with your child in 10 years?	.69		.53
23. How often does your child make you feel angry?		.83	.64
21. How much do you argue with your child?		.80	.69
20. How angry does your child make you feel?		.78	.61
19. How much would you like your child to change?		.72	.52
6. How much does your child make you feel guilty?		.70	.50
4. How upset does your child sometimes make you feel?		.69	.47
9. How much does your child want you to change?		.65	.48
14. How critical of you is your child?		.64	.41
Eigenvalue	5.34	3.71	-
Explained variance	33.40%	23.22%	-

Note. S/D = Support/Depth; C = Conflict. The items on this version submit a semantic change in order to be better understood in the English language; the expression *child* in the Portuguese version was replaced by a similar term.

Table 2. Means (*M*) and Standard Deviations (*SD*), Item-total Correlations (*r*), Cronbach's alpha of the total scale if the item was to be deleted (α)

Factor / Item	*M*	*SD*	*r*	α
Factor 1: Support / Depth (α = .89)				
11. How significant is this relationship with your child in your life?	3.92	.37	.77	.87
13. How much would you miss your child if the two of you could not see or talk with each other for a month?	3.87	.43	.71	.87
8. To what extent can your child count on you to help him/her if a family member every close to your family died?	3.89	.42	.68	.87
3. To what extent could your child count on you to help him when he has a problem?	3.83	.50	.63	.88
16. How responsible do you feel for your child well-being?	3.86	.40	.66	.87
18. To what extent can your child count on you to listen to him/her when he/she is very angry at someone else?	3.79	.52	.69	.87
12. How close will your relationship be with your child in 10 years?	3.75	.54	.62	.88
10. How positive a role does your child play in your life?	3.84	.50	.61	.88
Factor 2: Conflict (α = .86)				
23. How often does your child make you feel angry?	2.08	.53	.71	.84
21. How much do you argue with your child?	2.09	.57	.70	.84
20. How angry does your child make you feel?	2.15	.60	.66	.84
6. How much does your child make you feel guilty?	1.75	.70	.61	.84
19. How much would you like your child to change?	2.03	.85	.64	.84
4. How upset does your child sometimes make you feel?	2.17	.64	.57	.85
9. How much does your child want you to change?	1.87	.83	.59	.85

14. How critical of you is your child?	2.33	.93	.56	.86

To analyse gender differences in the perception of quality of interpersonal relationships, Student's t-tests were carried out. It was found that there were no significant differences in the two dimensions – support/depth and conflict (see Table 3).

Table 3. Differences between men (n = 27) e women (n = 133) in the two factors of QRI-PP

	Men (n = 27)		Women (n = 133)			
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*
S/D	3.85	.22	3.84	.37	-.11	.92
C	2.08	.45	2.05	.52	-.30	.76

Note. S/D = Support/Depth; C = Conflict

4.2. Confirmatory factor analysis

Based on the previous exploratory factor analysis, the verification of the proposed factorial structure was performed in a new sample.

Firstly, the absence of multivariate normality (Kline, 2011) was verified. To analyse the existence of outliers, we observed the values of the Mahalanobis distance (d^2) that were of p1 and p2 < .001 (Marôco, 2010; Hair et al., 2009). Thus, 4 multivariate outliers were eliminated, which allowed arriving to a final model with better adjusted indexes ($\chi 2/df$= 1.849; CFI = .920; TLI = .906; PNFI = .723; RMSEA = .054; and SRMR = .020).

The study of modification indexes was carried out in order to figure out if it would make sense, in theory, to correlate errors that could be associated as well as to eliminate items, since some items had low factorial weights and individual reliability (cf. Figure 1). These items were 8, 13, 16 and 18 in the first factor and item 14 in the second factor. In any case, their preservation seemed relevant to measure the respective construct, taking into account their content. We also kept the original model because it presented good adjustment indexes and, when trying to remove items and correlate errors, the quality of the adjustment model became poorer. Besides, it was intended, as far as possible, to keep the factorial structure of the original authors (Pierce et al., 1991).

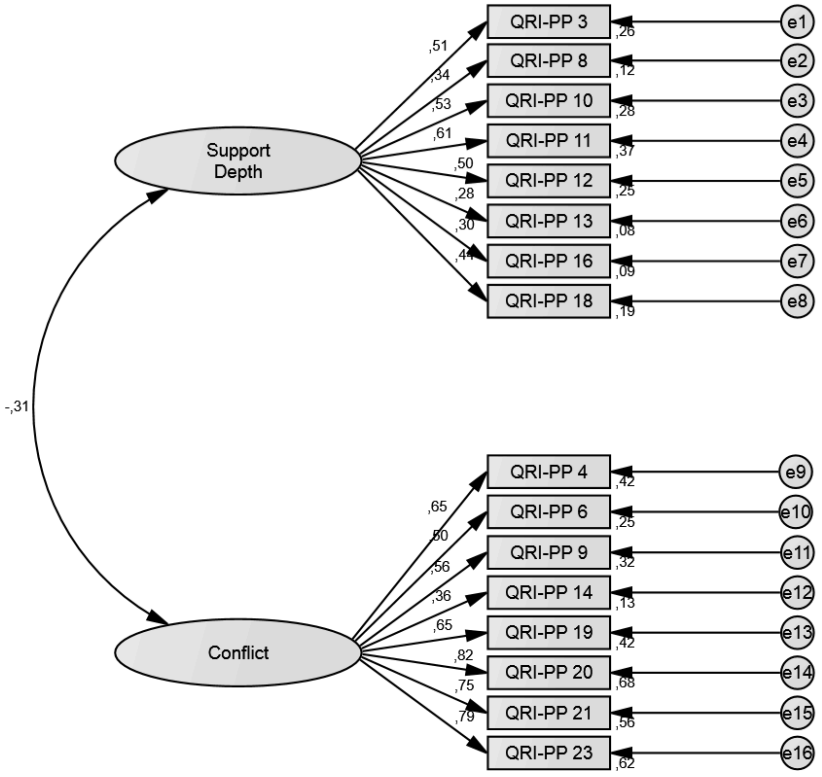

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Fig. 1. Model for Quality of Relationships Inventory – Parents Perception (QRI-PP)

4. Conclusions

The main purpose of this study was to analyze the dimensionality of the QRI-PP, which was built from the IQRI adolescents' version, originally developed by Pierce et al. (1991). To confirm it, an exploratory factor analysis was performed. In our sample, a factorial structure of 2 factors was found, such as in the Japanese sample of Nakano et al. (2002), as well as in Portuguese studies previously held by Pinheiro et al. (2013), Matos et al. (2013) and Matos et al. (2015), where similar factorial structures were found. It should also be noted that the 2 factors, which in this study were gathered (support and depth), already had a high correlation coefficient (r = .61) in the original study, which may indicate some difficulties in its differentiation (Nakano et al., 2002). Theoretically, the agglutination of these two constructs also makes sense, because we tend to expect support from those with whom we maintain relationships that we value and consider more positive.

It was intended that the instrument was as similar as possible to the original structure, assuring reliability. In future studies, we intend to test the replication of the structure obtained, considering to adopt a less conservative strategy on the withdrawal of items, as well as in their reformulation. The two factors found, explained 56.62% of the total variance. Support/depth dimension was composed of 8 items, which explained 33.40% of the variance (eigenvalue 5.34); and the conflict dimension was composed of 8 items that explained 23.22% (eigenvalue 3.71).

The items that constitute the support/depth dimension of the QRI-PP (items 3, 8 and 18 – support; items 10, 11, 12, 13 and 16 – depth) and the items that are part of the conflict dimension (4, 6, 9, 14, 19, 20, 21, 23) are the same as the ones found for the factorial solution in the original studies of the QRI (Pierce et al., 1991).

A negative association between the factors was also found, which suggests that the bigger the conflict in a relationship, the lesser the perception of support and the importance that this relationship takes.

The study of internal consistency revealed good values of Cronbach's Alpha in the two dimensions (Support/Depth $\alpha = .89$; Conflict $\alpha = .86$), with values similar to those found by other authors (Nakano, 2002; Neves & Pinheiro, 2009; Pierce et al., 1991).

On the factorial structure obtained in the present study, regarding the QRI, the following items were eliminated: items 1, 5, 15 and 22 of the support subscale; item 17, of the depth subscale; and items 2, 7, 24 and 25, of the conflict subscale (9 items). This can be due to the fact that parents might be answering according to what they think "it's socially accepted or expected" (social desirability) and not according to their true opinion. In particular, in items from the support subscale, most of these questions refer to advising or helping (e.g., *"To what extent can you advise your child about various problems?"* – item 1), usually considered important in the parental role. Thus, in the QRI-PP we should take into account specificities related to the influence of parental beliefs and expectations, for example, about skills that they must have and/or show, and also specificities related to the influence of feelings that can be associated with parenting as pride and guilt. However, all these issues and a review of the scale's items should be considered in future studies of the QRI-PP.

It should also be noted that this study did not meet the results obtained in other studies carried out previously, that found a tri-factorial structure that matches the original version: in Portuguese context, studies of Neves (2006), Marques et al. (2014) and Marques et al. (2015); and internationally, studies from Verhofstadt et al. (2006), Reiner et al. (2012) and Cousson-Gélie et al. (2013).

According to the confirmatory factor analysis, it can be noted that the values of the adjustment indexes corroborate the model initially proposed. However, these results should be taken into consideration with some caution, given the low factorials weights and individual reliabilities found. It is relevant to mention that, due to its content, it was considered appropriate to keep those items that showed lower factorials weights and individual reliabilities (8, 13, 14, 16 e 18). Items 8 and 18 are items from the support dimension and question about the availability of the father to help the child in more complicated situations (e.g. death of family and interpersonal conflict). Item 13 seems to be an item that perfectly relates to the depth of a relationship (missing the relation). Item 16 makes reference to the responsibility for the welfare of the child, which is considered to be important to assess the degree of depth in a relationship of this nature. Item 14 allows you to realize how much the father think he is criticized by his son and, therefore, this item seems to be revealing of a troubled relationship with the child, being associated with conflict.

To conclude, the limitations of this study must be acknowledged. A major limitation has to do with the absence of convergent and divergent validity analysis of this version of the QRI, which must be studied in future research. Another potential limitation is related to the predominance of female responders, in the sample. It is primordial to replicate this study in more heterogeneous samples of parents, in order to be able to generalize the results. The factorial structure of the QRI-PP should also continue to be replicated, in order to get to the structure that best represents parents of adolescents from Portuguese population. Similarly, it also becomes relevant to study other versions of the scale aimed at specific populations (e.g., clinical), as well as other age groups (e.g., children, elderly). Longitudinal studies could also give us information about the stability of these relations in time. In the future, we intend to study the temporal stability of this scale.

The present study contributes to increase the existing research on the QRI, improving the evaluation and understanding of the quality of specific support relationships (parents-children), which are very important in the course of a lifetime.

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