

Parental Acceptance, Parental Stress, and Quality of Life: A study with parents of ADHD children

Accettazione vs Stress dei genitori e qualità della vita: uno studio con i genitori di bam- bini con ADHD

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Adapting to a child with attention deficit hyperactivity disorder (ADHD) represents a great challenge for any family, and especially for the parents. Considering the psychological and behavioral issues inherent to this disorder, it's no easy task to promote the child's development, in a supportive way, while at the same time ensuring that it is well adjusted to all social contexts. More difficult yet is to achieve this while maintaining high quality of interpersonal relations and psychological health in the family. In this context, our research's objectives were to assess and analyze possible connections between the perception of parental acceptance and rejection, parental stress and quality of family life, in families with children with ADHD. To achieve our goals we applied the Parental Acceptance-Rejection Questionnaire (PARQ, Rohner, 2005), the Quality of Life Scale (QOL, Barnes & Olson, 1982), and the Parental Stress Scale (PSS, Mixão, Leal & Maroco, 2007) to a sample of 57 Portuguese parents, both fathers and mothers, of, at least, one child diagnosed with ADHD. Our results show that parents of children with ADHD perceive themselves as accepting of their children, and the majority present low levels of parental stress. Also, we found that the more stressed parents feel about parenting, the less accepting they perceive themselves to be, as well as having lower levels of quality of life. These results leave interesting pointers for future research and intervention, suggesting the importance of helping parents of ADHD children to deal with stress as it seems to have an important role on key dimensions of family functioning and consequently on children's socio-emotional adjustment and development.

Key-words: ADHD; acceptance-rejection; parental stress; quality of life

abstract

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III. Esiti di ricerca

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One of the biggest issues that families with children with ADHD face it's the dynamic nature of the problem. Meaning that the (negative) behavioral consequences of having this developmental disorder makes the task of parenting very difficult and stressful, which often translates into lower quality of parenting, which, in turn, reinforce the behavioral problems of children with ADHD (Barkley, 2003, Pelham & Fabiano, 2008). It's a self-reinforcing problem that creates increasingly higher levels of psychological distress for both parents and children. This problem, if not addressed from a perspective that considers not only symptom control but also contextual variables, can become a serious impairment for the children's development and adjustment.

The negative consequences of the inattention, hyperactivity and impulsivity that characterize ADHD (American Psychiatric Association, 2002) have a pervasive influence on the development of children (Oh et al., 2012) in different dimensions, namely in terms of self-esteem and social competence (Kats-Gold et al., 2007, Cumingham, 2007; Foley, McClowry, & Castellanos, 2008; Miranda, et al., 2009, Banga, 2013), academic achievement, behavioral problems (DuPaul et al., 2001, Sawyer et al., 2002) and socio-emotional maladjustment (Bagwell et al., 2001). Not surprisingly, due to these characteristics, children with ADHD tend to have interaction problems with their parents and other family members, especially when confronted with demands and requests or the need to inhibit impulsive responses (Mckee et al., 2004). Also, children diagnosed with ADHD have a higher risk of developing a wide range of psychiatric disorders, engaging in disruptive and delinquent behavior, as well as substance abuse as adolescents (Katusic et al., 2005, Molina et al., 2007, Yoshimasu et al., 2012).

Recognizing the demanding nature of the task of parenting children with ADHD, researchers have been focusing on its effects on parents and have found that these parents tend to have high levels of stress (Moreira, 2010, Narkunam et al., 2012, Viduoliene, 2013, Van Steijn et al., 2014), and higher levels of stress than parents of children without ADHD (DuPaul et al., 2001, Podolski & Nigg, 2001, Van Steijn et al., 2014). Parenting children with ADHD is also associated with depressive symptoms (Chronis et al., 2003, Van Steijn et al., 2014).

On the other hand, some evidence has been found that demonstrate that parents of children with ADHD, themselves, tend to display lower levels of parenting. Individual characteristics associated with adolescents with ADHD have been found to be associated with lower levels of monitoring efforts by parents (Eaton et al., 2009). Also, parents of children with ADHD are more likely to use negative or ineffective discipline (Hinshaw et al., 2000), as well as more inconsistent and hostile parenting (Cussen et al. 2012) than parents of children without ADHD.

Recent research has been reinforcing the importance of effective parenting and good quality of interpersonal relations in the family, for the mitigation of the negative consequences of ADHD on children and adolescents' behavior and development (Keown & Woodward, 2002, Chronis, Chacko, Fabiano, Wymbs & Pelham, 2004, Pelham & Fabiano, 2008, Walther et al. 2012, Cussen et al., 2012, Molina, 2015). This means that working with the parents of ADHD children and adolescents, helping them to develop better and more effective ways to cope with their children's behavior, as well as with the psychological stress that they themselves feel, seems to be the best way to promote adjustment, development and social inclusion of ADHD children.

Although a large body of literature has been produced focusing on ADHD and its effects on child, adolescent and adult development and adjustment, a lot less attention has been given to the study of the effects that parenting children with ADHD has on the parent's psychological adjustment, and even more to the importance of family functioning and relationship dynamics on the adjustment and wellbeing of both parents and children with ADHD (Walther et al. 2012). This is even more so in the Portuguese context, as there are very few studies that focus on these particular issues, regarding children with ADHD, their families and the interpersonal processes that might play an important role on their development and adjustment.

Taking in consideration this relative scarcity of research, the main objectives of our study are, firstly, to analyze if the tendency of ADHD children's parents to have high levels of stress is similar in Portuguese parents. Secondly, we wanted to know if the levels of parental stress were associated with the quality of interpersonal relations in the family, namely between parents and children with ADHD, as well as with the parent's perception of quality of life.

Following the trend of recent research on the field of ADHD, as shown before, we believe that it's important to further explore the role that contextual variables, especially those associated with the quality of interpersonal relationships in the family. In this context, the warmth dimension, namely the perception of interpersonal acceptance, as described in Ronald Rohner's Interpersonal Acceptance-Rejection Theory (IPARTheory, Rohner, 1986, 2004), might be a key dimension to better understand how families with ADHD children work and, more importantly, contribute to make intervention in this field more effective.

Acceptance and rejection are the two sides of the warmth dimension of parenting, which is expressed by a continuum, where any human being can be placed according with the level of acceptance or rejection that they've experienced from their parental figures along their life cycle (Rohner, 1986, 2004). It relates to the way parents express their feelings towards their children through physical, verbal and symbolic behaviors, and the way that children perceive those behaviors as acceptance or rejection.

A meta-analysis study done by Rohner, Khaleque and Cournoyer (2013), showed that there's evidence that the perception of not being accepted, or in other words, the perception of being rejected, is associated with a wide range of problems in childhood, adolescence and adulthood, namely anxiety and insecurity; dependence; hostility, aggressiveness and global self-control difficulties; low self-esteem and self-efficacy; emotional instability and lower ability to manage stress in adults. More recently it was also shown that, in adolescents diagnosed with ADHD, parental acceptance was associated with higher levels of self-esteem, self-efficacy, as well as with the dimensions of task initiation and persistence, and efficacy in adverse situations, which are key dimensions for the effectiveness of the learning process (Machado, Machado & Oliveira, 2015). Another study concluded that the negative effects of impulsiveness and aggressiveness worsened when children with ADHD felt that they were not supported, loved and wanted by their parents (Nunes & Werlang, 2008).

This data strongly suggest that interpersonal acceptance-rejection is a relevant variable when trying to analyze and further understand how interpersonal relations in the family, and especially those that are established between parent

and child, can have an effect, whether positive or negative, over the ADHD symptoms and their impact on parent's wellbeing, adjustment and quality of life.

Based on the information gathered, we believe that a family environment marked by interpersonal acceptance, where both parents and children perceive themselves as accepted and accepting of each other, will help to mitigate the negative effects of ADHD on the child and, consequently, lead to decrease of the pressure and emotional distress on the parents. This emotional relieve of the parents, with lower levels of stress, might, in turn, increase the probability that they will be emotionally available to do a better job at parenting.

Considering the arguments presented until this point, three questions arise, to which this study tries to respond. Do parents of ADHD children in Portugal present high levels of stress? Is the perception of being accepting of their ADHD children associated with lower levels of stress? Are the levels of stress and interpersonal acceptance of the parents associated to their perception of quality of life? Relying on the information gathered from our literature review, our expectation is that parents of children with ADHD in Portugal will follow the tendency shown in international studies and present high levels of stress, considering the proven difficulties posed by the behavioral effects of ADHD. Concomitantly, these high levels of stress will have a negative effect over the parent's perception of quality of life, as well as over their relationship with their children. Recent studies have shown that parenting stress is significantly associated with more negative parent-child interactions, child behavioral problems and harsh authoritarian parenting (Harpin, 2005, Vanlizandoorn et al, 2007).

Also, and considering the effect that interpersonal acceptance has been shown to have over key dimension for emotional and behavioral adjustment of children (e.g. anxiety; hostility; self-control difficulties; self-esteem and self-efficacy; emotional stability), we expect parent's stress levels to be associated with their perception of being accepting of their children with ADHD. Accepting parents have a higher probability to promote an accepting, positive, warm family environment than rejecting parents, as the latter might trigger a variety of negative consequences for the children that might perceive themselves as rejected, as seen before. More so when we are talking about a family environments with children with ADHD, that already have emotional and behavioral difficulties associated with the disorder from the start (Nunes & Werlang, 2008; Rohner, Khaled & Cournoyer, 2012). If that's the case, the worsening of what's already difficult to manage, can have a real impact on the parent's levels of stress and quality of life.

The present study results from the research gap mentioned above, pertaining the relative scarcity of research in this field focused on parents' needs and the quality of interpersonal relationships in the family, and from previous research (Machado, Machado & Oliveira, 2015), that suggested that interpersonal acceptance or rejection could have an important role on the adjustment of ADHD children and their families. This means that, this study represents another step in the direction of better understanding the role that contextual and relational variable play on the adjustment and wellbeing of these families, and particularly in the Portuguese context. Although simple in its design, our study's results, we believe, open new paths for future research in this field, and promise new findings to come.



1. Method

Participants

Participants were 57 parents (68.4% mothers) with ages between 30 and 70 ($M=40.4$, $DP=5.97$) all of which had one child diagnosed with ADHD. Maternal age was between 30 and 48 years ($M=39.6$, $DP=4.66$) while paternal age ranged from 35 to 70 ($M=41.9$; $DP=8.08$). 70.18% of participants were married.

Most parents had low to middle schooling levels and most, especially mothers, had low-qualification employment. 23.1% of mothers were stay-at-home and 12.8 were unemployed.

The children with ADHD were mainly male (86%) with ages ranging from 5 to 14 years old ($M=9.49$; $DP=2.44$). Only 2 children (4.1%) were not in school, all others were between 1st and 9th grade.

Procedures

Data was gathered at one-single moment in two different ways: in hospital and online.

In the first case, permission was asked and granted by the hospital board. Parents were approached by the main researcher while they were awaiting the child's medical appointment. At that point, the research was explained and an informed consent was obtained. Parents answered the questionnaires either before or after the child's appointment.

Due to difficulties in gathering participants, a part of our questionnaires were answered online. In both cases, participants' consent was always obtained previously, and questionnaires were answered anonymously.

The only inclusion criteria for this study was being a parent to a child diagnosed with ADHD by a health professional (medical doctor, psychologist or psychiatrist).

2. Measures

Personal information form

The personal information form gathered data on both the child diagnosed with ADHD and on their parents. Information on the child included child's age, age when first diagnosed, gender, school year, being on medication. Information on the parents comprised age, gender, educational level, marital status, profession and social-economical level.

Parental acceptance-rejection questionnaire (Rohner, 2005)

The Portuguese short version of the Parental Acceptance Rejection Questionnaire was used (Rohner, 2005). The questionnaire was answered by the parent about their child diagnosed with ADHD. Thus, the parent was asked to answer on how s/he perceived his/her own behavior towards the child (Khaleque & Rohner, 2002).

The questionnaire has twenty-four items answered in a four-point likert scale ranging from "almost never true" to "almost always true" (Rohner, 2005).

Results are given in four scales: warmth, hostility/aggression, indifference/neglect, and undifferentiated rejection as well as a global score in which lower values indicate acceptance.

Warmth encompasses manifestations of love and caring such as hugging, kissing, and praising (eg. Item 3 *I make it easy for my child to confide in me*); hostility/aggression refers to behaviors such as hitting or humiliating (eg. Item 6 *I punish my child when I am angry*); indifference/neglect concerns behaviors in which the parent ignores or doesn't pay attention to the child (eg. Item 7 *I am too busy to answer my child's questions*); undifferentiated rejection describes the child's feeling of being unloved (eg. Item 8 *I resent my child*). (Klaleque & Rohner, 2002).

Cronbach's alpha for the global scale in this study was .84.

Parental stress scale (Mixão, Leal & Maroco, 2010)

The Parental Stress Scale was used to assess parents' levels of stress regarding their relationship with their child with ADHD.

The questionnaire comprises 18 items answered in a 5-point likert scale ranging from completely disagree to completely agree (Mixão, Leal & Maroco, 2010; Rocha, 2012).

The scale includes four factors: parental concerns (eg. *Having a child has been a financial burden*); satisfaction (eg. *I feel close to my child*); lack of control (eg. *Having a child means having few choices and lack of control of my life*); and fear and anguishes (eg. *Sometimes I wonder if I do enough for my child*) (Mixão, Leal & Maroco, 2010; Rocha, 2012).

In this study only the global parental stress factor was used, with Cronbach's Alpha being .79.

Quality of life scale (QOL) (Relvas, Alberto, & Simões, 2008)

The Portuguese version (Relvas, Alberto, & Simões, 2008) of the quality of life scale (Olson & Barnes, 1982) was used in this study.

Only the parental version of the scale was used. This comprised 40 sentences divided into dimensions such as marriage and family life; friends; health; home; education; time; religion; employment; mass-media; neighborhood and community (Almeida, 2013; Grilo, 2013).

Answers are given in a five-point likert scale ranging from *unsatisfied* to *extremely satisfied* (Almeida, 2013; Grilo, 2013).

Cronbach's Alpha for each subscale were .82 for marriage and family life; .80 friends; .87 health; .91 home; .75 education; .87 time; .94 religion; .87 employment; .87 mass-media; .90 neighborhood and community thus indicating good internal consistency.

3. Results

Results show that parents perceive themselves as accepting (table 1) since perceived acceptance is below 60¹ ($M= 38.53$; $SD= 9.94$) (Rohner, 2005). In fact, since maximum value was 58.00 it seems that all parents perceive themselves as accepting (table 1). Parental stress was also low ($M= 39.58$; $SD= 10.72$) since low parental stress ranges from 18 to 42 (Mixão, Leal, & Maroco, 2010). However, since the maximum stress value was 70.00 a closer look was taken. 59.6% of parents reported low stress levels (values 18-42), 36.8% had intermediate stress levels (43-66) while 3.6% reported high stress levels (67-90).

Parental acceptance was positively correlated with parental stress. Since the parental acceptance scale is keyed backwards this means that low parental acceptance was associated with higher levels of parental stress suggesting that when parents felt overwhelmed with parenting they tended to be less accepting of their child.

Low parental acceptance was negatively correlated with quality of life perceived in marriage and family life, friends, home, and education. Results suggest that when parents felt better quality of life in these areas they tended to see themselves as more accepting of their child. Low parental acceptance was, however, positively correlated with quality of life regarding religion. As such it seems that religion was associated with perceiving themselves as being less accepting of their ADHD child.

Parental stress was negatively associated with all quality of life dimensions except for time. Results imply that when parents felt concerned they reported less quality of life.

4. Discussion

Even though it was expected that parents' of ADHD children would report being stressed, results aren't clear in this instance. Most parents report low stress but a considerable number report intermediate stress and a few indicate being highly stressed. ADHD symptomology has been consistently associated with, or even found to be a predictor for parental stress (Cussen, Sciberras, Ukoumunne, & Efron, 2012; Narkunam, Hashim, Sachdev, Pillai, & Ng, 2014; van Steijn, Oerlemans, van Aken, Buitelaar, & Rommelse, 2014), but even though this kind of analysis wasn't performed in our study the data seems to question it. Possible explanations for these results may be that participants had children, who had mild ADHD symptomatology, and thus not causing as much stress in the parents, or it is also possible that these parents might have found more efficient ways of coping with their everyday parental stress. Solem, Christophersen, & Martinius (2011), for instance, found that parents of children with behavior problems, who had better social support as well as other resources and strategies,

1 Lower scores in the acceptance scale indicate more perceived acceptance

reported less stress. Our study didn't look into these variables, which might explain relatively low stress in participants. Another clue may lay in one of the main objectives of the study: the correlation between parental acceptance and parental stress.

One of the main objectives of this study was to understand how parental acceptance was associated with parental stress in parents of ADHD children. Results show that parents who report more stress, specifically in the dimensions of parental concerns and lack of control, perceived themselves as less accepting of their child. Previous studies have shown that parenting behavior, namely responsiveness, is influenced by parenting stress (Ponnet et al., 2013). Correlations have also been found indicating an association between higher levels of self-esteem and self-efficacy in adolescents with ADHD and their perception of parents being accepting (Machado, Machado & Oliveira, 2015) As such, and reinforcing our argument, it is possible that parental acceptance promotes better outcomes in children with ADHD or that children with milder symptomatology are more accepted by their parents, which, in turn, is related to (lower levels of) parental stress.

Our second hypothesis conjectured that parental acceptance of the child with ADHD would be correlated with the parent's quality of life, which was confirmed. Previous studies have shown that children's behavior and development can influence parental quality of life. For example, children's oppositional defiant symptoms predicted mothers' quality of life (Lee et al., 2010), fathers (Huang, Chang, Chi, & Lai, 2014) and mothers of children with developmental disorders had worse quality of life (Yamada et al., 2012). In our study, as previously mentioned, the severity of symptomatology was not assessed. Participants reported adequate quality of life with was positively associated with parental acceptance and negatively with parental stress. Stress has been consistently shown to be a predictor of quality of life (e.g. Johnson, Frenn, Feetham, & Simpson, 2011).

Results show that there is a clear association between parental acceptance and quality of life. This suggests that parents, who accept their child, with all his /her characteristics, including those associated with ADHD, will have better quality of life. As such, parental acceptance may be key in allowing parents of children with ADHD to have lesser stress levels and higher levels of quality of life. Parental acceptance has been shown to promote better outcomes as well as wellbeing in a diversity of dimensions (Dwairy, 2010; Dwairy et al, 2010; Khaleque & Rohner, 2012; Rohner, 1986; Rohner, 2004; Rohner, Khaleque & Cournoyer, 2013). Results show that parental acceptance may be instrumental in improving the life of parents of children with ADHD, which opens new therapeutic possibilities.

Limitations of the Present Study and Future Research

As discussed throughout this article, there are some dimensions that need to be added to better explain results. In future studies it is suggested that the severity of ADHD symptomatology is assessed and that social support is brought into the equation.

The small number of participants didn't allow for more elaborate analysis but in the future it is essential that the role of each of these variables is carefully assessed by testing mediational models that include not only the dimensions analyzed in this article but also those suggested above.

Additionally, it would be interesting to analyze differences between fathers and mothers as well as explore if the child's gender as a part to play since it has been shown that boys report more parental rejection than girls (Hussain & Munaf, 2012).

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	N	Min	Max	M	SD
Parental Acceptance	57	24.00	58.00	38.53	9.94
Parental stress	57	21.00	70.00	39.58	10.72
Marriage and family life	57	10.00	20.00	15.58	3.11
Friends	57	3.00	10.00	6.98	1.73
Health	57	4.00	10.00	6.32	1.75
Home	57	9.00	25.00	16.84	4.03
Education	57	3.00	10.00	5.95	1.56
Time	57	5.00	25.00	14.39	3.93
Religion	57	2.00	10.00	6.39	1.89
Employment	57	2.00	10.00	5.98	1.88
Mass media	57	16.00	50.00	28.16	6.43
Neighbourhood and community	57	6.00	29.00	18.56	4.29

Table 1. Descriptive statistics for parental acceptance, parental stress and quality of life

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Parental Acceptance	---											
2. Parental stress	.69**	---										
3. Marriage and family life	-.54**	-.57**	---									
4. Friends	-.49**	-.45**	.47**	---								
5. Health	-.20	-.38**	.52**	.54**	---							
6. Home	-.30*	-.36**	.52**	.32*	.62**	---						
7. Education	-.38**	-.45**	.48**	.47**	.46**	.57**	---					
8. Time	-.18	-.26	.34*	.21	.33*	.58**	.51**	---				
9. Religion	.39**	-.35**	.39**	.28*	.27*	.37**	.32*	.36**	---			
10. Employment	.20	-.31*	.17	.31*	.33*	.43**	.44**	.46**	.37**	---		
11. Mass-media	.23	-.29*	.45*	.32*	.40**	.66**	.47**	.59**	.50**	.54**	---	
12. Neighborhood and community	.24	-.44**	.51**	.35**	.51**	.62**	.38**	.50**	.56**	.35**	.46**	---

Table 2. Correlations between parental acceptance, parental concerns and quality of life



