Family rituals in pediatric epilepsy: Links to parental competence and adaptation

Abstract

This cross-sectional study examined the associations between family ritual meaning and three indicators of parental adaptation (anxious and depressive symptoms and quality of life), via two dimensions of parental competence – satisfaction and efficacy, in parents of children with epilepsy. Two hundred Portuguese parents of children diagnosed with epilepsy for at least six months completed self-report measures assessing the main study variables. Our results showed that when parents reported stronger family ritual meaning, they also reported higher levels of parental satisfaction and efficacy, which were in turn were associated with lower psychological distress (anxious and depressive symptoms) and better quality of life of parents. This pattern of results was significant regardless of the severity of children's epilepsy, age group, and family socioeconomic level. In the context of pediatric epilepsy, empirical evidence was found for the role of family ritual meaning in being associated with parents' adaptation outcomes both directly and indirectly by higher levels of parental satisfaction and efficacy. Focusing intervention targets on what families naturally do and recognize as their own ritual meaning may be a favorable route to address those at risk of psychological distress and lower QoL.

Keywords: Family ritual meaning; pediatric epilepsy; parents; adaptation outcomes; parental satisfaction and efficacy

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Epilepsy is the most prevalent neurological condition during childhood and adolescent years, affecting 0.5-1% of children below age sixteen (Berg, Jallon, & Preux, 2013). Epilepsy is a spectrum of disorders, with a wide range of severities, seizure types and etiologies, that cause abnormal electrical activity in the brain resulting in an individual being predisposed to recurrent, unprovoked seizures (England, Liverman, Schultz, & Strawbridge, 2012; Fisher et al., 2014).

For most children with epilepsy, seizures are well controlled with anti-epileptic medication (Fisher et al., 2014). However, the impact of epilepsy goes well beyond seizures, affecting not only the child, but the entire family system (Ronen et al., 2010). The hidden, episodic and unpredictable nature and course of epilepsy represents a significant and permanent source of stress, threatening the stability of the family system (Austin et al., 2015; Ronen et al., 2010). Additionally, the high frequency of comorbidities such as learning difficulties and behavioral or emotional problems (Austin et al., 2010; Fastenau et al., 2004), the stigmatizing nature of the condition, and the potential for injury and death can curtail the social and leisure activities of the families and ultimately negatively impact children's and their parents' functioning across educational, emotional, social, and physical domains (Austin, Perkins, & Dunn, 2014; Painter, Rausch, & Modi, 2014).

Parenting a child or adolescent with epilepsy may be particularly challenging. Parents are at the front line for effective daily management of epilepsy, and studies have shown that parents of children with epilepsy are at increased risk for psychological distress, namely, clinical symptoms of depression and anxiety (C. Jones & Reilly, 2016; Shore, Austin, Huster, & Dunn, 2002) and poorer quality of life (QoL) (Reilly, Taft, Nelander, Malmgren, & Olsson, 2015). These difficulties may interfere with parents' ability to handle stress and cope with the demands

of leading a family (Rodenburg, Meijer, Dekovic, & Aldenkamp, 2006; Wagner, Smith, & Ferguson, 2012; Wu, Follansbee-Junger, Rausch, & Modi, 2014) and therefore contribute to an increased risk of behavioral and emotional problems in children with epilepsy (Ferro, Avison, Campbell, & Speechley, 2011; Rodenburg et al., 2006).

Over the last decades, family research in the context of pediatric chronic conditions has shifted from a deficit-centered to a strengths-centered approach, which stresses the need to identify the resources available to families that promote individual adaptation and are also amenable to intervention (Kazak, Rourke, & Navsaria, 2009; Rolland & Walsh, 2006). While the presence of a child with a chronic condition may disrupt normative family functioning, these latter models suggest that most families are able to adapt and demonstrate considerable resilience. Family rituals may be considered one of these resources, as presented next.

Family rituals

Family rituals are events with symbolic and affective meaning that are shared by the whole family (Fiese & Parke, 2002; Fiese et al., 2002). Ranging from relatively informal and frequent patterned family interactions (e.g., dinnertime, bedtime, special weekend activities), to family traditions (e.g., vacations, birthdays) and celebrations that mark important family transitions (e.g., weddings, funerals) (Wolin & Bennett, 1984), family rituals are embedded in the cultural context of family life. Although most families engage in family rituals, they differ in the specific ways that they are practiced and the relative importance they have in their daily lives (Spagnola & Fiese, 2007). Meaningful family rituals are considered vital resources for families, particularly in times of increased stress or transition (Crespo et al., 2013; Fiese et al., 2002). Fostering stability, predictability, and structure to family life, meaningful family rituals promote participation and positive interactions and provide their members with a sense of security and

belonging (Fiese & Wamboldt, 2000; Spagnola & Fiese, 2007; Wolin & Bennett, 1984). Within the field of pediatric chronic conditions, a growing body of empirical evidence shows that meanings ascribed to family rituals are associated with positive psychological outcomes such as fewer anxious and depressive symptoms and better quality of life for children, adolescents, and adults (Crespo et al., 2013; Denham, 2003; Fiese, 2007). More specifically, meaningful family rituals have been linked with improved QoL of parents and their children with pediatric cancer (Santos, Crespo, Canavarro, & Kazak, 2015), lower levels of anxious symptoms and family stress in pediatric asthma (Markson & Fiese, 2000), stronger family relationships (Crespo, Kielpikowski, Pryor, & Jose, 2011; Fiese et al., 2002), and better treatment adherence (Fiese & Wamboldt, 2000).

To date, the associations between family rituals meaning and the adaptation outcomes of parents of children with epilepsy are yet to be examined. Considering that the creation and maintenance of meaningful rituals needs to be understood in the context of a larger transactional process that evolves parents and children over time, Spagnola and Fiese (2007) identified parental competence as a potential mechanism linking family rituals and parental adaptation outcomes. More specifically, according to these authors, the symbolic meaning ascribed to family rituals may provide a window into how individuals form representations about how efficient they consider themselves in their parenting role, which ultimately may affect parental well-being. This hypothesized mechanism of influence still lacks empirical examination.

Parental competence

Parental competence has been considered a major determinant of effective parenting practices and is closely linked to positive child development and adaptation outcomes (Coleman

& Karraker, 2000; T. L. Jones & Prinz, 2005). According to Johnston & Mash (1989), parental competence encompasses two distinct but interrelated dimensions: satisfaction and efficacy. Parental satisfaction is defined by Johnston and Mash (1989) as “the quality of affect associated with parenting” (p. 215). Parental satisfaction places the focus on the personal value, investment and interest that individuals attach to their performance as parents. The parenting role entails multifaceted challenges. Parenting a child can be a potentially satisfying and emotionally rewarding experience conducive to feelings of gratification and personal fulfillment while simultaneously being potentially exhausting, stressful, and emotionally tense (Coleman & Karraker, 2000). A second dimension of parental competence is parental efficacy, a more instrumental dimension of competence grounded in Bandura’s social cognitive theory (Bandura, 1995). Parental efficacy can be broadly defined as the beliefs and expectations that parents have about their ability to positively influence the behavior and course of their child’s development (Johnston & Mash, 1989). Parents who are high in efficacy believe in their ability to provide the social, cultural, and emotional support their children need to function successfully. Parental efficacy is reported to help parents cope with stressful and challenging situations. This dimension has been linked to positive child developmental outcomes (Coleman & Karraker, 2000); specifically, parental efficacy has been found to mediate the links among infant difficulty, social network characteristics (e.g., size, network support), and mothers’ mental health outcomes (Benson, 2016; Cutrona & Troutman, 1986). In addition, the ways in which parental competence are linked to the wider family environment have received increasing attention (T. L. Jones & Prinz, 2005). Parental competence, namely, parental efficacy, has been associated with more positive family functioning (Sevigny & Loutzenhiser, 2010), more favorable financial

circumstances (Coleman & Karraker, 2000), and partner support and encouragement (Sevigny & Loutzenhiser, 2010).

Parenting a child with epilepsy raises additional issues, about how to best help children grow up, balancing their needs of protection and emotional support with the increasing urge for autonomy, while simultaneously meeting the needs of the entire family system and each of its individual members (McNelis, Buelow, Myers, & Johnson, 2007; Rodenburg et al., 2013). In a recent meta-analysis, Pinquart (2013) reported that compared to families with other chronic health conditions, families of children with epilepsy were at particular risk for difficulties at the level of parenting practices and parent-child relationships. Given the associations between parental self-efficacy and parenting practices and behaviors, these results may reflect increased difficulties in parental competence. With a few exceptions, parental competence has scarcely been researched in the area of pediatric epilepsy. Austin and colleagues (2004) found that low parental confidence in managing children's behaviors, along with low family mastery (e.g., disorganized family environment), were significant predictors of child behavior problems.

Links between family rituals and parental adaptation: Examining the role of parental competence

Family rituals can be considered important contexts for parenting (Spagnola & Fiese, 2007). Bandura (1995) claimed that the "most effective way of creating a strong sense of efficacy is through mastery experiences" (p. 3). Effective parenting tends to enhance feelings of personal efficacy as a parent. It may be hypothesized that family rituals, embedded in the broader context of family functioning and relationships, may boost the odds that parents would feel satisfied and efficacious in their parenting role by offering structure, content, and meaning to the time and space involved in parenting. Therefore, as parents invest more time and effort in

creating and maintaining special times together as a family, they may feel more competent in their role as a parent, thus leading to less psychological distress (i.e., anxious and depressive symptoms) and better QoL. This may be particularly relevant for parents of children with epilepsy who are faced with a host of non-normative challenges that require attention on the illness and can threaten the family's unity, stability, and identity.

Adopting a family systems framework (Kazak, 1989) that stresses interdependence between different levels in the family system, the present study aimed at: examining the associations between family ritual meaning and parental adaptation outcomes (anxious and depressive symptoms and QoL) in the specific context of families with children with epilepsy and testing the role of two dimensions of parental competence (satisfaction and efficacy) as possible avenues through which family rituals were linked to adaptation outcomes. We hypothesized that greater family ritual meaning would be associated with lower levels of psychological distress (anxious and depressive symptoms) and better QoL, both directly and indirectly, by fostering satisfaction and efficacy in the parental role.

Previous research in the field of pediatric epilepsy showed that parents from families facing higher economic challenges (Shore et al., 2002), whose children are older (Moreira et al., 2013) and/or with more severe epilepsies (Reilly et al., 2015) are at increased risk for psychosocial distress and lower QoL. Given our interest in examining a model that would apply to parents of children with different levels of epilepsy severity (low vs. moderate/high), child age groups (children vs. adolescents), and socioeconomic status of the family (low vs. medium/high), we further tested if the proposed model was valid across each of the three subgroups.

Methods

Participants

Our sample comprised two hundred parents of children with epilepsy. The majority were mothers (85%), married/living together with a partner (83.5%), and 29 to 58 years old ($M=41.6$; $SD=5.8$). According to the classification system by Simões (1994) for the Portuguese context, 56.0% of participating families were of low socioeconomic status (SES, 56.0%); 40.5% were of medium SES, and 3.5% were of high SES. Their children with epilepsy were mostly boys (52.5%) aged between 8 and 19 years old ($M=12$, $SD=3.4$) who had been formally diagnosed for an average time of 53 months. According to clinical assessments made by pediatric neurologists, 53.5% of the children presented epilepsy of low severity, and 46.5% of the children presented epilepsy of moderate/high severity. Children were mostly on anti-epileptic drugs (87.5%, $n=175$) and were seizure-free for the last twelve months (64.5%, $n=129$).

Procedures

A consecutive sampling approach was adopted at the outpatient services of three Portuguese public hospitals between July 2012 and September 2014. The eligibility criteria included the following: (1) parent of a child with a clinical diagnosis of epilepsy for at least 6 months as established by a pediatric neurologist; (2) child aged 8 years old and above; (3) absence of major developmental delays in the child; and (4) parent who is referred to as the primary care provider for health-related issues. The Board of Directors of the participating institutions approved the present study. Potential participants were invited to participate in the study during the children's scheduled routine neurology appointment. The main researcher explained the study's aims and procedures to the families. Written informed consent was

obtained from all parents who expressed interest in participating. Parents completed the questionnaires in a room designated for research purposes, and assistance was provided upon participants' request. The pediatric neurologists assessed epilepsy clinical variables by filling out a medical chart at the end of the child's medical appointment.

Measures

Family Ritual Meaning

Family ritual meaning was assessed with the Portuguese version of the Family Ritual Questionnaire (FRQ, Fiese & Kline, 1993, Portuguese version by: Crespo, Davide, Costa & Fletcher, 2008). Parents answered 10 forced-choice items covering family ritual meaning in two settings: dinnertime and annual celebrations (five items for each). Example items were "In some families, dinnertime is just for getting food/In other families, dinnertime is more than just a meal; it has special meaning"; "In some families, there are strong feelings at birthdays and other celebrations/In other families, annual celebrations are more casual; people are not emotionally involved." Participants first chose the description that best represented their family and then decided whether that description was entirely true or partially true. The four possible answers were scored using a 4-point scale. A total score was computed from the average of the item scores. Higher scores indicated stronger perceptions of family ritual meaning. The Cronbach's alpha for the current sample was .73.

Parenting Competence

Parenting competence was measured with the Portuguese version of the Parenting Sense of Competence (PSOC, Gibaud-Wallston & Wandersman 1978, cited in Johnston & Mash, 1989, Portuguese version by: Seabra-Santos et al., 2015). The PSOC focuses broadly on parents' satisfaction with parenting and their self-efficacy in the parenting role and comprises two

subscales. The satisfaction subscale includes nine items that assess the affective dimension of parenting, which is the degree to which the parent feels motivated and comfortable in that role (e.g., “Being a parent makes me tense and anxious”). The efficacy subscale includes seven items that assess the instrumental dimension of parenting, which is the extent to which parents believe they are capable of performing the parenting role well (e.g., “Being a parent is manageable, and any problems are easily solved”). Each item is answered on a 5-point scale ranging from 1 (*I strongly disagree*) to 5 (*I strongly agree*), with higher scores representing higher levels of parenting satisfaction and/or efficacy. Parents were asked to consider their general experiences of parenting in relation to the target child with epilepsy. The PSOC has demonstrated adequate psychometric proprieties (T. L. Jones & Prinz, 2005). In the current study, the Cronbach’s alpha values for the efficacy and satisfaction subscales were .75 and .74, respectively.

Adaptation Outcomes

Parents’ anxious and depressive symptoms

The symptoms of anxiety and depression were evaluated using the Portuguese version of the Hospital Anxiety and Depression Scale (HADS, Zigmond & Snaith, 1983; Portuguese version by: Pais-Ribeiro et al., 2007), consisting of two subscales: anxiety ($n=7$ items; e.g., “I am restless and cannot keep still”) and depression ($n=7$ items; e.g., “I feel as though I am slowed down”). Each item is answered on a 4-point scale ranging from 0 (*not at all/only occasionally*) to 3 (*most of the time/a great deal of the time*), with higher scores representing higher levels of symptoms. A score of 8-10 is suggestive of the presence of a respective state, and a score of 11 or higher indicates the possible presence (or “caseness”) of a mood disorder. In the present sample, the Cronbach’s alpha coefficient values obtained for both anxiety and depression subscales were .83 and .77, respectively.

Parents' quality of life (QoL)

Parents' QoL was assessed with the Portuguese version of the EUROHIS-QOL (Schmidt, Muhlan, & Power, 2006, Portuguese version by Pereira, Melo, Gameiro & Canavarro, 2011). This 8-item measure (e.g., "How satisfied are you with your health") is a brief indicator of overall QoL and includes four domains (social, physical, psychological and environmental), which are represented by 2 items each. These items are answered on a 5-point scale ranging from 1 (*not at all/very dissatisfied*) to 5 (*completely/very satisfied*). Higher scores indicate better QoL. In the current sample, the Cronbach's alpha coefficient for this scale was .83.

Clinical characteristics of epilepsy

Child neurologists reported measures on epilepsy variables (e.g., time since diagnosis, seizure frequency, medication). The severity of epilepsy was assessed with the neurologist-reported Global Assessment of Severity of Epilepsy (GASE) (Speechley et al., 2008), which asks clinicians to rate their patients' overall epilepsy severity since their last visit using a 7-point scale based on their patients' current clinical situation and its impact on their daily life activities. Higher scores indicate more severe epilepsy. The GASE has demonstrated adequate validity and reliability (Speechley et al., 2008).

Sociodemographic information

The sociodemographic information was reported by the parent and included parents' and children's age and sex, parents' marital status, employment status, and education level. The SES of each family was classified into three levels (low, medium, high) according to an accepted classification system for Portugal based on the parents' jobs and educational level (Simões, 1994). Most of our sample was comprised of families' belonging to the low SES, which is associated with lesser-qualified employees in construction or manufacturing, with less than a 9th

grade education.

Data analyses

Preliminary descriptive statistics and correlations were computed for all study variables using the Statistical Package for the Social Sciences v. 21.0 (SPSS Inc., Chicago, IL, USA). Given the limited number of households belonging to the highest SES and the lack of homogenous distribution of the sample across the seven levels of epilepsy severity, both SES and epilepsy severity, respectively, were dichotomized into two levels: low ($n=112$, 56%) and medium/high ($n=88$, 44%) SES; and low (1-2; $n=107$, 53.6%) and moderate/high (3-7; $n=93$, 46.5%) epilepsy severity.

Using Structural Equation Modeling (SEM) with Analysis of Product Moments software (AMOS, v. 21.0), we built a path model to test the direct and indirect associations between family ritual meaning and parents' adaptation outcomes (anxious and depressive symptoms and QoL), via parental satisfaction and efficacy. Maximum-likelihood estimation procedures were used. Following Kline (2011), a model-generation application of SEM was adopted: after examining the results of the fully proposed model, we trimmed the model by removing non-significant paths using $p < .05$ as the criterion. The model's goodness of fit was assessed using the reference values for the main fit indices: non-significant χ^2 statistic, Comparative Fit Index (CFI) $\geq .95$, Root Mean Square Error of Approximation (RMSEA) and Standardized Mean Square Residuals (SRMR) $\leq .06$ (Hu & Bentler, 1999). The significance of the indirect paths linking family ritual meaning and the three parental adaptation outcomes via each of the two dimension of parental competence (efficacy and satisfaction) were tested via bootstrapping resampling procedures with 5,000 random samples (95% bias-corrected (BC) confidence interval) (Williams & Mackinnon, 2008). When indirect paths reached significance, a comparison of the strength of

the each pair of indirect paths was performed with focus on estimate-based analyses (Amos Development Team, 2010). In order to examine the invariance of the hypothesized model across epilepsy severity groups (low vs. moderate/high); SES (low vs. medium/high); and age groups (children vs. adolescents), three separate multi-group analyses were performed. In each case, the unconstrained model was compared to the model in which structural weights were constrained to be equal using the χ^2 difference method (Byrne, 2010). A model was considered invariant across the two groups if the χ^2 difference was non-significant.

Results

Descriptive statistics and correlations

Table 1 presents the descriptive statistics and the matrix of inter-correlations among study variables. Regarding associations among study variables, family ritual meaning was positively associated with parents' satisfaction ($r=.33$) and efficacy ($r=.16$), negatively associated with parents' anxious ($r=-.31$) and depressive ($r=-.31$) symptoms and positively associated with QoL ($r=.45$). Parents' age was negatively associated with parental efficacy ($r=-.22$), but not with parental satisfaction. A negative association was found between severity of epilepsy and parental satisfaction and efficacy. Additionally, SES was negatively associated with parents' anxious and depressive symptoms and positively associated with family ritual meaning and QoL. The percentage of parents scoring in the clinically significant range for depression was 7.5% ($n=15$), and for anxiety, the percentage was 24.5% ($n=49$).

(TABLE 1 ABOUT HERE)

Path model testing the direct and indirect links between family ritual meaning and parents' adaptation outcomes

First, we tested a full model that assessed all the direct and indirect paths linking family ritual meaning, and the parents' anxious and depressive symptoms and QoL, via the two parental competence variables (satisfaction and efficacy). Next, given that the path parental efficacy → anxious symptoms revealed to be non-significant ($p=.99$), it was removed from subsequent analysis. The final trimmed model showed good fit indices: $\chi^2(1)=0.00$, $p=.97$; CFI=1.00; RMSEA=.00 (BC 95% CI=.00/.00, $p=.98$); and SRMR=.001, as depicted in Figure 1. The final model accounted for a significant percentage of the variability of the parents' anxious (24%) and depressive symptoms (22%) and QoL (29%). The three direct paths linking ritual meaning and each of the parental outcome variables (anxious and depressive symptoms, and QoL) were all significant. All tested indirect paths were significant. Family ritual meaning was associated with anxious symptoms via parents' satisfaction (BC 95% CI, [-.25, -.08], $p<.001$); with depressive symptoms via both parents' satisfaction (BC 95% CI, [-.16, -.05], $p<.001$) and efficacy (BC 95% CI, [-.06, -.01], $p=.02$); and with QoL via parents' satisfaction (BC 95% CI, [.05, .15], $p<.001$) and efficacy (BC 95% CI, [.01, .06], $p=.021$). When comparing the strength of the indirect paths, results showed that the indirect path from family ritual meaning to depressive symptoms via parental satisfaction was stronger than the path via parental efficacy (BC 95% CI, [-.14, -.02], $p<.018$). No significant differences in strength were found between the two indirect paths (via satisfaction and efficacy) linking family ritual meaning and QoL (BC 95% CI, [.01, .13], $p=.07$).

Multi-group analyses confirmed that this overall pattern of associations among family ritual meaning and parent's adaptation outcomes, via two dimensions of parental competence

(parental satisfaction and parental efficacy), was valid across epilepsy severity groups $\Delta\chi^2(4)=6.008, p=.199$; SES levels $\Delta\chi^2(10)=11.56, p=.316$; and age groups $\Delta\chi^2(10)=5.834, p=.829$.

(TABLE 2 AND FIGURE 1 ABOUT HERE)

Discussion

The present study expands past research on the links between whole-family processes and parents' individual adaptation in the context of pediatric chronic conditions. Two main conclusions may be derived from our findings. First, family ritual meaning was directly associated with parents' positive outcomes. When parents reported more family ritual meaning, they also considered themselves more satisfied and efficacious in their parental role and reported lower levels of anxious and depressive symptoms and higher QoL. Second, our key hypothesis was partially supported. Family ritual meaning was indirectly related to depressive symptoms and QoL via both parental satisfaction and efficacy. Regarding the links between family ritual meaning and anxious symptoms, evidence was found for indirect associations via parental satisfaction, but not via parental efficacy.

Links among family ritual meaning, parental competence and adaptation

To our knowledge, this was the first study conducted with parents of children with epilepsy to explore the associations between the meaning parents ascribed to family rituals and indicators of parental adaptation. Results showed that parents who scored higher in family ritual meaning presented less anxious and depressive symptoms and better QoL. These results are in line with past research in the broad context of pediatric chronic conditions, which shows that greater family ritual meaning is associated with lower levels of anxiety in parents of children

with chronic health conditions, namely asthma and cancer (e.g. Markson & Fiese, 2000; Santos et al., 2015). Moreover, previous studies showed the relevance of positive family factors, namely, satisfaction with family relationships, family resources and mastery and the importance of families engaging in regular whole-family activities, for individual family members' adaptation (Austin et al., 2010; Ferro et al., 2011; Shore et al., 2002). Differences in emotional investment in family rituals were associated with variations in satisfaction with family relationships, more precisely family cohesion (Santos et al., 2015). Results suggest that by engaging in more frequent and meaningful interactions, such as gathering for dinner on a regular basis and celebrating special occasions like religious holidays, family members' birthdays, and anniversaries of important dates for the family, parents may prompt a stronger sense of commitment and closeness between family members. Within this relational context, strains and uncertainties in the family are more likely to be shared, which can help parents deal with stress and consequently prevent or reduce anxious and depressive symptoms and improve their QoL (Crespo et al., 2013; Shore et al., 2002). In fact, regardless of idiosyncrasies, for many contemporary families across different cultures, such as Portuguese or US families, dinnertime may be the only consistent time when all family members gather together (Crespo et al, 2013). It is, thus, a privileged occasion for updates about the day, discussions about family matters and coordination of schedules and plans, providing an opportunity for parents to meet the emotional and informational needs of their child regarding life in general and eventually, epilepsy-related issues (Austin et al., 2014; Dickstein, 2002; McNelis et al., 2007).

Moreover, the positive relationship between family ritual meaning and the psychological health and QoL of the parents may also be related to the fact that family rituals may offer one avenue to promote a sense of control and constancy in the family (Wolin & Bennett, 1984, p.9).

This fuels family life with moments where everyone knows what to expect and helps families put the disease in its place (Gonzalez, Steinglass, & Reiss, 1989). This may be particularly resourceful for families of children with epilepsy who must deal with unpredictability in the course and consequences of the medical condition.

Regarding the two dimensions of parental competence, satisfaction and efficacy, significant associations were found with parents' adaptation outcomes. This pattern of results is supported by previous studies conducted with community samples (Cutrona & Troutman, 1986; Porter & Hui-Chin, 2003) and samples of parents of children with chronic conditions, namely, diabetes (Streisand, Swift, Wickmark, Chen, & Holmes, 2005). In pediatric epilepsy, a significant negative association between parental competence and parents' depressive symptoms was reported by Rodenburg and colleagues (2006).

The positive associations between family ritual meaning and the two dimensions of parental competence (satisfaction and efficacy) are also novel findings. Past research showed that predictable family activities represent an important correlate of positive self-assessments in the area of parenting skills (Brody & Flor, 1997; Fiese et al., 2002; Sprunger, Boyce, & Gaines, 1985). The current results add to this body of research by suggesting that family rituals provide settings that are rich in family involvement and affective exchanges (Fiese et al., 2002) and that the meaning that families ascribe to creating and maintaining special moments together such as family dinnertime or celebrations is associated with a sense of satisfaction in the parenting role. Parents with stronger convictions regarding the positive value of whole-family activities and events and positive expectations concerning family gatherings as satisfying and meaningful occasions tend to also feel more rewarded and motivated, upholding a higher sense of personal fulfillment in their role as parents. Another possible explanation is that by prioritizing certain

family interactions and taking the initiative to fulfill those interactions in a way that provides structure, predictability and meaning to family life in the form of clear rules and expectations embedded in a caring and supportive family environment, parents may facilitate the conditions to meet their child's needs and foster their harmonious development, which is linked to parental efficacy and satisfaction. Additionally, parents who engage in more frequent family rituals, are more likely to become comfortable with the tasks and gain a sense of accomplishment, which then leads to greater ease in carrying out activities and a greater likelihood that they will be sustained over time (Brody & Flor, 1997; Porter & Hui-Chin, 2003).

Family ritual meaning and parents' adaptation: the indirect links via parental competence

Our findings generally supported the hypothesized direct and indirect associations between family ritual meaning and parental adaptation outcomes via two dimensions of parental competence: parental satisfaction and parental efficacy. Of the six examined indirect paths, only the path linking family ritual meaning, parental efficacy, and anxious symptoms did not hold in the final path model. A comparison of the strength of the indirect paths linking family ritual meaning and two of the parental outcomes (QoL and depression) only showed one difference. The indirect path from family ritual meaning to depressive symptoms via parental satisfaction was stronger than the path via parental efficacy. This result suggests that family rituals may promote better adaptation by both increasing satisfaction with the parenting role and by providing opportunities for parents to learn and perform parenting skills in an efficacious way. Family ritual meaning reflects how family members feel about being together at particular family gatherings (Fiese & Kline, 1993), and can be regarded as a barometer of family affective life and organization. Although everyone in the family participates in rituals, parents serve as the

executive subsystem (Minuchin, 1974) and are most responsible for organizing and carrying out these events. Thus, when they are successful, they are more likely to feel satisfied and consider themselves to be doing a “good job” as parents. Specifically, in relation to depressive symptoms, rituals may be especially important due to the positive feelings and satisfaction they promote compared to the sense of efficacy.

The tested associations did not differ by children’s epilepsy severity, family SES, or children’s age group. Although more severe epilepsies may carry along increased demands over parents, namely regarding supervision, activity restrictions, dealing with stigma (Austin, Dunn, & Huster, 2000; Rodenburg et al., 2013), this does not seem to compromise the associations between the meaning ascribed to family rituals and parental adaptation outcomes. Similarly, data suggests that even in the presence of increased economic challenges, parents from families with low SES who put a bigger effort in promoting and preserving positive family relationships, tend also to feel more satisfied and confident and are also those who exhibit lower levels of anxious and depressive symptomatology and higher QoL. This finding is particularly relevant because Portugal is overcoming an economic crisis, which carried with it increased rates of unemployment and low incomes. In fact, most of our sample (57.3%) was comprised of families belonging to the low SES status, a percentage representative of the families who seek medical treatment care in the Portuguese national health system. Finally, with regard to children’s ages, and despite the age-appropriate differences between children and adolescents, the role of rituals and parental competence on parents’ adaptation proved to be equally valid for both groups of parents.

Limitations

The findings of this study must be interpreted in the context of some limitations. Assigning greater meaning to family rituals may be important ground on which to build a stronger sense of parental competence, but the hypothesis that competent parents may be more effective in creating family rituals is also a plausible one. In fact, in line with what Fiese and Spagnola (2007) have already reasoned, family ritual meaning and parental competence are probably bidirectional in the influence they exert on one another. Given the cross-sectional research design it is not possible to establish causality among the study variables. Only future longitudinal studies can disentangle the problem of the direction of the associations between family rituals and parental competence. Moreover, children and parents are linked in a transactional way throughout the children's development (Fiese & Sameroff, 1989); children who are more responsive to rituals may increase the likelihood that their parents would feel competent. Additionally, given that rituals are but one of many aspects of family life, it is possible that our findings can be explained by a third, more general and overarching construct, such as family competence (Crespo et al., 2011). Furthermore, although contemporary families in Western cultures similarly invest in daily rituals like gathering for dinner and for annual celebrations, it is possible that the ways in which family rituals are associated with individual and family outcomes vary according to cultural context. Future cross-cultural studies will be able to shed light on this question; thus, so far, caution must be placed over the generalization of the present results to other cultures. Also, the biasing effects of relying on a single informant and on a single method of data collection calls for a recognition that, to some extent, the results may be due to shared method variance. Future studies should consider multi-informant assessments, since family experiences may be perceived by family members in different ways. Relatedly,

given that most parents in our study were mothers; and the fact that sex differences in family ritual meaning and determinants of parental competence were found in previous research (Fiese & Kline, 1993; T. L. Jones & Prinz, 2005), caution must be used when generalizing results to both parents. Additionally, despite the multisite sampling process that combined families from three public hospitals of Portugal and the fact that our sample's major clinical characteristics (e.g., epilepsy severity, seizure control) were comparable to those reported in other international studies with children with epilepsy (e.g., Speechley et al., 2008), the convenience sampling method used in the data collection may have prevented representativeness of all families of a child with epilepsy, potentially limiting external validity. In this study, we did not include parents of children with severe, nonverbal cognitive problems who represent approximately one-third of families in the context of pediatric epilepsy (Shinnar & Pellock, 2002). Moreover, when performing the multigroup analysis to test the invariance of the indirect effects, the sample size of the groups under comparison dropped significantly, which may raise concerns regarding the adequacy of the analysis. The absence of disease-specific measures, namely at the level of parental efficacy in epilepsy management, can be regarded as a possible limitation of our study.

Implications for practice

Despite the aforementioned limitations, the present study builds upon and expands the current literature, and provides suggestions for future interventions. The relevance of adopting a family-centered model of care, and of routinely directing assessment and intervention efforts in the area of family functioning and parenting, especially among those parents experiencing higher psychological distress and poorer QoL, was highlighted in the present results.

Family rituals address the family as a whole, thus they present an advantageous route for intervention given the consensus that pediatric epilepsy is best understood and treated within the

family context (Austin, 1996). Past studies showed that certain families find it hard to perform flexible and meaningful family rituals after being confronted with serious medical conditions, and that family rituals may be interrupted or put aside (e.g., Crespo et al., 2013; Fiese et al., 2002). Our results suggest, to the extent possible, helping families with a child with epilepsy recognize, and/or develop meaningful family rituals, may help them reduce anxious and depressive symptoms and promote parents' QoL, by improving their parental sense of satisfaction and efficacy. Family rituals have the advantage of being easily recognized and talked by family members, and can be intentionally created or transformed to meet specific needs in the context of chronic condition management (e.g., daily medication intake requirements, behavior supervision). Discussing with families the meaning they ascribe to specific family rituals and identifying changes in family rituals due to the inscription of the medical condition in the family life, can be considered opportunities to address the issue of parental competence. In fact, family rituals may be regarded as privileged occasions for parents to both monitor and provide emotional support to their children, strengthening their parental role. Moreover, interventions targeting family rituals can improve family cohesion and communication, and propel a positive ripple effect at the parental and individual levels. Carrying out family rituals can also provide families with a sense of normalcy and continuity amid the disruption of family while adapting to the non-normative circumstances of living with a pediatric chronic condition like epilepsy (Crespo et al., 2013; Spagnola & Fiese, 2007). Finally, the parents, known as the “architects of the family” (Satir, 1983) also benefit when the family engages in rituals and is high on cohesion and they perceive themselves to be competent parents.

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Table 1. Descriptive statistics, matrix of intercorrelations among study variables and Cronbach's alpha values

	1	2	3	4	5	6	7	8	9	10	Range	<i>M (SD)</i>	Cronbach's alphas
1.Ritual meaning	1	.33**	.16*	-.32**	-.31**	.45**	-.001	.02	-.02	.20**	1-4	3.46 (.47)	.73
2.Parental satisfaction		1	.37**	-.45**	-.40**	.40**	-.03	-.04	-.14*	.11	1-5	3.61 (.56)	.74
3.Parental efficacy			1	-.17*	-.28**	.29**	-.22**	-.05	-.12+	-.04	1-5	3.70 (.55)	.75
4.Anxious symptoms				1	.64**	-.65**	-.06	.10	.08	-.16*	0-3	1.22 (.57)	.83
5.Depressive symptoms					1	-.68**	.043	.035	.11	-.19**	0-3	.70 (.50)	.77
6.QoL ¹						1	.013	-.02	-.08	.23**	1-5	3.62 (.55)	.83
7.Parent's Age							1	.36**	.049	.094	29-58	41.6 (5.8)	-
8.Child's age								1	.24**	-.07	8-20	12 (3.2)	-
9.Severity of epilepsy ²									1	-.04	1-7	2.28 (1.14)	-
10.SES ³										1	1-3	-	-

*** $p < .001$ ** $p < .01$; * $p < .05$; + $p < .1$

Note. ¹Quality of Life; ²Low severity of epilepsy is coded as 0; Moderate/high severity of epilepsy is coded as 1; ³ Low SES is coded as 0; Medium/high SES is coded as 1

Table 2. Unstandardized coefficients and standard errors (SE) for all parameters and bias-corrected (BC) bootstrap confidence intervals (CI) for indirect effects of the final mediation model

Estimated Parameters	Unstandardized coefficients (SE)	p value	BC bootstrap CI for indirect effects
Direct effects			
Ritual Meaning→Parental Satisfaction	.39 (.08)	<.001	
Ritual Meaning→Parental Efficacy	.17 (.08)	.023	
Ritual Meaning→Anxious symptoms	-.22 (.08)	.005	
Ritual Meaning→Depressive symptoms	-.20 (.07)	.004	
Ritual Meaning→QoL	.40 (.07)	<.001	
Parental Satisfaction→Anxious symptoms	-.40 (.07)	<.001	
Parental Satisfaction→Depressive symptoms	-.25 (.06)	<.001	
Parental Satisfaction→QoL	.23 (.07)	<.001	
Parental Efficacy→Depressive symptoms	-.15 (.06)	.008	
Parental Efficacy→QoL	.17 (.06)	.005	
Covariances			
e(Satisfaction)↔ e(Efficacy)	.09 (.02)	<.001	
e(Anxious symptoms)↔ e(Depressive symptoms)	.12 (.02)	<.001	
e(Anxious symptoms)↔ e(QoL)	-.13 (.02)	<.001	
e(Depressive symptoms)↔ e(QoL)	-.12 (.02)	<.001	
Indirect effects			
Ritual Meaning→Anxious symptoms (via Satisfaction)	-.15 (.04)	<.001	[-.25, -.08]
Ritual Meaning→Depressive symptoms (via Satisfaction)	-.10 (.031)	<.001	[-.16, -.05]
Ritual Meaning→Depressive symptoms (via Efficacy)	-.025 (.015)	.021	[-.06, -.01]
Ritual Meaning→QoL (via Satisfaction)	.09 (.03)	<.001	[.05, .15]
Ritual Meaning→QoL (via Efficacy)	.03 (.02)	.021	[.01, .06]
Differences of strength of indirect effects			
Ritual Meaning→Depressive symptoms (via Satisfaction) ≠ Ritual Meaning→Depressive symptoms (via Efficacy)	-.074 (.035)	.018	[-.137, -.024]
Ritual Meaning→QoL (via Satisfaction) ≠ Ritual Meaning→QoL (via Efficacy)	.060 (.036)	.069	[.006, .125]

Figure 1. Mediation model (Trimmed, non-significant paths are not represented).

Note. Fit indices for the model are as follows: $\chi^2(1)=0.00$, $p=.969$; RMSEA=.00, $p=.98$; CFI=1.00;

SRMR=.001. Figures inside arrows represent standardized coefficients; italicized figures represent

Pearson's correlation coefficients. For simplicity, covariances are not depicted; *** $p<.001$; ** $p<.01$;

* $p<.05$.