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ORIGINAL ARTICLE

Defining Resilience in Families Living with Neurodevelopmental Disorder: A Preliminary Examination of Walsh's Framework

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Abstract Family interaction and support play a critical role in raising a child with a neurodevelopmental disorder (NDD) of brain function and growth. Although the negative effects of NDD on the family, including parental distress, have been widely studied less is known about the structure of resilience in these families, or their capacity to cope. The current study attempts to quantitatively define this complex construct, with reference to Walsh's (2003) Family Resilience Framework. Results from an online survey of 155 female caregivers of children diagnosed with an autism spectrum disorder, intellectual disability, specific learning or communication difficulty highlighted the individual and combined contribution of three family processes—belief systems, organisational patterns and communication skills—to resilience. Regression analysis revealed that parental distress, directly associated with problematic communication patterns, was a significant ($p < .01$) impediment to family resilience. Facilitators of resilience included positive belief systems (i.e. positive perceptions of a child's disability and general outlook) along with a parental organisational style characterised by high nurturing. However, the combined contribution of these variables accounted for only 35 % of the variance in resilience scores, suggesting that further work is needed to operationalise the resilience process. Large-scale and longitudinal data will also help to determine resilience trajectories over time and in different family contexts.

Keywords Families · Resilience · Distress · Autism · Disability · Neurodevelopmental

Traditionally there has been an assumption in the disability literature that the challenges of raising a child with a neurodevelopmental disorder (NDD) such as autism, attention-

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deficit/hyperactivity disorder or an intellectual disability, inevitably leads to psychological distress and, ultimately, family dysfunction (Green 2007; Stainton and Besser 1998). However, recent research suggests that the pathway between a child's challenging behaviour and family functioning is conditional upon a family's skills, strengths and resources to positively overcome a hardship, strengthened and resourceful: their resilience (Peer and Hillman 2014; Rolland and Walsh 2006; Walsh 2003). The concept of family resilience holds promise in clinical practice and research – by characterising the factors that are instrumental in shaping family resilience we can identify the best ways to support them. However the conceptualisation and assessment of family resilience as a construct remains unclear. This study attempts to quantify this complex construct in a cross-sectional sample of parents and grandparents caring for a child diagnosed with a NDD, with reference to Walsh's Family Resilience Framework (2003).

A Model of Family Resilience

According to Walsh (2003), efficient family processes determine a family's ability to overcome a life crisis. These processes involve three over-arching domains of family functioning: belief systems (including spirituality, the importance of making meaning of adversity and maintaining a positive outlook); organisational patterns characterised by nurturing interpersonal relationships, effective social networks and economic resources; and, finally, collaborative communication and problem-solving. It follows that targeting each of these domains can reduce stress among vulnerable families.

Family Belief Systems

Religious practices and faith in a higher power can be a source of comfort and hope in times of crisis (Meadan et al. 2010). The ability to acknowledge the positive contribution of a child's disability can also help to normalise and contextualise a crisis (Walsh 2003). Similarly, an optimistic outlook can help families overcome the stressors associated with caregiving—including navigating community support services (Minnes et al. 2015). Indeed, Thompson et al. (2012) found that positive parental perceptions in relation to disability mediated the relationship between parental stress and overall family adjustment. However, these findings relied on young families engaged in an early intervention service, potentially limiting the generalizability to other families affected by NDD that may not have access to needed supports (Thompson et al. 2012).

Organisational Patterns

Parenting behaviours, expectations and strategies are essential to family organisation and functioning. A mixed parenting style, where parents employ discipline but are also flexible and nurturing, appears to provide the best outcomes for both children and families (Garcia and Garcia 2009; Torres Fernandez et al. 2013; Walsh 2003). Indeed, Woolfson and Grant (2006) found that authoritarian parents who relied on discipline and boundary setting to manage a child with NDD reported greater distress—perhaps providing an explanation for why parents adopted less restrictive parenting practices over time. Conversely, Aran et al. (2007) found that parents who endorsed a permissive, nurturing style when caring for their child with cerebral palsy had improved mental health.

Efficient community connections are also vital to family resilience (Walsh 2003). Developing and maintaining strong social networks outside of the immediate family can negate stress by alleviating the physical and emotional burden often associated with caregiving responsibilities (Dale et al. 2006; Peer and Hillman 2014). There are, however, discrepancies in this literature with evidence that support availability is unrelated to psychological adaptation (Greeff and Nolting 2013). This finding, in part, may be due to social determinants, with financial hardship or a parents' inability to engage in employment, resulting in the loss of social networks and support (McConnell et al. 2014).

Communication Patterns

Walsh (2003) acknowledges the role of parental distress in overall family functioning. When experiencing a crisis, families who repress negative affect may experience behavioural disturbances and withdrawal from one another, potentially negating communication and problem solving systems within the family unit (Patterson 2002). At the same time, heightened levels of depression, anxiety and stress can impede a parent's ability to develop positive relationships with their child, particularly during the child's early years (Jellet et al. 2015; Mitchell and Hauser-Cram 2010).

Current Study

It follows that research on family functioning and its impact on the quality of family life for those affected by NDD is important when examining a multidimensional construct such as resilience. This study explores, and attempts to quantitatively define, family resilience in accordance with Walsh's (2003) framework. The specific aims were to:

- Characterise current resilience in families raising a child with a NDD, including potential differences reported between socio-demographic subgroups.
- Evaluate the structure of family resilience in a caregiver sample.
- Examine predictors of resilience in these families including the interrelationships between family processes (i.e. family belief systems, organisational and communication patterns) and child behaviour severity. It was anticipated that family resilience would be enhanced by parents' positive perceptions of their child's disability in addition to a nurturing parenting style. In comparison, parental distress would impede overall family resilience.

Method

Participants

Participants were required to be 18 years or older and a primary caregiver (i.e. biological, adoptive, step or grandparent), for a child (aged < 18 years) diagnosed with a NDD. As per the DSM-5 criteria, this included any disorder with onset in the developmental period and associated deficits in adaptive functioning (APA 2013).

The final sample comprised of 155 female caregivers, after removing the data for 34 respondents due to incomplete survey responses (i.e. < 80 % of survey completed) and ineligibility (i.e. child > 18 years of age). The data from six males was also removed as this only comprised 3 % of the original sample. Most respondents identified themselves as Caucasian (*n* =139, 90 %). The majority held secondary (*n* = 22, 14 %), tertiary (*n* = 62, 40 %) or trade (*n* =56, 36 %) qualifications and were in paid employment (i.e. full, part or casual work; *n* = 92, 59 %), working 26 hours per week (SD =11.4, range: 4–60 hours). Among those not currently working (i.e. unemployed, pension; *n* = 50), 8 % (*n* = 13) were involved in vocational activities including further study and volunteering. A third (*n* = 50) were members of a support group, including social media pages (i.e. Facebook), community advocacy and support services.

Diagnosed children were primarily male (*n* = 122, 79 %), with an average age of 9 (SD = 3.7, range: 2–17). Mean age at diagnosis was 5 years (SD = 3.1, range: 6 months–18 years), although this varied depending on the severity and range of developmental deficits. Autism spectrum disorder was the most common primary disorder (*n* = 128, 83 %), followed by attention deficit hyperactivity disorder (*n* = 48, 31 %), learning disorder (*n* = 19, 12 %) intellectual disability (*n* = 14, 9 %), and/or specific communication difficulties (*n* = 9, 6 %). For 36 % (*n* = 56) of children these conditions co-occurred. Caregivers frequently identified psychological or medical comorbidities in their child, namely an anxiety or mood disorder (*n* = 16, 10 %), asthma (*n* = 9, 6 %) and/or epilepsy (5 %, *n* =8). The complex physical, emotional and behavioral needs of this group was further reflected in their treatment, with 71 % (*n* = 110) receiving adjunct speech therapy (*n* = 63, 41 %), occupational therapy (*n* =60, 39 %), psychology (*n* = 29, 19 %), and/or applied behavior analysis (*n* = 18, 12 %). Children with NDD resided in dual (*n* = 119, 77 %) or single parent households (*n* = 36, 23 %), with 77 % (*n* = 120) having 1 or more siblings (range: 1–4 siblings): 6 % (*n* = 10) being siblings with a developmental disorder.

Measures

In addition to providing the aforementioned sociodemographic data, respondents completed five standardized psychological measures, as follows.

Family Resilience Assessment Scale (FRAS; Sixbey 2005) The 66-item FRAS contains 54 items which map onto Walsh's (2003) subdomains of family resilience: family spirituality, maintenance of a positive outlook and making meaning of adversity (all related to the theoretical construct 'belief systems'); family connectedness and resources (both relating to 'organisational patterns'), and a single subscale which broadly focuses on family communication and problem-solving skills. Respondents rate their agreement with statements regarding their family's behaviour on a 1 (*strongly disagree*) to 4 (*strongly agree)* Likert scale, with four questions being reverse scored. Individual item scores can be summed to produce subscale scores in addition to an overall resilience score. In this study, the total FRAS had an alpha of .92, with internal reliability for five of the six subscales being acceptable (α range: .60 to .94). The low

Cronbach alpha for ‘Family Connectedness’ (α = .42) might be explained by the reverse-scoring required for 4 of the 6 subscale items (Sixbey 2005; Weitjers et al. 2013).

Developmental Behavioural Checklist-Short Form (DBC-P24; Taffe et al. 2007) The 24-item DBC provides an index of child behavioural and emotional disturbance for those diagnosed with NDD (McConnell et al. 2014) and, as such, provides a context for an examination of family resilience. Caregivers rate their agreement with behavioural statements on a Likert scale from 0 (*not true as far as you know*) to 2 (*very true or often true*), with items summed to provide a total behaviour problem score: higher scores indicate more severe psychopathology. Consistent with available psychometric data (Dekker et al. 2002), the Cronbach alpha for the DBC-P24 was a reliable .86 in this study.

Positive Contributions Scale, Kansas Inventory of Parental Perceptions (PCQ, Behr et al. 1992). The 50-item PCQ was included to further validate the role of positive parental perceptions in family resilience. The PCQ examines the child’s impact on the parent (e.g. the child has helped the parent expand their social network) and wider family (e.g. the child has helped others become more understanding about disability), in addition to the child’s positive traits (e.g. kind and loving). Respondents rate their agreement with statements on a Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*). Subscale scores can be summed to provide a total perception score: higher scores suggest more positive perceptions. An internal reliability of .80 has been reported for the total PCQ (Behr et al. 1992). The Cronbach alpha for the total PCQ in this study was .93.

Modified Child Rearing Practises Report (CRPR: Rickel and Biasatti 1982) This 40-item questionnaire, derived from the 91-item Q-sort CRPR (Block 1965), assesses two dimensions of parenting style, nurturance (i.e. endorsement of flexible child-rearing attitudes and practices) and restrictiveness (i.e. a focus on control-related practices, including how a child should behave and feel). Each style therefore represents different degrees to which families adopt flexible organisational patterns (Walsh 2003). The CRPR has been validated using children with developmental disabilities (Woolfson and Grant 2006). Respondents rate their agreement with statements regarding their parenting style on a Likert scale from 1 (*not at all descriptive of me*) to 6 (*highly descriptive of me*). In this study, high internal consistency was noted for the CRPR (restrictiveness α = .85, nurturance α = .92).

Depression Anxiety Stress Scales -21 (DASS-21; Lovibond and Lovibond 2005) The 21-item DASS, was used to measure parental distress: a variable which can negatively impact on family communication (Walsh 2003). Respondents rate the extent to which they have recently experienced symptoms of depression, anxiety, and stress on a Likert scale from 0 (*did not apply to me at all*) to 3 (*applied to me very much, or most of the time*): higher scores reflect more severe symptomatology. Subscale scores are totalled and multiplied by two to allow for comparison between the three scales and to provide severity ratings (Lovibond and Lovibond 2005) based on cut-offs for moderate to extremely severe symptomatology (depression: ≥14, anxiety ≥ 10, stress ≥19). Subscale scores can also be combined to produce a composite score of psychological distress. Similar to Osman et al. (2012), this study identified high internal reliability for the total DASS-21 ($\alpha = .94$) and its subscales (depression $\alpha = .91$, anxiety $\alpha = .80$, stress $\alpha = .88$).

Procedure

Following ethical approval from the University of Adelaide's Human Research Ethics Committee (approval number 15/43), Australian-based disability and advocacy organisations were identified using the search terms "(type of) disability" and "support group" on Google (https://www.google.com.au/). Seventy-four organisations were subsequently emailed to establish their willingness to promote this study among their client base: 29 (39 %) replied and 22 (30 %) agreed to participate. Assenting organisations were then emailed the participant information sheet and a link to the online questionnaire (hosted by SurveyMonkey^{TM}). Organisations promoted the questionnaire to their members through various media (i.e. newsletters, social network pages, emails, online notice boards) – thereby exposing the study to a larger sample (Birnbaum 2004; Galea and Tracy 2007).

Voluntary informed consent from all individuals included in the study was assured by providing participants sufficient information about the project's intent, nature and purpose in the survey preamble. Participants also had opportunity to opt out of the project at any time.

Data Analysis

Analyses were conducted with the Statistical Package for the Social Sciences (Released 2013, Version 23.0. Armonk, NY: IBM Corp). Descriptive data were initially examined to determine sample characteristics. This included the relationship between resilience and demographic variables (i.e. independent samples *t* tests and Cohen's *d*, effect size estimate) in addition to the association between the components of family resilience and individual child and parent measures. This was followed by a multiple linear regression to test the independent effects of the standardised variables on family resilience. The stepwise method was utilised, whereby the variable with the highest *F* statistic was entered into the regression equation at each step. An a priori power analysis (G*power 3.0.10) indicated that the sample size was sufficient to detect a significant and large effect with these parametric analyses ($\alpha = .05$, power at .80).

Results

Characteristics of Family Resilience

Family resilience appeared to be positively skewed, with scores clustered around the mean (Table 1). A one-sample *t*-test indicated that the average FRAS score was

Table 1 Descriptive statistics for standardised psychological measures ($N = 155$)

Measures	Subscales	*M*	*SD*	Range
FRAS	Family spirituality	6.90	3.09	4–15
	Maintaining a positive outlook	18.53	2.71	6–24
	Making meaning of adversity	9.52	1.31	6–12
	Family connectedness	18.09	2.20	12–24
	Utilising social and economic resources	19.76	4.11	8–31
	Family communication and problem solving	80.47	10.49	33-105
	Total	185.05	18.46	106–236
DBC-P24		20.81	8.65	0–45
DASS-21	Depression	11.34	9.94	0–42
	Anxiety	8.05	8.43	0–38
	Stress	17.75	9.89	0–40
	Total	37.15	24.89	0–106
PCQ		137.44	19.32	86–181
CRPR	Restrictiveness	51.14	14.43	22–91
	Nurturance	90.34	13.49	25–108

Measure abbreviations: *FRAS* family resilience assessment scale, *DBC-P24* developmental behavioural checklist, *DASS-21* depression, anxiety, stress scale (21 item), *PCQ* positive contributions scale, *CRPR* child rearing practices report, *Range* range of scores reported by this caregiver sample

comparable to other studies on caregiver resilience among families with NDD (Cripe 2013; $N = 130$, $M = 185.31$, $SD = 24.81$; t (154) = -.18, $p = .14$, Cohen's $d = .016$).

Family resilience was experienced in the context of challenging child behaviour (DBC-P24) and varying levels of parental distress (DASS-21; Table 1). This included severe to extremely severe levels of depressive ($n = 24$, 15 %), anxiety ($n = 28$, 18 %), and/or stress symptomatology ($n = 38$, 25 %). Despite these psychological difficulties, parents held positive perceptions of their child (PCQ) and endorsed a nurturing, more so than restrictive, parenting style (CRPR).

Structure of Family Resilience

As seen in Table 2, this sample of caregivers utilised key processes in family resilience, relying on their belief systems (i.e. normalizing and contextualising distress in a positive way by making meaning of adversity), organisational skills (including mutual support for one another, family connectedness, parental style and ability to mobilise social and economic resources), clear communication and collaborative problem solving. As hypothesised, positive perceptions of one's child and the impact of their disability (PCQ), along with a nurturing parenting style (CRPR), promoted family resilience in a significant way. Conversely, parental distress (DASS-21 subscales) negatively affected the family resilience framework. Child behaviour had an indirect impact on resilience, by demonstrating a strong relationship with parental distress.

Comparable resilience scores were reported by single- and dual-parent households (t(151) = .97, $p = .33$, $d = .19$), caregivers in paid employment (i.e. full-, part-time,

Table 2 Correlational matrix of psychological measures ($N = 155$)

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Family spirituality (FRAS)	–	–.007	.075	–.067	.054	.153	–.101	–.112	–.122	–.221**	–.035	–.100	–.155
2	Positive outlook (FRAS)		–	.519**	.333**	.762**	.192*	–.009	–.416**	–.232**	–.259**	.418**	.354**	–.029
3	Making meaning (FRAS)			–	.295**	.568**	.193*	.130	–.270**	–.180*	–.179*	.304**	.250**	.015
4	Family connectedness (FRAS)				–	.315**	.403**	–.102	–.240**	–.201*	–.096	.018	.138	–.065
5	Communication & problem-solving (FRAS)					–	.180*	.008	–.427**	–.182*	–.339**	.421**	.385**	–.023
6	Social & economic resources (FRAS)						–	–.065	–.480**	–.298**	–.393**	–.364**	.335**	.057
7	Child behaviour (DBC-P24)							–	.287**	.438**	.449**	–.096	–.089	.159*
8	Depression (DASS-21)								–	.594**	.696**	–.267**	–.173*	.117
9	Anxiety (DASS-21)									–	.696**	–.039	.027	.153
10	Stress (DASS-21)										–	–.210**	–.049	.043
11	Positive contributions (PCQ)											–	.401**	.003
12	Nurturance (CRPR)												–	–.200*
13	Restrictiveness (CRPR)													–

Note: Measure abbreviations in brackets. **$p < 0.01$, *$p < 0.05$, two tailed casual) and those not currently employed ($t(141) = -.48$ $p = .63$, $d = .08$), members of a community support group and those who did not access this support ($t(153) = .50$, $p = .61$, $d = .09$), suggesting that these organisational elements were not significant components of resilience for this particular sample of caregivers. Households with two or more children (both diagnosed and neurotypical) reported greater levels of stress ($r = .221$, $p = .006$), although this association was small. The association between child age, which had a wide range in this sample, and family resilience was also examined. There was no significant correlation between these two variables (r range = -.003 to -.126, $p > .10$): for this sample of caregivers, the structure of family resilience remained similar regardless of developmental stage.

Predictors of Family Resilience

Multiple regression revealed the unique contribution of the standardised measures to resilience. Only variables with significant ($p < .05$) values with resilience subdomains were entered into the stepwise equation. Psychological distress (composite DASS-21 score) was entered first and contributed the greatest proportion (20 %) of individual variance, impeding resilience. This was followed by a nurturing parental style and positive contributions – both of which helped to promote resilience, although their contribution to the overall model was small (<12 %). At the final step, child behaviour severity was entered—this had a negative, albeit small, impact on resilience levels. The combined contribution of the aforementioned variables explained 35 % of the variance in family resilience scores (F (5,146) = 15.75, $p < .001$, $R^2 = .350$; see Table 3).

Discussion

Walsh's (2003) Family Resilience Framework was utilised to examine the experience of current resilience in families raising a child with a NDD. The findings suggest that resilience is, in part, characterised by a family's belief systems, organisational skills and communication processes. Given that the combination of variables examined in this study only accounted for a portion of the variance in family resilience also suggests that further research is needed to determine how these familial processes develop with different stressors and in different contexts.

Table 3 Contribution of child and parent variables to family resilience

Variable	R	R^2	Adjusted R^2	SE	R^2 change
1. Distress (Total DASS-21)	.449	.201	.196**	16.55	.201**
2. Parenting style (CRPR - Nurturance)	.540	.292	.282**	15.64	.090**
3. Positive contributions (CPQ)	.567	.322	.309**	15.35	.030**
4. Child behaviour (DBC-P24)	.591	.341	.332**	15.09	.027***

Note: **$p \leq 0.01$ *$p < 0.05$

Parental distress, which provides a context to family communication patterns, provided the strongest contribution to resilience. Jellet et al. (2015) suggests that depression, in particular, compromises family resilience with symptoms of depression including lack of initiative, lack of enthusiasm and irritation, impacting upon a parent's caregiving ability and participation in family life. In comparison, acknowledging the positive impact of a child's disability at a personal and family level helped these parents proactively manage the stressors associated with caregiving responsibilities including perceptions of their ability to provide adequate care for their child (Hastings et al. 2002, 2005; Kayfitz et al. 2010; Peer and Hillman 2014; Thompson et al. 2012). Similarly, nurturance enhanced family resilience, although restrictive parenting did not seem to be highly stressful—as suggested by previous NDD studies (Aran et al. 2007; Woolfson and Grant 2006).

There were also subcomponents of family resilience that did not resonate strongly for this caregiver sample. Specifically, having spiritual faith and being actively involved in religious practices were not prevalent. It may also be that the four items measuring spirituality in the FRAS, while indicative of spiritual interest, do not capture the complexity of this construct which includes spiritual coping, need and wellbeing (Monod et al. 2011). Similarly, potential moderators of resilience such as family composition, employment status and household income, did not characterise resilience. Perhaps for these families, resilience is not directly determined by these extrinsic factors. This is in line with Walsh's (2006) suggestion that family resilience is driven by the internal characteristics of individual members: how the family unit copes with, and makes meaning of, a crisis. As such, access to social and economic resources may promote family resilience but is not the driving force (Walsh 2003, 2006).

Clinical Implications

These findings have implications for clinicians working with families affected by NDD. In particular, the heterogeneity of caregivers' psychological responses highlights the need for practitioners to examine areas of family weaknesses but also opportunities to strengthen resilient processes, consistent with a positive psychology approach (Hastings et al. 2005; Thompson et al. 2012). This includes an investment in early assessment and intervention techniques to enhance parental wellbeing and subsequent family functioning (Jellet et al. 2015; Herring et al. 2006). In this context, empirically supported third wave cognitive behavioural therapies, which are characterised by positive psychology concepts such as acceptance and mindfulness, might be considered (Öst 2008). Specifically, acceptance based therapies can help caregivers positively embrace their situation and challenges while also providing an avenue to discuss and explore alternative ways of coping (Ruiz-Robledillo et al. 2015). There is also evidence that participating in mindfulness training can help to increase positive psychological functioning, empathic concern and self-compassion whilst also reducing negative mood (Jones et al. 2014).

Methodological Limitations

These findings need to be considered in the context of several limitations. First, the cross-sectional design meant that resilience could only be measured at a given point in time. Longitudinal studies are needed to track the trajectory of family resilience over time. This is consistent with current research which characterises family resilience as a dynamic process involving cycles of relative stability and change according to phases of the family's developmental cycle (Henry et al. 2015).

A second limitation relates to the sample characteristics. The disproportionate sample bias towards female caregivers prevented exploration of potential gendered differences in the experience of resilience. Gaining the perspective of male carers would be interesting and potentially yield somewhat different results (Hastings 2003). In saying this, the literature recognises that there is a general bias towards female carers across the breadth of disability, hence the current sample actually reflects the general population of caregivers (Viana et al. 2013). The wide variation in child diagnoses reported by this sample of caregivers also needs consideration. Although the challenges of caregiving may cut across disability type, NDDs vary in the type and severity of sensory, motor and cognitive impairments (APA 2013) which, in turn, may lead to variability in their psychosocial impact. Further research is needed to determine how family resilience develops with different disability stressors.

Third, the reliance on self-report measures for data collection may have introduced a social-desirability bias, particularly for measures with socially sensitive questions such as the Modified Child Rearing Practices Report (e.g. "I believe that scolding and criticism make a child improve"). Future studies might include a social desirability scale in order to detect and control for such bias (van de Mortel 2008). Similarly the conceptualisation of disability severity could be broadened by supplementing the self-report DBC-P24 with a measure of functional ability. This might include multidisciplinary measurements (e.g. WeeFIM; Msall et al. 1994) or an index of activity and participation (e.g. Child and Adolescent Scale of Participation; Rainey et al. 2014).

Fourth, the study relied on the perspectives of primary caregivers, including their perceptions of the family as a whole. Consequently, the individual, rather than family unit, was the primary source of data (De Haan et al. 2002). Although the primary caregiver is often aware of their family's needs and has unique insight into family life (McConnell et al. 2014; Voysey Paun 2006), responses may have changed if a different family member was sampled. For example, there is evidence that siblings of children with chronic disability are at heightened risk of psychosocial difficulties (Emerson and Giallo 2014; Giallo et al. 2014). Future studies might therefore consider supplementing caregiver with sibling data in order to gain insight into the health and wellbeing of all family members and how this may impact on family resilience.

Conclusions

The present findings confirm the applicability of Walsh's (2003) framework within an Australian context - with familial belief systems, communication and organisational patterns identified as components in the resilience process. Importantly, the findings highlight that these families are able to cultivate resilience and experience positive outcomes despite the challenges of caregiving. Further research examining family resilience in different contexts will help to confirm Walsh's (2003) conceptualisation of a process that is both dynamic and dependent on the context of the stressor.

Compliance with Ethical Standards

Ethical Approval All procedures performed were in accordance with the ethical standards of the University of Adelaide Human Research Ethics Committee and the NHMRC National Statement on Ethical Conduct in Human Research.

Informed Consent Informed consent was obtained from all individual participants included in the study.

Conflict of Interest The authors declare no potential conflicts of interest.

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