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Measuring Family Resilience: Evaluating the Walsh Family Resilience Questionnaire

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Abstract

With a continued focus by practitioners, such as marriage and family counselors, behavioral/social scientists, and policy makers, on promoting resilience among families, it is important to ensure that reliable and valid instruments exist to accurately measure resilience. Using a sample of 603 college students from a large, public university in a mid-South U.S. state, this study investigated the measurement of family resilience operationalized by Walsh (the Walsh Family Resilience Questionnaire [WFRQ]) based on the three-domain theoretical framework. Item-level analysis was conducted to examine reliability followed by a confirmatory factor analysis (CFA) to examine construct validity and confirm the proposed three-factor structure of family resilience. Item-level analysis was examined through individual item mean scores and bivariate correlations, and the CFA was evaluated through examination of model fit and significance of pathways between factors and individual items. Results from the item analysis indicated that individuals reported that the proposed family resilience items characterized how their families rebounded from stressful events. Results from the CFA upheld the theorized three-factor structure comprised of (1) belief systems, (2) organization patterns, and (3) communication/problem-solving. Altogether, these findings demonstrate the suitability of the WFRQ and provide practitioners and scholars alike a more holistic insight into resilience beyond the individual level.

Keywords

family resilience, confirmatory factor analysis, reliability, validity, Walsh Family Resilience Questionnaire

Resilience is a construct that has garnered considerable attention from social scientists, policy makers, and public and private organizations. Resilience has long been emphasized as a construct warranting additional research (McDonald, 2013; Simon et al., 2005). Supporting resilience is likely to promote the well-being of individuals, families, and communities thereby improving lives and reducing social costs associated with stressful events in the lives of people and communities. Despite the attention that resilience has received from social scientists, the theoretical and empirical underpinnings of the construct and what it means and how it is measured are still disputed. The purpose of this study was to examine the empirical approach proposed by Walsh (2015) in light of the theoretical framework.

Walsh (2015) defined resilience as an ability to both rebound from disruptive and stressful events and to withstand disruptive events as they arise. There continues to be, however, debates about the characteristics that comprise resilience. Such debates are evident in a recent meta-analysis conducted by Oshio and colleagues (2018). Across 30 studies reviewed, Oshio et al. (2018) found individual characteristics such as personality type to be associated with different expressions of resilience. Some studies have demonstrated that resilience is facilitated through the use of social resources (e.g., Netuveli et al., 2008), while others have found that some forms of social resources may hamper the facilitation of resilience (e.g., Donnellan et al., 2017). Not surprisingly, researchers have also investigated the interplay of both individual characteristics and social characteristics in the context of resilience (Becvar, 2013; Walsh, 2015).

Given that resilience has been studied in a multitude of contexts, it is understandable that different measures of the construct have been created. Nevertheless, the variability and inconsistency of how the construct is defined and measured across studies exacerbate confusion both in terms of theoretical and empirical definitions of resilience. Some of the most widely cited resilience instruments are mostly focused on individual characteristics of resilience, including the Connor-Davidson Resilience Scale (Connor & Davidson, 2003), the Brief Resilience Scale (Smith et al., 2008), the Resilience Scale (Wagnild & Yung, 1993), and the Ego-Resiliency Scale (Block & Kremen, 1996). Fewer resilience instruments account for

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social and collective resources; those that do include the Family Resilience Assessment Scale (Sixbey, 2005), the Resilience Scale for Adolescents (Hjemdal, 2007), and the Individual, Family, and Community Resilience Profile (Distelberg et al., 2015).

An ecological point of view (Bronfenbrenner, 2009) suggests that theoretical and empirical approaches toward resilience should focus on individuals and the contexts, including systems, in which they are embedded. Moreover, there are sound reasons to believe that families are the most salient contexts for constructing resilience because of the close, intimate, and emotionally powerful environments in which people experience their families. Indeed, families can both hamper and promote resilience (Walsh, 2006) based on variability in family perceptions responding to stress (Boss et al., 2016). As Boss and colleagues (2016) point out, the family is a system of interdependent parts acting as a whole. In other words, individuals within the family share relationships, memories, and positive and negative experiences. All these factors may influence the families' abilities to act as a functional system that can employ coping processes and adaptational processes (Walsh, 2015).

Based on the perspective that families are foundational to coping and adaptative resources, Walsh developed the *Walsh Family Resilience Questionnaire* (WFRQ; Walsh, 2015). Walsh has long endorsed that family resilience was a construction of three key domains: (1) *belief systems*, (2) *organization patterns*, and (3) *communication/problem-solving*. Briefly, belief systems refer to families' abilities to make meaning of adversity (e.g., Does the family normalize the situation?), maintain positive outlooks (e.g., Does the family try and remain hopeful?), and draw strength from spirituality and transcendence (e.g., Does the family look to congregational support in times of need?). Organizational patterns reference families' abilities to maintain flexibility (e.g., Does the family reorganize their lifestyle in response to the situation?), maintain connectedness (e.g., Does the family show respect for individual needs of all family members), and draw from social and economic resources (e.g., Does the family feel that they have community networks?). Finally, communication processes/problem-solving refers to families' abilities to approach adversity with clarity (e.g., Does the family provide clarity when confronted with ambiguous information?), support and express appropriate emotional responses to adversity (e.g., Does the family share positive feeling such as joy?), and engage in collaborative problem-solving (e.g., Does the family work together to brainstorm to address the situation?).

The WFRQ has been used to measure family resilience in less than a handful of studies (Walker, Killian, Garrison, Moon & Way, 2018, Dadashi et al., 2018; Rocchi et al., 2017); nor have psychometric properties of the measure been established. This is not surprising as Walsh (2015) herself stated, "psychometrics . . . are inherently complex" (p. 125). Despite these caveats, it is important to evaluate quantitative measures, regardless of the setting.

The purpose of this study was to further the evaluation of the WFRQ. There were two objectives: One, conduct an item analysis of the WFRQ to examine its reliability and two, conduct a confirmatory factor analysis (CFA) of the WFRQ to examine its construct validity.

Method

Following institutional review board's approval, and Walsh's permission to use the WFRQ, 603 students from a large university in a mid-South U.S. state were recruited to be part of the current study. The profile of the typical participant was White (85%), young (80% born after 1995), and female (82%).

The WFRQ is a 32-item instrument with a 5-point response set ranging from 1 (*rarely/never*) to 5 (*almost always*). Participants were asked how their families deal "with crises and ongoing challenges." Of the 32 items, 13 items access the domain titled *belief systems*, nine items referenced the domain titled *organizational patterns*, and 10 items represented communication/problem-solving (see Table 1). An overall family resilience score is calculated using the mean from each of the participants' responses to the 32 items. Higher scores indicate greater family resilience.

Analyses

SPSS (Version 26) and AMOS (Version 26) were used in all the analyses. To address the first objective, item-level analyses were used to estimate means, standard deviations, normal distributions (skew and kurtosis), item missingness, and a reliability estimate (Cronbach's α). Item missingness was analyzed using Little's (1988) Missing Completely at Random test.

To address the second objective, CFAs were conducted using AMOS (Version 26) with full information maximum likelihood. These analytical approaches were used to examine the hypothesized three-factor structure of the WFRQ. Error terms within each of the three factors were allowed to correlate within the same factor (Byrne, 2010), and four fit indices were examined to assess model fit of the CFA. These were the comparative fit index (CFI), Tucker–Lewis index (TLI), root-mean-square error of approximation (RMSEA), and p of close fit (PCLOSE).

CFI and TLI between .90 and .94 indicate adequate fit and above .95 indicate good fit (Hu & Bentler, 1999). An RMSEA between .6 and .8 indicates adequate fit and below .6 indicates good fit (Hu & Bentler, 1999). PCLOSE values above .05 indicate good fit (Kenny, 2015). Nonsignificant PCLOSE values help to strengthen the implication that RMSEA values have little specification error (Kenny, 2015).

Results

Item-level missingness ranged from 0.5% to 1.2%. Missing data on all items were not significant ($\chi^2 = 724.35$, $df = 676$, $p = .09$) indicating that the missing data were missing completely at random (Little, 1988). Skew values ranging from

Table 1. Item Analysis of the Walsh Family Resilience Questionnaire.

Item	α	% Miss	*S*	*K*	*M*	*SD*
All items	.94				3.95	0.565
Factor 1: Belief systems	.88					
1. Family faces distress as a team		0.5	−0.612	−0.385	3.57	1.174
2. Distress is common and understandable		0.7	−0.351	0.012	3.40	0.901
3. Shared effort in managing challenge		0.7	−0.547	0.052	3.70	0.932
4. Try and make sense of stress		0.7	−0.716	0.344	4.05	0.823
5. Maintain hopefulness		0.7	−0.857	0.247	4.22	0.832
6. Encouraging toward each other		0.8	−0.878	0.343	4.10	0.919
7. Maintain persistence		0.8	−0.536	−0.136	4.04	0.812
8. Have an accepting attitude		0.5	−0.659	0.318	3.91	0.863
9. Share important values		1.2	−1.097	0.785	4.18	0.938
10. Use spirituality		1.2	−0.761	−0.629	3.82	1.287
11. Challenge inspires creativity		0.5	−0.500	−0.102	3.70	0.960
12. Display compassion		0.8	−0.684	0.148	3.94	0.917
13. Learn from challenges		0.8	−0.808	0.405	4.22	0.785
Factor 2: Organization patterns	.85					
14. Flexible when adapting to stress		0.5	−0.340	0.017	3.74	0.852
15. Stable and reliable home environment		0.7	−0.566	0.048	3.94	0.874
16. Parental leadership present		0.7	−1.425	1.641	4.32	0.928
17. Reliance on family members		0.5	−1.156	0.641	4.32	0.867
18. Respect for individual needs		0.7	−0.814	0.334	4.12	0.864
19. Role models are present		0.8	−1.123	0.667	4.19	0.967
20. Reliance on peers and the community		0.8	−0.858	0.262	4.07	0.921
21. Financial stability is present		1.2	−0.971	0.502	4.07	0.983
22. Community resources are present		0.7	−0.448	−0.477	3.64	1.055
Factor 3: Communication/problem-solving	.90					
23. Family members clarify information		0.5	−0.370	−0.097	3.77	0.864
24. Family is clear and consistent in actions		1.0	−0.400	−0.172	3.66	0.937
25. Family members can express opinions		0.7	−0.710	0.069	3.94	0.957
26. Family can share difficult feelings		0.7	−0.597	−0.393	3.79	1.058
27. Share positive feelings		0.5	−0.244	−0.395	3.53	0.977
28. Family members display understanding		0.7	−1.099	1.069	4.34	0.784
29. Family collaborates in decision making		0.5	−0.430	−0.297	3.72	0.969
30. Goal setting is used		0.5	−0.615	0.021	4.07	0.822
31. Family learns from mistakes		0.5	−1.130	1.348	4.34	0.771
32. Family plans for the future		0.7	−0.963	0.428	4.14	0.930

Note. α = Cronbach's α; % miss = percent missing; *S* = skew values; *K* = kurtosis values; *M* = mean; *SD* = standard deviation.

−1.13 to −0.244 and kurtosis values ranging from −0.477 to 1.64 indicated a normally distributed sample (Curran et al., 1996; see Table 1). Bivariate correlations between the overall WFRQ and all items were moderately and significantly correlated.[1]

Means of the WFRQ items ranged from 3.42, "We view distress with our situation as common, understandable" (belief systems), to 4.34, "We celebrate successes and learn from mistakes" (communication/problem-solving). The scores of 13 of the items were between 3.00 and 4.00 and the scores of the remaining 19 items were above 4.00 (see Table 1). These results indicated that individuals reported that the items characterized how their families rebounded from stressful events. Finally, internal consistency of all 32 items comprising of the overall construct of family resilience was high (Cronbach's α = .94).

The model fit of the CFA was good: CFI = .95, TLI = .92, RMSEA = .04, PCLOSE = .95 (see Figure 1). The second-order standardized factor loadings comprising of the overall construct of family resilience ranged from .90 to .96 ($p < .001$). All first-order factor loadings were significantly loaded onto each of the hypothesized domains of family resilience. The first-order factor of belief systems consisting of 13 items (Cronbach's α = .88) had standardized factor loadings ranging from .25 to .78 ($p < .001$). The first-order factor of organization patterns consisting of nine items (Cronbach's α = .85) had standardized factor loadings ranging from .45 to .74 ($p < .001$). The first-order factor of communication/problem-solving consisting of 10 items (Cronbach's α = .90) had standardized factor loadings ranging from .58 to .76 ($p < .001$).

Discussion

It is likely that the construct of family resilience will grow in salience in the future as communities experience increasingly stressful lives. In fact, the nature of family stressors is such that families from across a wide range of geographic, social,

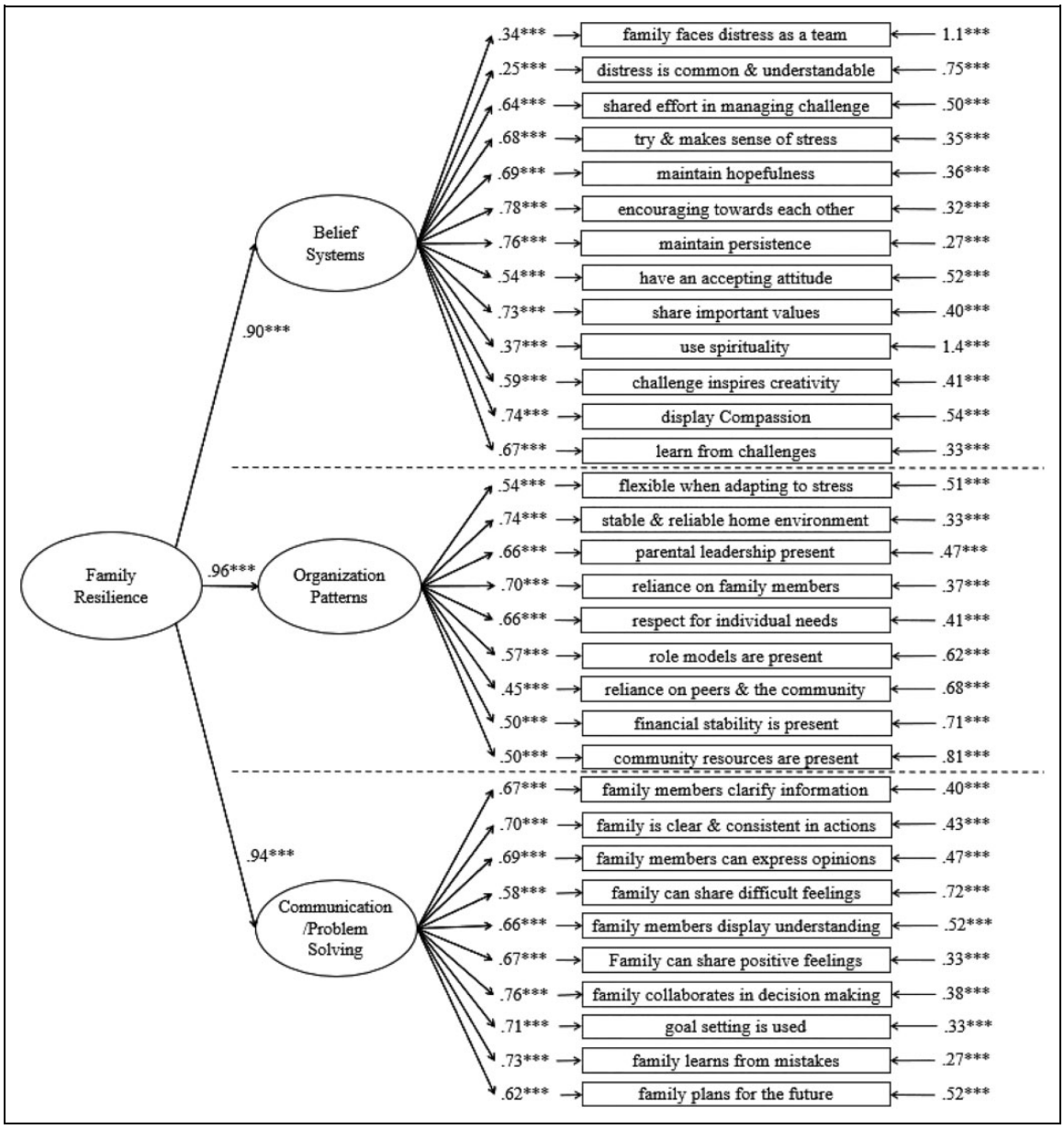

Figure 1. Confirmatory factor analysis of the Walsh Family Resilience Questionnaire. *Note.* Model fit ~ confirmatory factor analysis = .951; Tucker–Lewis index = .929; root-mean-square error of approximation = .046; *p* of close fit = .959. Standardized regression weights displayed for latent variable pathways. Covariances of error terms are available upon request. *$p < .05$. **$p < .01$. ***$p < .01$.

economic, racial, and political communities will adapt differently from each other. Identifying a measure of family resilience that has wide application is particularly important as families themselves as well as helping professionals and policy makers use information to direct recourses and hone their efforts. This study is limited in its sample, college students, but provides evidence that the WFRQ has acceptable psychometric properties to measure family resilience.

The WFRQ is a reliable instrument, given the results of the reliability analysis, thus addressing the study's first objective. The second objective of this study was to investigate the factor structure of the WFRQ. The WFRQ is hypothesized to be a second-order factor meaning that family resilience (the second-order factor) was expected to be comprised of the domains of belief systems, organization patterns, and communication/problem-solving (first-order factors). In turn, these first-order factors were hypothesized to be measured by the 32 individual measurement items. Based on significant factor loadings within the first-order and second-order factors, good model fit indices, and inter-item reliability for the overall measure, the WFRQ has construct validity.

Importantly, the psychometric properties presented here suggest that family resilience can be examined as an overall construct or researchers can choose to examine one of the first-order constructs if their research project elicits an interest in one of those domains. Researchers are likely to find this scale

of family resilience a useful tool for comparing across geographical and social contexts. Not only is the construct of family resilience important for policy makers and scholars in ordinary times but the concept of family resilience is also important in the preparation and recovery from adverse events experienced by families and communities. Although family resilience may also be understood in unique ways across families, the common metric helps to understand variations across contexts. Consequently, it affords the potential to be used to focus the distribution of resources and efforts efficiently. The psychometric properties of the scale have not only been demonstrated by this study but also by previous studies suggesting that this instrument may gain increased acceptance and use in future research projects.

Limitations and Future Directions

Future research should extend this study in multiple ways. First, concurrent validity of the WFRQ can be examined by exploring correlations of this instrument with other established resilience ones that include similar intentions and underpinnings. Specifically, the Family Resilience Assessment Scale (Sixbey, 2005) has been in use for several years and was created based on resilience tenants proposed by Walsh and has been used in general research (Duncan Lane et al., 2017; Gardiner et al., 2019) and has even been adapted for use in different populations (e.g., Isaacs et al., 2018; Li et al., 2016). In addition, future work should include predictive validity analyses, perhaps with health-related outcomes, as well as additional reliability ones. Future work would also prove beneficial by administering the WFRQ with other populations and settings to further establish its reliability and validity, which would also help strengthen generalizability of the scale.

Although all factor loadings were significant in this CFA model, it should be noted that some literature suggests that factor loadings should be above .45 to be considered acceptable (Hair et al., 1998; Tabachnick & Fidell, 2007). In this model, the second-order factor of belief systems had standardized factor loadings below .45 on three of the 13 items (see Figure 1). This indicates that future research may consider looking at modifications to items included in this factor to determine whether refinement of the WFRQ Scale is warranted.

This study provides evidence for considering family resilience in the context of three domains: belief systems, organization patterns, and communication/problem-solving. This is important as it may provide practitioners, certified family life educators, and other helping professionals with a more nuanced approach to looking at specific resilience characteristics of interest when tailoring intervention services for families. Not only does it allow for specific domains of interest to be explored but it also gives helping professionals a larger and more holistic picture of family resilience by considering multiple domains.

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Note

1. A complete correlation matrix is available upon request. Please contact Walsh directly for permission to use the instrument.

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