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Development and validation of the Malaysian gen Y family resilience scale (myFRSGY): A second-order model

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Abstract

In the Malaysian context, assessing family resilience in the Generation Y population necessitates the development of context-specific and psychometrically validated instruments. This study developed and validated a second-order family resilience model specifically for families belonging to Malaysian Generation Y. The instrument is named the Malaysian Generation Y Family Resiliency Scale, abbreviated as myFRSGY. A mixed-methods design was employed, beginning with qualitative focus group discussions across five Malaysian regions to develop culturally relevant items. Five hundred ninety-six valid responses were collected from participants who served as either husbands or wives in families with children. A second-order Confirmatory Factor Analysis (CFA) was conducted to examine the theoretical model, and items with high residuals were removed to optimize model fit. Prior to CFA, Exploratory Factor Analysis (EFA) results supported a ten-construct model based on 102 items. The final model confirmed that family resilience among Malaysian Generation Y families can be represented as a second-order construct, supported by ten first-order latent variables comprising 90 items, with satisfactory model fit and psychometric properties. The final model demonstrated satisfactory fit indices (χ^2 = 10564.570, CFI = 0.851, RMSEA = 0.054, SRMR = 0.033). Internal consistency reliability (CR = 0.825–0.988) and convergent validity (AVE = 0.536–0.890) were established, with factor loadings ranging from 0.676 to 0.984. The study establishes that family resilience in Generation Y families can be reliably measured through a multidimensional second-order model. The validated myFRSGY provides researchers and practitioners with a robust framework to assess family resilience, identify areas requiring support, and design targeted interventions to enhance the resilience of Generation Y families, not only within the Malaysian context but globally. The myFRSGY offers a culturally grounded, reliable tool to assess resilience and guide interventions in Malaysian Generation Y families, benefiting researchers, practitioners, educators, and policymakers. Its solid theoretical foundation and empirical validity also support broader applicability in other collectivist or multicultural societies.

Keywords: Confirmatory Factor analysis, Family resilience, Generation Y, Malaysia, Psychometric validation.

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1. Introduction

What enables some families to persevere through hardship while others struggle to stay together? The idea of family resilience, which has grown significantly in social science and mental health research, revolves around this question. The ability of a family to withstand, adjust to, and bounce back from adversity and come out stronger is known as family resilience. According to Walsh [1], resilience is better understood as an ongoing process that develops over time, rather than as a fixed trait an individual possesses. It takes shape through a range of influences, such as family relationships, cultural beliefs, patterns of communication, and broader social environments. This view highlights how resilience grows through the interplay between people and their surroundings. Increasingly recognized across disciplines such as psychology, sociology, public health, and education, Walsh [2] and Walsh [3] argue that family resilience is not an innate trait but a dynamic process shaped by internal family interactions, belief systems, and sociocultural environments. In rapidly changing societies, resilience has become a critical area of inquiry and intervention, particularly in contexts marked by generational transitions, social change, and economic uncertainty.

Rapid social and cultural changes in Malaysia are making this study particularly relevant. Strong religious values, communal customs, and a profound respect for ethnic and family identity have shaped Malaysian families for generations. The last few decades, however, have seen clear changes. Urbanisation, exposure to global standards, technological developments, and demographic trends influence family dynamics and interactions. Shahid and Bushra [4] observe that Malaysian families' roles and expectations are undergoing significant change, particularly among younger generations influenced by evolving socioeconomic and cultural norms. More people are including digital technologies in everyday family life, creating dual-income households and delaying marriage. Often known as Millennials, Generation Y, born between 1981 and 1996, is a major group in Malaysia's population during this broad transformation. Many are juggling careers, raising children, and helping elderly relatives simultaneously. Noor et al. [5] highlight the tension Gen Y families face: they are engaged in fast-paced, tech-driven careers but still carry the weight of cultural expectations like honouring elders, practising religion, and managing multigenerational households. These dual pressures create resilience challenges that differ from those in Western contexts, where much of the family resilience literature has originated. Yet, despite these differences, research in Malaysia often continues to depend on Western-developed measurement tools.

Globally recognized tools like the Family Adaptability and Cohesion Evaluation Scale (FACES-IV) [6] and the Walsh Family Resilience Questionnaire [2] have been instrumental in advancing theoretical frameworks for family resilience. Yet, Selman et al. [7] argue that such instruments do not always translate well across cultures due to variations in family dynamics, spiritual beliefs, and social structures. Malaysians often shape resilience through communal living, religious coping, extended family involvement, and flexible family roles, features that Western models tend to emphasize less. Recognizing these limitations, Malaysian scholars have begun to create and validate localized instruments that reflect the nation's cultural and societal realities. To support family resilience in Borneo communities, Allred et al. [8] stress the significance of religious values and communication. In the meantime, Tengku Kasim and Abdul Majid [9] investigate how Malaysian teachers use spirituality as a coping strategy. While these contributions are valuable, most focus on specific populations or resilience factors and lack a comprehensive, multidimensional framework that is both culturally grounded and psychometrically robust.

A recent development addressing this need is the Malaysian Generation Y Family Resiliency Scale (myFRSGY), introduced by Alias et al. [10]. Through exploratory factor analysis (EFA), the study identified ten constructs theorized to define resilience in Malaysian Gen-Y families: family endurance, roles and responsibilities, psychological and physical support, communication and conflict resolution, financial stability, adaptability, parenting, child well-being, spiritual and moral values, independence, and social support networks. Although EFA provided initial evidence of structural validity, the theoretical model requires confirmatory factor analysis (CFA), specifically second-order CFA, for validation. This step would confirm whether the ten constructs collectively represent a higher-order factor of family resilience.

The development of the myFRSGY scale is conceptually grounded in Walsh's Family Resilience Framework [2, 3], which organizes resilience processes into three core domains: family belief systems, organizational patterns, and communication/problem-solving processes. These domains serve as a theoretical blueprint for defining myFRSGY's constructs. For example, components such as spiritual and moral values, roles and responsibilities, and communication and conflict resolution correspond directly to Walsh's meaning-making processes, adaptability, and collaborative

functioning. Embedding the myFRSGY scale in Walsh's Family Resilience Framework [2] enhances its conceptual coherence and ensures alignment with a globally recognized model of resilience. The study increases theoretical validity by rooting the myFRSGY scale in an established theoretical framework of family resilience. This approach improves the cross-cultural transferability and significance in global academic and professional contexts, demonstrating the myFRSGY scale as culturally rooted with a universally acknowledged model of resilience.

CFA, especially second-order CFA, is widely recognized for its utility in confirming the hierarchical structure of complex constructs. Brown [11] outlines how second-order CFA tests whether multiple first-order latent variables reliably reflect a broader theoretical factor. In resilience research, this approach is essential for modeling family resilience as a multifaceted phenomenon. For instance, Chin [12] applied second-order CFA to validate a family functioning scale for adolescents in Malaysia, demonstrating that this approach works well within the local context. Researchers abroad have also adopted second-order CFA to examine resilience in different cultural settings. For example, Karaman et al. [13] used it to evaluate resilience among Latinx families. Seok et al. [14] conducted a Confirmatory Factor Analysis (CFA) to test the factor structure of the Flourishing Scale (FS) in a Malaysian sample. People who handle tough times often feel more satisfied with life and have a stronger sense of purpose. This sense of doing well and feeling good about life is known as flourishing, and it usually comes from resilience. However, in Malaysia, no study has validated a comprehensive second-order model of family resilience explicitly tailored to Generation Y households. Additionally, psychometric rigor requires that any newly developed scale demonstrate adequate internal consistency, convergent validity, and model fit. Beaton et al. [15] highlight the importance of culturally adapting and validating assessment tools to local norms to avoid biased or incomplete conclusions. These efforts enhance the reliability of instruments such as the myFRSGY across diverse Malaysian subpopulations and contextual settings.

The Malaysian Generation Y demographic exists at the confluence of tradition and modernity. Hamzah et al. [16] indicate that this group encounters mental health concerns linked to elevated performance demands, metropolitan stressors, and evolving family dynamics. During the COVID-19 pandemic, many Generation Y families faced growing pressure from job insecurity, remote schooling, and the burden of caring for both children and aging parents. For some, the prolonged stress and confinement led to severe strain on family relationships, with several households experiencing breakdowns or separation as a result. In this context, the ability to assess and build resilience is not only a research imperative but a societal one. Hamzah et al. [17] developed a brief four-item family resilience tool validated among Malaysian adolescents, showing promise for large-scale screening. However, a multidimensional, second-order scale like the myFRSGY is necessary for a more comprehensive family resilience instrument. The myFRSGY scale would enable researchers, counsellors, educators, and policymakers to identify specific areas where families lack resilience, guide resource distribution more effectively, and develop support programs that reflect Malaysian families' cultural values and lived realities.

The psychometric evaluation of instruments such as myFRSGY involves using multiple statistical indices. Hair et al. [18] advise researchers to evaluate model fitness using indices such as the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). Researchers also evaluate how consistently and precisely each latent construct reflects the fundamental idea using Composite Reliability (CR) and Average Variance Extracted (AVE) techniques. These indicators support the theoretical grounding and statistical validity of the concept. In addition to statistical validity, practical usability is a key consideration. Wu et al. [19] argue that measurement tools should be adaptable across clinical, educational, and policy-making settings to make a real-world impact. The myFRSGY scale is designed for versatility and can be utilized in several contexts, such as parenting workshops, school counseling programs, and national surveys centered on family well-being.

Finally, the theoretical grounding of this study lies in ecological and systemic models of family functioning, which see families as dynamic systems embedded in larger socio-environmental contexts. Instruments like the FACES-IV, developed by Olson [6] and theoretical models proposed by Patterson [20] support the idea that resilience emerges from the interaction of stressors, resources, and meaning-making processes. Validating a Malaysian model adds to this global literature while offering culturally specific insights. International parallels exist as researchers across various regions create culturally specific family resilience models to address the unique values, challenges, and coping mechanisms of their families. Sabah et al. [21] investigated family resilience during pandemic lockdowns in Arab countries, highlighting the significance of communication, faith, and parental leadership. Such studies underscore the need for region-specific models to inform local intervention strategies.

The specific objectives of this study are threefold:

a. To validate the theoretical structure of the myFRSGY by confirming whether the ten first-order factors identified through exploratory analysis adequately represent a second-order construct of family resilience;
b. To assess the psychometric properties of the myFRSGY, including internal consistency, convergent validity, and model fit through second-order Confirmatory Factor Analysis (CFA); and
c. To propose the myFRSGY as a culturally relevant and comprehensive tool for assessing family resilience in Malaysian Gen Y families while recommending further validation across other populations to determine its broader applicability beyond the Malaysian context.

2. Materials and Methods

2.1. Research Design

The study used a mixed-methods approach, beginning with qualitative exploration and followed by quantitative analysis, to guide the development and preliminary validation of the Malaysian Generation Y Family Resiliency Scale

(myFRSGY) [22]. The research began with a qualitative phase involving focus group discussions conducted across five major zones in Malaysia, Peninsular Malaysia: North, South, East, Central, and one state from East Malaysia. A total of 25 families; five per zone participated, offering diverse perspectives on how family resilience is experienced and understood within different cultural and regional contexts. Thematic insights from these discussions guided the creation of scale items that represent Malaysian families' lived experiences and cultural subtleties. The subsequent quantitative phase entailed giving a preliminary version of the myFRSGY scale to a broader sample for empirical evaluation. The sequential exploratory strategy enabled the researchers to base the scale on local experiences before its statistical validation, ensuring cultural relevance and methodological rigour [23].

2.2. Participants and Sampling

The study utilized simple random sampling to ensure that participants from all Malaysian states had an equal chance of being included [24]. The approach was chosen to achieve broad regional coverage and to reflect the diverse experiences of Generation Y families in Malaysia. The sample included participants from different ethnic backgrounds, cultural settings, and income and education levels. The sample also included husbands and wives from urban and rural areas and those with different levels of education. Randomly drawing participants from across the country helped reduce selection bias and improve the representativeness of the data. This study's participants were Generation Y members, defined as individuals born between the early 1980s and late 1990s [25]. However, for the purpose of this study, the Generation Y birth range was extended to include individuals born up to 1999. All participants were married and had at least one child, meeting the study's definition of a family. 596 valid responses were collected from participants across all 13 states and three Federal Territories in Malaysia.

The field study included a diverse group of participants, consisting of 262 individuals identified as husbands and 334 as wives. In terms of employment, 115 participants work in the public sector, 243 in the private sector, 159 are self-employed, and 179 are housewives. Geographically, participants were drawn from all 13 states and three federal territories of Malaysia, with the highest number from Selangor (127), followed by Terengganu (106), and the Federal Territory of Kuala Lumpur (49), indicating a broad and representative demographic distribution.

2.3. Instrument Development Malaysian Generation Y Family Resiliency Scale [myFRSGY]

The Malaysian Generation Y Family Resiliency Scale (myFRSGY) was informed by the eight-step scale development process proposed by DeVellis and Thorpe [23], which emphasises theoretical clarity, cultural relevance, empirical testing, and methodological rigour to ensure the creation of valid and reliable measurement instruments. The construct of family resilience was shaped using Walsh [2] and Walsh [3], further contextualized through focus group discussions involving 25 families from five major regions in Malaysia. These discussions shed light on the experiences of resilience in Malaysian family life, especially among Generation Y couples.

Drawing from these qualitative findings and existing literature, an initial pool of 102 items was created, representing ten proposed dimensions: family endurance (8 items), roles and responsibilities in family structure (15 items), psychological and physical support within the family unit (16 items), communication and conflict resolution (9 items), financial stability and economic resilience (10 items), adaptability and flexibility in daily life (6 items), parenting and child well-being (11 items), spiritual and moral values (7 items), independence and self-reliance (11 items), and social support networks and community influence (9 items).

Items were written in clear, culturally appropriate language and structured using a 5-point Likert scale. The initial scale items were reviewed by six subject matter experts in psychology, family studies, and family law to evaluate their content relevance, clarity, and cultural appropriateness. Feedback from the content validity assessment informed minor revisions before the instrument was finalized for large-scale data collection.

2.4. Data Collection Procedure

Data collection for the field study was conducted using a structured online questionnaire hosted on Google Forms. The survey link was distributed digitally with the assistance of 36 trained enumerators appointed under the project’s grant scheme. The enumerators contacted participants from different states across Malaysia to support a wide range of demographic and regional representation. The survey could be accessed using smartphones or computers, making it easier for digitally inclined Generation Y respondents to participate, which contributed to a strong response rate. The field data collection was carried out in the first two weeks of January 2025. A total of 600 responses were obtained for the field data.

2.5. Data Analysis Procedures

Data analysis for this study was conducted in two phases, beginning with a pilot study followed by full-scale field data analysis. For the pilot phase, data were analyzed using IBM SPSS Version 26, where Exploratory Factor Analysis (EFA) was employed to identify the underlying factor structure of the initial 102-item pool in the myFRSGY scale. The initial 102 items were grouped under ten theoretical constructs of family resilience in Malaysian Gen Y. Principal Axis Factoring with varimax rotation was used, and items with factor loadings below 0.40 or cross-loadings were removed to refine the scale. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were used to assess the suitability of the data for factor analysis. Internal consistency was evaluated using Cronbach's alpha, with a threshold of 0.70 for acceptable reliability.

Following the pilot, data from the field study were analyzed using IBM SPSS AMOS Version 25 to conduct Confirmatory Factor Analysis (CFA). This phase tests the hypothesized measurement model derived from the EFA results.

The model's fit will be evaluated using commonly accepted indices such as CFI, RMSEA, and SRMR. The scale's validity will be assessed by examining both convergent and discriminant validity. This two-phase analysis facilitates the development of a theoretically sound and empirically validated scale.

2.6. Ethical Considerations

This research was conducted with financial support and under the full supervision of the Ministry of Higher Education Malaysia (MOHE) through the Fundamental Research Grant Scheme (FRGS) [Project ID: 20888; Reference Code: FRGS/1/2022/SS09/SEGI/02/2]. However, institutional ethical clearance was also obtained from the SEGi University Ethics Committee [Reference: SEGiEC/STR/FOELPM/476/2024-2025], of which the principal investigator is affiliated, and has granted ethical approval to ensure compliance with institutional ethical standards.

Data were collected using a self-administered online questionnaire via Google Forms, and participation was voluntary. A cover letter at the beginning of the survey explained the purpose of the study, the confidentiality conditions, and the rights of the participants. By completing the questionnaire, participants gave their consent. To protect the privacy of the participants and to comply with recognized ethical standards in social science research, the principal researcher carefully collected and securely stored all anonymous responses.

3. Results

3.1. a. Objective 1 - Validation of the Theoretical Structure of myFRSGY

3.1.1. Content Validity

The content validity of the myFRSGY scale was established through a structured expert review involving six subject matter experts in psychology, counselling, family studies, education, and family law. These experts assessed the scale's initial pool of 102 items across ten theoretical constructs for clarity, relevance, cultural appropriateness, and theoretical alignment. Feedback revealed that while most items reflected meaningful dimensions of family resilience, several items required refinement. Experts recommended simplifying complex or double-barreled statements, ensuring more precise definitions of overlapping concepts (e.g., resilience vs. perseverance, calm vs. composed), and improving item specificity. For example, items under constructs like ‘Family Endurance’ and ‘Roles and Responsibilities in Family Structure’ were revised to better distinguish between related but distinct ideas such as resilience and determination, or strengths and weaknesses.

Additionally, some items were flagged for redundancy or misalignment with the intended construct. Experts suggested separating combined ideas into two clearer items (e.g., emotional and practical support or optimism and positive outlook), ensuring each statement targeted a single, measurable behavior or belief. Sub-constructs, including ‘Community Support’, ‘Children as Motivation’, and ‘Spiritual Practices’, initiated discussions regarding cultural sensitivity and relevance, resulting in minor revisions and the potential removal of items where overlap or conceptual misalignment was identified. The expert feedback contributed to the refinement and cultural contextualization of the scale, improving its conceptual clarity and supporting its readiness for pilot testing.

3.2. EFA Result

To validate the theoretical structure of the myFRSGY scale, Exploratory Factor Analysis (EFA) was conducted on an initial pool of 102 items grouped under 10 predefined constructs: (1) Family Endurance (FE), (2) Roles and Responsibilities in Family Structure (RRFS), (3) Psychological and Physical Support (PPS), (4) Communication and Conflict Resolution (CCR), (5) Financial Stability and Economic Resilience (FSE), (6) Adaptability and Flexibility in Daily Life (AFL), (7) Parenting and Children's Well-being (PCWB), (8) Spiritual and Moral Values (SMV), (9) Independence and Self-Reliance (ISR), and (10) Social Support Network and Community Influence (SSNC). Each construct was analyzed individually using Principal Axis Factoring with varimax rotation, following recommendations for construct validation in social science research. Before EFA, data normality was assessed, and one severe outlier (case 128) was removed. The final pilot sample size was N = 242, with skewness and kurtosis values falling within acceptable limits (±2), allowing the analysis to proceed. The results of the EFA, confirming the ten-construct structure, have been published separately by the same authors in a related article [10], providing empirical support for the theoretical model used in the present study.

All ten constructs demonstrated strong sampling adequacy, with Kaiser-Meyer-Olkin (KMO) values ranging from .897 to .962, and Bartlett's Test of Sphericity yielded significant results ($p < .001$), indicating the data's suitability for factor analysis. Items with factor loadings below .40 or with high cross-loadings were excluded during the analysis. Consequently, the final Exploratory Factor Analysis (EFA) retained all 102 items, with factor loadings ranging from .671 to .892, and the variance explained for each construct ranged from 60.02% to 73.48%. Internal consistency was high across all constructs, with Cronbach's alpha values exceeding .90; however, some redundancy was noted and flagged for further review in the Confirmatory Factor Analysis (CFA) stage. Given the empirical support for the ten first-order constructs and their theoretical coherence, the structure was deemed appropriate for modeling family resilience as a second-order construct, thus justifying the continuation of CFA in the next phase.

3.3. Objective 2 - Psychometric Properties and CFA

3.3.1. Normality Assessment for CFA Field Data

CFA depends on the multivariate normality assumption. Multivariate normality was checked for 600 data points obtained before proceeding to CFA through chi-square over the Mahalanobis distance plot [26]. Figure 1 shows the

scatterplot for 600 data.

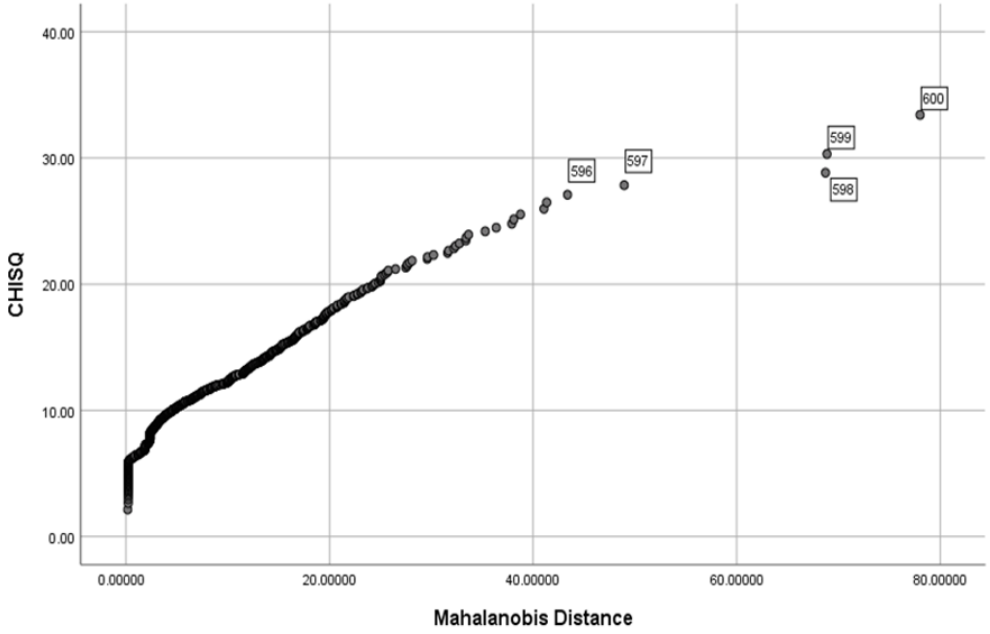

Figure 1.
Scatterplot of Normality Assessment of N=600.

From the scatterplot, a total of four data points, with IDs 597 to 600, showed deviation from the linear line, indicating outliers. Thus, all four data points were removed. Figure 2 shows the scatterplot for the remaining 596 data.

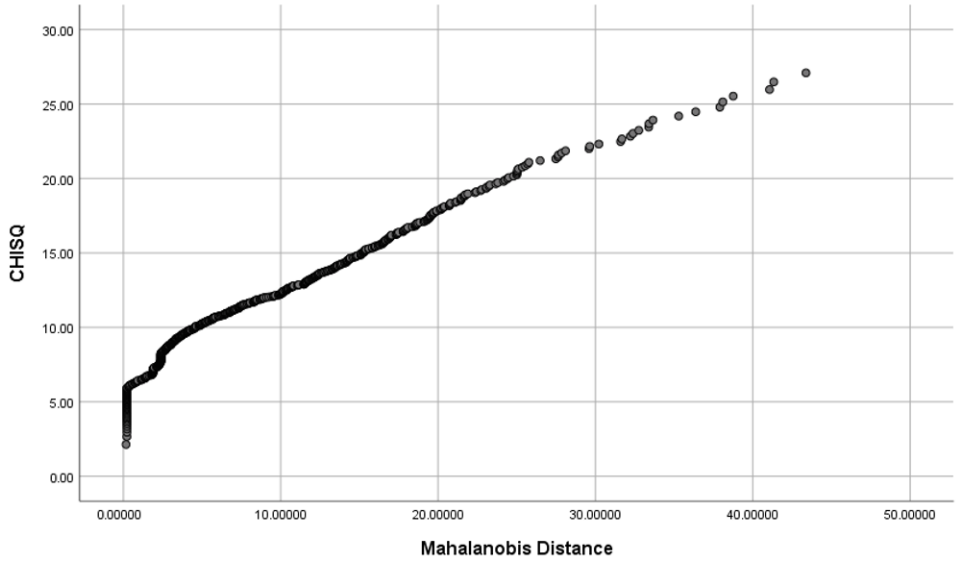

Figure 2.
Scatterplot of Normality Assessment of N=596.

3.4. Multicollinearity Assessment

The field data were then processed to assess multicollinearity prior to CFA. Multicollinearity arises when independent variables intended to measure distinct constructs actually measure the same construct [27]. Tolerance and variance inflation factor (VIF) are two of the most commonly used methods to assess multicollinearity. Tolerance indicates how much of an independent variable is unique and not explained by other independent variables, which helps measure multicollinearity directly, while VIF is the reciprocal of tolerance.

To indicate multicollinearity, the tolerance and VIF values for each independent variable must be less than .10 and exceed 10.0, respectively. From Table 1 the collinearity statistics show all VIF values between 3.372 and 8.349, which are less than 10.0 for each construct, and tolerance values between 0.120 and 0.297, more than 0.10, indicating no presence of multicollinearity. Table 1 shows the values for tolerance and VIF for multicollinearity assessment.

Table 1.
Multicollinearity Assessment through Tolerance and VIF Values.

Construct Label	Tolerance	VIF
FE	0.184	5.427
RRFS	0.120	8.349
PPS	0.133	7.533
FSE	0.123	8.155
CCR	0.169	5.908
AFL	0.182	5.482
PCWB	0.138	7.234
SMV	0.197	5.073
ISR	0.123	8.140
SSNC	0.297	3.372

3.5. Confirmatory Factor Analysis of myFRSGY

The CFA was conducted in the following step-by-step analysis, incorporating several suggestions by Kline [27]: (1) assessment of chi-square, (2) local fit testing, and (3) re-specification of the model. Thereafter, the researcher also tested the reliability and validity of the model and the presence of common method bias. Additionally, fit indices have become a norm in the field of CFA and SEM analysis to determine model fit [18]. Therefore, the researcher shared four fit indices to assess how well the model fits, which are χ^2/df (a simple fit index), CFI (a measure of improvement), and RMSEA and SRMR (measures of absolute fit).

The researcher began by analyzing the initial model (Model 1) for chi-squared and model fit. CFA was conducted using the maximum likelihood estimator, as it is robust and suitable for data with a normal distribution [18]. The result of the initial analysis (Model 1) showed a slightly poor model fit, with chi-square $\chi^2(5004) = 14158.72$, $p = .000$, $\chi 2/df = 2.829$, RMSEA = .055, 90% CI [.065, .070], SRMR = .035, and CFI = .826. Specifically, the incremental indices, CFI, failed to meet the minimum threshold of .90, and the chi-square test was significant. Thus, the initial model was tentatively rejected. Figure 3 shows the initial model, Model 1. The initial CFA model (Model 1) is considered first-order because it tests the relationships between observed variables (items) and their respective latent constructs without yet modeling an overarching second-order factor. This step is crucial to ensure each domain is psychometrically sound before testing a higher-order structure.

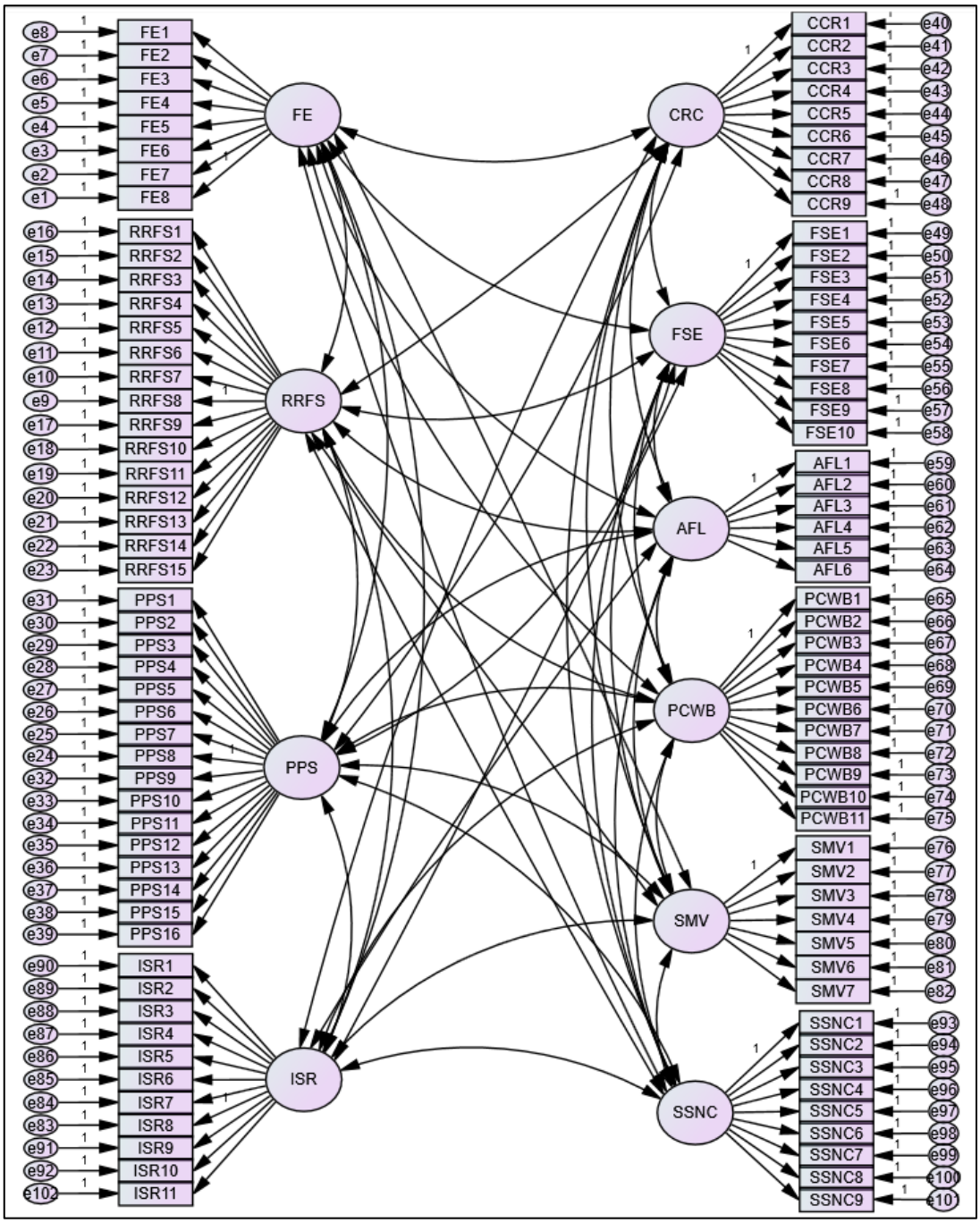

Figure 3.
Model 1: First-Order Model of myFRSGY.

Model 1 was then re-specified to improve model fit. These re-specifications included removing items with high standardised residuals of more than 1.96 [27]. According to Hair et al. [18] and Memon et al. [28], the deletion of indicators should not exceed 20% of the total indicators in the model. Consequently, 12 indicators out of 102 with high residuals were removed, representing approximately 11.76% of the total indicators. The indicators removed include SSNC9, SSNC7, SSNC6, SSNC3, SSNC5, PCWB11, PPS12, RRFS5, RRFS1, FSE1, PPS1, and PPS3. Specifically, five items from the nine items of the construct 'Social Support Network and Community Influence (SSNC)' were removed; one item from the eleven items of the construct 'Parenting and Children's Well-Being (PCWB)'; three items from the 16 items of 'Psychological and Physical Support (PPS)'; two items from the 15 items of 'Roles and Responsibilities in Family Structure (RRFS)'; and one item from the 10 items of 'Financial Stability and Economic Resilience (FSE)'. With the removal of these 12 indicators, the model has successfully achieved an acceptable fit, ensuring the robustness and validity of the model analysis.

The final first-order construct reported an acceptable model fit, with $\chi^2(3870) = 10{,}274.51$, $p < .001$, $\chi^2/df = 2.655$, CFI = 0.857, RMSEA = 0.053, 90% CI [0.052, 0.054], and SRMR = 0.031. According to the theorized factor structure, the ten constructs, though conceptually distinct, are inherently interrelated and reflect complementary dimensions of the broader concept of family resilience. Treating them as isolated factors would ignore the underlying theoretical premise that family resilience operates as a unified, higher-order system of coping and adaptation. Furthermore, inter-factor correlations within the first-order model were moderately high, suggesting shared variance that could be more efficiently captured through a

hierarchical structure. As such, modelling family resilience as a second-order construct aligns with foundational theoretical frameworks, such as Walsh's Model of Systemic Family Functioning [2, 3] and enhances parsimony by reducing model complexity without sacrificing explanatory power. A second-order CFA was therefore conducted, producing a comparable model fit ($\chi^2(3905) = 10{,}564.57$, $p < .001$, $\chi^2/df = 2.705$, CFI = 0.851, RMSEA = 0.054, 90% CI [0.052, 0.055], SRMR = 0.033), supporting the appropriateness of a higher-order model in capturing the multidimensional nature of family resilience in Malaysian Gen Y households. Figure 4 illustrates the final second-order CFA model of the myFRSGY scale. The CFI value of 0.851 is considered acceptable for this research because the study involves a newly developed, multidimensional instrument grounded in a culturally specific context, where slightly lower fit indices are often permissible. As emphasized by Hair et al. [18] and Hooper et al. [29], a CFI above 0.85 may be deemed adequate during the initial validation phase, particularly when supported by other fit indices such as RMSEA and SRMR within acceptable thresholds.

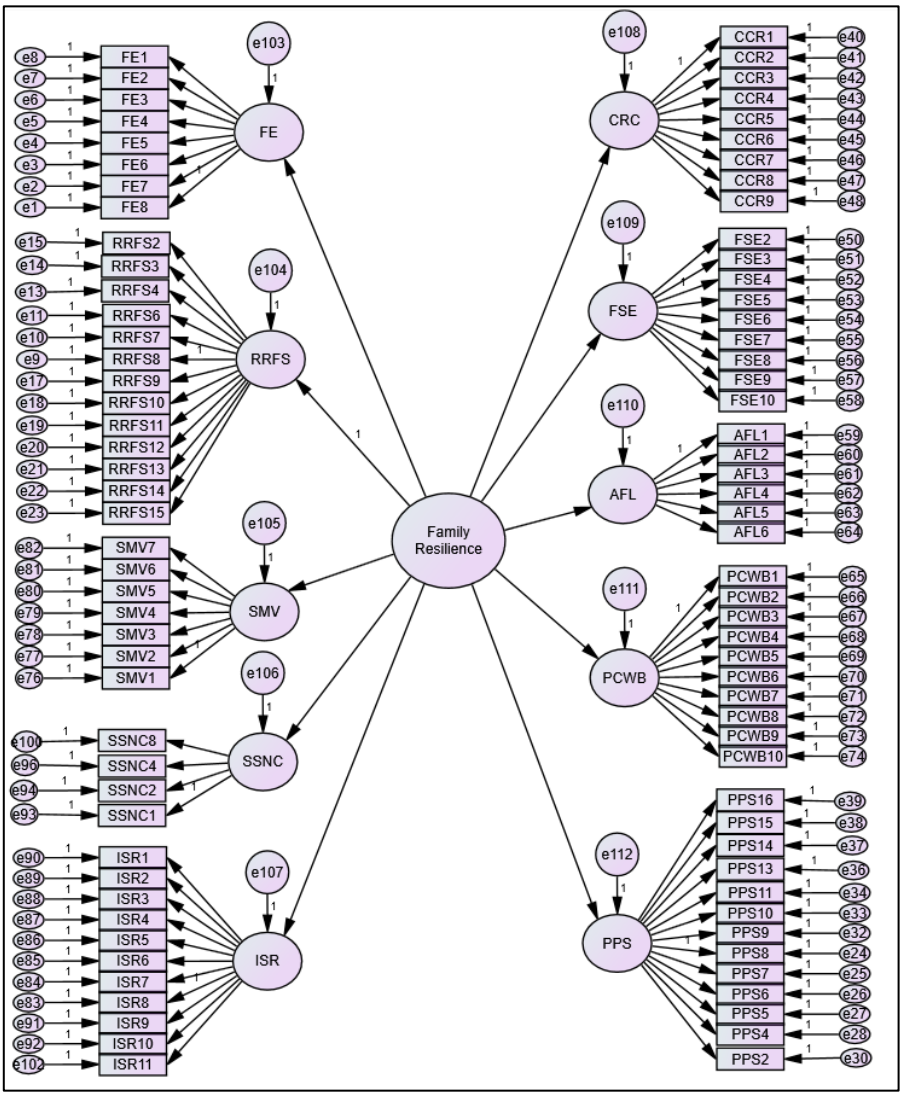

Figure 4.
Model 2: Second-Order Model of myFRSGY - Final Model.

Table 2.
Standardized Regression Weights of Model 2 of myFRSGY.

Indicator		Construct	Estimate
FE	<---	FR	0.948
CRC	<---	FR	0.984
FSE	<---	FR	0.951
AFL	<---	FR	0.965
RRFS	<---	FR	0.969
SMV	<---	FR	0.921
SSNC	<---	FR	0.821
PCWB	<---	FR	0.946
PPS	<---	FR	0.951
ISR	<---	FR	0.970
FE8	<---	FE	0.736
FE7	<---	FE	0.728
FE6	<---	FE	0.732
FE5	<---	FE	0.767
FE4	<---	FE	0.749
FE3	<---	FE	0.744
FE2	<---	FE	0.765
FE1	<---	FE	0.763
RRFS8	<---	RRFS	0.750
RRFS7	<---	RRFS	0.766
RRFS6	<---	RRFS	0.806
RRFS4	<---	RRFS	0.693
RRFS3	<---	RRFS	0.690
RRFS2	<---	RRFS	0.752
RRFS9	<---	RRFS	0.787
RRFS10	<---	RRFS	0.718
RRFS11	<---	RRFS	0.775
RRFS12	<---	RRFS	0.731
RRFS13	<---	RRFS	0.750
RRFS14	<---	RRFS	0.721
RRFS15	<---	RRFS	0.722
PPS8	<---	PPS	0.754
PPS7	<---	PPS	0.794
PPS6	<---	PPS	0.778
PPS5	<---	PPS	0.764
PPS4	<---	PPS	0.750
PPS2	<---	PPS	0.706
PPS9	<---	PPS	0.782
PPS10	<---	PPS	0.768
PPS11	<---	PPS	0.756
PPS13	<---	PPS	0.740
PPS14	<---	PPS	0.768
PPS15	<---	PPS	0.763
PPS16	<---	PPS	0.772
CCR1	<---	CRC	0.746
CCR2	<---	CRC	0.738
CCR3	<---	CRC	0.699
CCR4	<---	CRC	0.785
CCR5	<---	CRC	0.761
CCR6	<---	CRC	0.745
CCR7	<---	CRC	0.757
CCR8	<---	CRC	0.760

CCR9	<---	CRC	0.754
FSE2	<---	FSE	0.691
FSE3	<---	FSE	0.710
FSE4	<---	FSE	0.760
FSE5	<---	FSE	0.770
FSE6	<---	FSE	0.755
FSE7	<---	FSE	0.774
FSE8	<---	FSE	0.739
FSE9	<---	FSE	0.699
FSE10	<---	FSE	0.736
AFL1	<---	AFL	0.714
AFL2	<---	AFL	0.723
AFL3	<---	AFL	0.754
AFL4	<---	AFL	0.726
AFL5	<---	AFL	0.741
AFL6	<---	AFL	0.733
PCWB1	<---	PCWB	0.771
PCWB2	<---	PCWB	0.777
PCWB3	<---	PCWB	0.713
PCWB4	<---	PCWB	0.755
PCWB5	<---	PCWB	0.764
PCWB6	<---	PCWB	0.794
PCWB7	<---	PCWB	0.786
PCWB8	<---	PCWB	0.797
PCWB9	<---	PCWB	0.789
PCWB10	<---	PCWB	0.694
SMV1	<---	SMV	0.771
SMV2	<---	SMV	0.813
SMV3	<---	SMV	0.769
SMV4	<---	SMV	0.795
SMV5	<---	SMV	0.750
SMV6	<---	SMV	0.777
SMV7	<---	SMV	0.796
ISR8	<---	ISR	0.730
ISR7	<---	ISR	0.764
ISR6	<---	ISR	0.751
ISR5	<---	ISR	0.736
ISR4	<---	ISR	0.758
ISR3	<---	ISR	0.742
ISR2	<---	ISR	0.775
ISR1	<---	ISR	0.751
ISR9	<---	ISR	0.768
ISR10	<---	ISR	0.727
SSNC1	<---	SSNC	0.754
SSNC2	<---	SSNC	0.755
SSNC4	<---	SSNC	0.755
SSNC8	<---	SSNC	0.676
ISR11	<---	ISR	0.772

The final second-order model demonstrated an acceptable fit based on key indices. All items loaded well onto their first-order constructs, with loadings between .676 and .813. The first ten-order constructs also loaded strongly onto the second-order factor, Family Resilience, with loadings ranging from .821 to .984. These results support using a second-order model to represent family resilience as a single, multidimensional construct. Table 2 presents the standardized factor loadings from the final second-order CFA model of the myFRSGY scale.

The second-order construct, Family Resilience (FR), is measured by ten first-order constructs, each representing a core dimension of family resilience. The loadings from the first-order constructs to Family Resilience range from .821 to .984, indicating a strong relationship between each dimension and the overall resilience factor. Additionally, Table 2 shows how individual items (indicators) load onto their respective first-order constructs. For instance, items FE1 to FE8 are linked to the Family Endurance (FE) construct, with loading values between .728 and .767. Since all item loadings exceed the acceptable minimum of .676, each item effectively represents its assigned construct. These results support the validity and reliability of the scale, demonstrating that both the first-order and second-order structures are statistically robust and conceptually sound.

3.6. Reliability and Validity of my FRSGY

To assess the measurement model's quality, the constructs' reliability and validity were evaluated. Internal consistency was determined using Composite Reliability (CR), while convergent validity was assessed through Average Variance Extracted (AVE), as recommended in the structural equation modeling literature [18, 28, 30, 31].

For each of the constructs, the CR for each construct exceeded the minimum requirement of .60 [31], indicating that the internal consistency reliability is established. Furthermore, convergent validity is the degree to which indicators of a specific construct share a large amount of common variance and is measured by an average variance extracted (AVE) value of more than .50 [18]. Table 3 provides the reliability and validity of all ten constructs of the myFRSGY scale.

Table 3.
Internal Consistency, Reliability, and Convergent Validity for each Construct in myFRSGY Scale.

Construct	CR	AVE
FE	0.910	0.560
RRFS	0.941	0.553
PPS	0.947	0.580
CRC	0.920	0.562
FSE	0.915	0.545
AFL	0.874	0.536
PCWB	0.934	0.585
SMV	0.917	0.611
ISR	0.935	0.566
SSNC	0.825	0.541
Family Resilience	0.988	0.890

3.7. Objective 3: Cultural Relevance and Practical Utility of myFRSGY Scale

The Malaysian Generation Y Family Resiliency Scale (myFRSGY) has undergone a rigorous scale development process, including item generation based on empirical and cultural input, expert content validity reviews, and psychometric testing through Exploratory and Confirmatory Factor Analyses. Through this process, the scale has been shown to be valid and reliable, making it a scientifically sound instrument for assessing family resilience in the Malaysian context. The myFRSGY scale critically reflects the multifaceted resilience of Malaysian Gen Y families. It addresses emotional and structural strengths, such as Family Endurance (FE) and Roles and Responsibilities in Family Structure (RRFS), highlighting evolving gender roles and intergenerational dynamics. Constructs like Psychological and Physical Support (PPS) and Communication and Conflict Resolution (CCR) emphasize mental well-being and parenting dialogue, growing priorities for Gen Y. Economic survival is captured in Financial Stability and Resilience (FSE). At the same time, Adaptability and Flexibility in Daily Life (AFL) and Independence and Self-Reliance (ISR) reflect their response to modern pressures of life. Parenting and Children Well-Being (PCWB), Spiritual and Moral Values (SMV), and Social Support Network and Community Influence (SSNC) round out a culturally rooted but forward-looking view of family resilience.

Unlike many Western-based family resilience instruments, which often emphasize personal autonomy, emotional expressiveness, and nuclear family structures, the myFRSGY scale adopts a more holistic and collectivist perspective. Western models tend to underrepresent culturally grounded coping mechanisms such as spiritual endurance, shared roles, or community-based support, which are fundamental to the Malaysian context. The myFRSGY scale addresses a critical gap in existing research by combining cultural traditions with the changing realities of modern family life, providing a practical and relevant tool for Malaysian educators, researchers, and practitioners working in the field of family studies. The comprehensive structure of the myFRSGY scale allows for more accurate assessment, better-targeted interventions, and the potential for adaptation in other collectivist or multicultural societies.

Although the myFRSGY scale was developed within the Malaysian context, it is not limited to use among Malaysian families alone. The constructs, such as emotional endurance, shared responsibilities, financial resilience, spiritual values, and community support, reflect universal aspects of family functioning that are relevant in many cultures, especially in collectivist or multicultural societies. The scale's foundation in theory and lived experiences allows it to capture resilience in families navigating change, stress, and intergenerational dynamics, which are common global challenges. With proper translation and cultural validation, myFRSGY has strong potential for adaptation and use in other countries, seeking to measure family resilience in a way that respects cultural diversity and evolving social roles.

4. Discussions

This study aimed to develop and validate the myFRSGY scale to assess family resilience among Malaysian Generation Y families. The results support the view of family resilience as a dynamic, multidimensional process shaped by cultural, emotional, and structural strengths, as conceptualized by Walsh [1] and Walsh [2]. The scale demonstrated strong psychometric properties through EFA and CFA, confirming a reliable ten-factor structure reflective of local values and contemporary challenges.

EFA confirmed the theoretical structure of the scale with ten constructs, including Family Endurance (FE), Financial Stability and Economic Resilience (FSE), and Spiritual and Moral Values (SMV). High KMO values and significant Bartlett's tests confirmed sampling adequacy. Item loadings above .60 and Cronbach's alpha values above .90 indicated strong internal consistency. CFA further confirmed the model's validity, with acceptable fit indices (CFI = .851, RMSEA = .054, SRMR = .033) and clear support for a second-order structure representing overall family resilience.

The myFRSGY scale aligns well with Malaysian family life. Constructs such as Roles and Responsibilities in Family Structure (RRFS) and Parenting and Children's Well-Being (PCWB) reflect the lived experiences of Generation Y families balancing cultural expectations with modern realities, echoing findings by Noor et al. [5]. Unlike Western instruments such as the Family Resilience Assessment Scale (FRAS) by Tucker Sixbey [32] which focuses on individual coping and nuclear structures, the myFRSGY captures collectivist values through domains like Spiritual and Moral Values (SMV) and Social Support Network and Community Influence (SSNC), addressing the critique by Hamzah et al. [17] of the cultural limitations of imported scales.

The myFRSGY scale, with its structure that blends traditional resilience traits and Gen Y-specific experiences such as dual-income parenting and digital adaptation, aligns with Patterson's [20] ecological perspective, which views resilience as arising from the interaction of individual, family, and environmental systems. This validated and culturally responsive tool offers practical utility for family service professionals, educators, and policymakers working to assess and strengthen family resilience in diverse settings. The myFRSGY scale fills a longstanding gap in culturally relevant family resilience measurement and sets a new standard for context-sensitive psychometric tools in family studies. Grounded in the Malaysian experience yet designed with conceptual flexibility, the scale holds strong potential for adaptation across other collectivist or multicultural societies. With appropriate validation, it can serve as a powerful instrument for global researchers and practitioners seeking to understand and support family resilience in diverse cultural settings.

5. Conclusion

This study introduces the myFRSGY scale as a new measure of family resilience among Malaysian Generation Y families. Built through a careful process and tested with robust analysis, the scale demonstrates how resilience functions across various aspects of family life, including emotional, financial, spiritual, and social domains. The results support the notion that family resilience is not a single trait but a combination of multiple strengths. The myFRSGY scale comprises ten key constructs that reflect how modern Malaysian families manage responsibilities, support each other, and adapt to change. These constructs are based on the actual experiences of families today, making the scale practical and relevant.

The myFRSGY scale is a valuable tool for research and can assist professionals working with families. It guides counselling, program planning, and community support. Since it is based on Malaysian values and everyday realities, it provides a more accurate picture than tools developed in other countries. The myFRSGY scale also has potential for use beyond Malaysia. Proper adjustments to the original scale could enable its application in measuring resilience in other cultures that emphasize family and community connections. A limitation of this study is its focus on Malaysian Generation Y families, which may not fully capture the resilience traits of other generations. The reliance on self-reported data can introduce bias, and a cross-sectional design does not allow for observing changes over time. Future research should test the scale across different age groups and cultural settings and consider longitudinal designs to track resilience over time. In conclusion, the myFRSGY scale offers a reliable and meaningful way to understand how families maintain strength. It captures the challenges and strengths of Generation Y households and provides a clear pathway for future research, policy development, and family support initiatives.

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