



Development and content validity of the readiness for Filial Responsibility Scale

Huemer O. Uy, MSN, RN
Cebu Normal University, Philippines.
E-Mail: Huemer.uy@gmail.com

Abstract

Ageing brings physical limitations which gradually hamper people's ability to do self-care and activities of daily living. Changes in social roles, financial stability, cognitive functions, emotional needs and spirituality could steer ageing parents toward partial or total dependence on their children. This study aims to develop a scale which measures the adult children's readiness to assume filial responsibility. Using inductive approach and literature reviews, various ways of assuming filial responsibility have been explored and classified into five themes- physical support, financial support, psychological support, emotional support and spiritual support. 25 questions were formulated in relation to the identified themes and were evaluated by five gerontology experts based on each items' relevance to the scale. Content validity was measured at both item and scale level. Item-level content validity was identified through content validity ratio (CVR) and Content Validity Index (I-CVI). 22 items rated as "essential" had a perfect agreement between all experts (CVR=+1.00; I-CVI=1.00); three items did not meet the recommended level of agreement proportion (CVR_{critical} ≥ +0.99; I-CVI=1.00). Overall, the scale has an average scale-level content validity index (S-CVI/Ave) of 0.952, with a scale-level content validity index for universal agreement (S-CVI/UA) of 0.88.

Keywords: Filial Responsibility, Filial Piety, Filial Responsibility Scale, Content Validity, Readiness Scale

Introduction

Following the traditional family dynamics, parents normally provide the needs of their growing children. With the inherent and implicit responsibility of providing a nurturing environment conducive for growth and healthy development, these parents become the primary source of family support. Treas and Cohen (2007) defined family support as social, emotional, instrumental, and economic exchanges between family members. However, in time, these parents who used to be the primary provider and care giver of the family grow old and develop needs that they can no longer independently meet because of the limitations brought about by ageing. Aside from the physical limitations that can gradually hamper their ability for self-care and activities of daily living, changes in their social role, financial stability, cognitive function, emotional needs and spirituality become imminent. Associated with changes in health and social status, the once independent parents can end up seeking assistance from their significant others such as close kin, able peers and mostly, from family members.

During the early phase of late adulthood, spousal obligations normally develop wherein the couple mutually meet their own needs independently without their children's aide. However, their independence may not last long if a spouse dies or both partners start developing the same needs that cannot be met by the other (example, physical and sensory limitations on both partners). In most Asian families, it is not uncommon for ageing parents to start reaching out seeking help from their own children (Kim, et al., 2015, Waheed et al. 2020). Also in some cultures, where having close family ties is the norm, the children may start to reach out to their parents once some parental needs are perceived. At this point, the burden of taking care, and meeting the needs and expectations of the family starts to

reciprocate. The children who were once dependent on their parents' provision and care, are now the functional adults who are responsible for taking care and meeting the needs of their elderly family members. Now having the added responsibility of caring for and looking out for their elderly parents' needs, this becomes a stressful period for functional adult children (Stephens, & Townsend, 1997; Szinovacz, & Davey, 2013, Gilani et al., 2020) for playing the role of a "sandwich" generation.

Filial responsibility (also known as filial piety or filial obligation) refers to one's caring duty to one's parents (Coalson, 1999; Polenick et al., 2017). Such support may come in various forms such as physical, financial, psychological, emotional or spiritual support. When the children's ability to meet their filial responsibility is perceived to be poor, their parents experience despair over their children's unreliability and become distressed about being abandoned upon reaching old age (Liu, & Huang, 2009). To address that, developing readiness among adult children in assuming the responsibility to provide support to ageing parents becomes a need.

Due to the lack of conceptual clarity in literature on adult children's responsibility for ageing parents, the Filial Values Index was developed in order to predict association of filial care-giving, filial values, and caregiver health outcomes (Jones, et al., 2011). In developing the index, 119 questionnaire items were assessed for clarity by 20 individuals representing different cultural groups. Every cultural group is represented by two females and two males who rate each item on a 4-point rating scale. At this point, ten cultural experts (one male and one female from each cultural group) examined the content validity. Such process then reduced the questionnaire into 59-item with seven themes, with seven questionnaire items per theme. The said tool was then pretested twice involving 34 and 30 individuals respectively. The final questionnaire had all the 59 items rated on nine point Likert scales. (Jones, et al., 2011).

Fingerman, et al., (2010) established the *Intergenerational Support Scale* in order to assess an adult child's parental support. In developing the tool, five questions were derived from other tools that assess Social Support (Vaux, 1988; Vaux & Harrison, 1985), and one question pertaining to daily interactions was derived from Fingerman (2001). Each item was scored based on the frequency of its occurrence. To come up with the score, the mean of the six items are calculated.

Multiple scales have been developed to measure filial piety among adult children. Ho and Lee (1974) created a filial piety scale that assesses the traditional filial attitudes that rooted from Confucianism and overemphasizes some aspects of authoritarianism which implies the children's absolute submission to parents' wishes, duties to repay parents' sacrifices, preserve family honor, and continue the ancestral line (Hwang, 1999; Gilani et al., 2020). Such authoritative elements were criticized in Yang et al. (1989) by emphasizing that filial piety should also include emotional connection and affection between parents and children (reciprocity), thus developing the Formal Filial Piety Scale. In order to measure two integrated concepts—1. authority and obedience, 2. and emotion and reciprocity-- Yeh and Bedford (2003) designed the nine-item Dual Filial Piety Scale (DFPS), wherein few items relating to reciprocal and authoritarian form of filial piety were modified from the formal filial piety scale of Yang et al. (1989).

Lum et al, (2016) developed the Contemporary Filial Piety Scale (CFPS) by compiling 42 items through concept analysis on current literature. Using principal component analysis, a three-factor model was generated: pragmatic obligation, compassionate reverence, and family continuity. The third factor (family continuity) was removed after a confirmatory factor analysis. The remaining two-factor model with a total of 10 items was then adopted as an efficient instrument with psychometric capabilities of assessing contemporary filial piety.

Cicirelli (1988) originated the concept of filial anxiety to explain the state of distress about the anticipated decline and death of an ageing parent, as well as one's apprehension about one's ability to meet a foreseen parental care-giving needs and in preparation for further parental decline and needs for supplementary care. To measure such anxiety, Cicirelli (1988) designed the filial anxiety scale (FAS) and was administered to 71 adult children. The scale, which was narrowed down to 13-items, generated two themes which relate to the cause of filial anxiety- foreseen care-giving role and anticipated parental decline. The tool validity was proven as anxiety caused by an expected care-giving role turned out to be significantly related to level of adult children's resources; while the anxiety caused by parental declines was related to their parental attachment.

Bergelson, et al., (2015) studied the phenomenon called “post-migration filial responsibility” which retrospectively explored the emotional reactions of immigrant children towards their family’s traditional practices of filial responsibility and their respective psychological adaptation. The emotional reaction to filial responsibility scale (ERFR) was created and was tested on immigrant adults who migrated when they were 16 to 55 years old. Along with ERFR, four other proxy measures of adjustment were used such as an adapted version of the Brief Symptom Inventory, the Satisfaction with Life Scale, the General Self-Efficacy Scale, and selected items from the General Life Functioning Inventory (Bergelson, et al., 2015). In this study, resilience factors were examined which included individual characteristics of sense of coherence, optimism, and perceived social support, which in general, diminished the relationship between filial responsibility and some of the adjustment indicators. The results contribute to an understanding of interrelations between post-migration filial responsibility and adjustment (Bergelson, et al., 2015).

Various research tools have been developed to measure filial piety/responsibility (Ho & Lee, 1974; Lum, et al., 2016; Yang, et al., 1989; Yeh & Bedford, 2003), filial anxiety (Cicirelli, 1988), expectations of filial piety/responsibility (Kao & Travis, 2005; van der Pas, et al., 2005), attitudes toward filial responsibility (Brody et al., 1983; Hamon, & Blieszner, 1990; Seelbach, & Sauer, 1977) and the willingness for filial responsibility (Zhan, 2004). However, most of the previously constructed scales pertaining to filial responsibility attitude lacks reliability and validity estimates (Coalson, 1999). Furthermore, there has been no known tool developed to assess the adult children’s readiness to assume filial responsibility. Thus, this paper aims to develop a measurement that gauges an adult child’s self-perceived level of readiness to support their ageing parents.

Theoretical Framework

The Bowen Family Systems Theory (1974), which conceptualizes human behavior and human relationships, provides an important framework that makes the assessment of an adult child’s readiness to assume filial responsibility pertinent. The family systems theory posits that “all important people in the family unit play a part in the way family members function in relation to each other” (Bowen, 1974). This theory considers family as a system where a functional change in one family member leads to a compensatory change and reciprocal impact with other family members (Bowen, 1974). Families acting as systems explain why people tend to seek his family’s attention, approval and support and respond to each others’ needs, expectations and disappointments. Such connection makes family members function interdependently and is presumed to promote cohesiveness and cooperation among family members in terms of providing protection, shelter, provision towards other family members (Kerr, 2000). However, increased pressure can lead to anxiety and other problems. Should this anxiety be left unresolved, the emotional connection among family members may lead to more stress, thereby making one or more family members feel overwhelmed, isolated and out of control (Kerr, 2000). These people are mostly the ones who absorb most of the tension and the system “anxiety”, and thus become more inclined to depression, alcoholism, affairs and physical illness.

The family systems theory has eight interlocking concepts-- triangles, emotional fusion and self-differentiation, nuclear family emotional process, family projection process, emotional cutoff, multi-generational transmission process, sibling positions, and societal emotional process (Bowen, 1974; Brown, 1999; Kerr, 2000).

First, the triangle refers to the three-person relationship system which can contain much more tension, as the tension can shift around three relationships. Triangling (otherwise known as triangulation) takes place when an inevitable anxiety between two persons is alleviated by accommodating a third person who can take sides, or temporarily reroute the anxiety (Brown, 1999). This can be observed in the filial responsibility taking place in some families, as a response to failing spousal obligations between ageing parents.

Second, the concept of emotional fusion and self-differentiation refer to a family member’s tendency to independently or dependently function within family relationships. ‘Fusion’ happens when independent preferences are ignored for the purpose of creating harmony inside the system and is conveyed either by assuming responsibility over the others reactions, or by emotional ‘cut-off’ within the relationship (Brown, 1999). ‘Differentiation’, on the other hand, refers to one’s ability to independently make decisions, while maintaining emotional bond to relationship (Brown, 1999). This

can be observed in the decision making of some adult children pertaining to their assumption of filial responsibility as some adult children may be obliged to assume certain roles to achieve harmony and minimize parental anxiety, yet others may choose otherwise, while maintaining emotional connection to the family.

Third, the emotional dynamics of nuclear family pertains to four patterns that govern complications in a relationship - marital conflict, a spouse's inability to perform individual roles, disability of any of the children, and emotional detachment. This concept assumes that tension increases the activity of one or more relationship patterns; and that the greater the tension, there is an increasing tendency of the manifestations to be serious, and more relationships will be symptomatic (Kerr, 2000).

Fourth, the family projection process refers to a concept of communicating tension and emotional problems to a child. This in turn can lead to anxiety to the child, as it is assumed that children with the weakest emotional independence are most prone to developing anxiety. Through this reciprocal anxiety, children become more impaired as they inherit the tension from their parents (Brown, 1999). Kerr (2000) summarizes this projection into three steps—the parent pays special attention to the child because of a perceived abnormality, the parent validates the said perceived abnormality by translating the child's manifestations, and the parents provides special treatment to the child by assuming that the child is dysfunctional. In the concept of filial responsibility, a parental anxiety on the adult child's level of preparedness to assume such responsibility may be directly or indirectly communicated to the child, which may cause the adult child to inherit the anxiety. When such anxiety is manifested on the adult child's behavior, the parents may interpret it as confirming their adult child's lack of preparedness.

Fifth, the emotional cutoff refers to the concept where children emotionally dissociates from their parents and other family members to alleviate emotional conflict. This may be attained by physical detachment, or by maintaining physical connection while avoiding issues that may lead to tension (Kerr, 2000). A main proposition of Bowen's family system theory is that "the more people maintain emotional contact with the previous generation, the less reactive they will be in current relationships" (Brown, 1999).

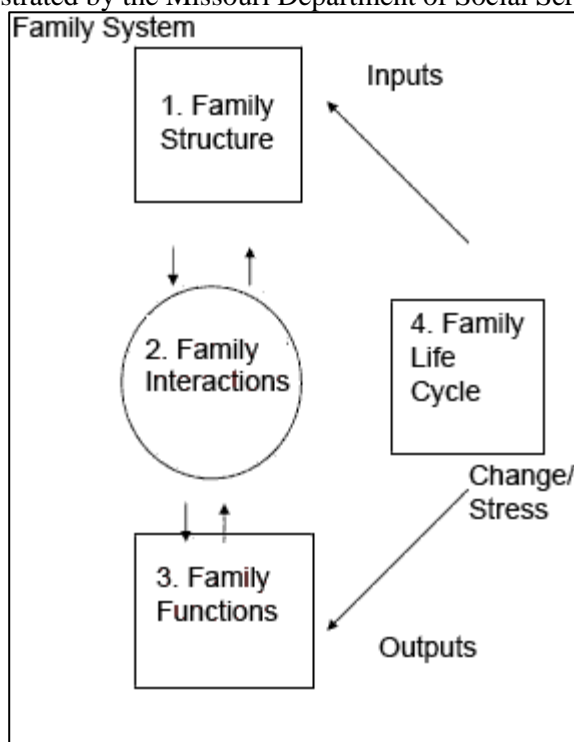
Sixth, the multi-generational process describes how patterns and roles in a triangle are passed down to the next generations. This concept assumes that each generation promotes lowered levels of differentiation to family members of the next generation (Kolhepp, 1998). However, it is also possible for the succeeding generations to differentiate by having family members that are minimally focused on the family projection process, or by having a spouse with a higher level of differentiation (although Bowen (1979) believes that most people select mates with similar levels of differentiation (Kolhepp, 1998).

Seventh, the concept of sibling position assumes that people who grew up in the same sibling position most likely have common characteristics (Kerr, 2000). As an example, the eldest child are more likely to be responsible and manifest leadership characteristics, the middle child tends to be the mediator and may shift between both leader/follower roles, while the youngest of the siblings are often the followers. Though the characteristics of these sibling positions are not necessarily opposites but are complementary to each other- as in a leader-follower relationship (Kerr, 2000). Although, Bowen (1979) never really concluded that these generalized traits are universal, such that the youngest child may even act as 'functional eldest' (Brown, 1999).

And lastly, the societal emotional process which refers to the extension of the family patterns to the larger emotional systems of the society. This idea outlines how the emotional system dictates behaviors on a societal level, affecting both progressive and regressive impact to a society (Kerr, 2000; Kolhepp, 1998). Just as in the dynamics of family relationships to its individual members, the societal emotional process has reciprocal influence on the emotional processes in families (Kolhepp, 1998).

The family systems theory has also guided family therapies through the use of family systems approach which is based on assumptions that consider each family unique as shaped by personal characteristics of its members, cultural influence and ideological upbringing; families are interlinked systems with parts whose boundaries are constantly shifting and resistance to change varies; families need to fulfill varying roles for each member, individually and collectively as a family, in order for its members to grow and develop; and families pass through developmental and non-developmental changes that stress all members, at varying degrees (Missouri Department of Social Services, n.d).

Figure 1. The Family Systems
(Illustrated by the Missouri Department of Social Services).



Filial responsibility invokes changes in family dynamics and roles. Since the family, as a system, is composed of individual members that play important roles to one another, it is necessary to assess each family member's readiness to the changes and the assumption of new roles. Pelletiere (2006) proposed that the change process in a system usually fails because a lack of readiness for change. Individual's readiness for change consists of beliefs and attitudes towards a change initiative; a state of unfreezing; and a collection of thoughts toward a change initiative (Armenakis, & Harris. 2002; Bernerth, 2004). In the context of filial responsibility, this translates to an adult child's readiness to let go of being the recipient of parental support into being the provider of support to ageing parents. Furthermore, to ensure individual readiness to embrace changes in the family roles, each member must be able to perceive a demonstrable need for change, have a sense of one's ability to accomplish change (or assume the new role), and an opportunity to participate in the change process (Armenakis, et al., 1993).

Research Methodology

The study started with an inductive approach as its aim is to capture various ways filial responsibility is assumed in order to develop a tool that measures an adult child's readiness to assume filial responsibility. This process was done through focused group discussions and individual interviews in order to illicit as much data that could be used to generate the questionnaire. In choosing the participants, inclusion criteria were set to ensure that the interviews and focused group discussions yield useful and realistic data. The criteria in choosing the participants include a.) adult, b.) with at least one living parent who is perceived to fall under the participant's care in the future, or with at least one parent who is currently under the participant's care, or with any parent (deceased or living) who was previously under the participant's care.

Thirteen respondents joined two separate focused-group discussions; and three respondents were interviewed individually to gather their experiences and perceptions on filial responsibility. Participants were classified into three groups- Group A are adults with an anticipated responsibility to take care of an ageing parent(s) soon; Group B are adults who are currently taking care and providing support to at least one living parent; and Group C are adults who have previously taken care and

provided support to at least one parent. Of the sixteen total respondents, eight were classified under group A (with mean age of 23), five are classified under group B (with mean age of 28); and three are classified under group C (with mean age of 37). A total of 23 significant statements led to data saturation.

Group A participants were asked about what they expect filial responsibility will involve, and what needed preparations are perceived. Group B participants were asked about what their current responsibilities toward their ageing parents are, and the ways in which their current responsibilities are accomplished. Group C participants were requested to recall how they provided support to ageing parent(s) who was/were previously under the participant's care. By involving the three group of participants, the interviews and informal focused group discussions were able to gather data based on perceived responsibilities from Group A participants, and the actual responsibilities experienced by participants from Group B and C.

After gathering enough information, the interview data were then transcribed, read and analyzed in order to illicit their formulated meanings. The formulated meanings were classified according to their thematic ideas. Five themes emerged as to how filial responsibility is perceived and assumed—physical support, financial support, psychological support, emotional support, and spiritual support. Literature review was also done in order to consider the compositions and methods of previously developed questionnaires, and to consider how filial responsibility is practiced across different cultures.

After identifying the themes from the data, the questions were liberally formulated into questionnaire items that represent these themes. The questions were read multiple times and analyzed until the contextual similarities were identified, then the items were integrated to narrow down the questionnaire into more generalized statements that can be applied in varying situations. After integrating pertinent information from literature reviews and participant's statements according to their contextual similarities, interview questions were formulated and grouped into five clusters, representing each of the five themes.

Method Verification

Twenty-five questions were formulated and arranged into clusters, according to their themes. An evaluation sheet containing a table with three columns was created to test the content validity of these questions. The first column contained all the 25 questions, while the second and third columns were left blank as they were intended for the rating of each item and for the expert's comments, respectively.

The evaluation sheets were sent via email to five experts. All five experts are gerontology practitioners and educators, who have already earned a doctorate degree in gerontology nursing. On the email sent to them, the purpose of the evaluation was explained, including the instructions on how to use the evaluation sheet and how each item should be evaluated.

All 25 items were evaluated based on their relevance using a 4-point scale. While Lynn (1986) advised that item evaluation should be rated using a 3- or 5-point rating scale, a 4-point rating scale may be preferred in order to avoid having a neutral or ambivalent midpoint (Polit, & Beck, 2006). Davis (1992), as cited in Polit and Beck (2006), supported the most frequently used label for the 4-point scale: 1= not relevant, 2= somewhat relevant, 3= quite relevant, and 4=highly relevant. The scoring and its labels are shown on the evaluation sheet used by all five experts in rating the relevance of each item in the proposed questionnaire.

After receiving the feedback from each expert, the data was processed on a spreadsheet to calculate for the Content Validity Ratio (CVR) and the Content Validity Index (CVI), which will reflect the item-level content validity. The comments from the experts were also considered in order to enhance the formulation of the questions, making them more inclusive and applicable to adult children with various backgrounds.

The Tool

Prior to proceeding to the readiness for filial responsibility (RFR) scale, the tool (see appendix A) begins with a questionnaire asking for the participant's age, gender, marital status, nationality, and country of origin. These questions are not part of the scale, but they yield important information that can be used in profiling the participant. The age, gender, and marital status are included in the tool as

such information may justify the level of participant's readiness in various clusters. Nationality and the country of origin may also be used to determine the participant's cultural background which may influence the participant's perception and behavior toward filial responsibility.

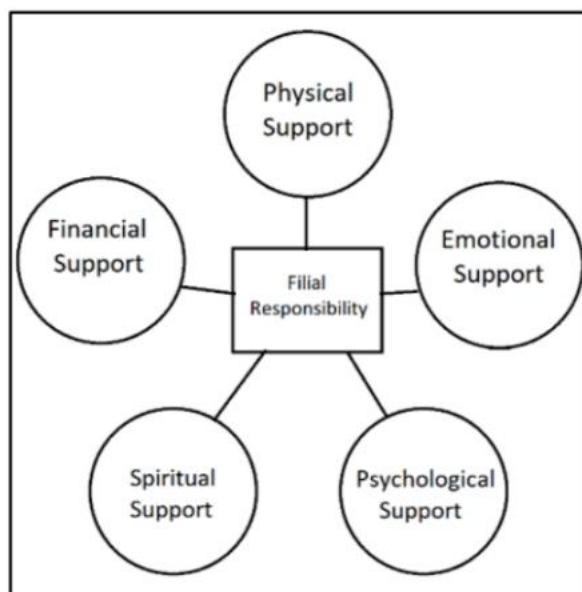
Apart from the profiling information, the tool also includes few questions that assesses the participant's current status (if the participant is supporting a parent at the moment, and if the participant's current finances are enough), the participant's current responsibilities (such as having dependent children, and having a full-time job), and the participant's perception of future filial responsibility. The answers to these questions may justify the participant's level of readiness and may be used to test the tool's reliability in future studies. Furthermore, questions 1 and 2 function as qualifiers to ensure that the participant is either a.) currently supporting a parent, or b.) anticipating an ageing parent as dependent. In order to identify if a participant is qualified for this tool, at least one of the questions 1 and 2 should be answered with a "YES". If both questions 1 and 2 are answered with a "NO", this tool may not be applicable as there is no reason to assess the participant's RFR.

The main part of the initial tool is the RFR scale composed of 25-item questions classified into five clusters. The first cluster which measures readiness for physical support (RPS) contained five items (items 1 to 5); the second cluster which measures readiness for financial support (RFS) contained five items (items 6 to 10); the third cluster which measures readiness for psychological support (RPsS) contained six items (items 11 to 16); the fourth cluster contained five items that measure readiness for emotional support (RES) (items 17 to 21); and lastly, the fifth cluster contained four items that measure readiness for spiritual support (RSS) (items 22 to 25). Each question is to be rated by a participant using a 5-point scale with the following label: 1- Fully unprepared, 2- slightly prepared, 3- Moderately prepared, 4- Highly prepared, and 5- Fully Prepared.

To use the tool, the researcher will compute the average rating of all items belonging to the same cluster. The average rating will represent the cluster score. For example, to determine the participant's RPS, the average ratings of items 1 to 5 will be computed. The average rating (cluster score) will represent the participants' readiness level for that cluster.

The same procedure of averaging will be applied to all five clusters. Recognizing that filial responsibility involves a balance of physical, financial, emotional, psychological and emotional support, the researcher assumes that each cluster in this tool should have an equal weightage in determining a participant's total RFR score. Considering that not all clusters have an equal number of items (three clusters have five items each, one cluster have four items, and one cluster have six items), computing for a participants' level of readiness should not be done by calculating the average of all 25 items altogether. Instead, computing for a participant's overall RFR shall be done by calculating the readiness level for each cluster first and obtaining the average of 5 cluster scores to a generate the overall RFR score.

Figure 2. The five themes representing equal relevance in filial responsibility.



Each of the five cluster’s score and the RFR score will yield a minimum value of 1.0 and a maximum value of 5.0. The cluster scores and the RFR score will be interpreted based on three classifications- Poorly Prepared, Moderately Prepared, and Highly Prepared. This will help identify the level of the participant’s readiness at each category. The ranges of scores and their interpretations are shown in table 3.

Table 2. The ranges of scores and their interpretation

1.00	to	2.33	Poorly prepared
2.34	to	3.67	Moderately prepared
3.68	to	5.00	Highly prepared

Results and Discussion

For the CVR and the CVI to be computed, it is necessary to classify each item using a dichotomized nominal data-- relevant and non-relevant (Polit, & Beck, 2006), or essential and non-essential (Ayre, & Scally, 2014). The experts’ evaluations sheets rated each item with values ranging from 1 to 4. These ratings were dichotomized by considering those items rated 3 or 4 as ‘relevant/essential’, while those items rated as 1 or 2 were considered as ‘non-relevant/non-essential’.

Content Validity Ratio (CVR)

Lawshe (1975), as cited in Ayre and Scally (2014), proposed CVR to calculate the proportional level (ratio) of agreement between experts who rated an item as “essential” (or relevant). Lawshe (1975) also argued that computing the CVR is useful in order to easily identify which item is considered “essential” by more than 50% of the panelists, assuring its content validity (Ayre & Scally, 2014). CVR is computed using the Lawshe’s formula shown below:

$$CVR = \frac{n_e - (N/2)}{N/2}$$

Lawshe’s formula computes CVR by considering n_e (which is the number of experts indicating an item is “essential”), and N (which is the total number of experts rating the item). CVR can be expressed in values ranging from +1 to -1, wherein +1 is interpreted as perfect agreement and -1 as perfect disagreement. Any item with a CVR above zero means more than 50% of the experts agree that

the item is essential, while a CVR below zero means that less than 50% of the experts consider the item essential.

However, using 50% agreement (represented by a CVR of 0) as the basis for finally considering the item as essential may not be enough as it is important to consider the possibility that the agreement may have occurred by chance (Ayre & Scally, 2014). In order to exceed the level of agreement by chance for a given number of experts, Lawshe provided a table of critical CVR values ($CVR_{critical}$).

For this study, a panel size of 5 experts have a $CVR_{critical}$ of +0.99, which means that almost all 5 experts are required to agree that the item is “essential” in order to meet the $CVR_{critical}$. Even if 3 out of 5 experts ($CVR=0.2$) would already mean that more than 50% of the experts agree that the item is “essential”, this study would apply Lawshe’s $CVR_{critical}$ as the basis for retaining an item in the questionnaire in order to get rid of a possible agreement by chance.

Table 1. Lawshe's Table of Critical CVR values (Taherdoost, 2016)

No. of Panellists	Minimum Value
5	.99
6	.99
7	.99
8	.75
9	.78
10	.62
11	.59
12	.56
13	.54
14	.51
15	.49
20	.42
25	.37
30	.33
35	.31
40	.29

Of the 25-items rated by the experts, 22 items have a CVR above the +0.99 $CVR_{critical}$ value. The three items that did not reach the critical limit have CVR values of +0.2, -0.2, and +0.6, respectively. Basing on each item’s CVR and Lawshe’s table of Critical CVR Values, only 22 “essential” items of the questionnaire pass the minimum level of agreement of all five experts.

Content Validity Index (CVI)

Like CVR, CVI is an index that conveys the proportion of agreement between raters (experts). Lynn (1986), as cited in Polit and Beck (2006), noted two types of CVI. The first type computes the content validity of individual items (I-CVI), while the second type computes the content validity of the entire scale (S-CVI).

I-CVI is computed as the number of experts considering an item as “relevant” (rating of 3 or 4), divided by the total number of experts (Polit & Beck, 2006). Like CVR, I-CVI also has the possibilities that the agreement between raters happened by chance. To resolve this, Lynn (1986) utilized the standard error of proportion to develop the criteria for item acceptability (Polit & Beck, 2006). Basing on Lynn’s criteria, a panel composed of five experts (or less) must have all experts agree on the item’s content validity (I-CVI=1); while a panel of six or more experts has a recommended I-CVI of not less than 0.78 (Polit, & Beck, 2006). For this study, 22 items achieved an I-CVI of 1.00, while the three other items have an I-CVI of 0.6, 0.4, and 0.8, respectively.

Polit and Beck (2006) cited two definitions of S-CVI coming from two sources -- “The proportion of items given a rating of quite/very relevant by both raters involved” (Waltz et al., 2005); and “the proportion of items given a rating of 3 or 4 by both raters involved” (Waltz, & Bausell, 1981). However, both definitions emphasized the use of the word “both”, which suggest that S-CVI is the proportion of agreement between two experts. Considering that more than two experts are usually

involved in evaluating the content validity, Polit and Beck (2006) provided an extension to the original definitions of a two-rater S-CVI. To account for the rating of “all” content experts who evaluated each item, in cases where multiple raters are involved ($N > 2$), Polit and Beck (2006) coined the concept of S-CVI/UA to represent the scale-level content validity index by universal agreement. Hence, S-CVI/UA is defined as “the proportion of items on a scale that achieves a relevance rating of 3 or 4 by all the experts” (Polit, & Beck, 2006).

Polit and Beck (2006) also coined the concept of S-CVI/Ave (average) which serves as a “more liberal interpretation” to the original definitions of S-CVI. S-CVI/Ave is defined as the “average of the I-CVIs for all items on the scale”, and is recommended to be 0.90 or higher, for a scale to be considered as having excellent content validity (Polit & Beck, 2006).

For this study, the S-CVI/UA is at 0.88, while the S-CVI/Ave is at 0.952.

Validation Findings

The tool’s S-CVI/Ave of 0.952 can classify the 25-item scale as having an excellent overall content validity. However, three items did not meet the recommended agreement proportion ($CVR_{critical} \geq +0.9$ and $I-CVI=1.00$) of five experts.

Experts suggested that encouraging friends and younger family members to visit an ageing parent may not be feasible in most scenarios, especially if the friends and relatives are living in a distant location (ie, the relatives are from abroad). The experts recommended an integration of questionnaire items which will suggest the use of technology (ie, video calls) to maintain communication with friends and relatives from distant places. However, the researcher’s reason for not integrating some items is not all relatives/friends are coming from distant places, and the item could mean encouraging visits from friends/relatives nearby. Having a CVR of 0.2 and an I-CVI of 0.6, item #12 of the original questionnaire was removed from the final questionnaire and is now integrated to item #11.

Furthermore, the original item #16 with a CVR of -0.2 and an I-CVI of 0.4, experts suggested that constantly providing resources to promote learning may not be necessary or applicable in most scenarios. However, the experts recommend having item #16 integrated with item #15 by carefully rephrasing the statement in order to classify “learning” as a hobby or a mode of self-discovery. This is now reflecting as item # 14 in the validated questionnaire.

For the original item #18 with a CVR of 0.6 and an I-CVI of 0.8, the expert who rated the item as non-essential recommend having item #18 integrated with the original item #19, as involving ageing parents in important family occasions is similar to involving them in making family decisions. However, all the other four experts agree that item #18 is essential on its own. By following Lawshe’s critical CVR values and Lynn’s criteria, the original item#18 shall be removed from the questionnaire, but shall be integrated to the original item #19. In the validated questionnaire, it is shown as item #16.

All experts who rated most items of this tool as “essential” recommend that some items can be improved by carefully rephrasing them to be more inclusive, and not appearing as “too ideal”. It was recommended that the items be rephrased in a way that they do not appear to hinder the participant’s personal growth in the pursuit of providing support to their ageing parent(s). Furthermore, in rephrasing the questions, experts suggested to avoid the usage of certain words, such as the word “permanently”, which may suggest a perpetual responsibility. Rather, it is recommended to use the word “sustainably” as an alternative, which suggests consistency in providing support.

Most of the experts also recommend using statements and examples that are inclusive, which participants from any origin or culture can relate to. For instance, the usage of the term “church services” is exclusive to Christians, while “praying the rosary” is exclusively Catholic in nature. Furthermore, it was recommended to have the term “church services” replaced with religiously inclusive terms such as “worship activities” or “religious gatherings”. For the same reason, “providing a quiet place for worship” is more inclusive than the usage of “praying the rosary”. The 22-item final version of this validated tool, applying the validation criteria and integrating the experts’ recommendations, is shown on appendix A.

Conclusions and Recommendations

Despite having three items not meeting the recommended agreement proportion between five experts, this scale can already be considered a valid tool in measuring an adult child’s readiness to assume filial responsibility. The reliability (consistency) of this tool, however, has not been established.

The researcher recommends having this tool tested on multiple participants with various backgrounds, in order to ascertain the tool's reliability.

Overall, the content of this tool is already considered valid. After applying minor improvements on the sentence construction, the final version version of the validated tool can already be used as an instrument or reference for future research studies in family dynamics and gerontology.

References

- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for Organizational change. *Human relations*, 46(6), 681-703.
- Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of organizational change management*.
- Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development*, 47(1), 79-86.
- Bergelson, Y. P., Kurman, J., & Roer-Strier, D. (2015). Immigrant's emotional reactions to filial responsibilities and related psychological outcomes. *International Journal of Intercultural Relations: IJIR*, 45, 104.
- Brody, E. M., Johnsen, P. T., Fulcomer, M. C., & Lang, A. M. (1983). Women's changing roles and help to elderly parents: Attitudes of three generations of women. *Journal of Gerontology*, 38(5), 597-607.
- Bowen, M. (1974). Alcoholism as viewed through family systems theory and family psychotherapy. *Annals of the New York Academy of Sciences*, 233(1), 115-122.
- Brown, J. (1999). Bowen family systems theory and practice: Illustration and critique. *Australian and New Zealand Journal of Family Therapy*, 20(2), 94-103.
- Cicirelli, V. G. (1988). A measure of filial anxiety regarding anticipated care of elderly parents. *The Gerontologist*, 28(4), 478-482.
- Coalson, D. L. (1999). Filial responsibility attitudes: Scale development and its correlates. Texas University.
- Davis, L.L. (1992). Instrument review: Getting the most from your panel of experts. *Applied Nursing Research*, 5, 194-197
- Fingerman, K. L. (2001). "We Had a Nice Little Chat" Age and Generational Differences in Mothers' and Daughters' Descriptions of Enjoyable Visits. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(2), P95-P106.
- Fingerman, K. L., Pitzer, L. M., Chan, W., Birditt, K., Franks, M. M., & Zarit, S. (2010). Who gets what and why? Help middle-aged adults provide to parents and grown children. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66(1), 87-98.
- Gilani, N., Waheed, S. A., Thakur, I., Zafar, S. (2020). What do university students talk about in leisure time? Students' reflections on their personal and academic life. *Psychology and Education*, 57(5), 368-374.
- Gilani, N., Waheed, S. A., Hussain, B. (2020). Multiculturalism and Integration: Challenges, Strategies and Prospects of Students' Integration in Educational Environment and Society. *Global Social Sciences Review*, 5(2), 174-181.
- Hamon, R. R., & Blieszner, R. (1990). Filial responsibility expectations among adult child-older parent pairs. *Journal of Gerontology*, 45(3), P110-P112.
- Ho, D. Y. F., & Lee, L. Y. (1974). Authoritarianism and attitude toward filial piety in Chinese teacher. *The Journal of Social Psychology*, 92, 305-6.
- Hwang, K. K. (1999). Filial piety and loyalty: Two types of social identification in Confucianism. *Asian Journal of Social Psychology*, 2(1), 163-183.
- Jones, P. S., Lee, J. W., & Zhang, X. E. (2011). Clarifying and measuring filial concepts across five cultural groups. *Research in nursing & health*, 34(4), 310-32
- Kao, H. F. S., & Travis, S. S. (2005). Development of the expectations of filial piety scale-Spanish version. *Journal of Advanced Nursing*, 52(6), 682-688.

- Kerr, M. E. (2000). *One Family's Story: A Primer on Bowen Theory*. The Bowen Center for the Study of the Family. <https://thebowncenter.org/theory/>
- Kim, K., Cheng, Y. P., Zarit, S. H., & Fingerman, K. L. (2015). Relationships between adults and parents in Asia. In *Successful aging* (pp. 101-122).
- Liu, B. S., & Huang, H. C. (2009). Family care for the elderly and the importance of filial piety. *Hu li za zhi the journal of nursing*, 56(4), 83-88.
- Lum, T. Y., Yan, E. C., Ho, A. H., Shum, M. H., Wong, G. H., Lau, M. M., & Wang, J. (2016). Measuring filial piety in the 21st century: Development, factor structure, and reliability of the 10-Item contemporary filial piety scale. *Journal of Applied Gerontology*, 35(11), 1235-1247.
- Missouri Department of Social Services. *Family Systems Theory*. (n.d.). https://dss.mo.gov/cd/info/cwmanual/section7/ch1_33/sec7ch1.htm
- Pelletiere, V., "Organization self-assessment to determine the readiness and risk for a planned change", *Organization Development Journal*, 2006, Vol.24, No.4, pp.38
- Polenick, C. A., M.S., Seidel, A. J., PhD., Birditt, K. S., PhD., Zarit, S. H., PhD., & Fingerman, K. L., PhD. (2017). Filial obligation and marital satisfaction in middle-aged couples. *The Gerontologist*, 57(3), 417.
- Polit, D. F., & Beck, C. T. (2006). The content validity index: are you sure you know what's being reported? Critique and recommendations. *Research in nursing & health*, 29(5), 489-497
- Seelbach, W. C., & Sauer, W. J. (1977). Filial responsibility expectations and morale among aged parents. *The Gerontologist*, 17(6), 492-499.
- Stephens, M. A. P., & Townsend, A. L. (1997). Stress of parent care: Positive and negative effects of women's other roles. *Psychology and Aging*, 12(2), 376-386.
- Szinovacz, M. E., & Davey, A. (2013). Changes in adult children's participation in parent care. *Ageing & Society*, 33(4), 667-697.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to Test the Validation of a Questionnaire/Survey in a Research* (August 10, 2016).
- van der Pas, S., van Tilburg, T., & Knipscheer, K. C. (2005). Measuring older adults' filial responsibility expectations: Exploring the application of a vignette technique and an item scale. *Educational and Psychological Measurement*, 65(6), 1026-1045.
- Vaux, A., & Harrison, D. (1985). Support network characteristics associated with support satisfaction and perceived support. *American Journal of Community Psychology*, 13(3), 245-265.
- Vaux, A. (1988). *Social support: Theory, research, and intervention*. Praeger publishers.
- Waheed, S. A., Gilani, N., Raza, M., Sharif, S. (2020). Understanding Students' Experience of Lived Space in Schools: A Phenomenological Perspective. *Hamdard Islamicus*, 43(1), 211-220.
- Yang, K. S., Yeh, K. H., & Hwang, L. L. (1989). A social attitudinal analysis of Chinese filial piety: Concepts and assessment. *Bulletin of the Institute of Ethnology, Academia Sinica*, 56, 171-227.
- Yeh, K. H., & Bedford, O. (2003). A test of the dual filial piety model. *Asian Journal of Social Psychology*, 6(3), 215-228.
- Zhan, H. J. (2004). Willingness and expectations: Intergenerational differences in attitudes toward filial responsibility in China. *Marriage & Family Review*, 36(1-2), 175-200.

Appendix A
The Validated 22-Item Version of the
Readiness for Filial Responsibility (RFR) Scale

Readiness for Filial Responsibility Scale

Age: _____ Marital Status: _____ Nationality: _____
Sex: _____ Country of Origin: _____

1. Are you currently living with an ageing parent who is dependent to your support?
 YES NO

1.a) If Yes, who is that parent?
 Mother Father Both Others: (Please specify) _____

1.b) If Yes, in what manner are you providing support? (select all that applies)
 Physical Financial Psychological Emotional Spiritual

2. Do you anticipate any of your parents to depend on you in any aspect (whether physical, financial, emotional, psychological or spiritual) when they grow old?
 YES NO

3. Do you have children who are dependent to your support?
 YES NO

3.a) If Yes, how many children are dependent on you? _____

4. Do you currently have any source of personal income? YES NO

4.a) How do you perceive your current financial situation in relation to your personal needs?
 Barely enough Enough More than enough

5. Do you currently have any commitments that demand your physical presence regularly (ie, fulltime job)?
 YES NO

6. Assuming your parents become your dependents today, how do you perceive your current level of readiness to provide for their overall needs?
(1 being the lowest; 10 being the highest): _____

Instruction: Please answer the 25-item questionnaire below by marking an X on the column that represents your answer. Please consider your current situation in answering each item.

Readiness for Physical Support (RPS)	1-Fully Unprepared	2- Slightly Prepared	3. Moderately Prepared	4- Highly Prepared	5- Fully Prepared
1. I am prepared to provide practical measures to ensure my ageing parents' physical safety (ie., Prevention of falls)					
2. I am prepared to provide physical security and measures to guard against intruders (ie, maintaining a secure living environment)					
3. I am prepared to be physically available anytime my ageing parents have emergencies or needs (ie, whenever they experience falls or feel unwell)					
4. I am prepared to maintain my ageing parents' physical comfort (ie., ensure that they have access to their own clean clothes, dentures, comfortable furniture)					
5. I am prepared to ensure that my ageing parents receive the appropriate physical assistance they need (ie., assistance in lifting heavy objects, doing the laundry, cooking, cleaning).					
Readiness for Financial Support (RFS)	1-Fully Unprepared	2- Slightly Prepared	3. Moderately Prepared	4- Highly Prepared	5- Fully Prepared
6. I am financially prepared to sustainably support the cost my ageing parents' basic needs (ie., food, shelter, clothing, etc).					
7. I am financially prepared to sustainably assume my parents' household utility bills.					
8. I am financially prepared to sustainably support the cost of my ageing parent's basic health needs (ie.,					

maintenance meds, routine check-up etc).					
9. I am financially prepared to sustainably support the cost of my ageing parent's high-cost medical needs (ie., Hospitalization, Physical Therapy. etc.)					
10. I am financially prepared to sustainably provide for my ageing parent's leisure and recreation.					
Readiness for Psychological Support (RPsS)	1-Fully Unprepared	2- Slightly Prepared	3. Moderately Prepared	4- Highly Prepared	5- Fully Prepared
11. I am prepared to sustainably ensure that my ageing parents maintain contact with their nearby friends and family (or provide the appropriate technology to maintain regular communication with distant friends and relatives..)					
12. I am prepared to constantly listen with attention to what my ageing parents have to say, and discuss their needs and issues.					
13. I am prepared to sustainably encourage my ageing parents to continue taking responsibility for themselves (ie, Self-care and decision making).					
14. I am prepared to discuss my ageing parents' interests and motivate them to continue their hobbies and engage on self-discovery and learning.					
Readiness for Emotional Support (RES)	1-Fully Unprepared	2- Slightly Prepared	3. Moderately Prepared	4- Highly Prepared	5- Fully Prepared
15. I am prepared to be available and reliable in order to reduce my ageing parents' fear of failing to get help, should they fall or become unwell.					

16. I am prepared to constantly include them in important family occasions and involve them in making family decisions to ensure that they feel valued.					
17. I am prepared to provide a constant physical companion (whether it be myself or have another individual) to ensure that my ageing parents are never left alone for long periods of time.					
18. I am prepared to be patiently sensitive and responsive to the changes in their moods and behaviors.					
Readiness for Spiritual Support (RSS)	1-Fully Unprepared	2- Slightly Prepared	3. Moderately Prepared	4- Highly Prepared	5- Fully Prepared
19. I am prepared to accompany my ageing parents (or have someone else) to attend worship activities regularly.					
20. I am prepared to constantly motivate them to participate in their local religious group activities, whenever applicable.					
21. I am prepared to constantly encourage them to maintain their spiritual beliefs.					
22. I am prepared to support their spiritual practices and rituals (ie., providing a quiet place and time for worship)					