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Number of children or family size? An examination of the influence of parenthood on well-being among the Igbo of Eastern Nigeria

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Abstract

The presence of African samples in the bourgeoning research on the impact of parenthood on wellbeing is only beginning to emerge. In the present study, and anchoring on existing literature, we investigated the interactive role of the number of children, family size, economic status, and love of the family on the wellbeing of Nigerian parents. Economic status, family size, and love of family interactively played significant roles in parents' well-being. Parents on the bottom of the economic ladder, engaged in junior job positions, and had larger family size experienced poorer life satisfaction. However, love of family potentiated parents' experiences of life satisfaction, and equally reduced the negative impact of family size on parents' life satisfaction. The result of the study shows that a robust and nuanced understanding of the effect of parenthood on well-being requires an approach that takes into consideration the social, economic, and psychological circumstances surrounding the families.

Keywords: Number of children, family size, parenthood, well-being, Igbo, Nigeria

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Introduction

The influence of parenthood on the well-being of families has been on the front burner of family and well-being studies for quite some time now. The reasons may not be farfetched. Parents' well-being does not only define parents' lives but equally has important implications for the well-being of people under their care. Parents' well-being defines the quality of care and relationship they give to their children and others around them (Kaiser et al., 2017; Kvalevaag et al., 2013; Stein et al., 2014). However, the literature is awash with diverse views on the matter. There are those who believe that parenthood undermines well-being (Aassve et al., 2012; Hansen, 2012; Kohler et al., 2005; Stutzer & Frey, 2006). On the other hand are scholars who believe that parenthood is positively associated with wellbeing if other impinging circumstances are to be held constant (e.g Evenson & Simon, 2005; Nelson et al., 2014; Umberson et al., 2010).

Studies from Africa are, however, only beginning to emerge on this (e.g Onyishi et al., 2012). Onyishi et al. (2012) found that parents' marital satisfaction grew with an increased number of children, an indication that parenthood contributes positively to parental well-being among Africans. In addition, their study showed that other demographic and economic factors do not undermine the positive association between the number of children and marital satisfaction. The authors attributed the result to the strong fertility desire among Africans. Whereas this position carries some elements of veracity, it must be noted that Africa has changed and is changing rapidly in a manner that economic and other social factors can no longer be neglected when trying to determine the impact of parenthood on any aspect of parents' well-being within the continent. For instance, many areas are rapidly urbanizing (Güneralp et al., 2017); hence, more women are joining paid employment, more people now go to school, and the core cultural foundations are equally shifting (Bradley & Weisner, 1997; Nwakaeze-Ogugua, 2007; Renzaho et al., 2011). Therefore, the role of parenthood in the well-being of parents in Africa can only be robustly understood when examined under prevailing circumstances. In addition, as observed by Karney and Bradbury (2020), it equally requires the use of a more encompassing indicator of well-being.

In a similar vein, Lucas et al. (2008) argue that times have changed and are changing rapidly such that the importance of cultural, economic, and socio-political contexts can no longer be ignored in explaining the impact of children or parenthood on parents' well-being. Similarly, Nelson et al. (2014) contends that parenthood and children are associated with well-being or ill-being, depending on the psychological, social, or demographic idiosyncrasies of the respondents. A more veritable and resourceful approach would therefore entail a contextualized view that draws from existing literature but equally prioritizes the operating characteristics of the population in focus. Accordingly, therefore, our aim in the current paper is to examine the well-being of Nigerian parents given the presence of some socio-economic, demographic, and psychological factors. We start by redefining a criterion that has long been used in studying this matter with the aim of providing a more encompassing view of parenthood in the African family setting.

The foregoing view is in line with the social change theory. According to the social change paradigm, societies don't remain static. Scholars agree that even evolutionarily inherited traditions and systems are subject to the emergence of other factors that are capable of attenuating their operations within societies (Furlong & Cartmel, 2007). Glenn (2004) argues that human behaviours interact with cultures to berth circumstances that lead to significant changes in how the society functions. Thus, relying solely on age-long construct, such as evolutionarily induced motivations, to explain current behaviours appears deficient. Furthermore, in line with our idea that some constructs needs redefinition or reconceptualising in order to gain a better understanding of how parenthood influences well-

being, Barth (1967), while reviewing advances in the study of social change, agrees that we need to reconceptualise some constructs in order for us to understand their effects on current behaviours. In his words, "what we need to do…is to describe all of societies in such terms that we see how it persists, maintains itself and changes through time. This may mean recasting many of our terms for the description of social systems, not merely adding a chapter of additional data" (p. 661). He went further to argue that

> "unwillingness to abandon well-established routine, studies explicitly addressed to the investigation of change have been prone to contain descriptions of a social system at two points in time – and then rely on extrapolation between these two states, or from the one state, to indicate the course of change…if we want to understand social change, we need concepts that allow us to observe and describe the *events* of change" (p. 661)

It is along this theoretical line that we argue that Africa and Nigeria, in particular, is experiencing changes in her family, socio-economic, and environmental systems and any attempt to understand the effect of parenthood on well-being among the population requires taking into consideration these changes and, if possible, recasting of constructs or concepts to suit prevailing circumstances..

Number of children or family size

From the literal point of view, one's number of children refers to the actual number of one's biological or legally adopted children. The addition of the parents or parent will then make one's immediate family. Whereas this strict sense of family is common in many parts of the world, especially among Western nations, it may be deceptive to directly apply it to African nations. For instance, the concept of children among African people goes beyond biological or legally adopted children. In its broadest and epistemological meaning, it involves all the people living in one's house or all the people one provides for and takes care of. It is often common to find more than two parental figures within one family, such as grandparents living together with their children and grand children. This practice is potentiated by the dearth of old people's home in most African countries. It is equally common to find parents and their children cohabiting with other relatives. In all these instances, the parents are socially and culturally required to provide and cater for all the people living under their care. This raises reasonable suspicion over the sole use of the number of children, in its literal meaning, to estimate the impact of parenthood on the well-being of parents in Africa. Such may not sufficiently capture the actual impact of parenting on the parents' well-being. Hence, family size may serve as a more viable alternative.

It is possible to argue that the use of the number of children has some important intrinsic qualities that family size may not have. For instance, it can be argued that parents' emotional attachment to their children is likely to outweigh their emotional attachment to other people irrespective of cohabitation. Thus, isolating the impact of children may likely present a fine-grained picture of the situation than family size can present. Fortunately, family size encompasses such condition and, in addition, recognizes other emotional, social, financial, and psychological factors that parents incur while performing their roles as parents, either to their biological or socially constructed children, which the use of the number of children may not be able to capture.

Furthermore, the cultural system in most African societies requires people to treat others as they would treat their own biological children. For instance, there is a saying among the Igbo people of Easter Nigeria that a child belongs to everyone. Bledsoe and Isiugo-Abanihe (1989) wrote that childrearing in Africa is rarely the exclusive preserve of the

parents. Individuals are required to invest the same emotional and material substances in both their children and anyone living within their care. Although this social expectation may not be fully practicable, its existence is an indication of a social and cultural obligation that has the potential to exert a non-negligible influence on the toils and functions of African parents. Therefore, in addition to estimating the influence of the number of parents' biological children on the well-being of the parents, we equally explored the influence of family size, defined as the number of people living with the parents, including the parents themselves. The idea here is that the concept of family size may present a stronger influence on parents' well-being than number of children.

The moderating potentials of economic factors

One of the amazing findings of Onyishi et al. (2012) is that the positive influence of the number of children on parents' marital satisfaction remained strongly significant even when other factors, such as the wealth of parents, were simultaneously added to the equation. This finding is inconsistent with many findings, showing how economic factors can impinge on parents' well-being (see Cooper & Pugh, 2020; Guzzo & Hayford, 2020). Onyishi et al. (2012) attributed their finding to the prevailing strong positive feelings associated with fertility in non-Western nations and argued that the feeling is less likely to be undermined by other factors. Although fertility desirability has remained a strong motive for marriage in Africa, pieces of emerging evidence show that fertility desirability is equally changing along with developmental and economic trajectories in non-western nations (Furstenberg, 2019; Thornton et al., 2012). For instance, Ibrahim (2020) found that "the cost of raising children hinders fertility in south-western Nigeria *in a manner* that it is converging with the global low fertility regime" (pp. 745, words in italics was added).

There are several reasons to consider economic factor as one of the critical influencers of parents' well-being in contemporary Africa. For instance, the traditional agrarian societies in Africa are fast giving way to modern cities and towns. This change now requires most families to send their wards to school instead of farms, rent houses and equip them with modern amenities such as television, and pay for social amenities such as electricity and water bills. In addition, because many are now moving away from traditional subsistence farming and are going into paid employments, majority of families are now required to buy most of the foodstuffs from the market. The responsibility of providing the funds required to address the aforementioned needs obviously rests on the parents. Unfortunately, the poor economic growth and development across many African nations make it even more difficult for parents to satisfactorily address such family needs. It is, therefore, reasonable for one to wonder whether the well-being of parents in Nigeria is immune to such economic conditions. We therefore examined how parents' income directly and in conjunction with other factors impacts the well-being of Nigerian parents.

Love of family

In addition to economic factors, we also suspect that parents' intrinsic love for their families has the potentials to contribute to well-being of the parents and equally tamper the role of other factors in their well-being. We define the love of family as an intrinsic, unconditional attachment, and feelings of satisfaction towards one's family irrespective of one's personal or family condition. Our first line of insight comes from the various strands of literature on intrinsic motivation. Both theoretical and empirical works on intrinsic motivation show that actions and motives based on intrinsic desires lead to more rewarding and positive experiences (Deci & Ryan, 2008; Ryan & Deci, 2000). Blais et al. (1990)

examined the possible impact of intrinsic motivation on the well-being of couples, and found that couples who were intrinsically motivated were more likely to experience positive marital quality than extrinsically motivated couples. Several other studies highlight the potential influence of the love of family on parents' well-being.

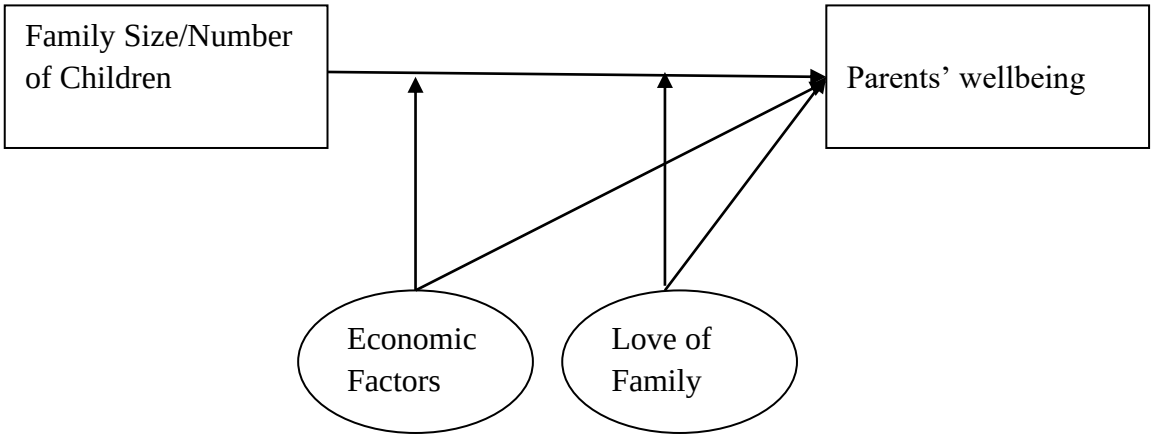
One of such pieces of evidence comes from studies on relationships. Studies show that people who enter into relationships on the grounds of intrinsic reasons are often more likely to experience higher well-being and healthier relationships than people who enter into relationships based on extrinsic reasons (Gaine & Guardia, 2009; Knee et al., 2005; La Guardia & Patrick, 2008). Another line of evidence comes from studies on child-centrism, which refers to "the psychological mind-set in which parents are motivated to maximize their child's well-being even at the cost to their own and are willing to prioritize the allocation of their emotional, temporal, financial, and attentional resources to their children rather themselves" (Ashton-James et al., 2013, p. 635). In two studies, Ashton-James et al. (2013) found that child-centrism enhanced positive feelings and meaning in life, and undermined negative affect.

The other line of evidence comes from a direct assessment of the influence of motivation to become a parent on parents' well-being. Brenning et al. (2015) found that women who were more intrinsically motivated to become parents were more likely to experience higher well-being and relationship satisfaction during pregnancy. Gauthier et al. (2010) also found that autonomous motivation to have children significantly decreased postpartum depression symptoms. Other scholars have reported similar findings (e.g Cassidy & Sintrovani, 2008; Reut & Kanat-Maymon, 2017). We build on these lines of studies to suspect that parents' intrinsic love for their families has the potentials to tamper with how family matters affect parents' well-being. The reasons are readily deducible. Parents with intrinsic love for their families are less likely to see their parental roles and duties as imposed obligations. Such mental disposition has the potential to help parents cope and overcome the challenges often associated with parenting as has been shown by several lines of evidence (see Bonneville-Rousy et al., 2017).

Summary of review and objectives of the Study

We have argued, in the light of social change, that the effect of parenthood on well-being can't be solely explained by fertility desirability among Africans, although the desire to have children remains strong in the continent. We posit that African societies have progressed significantly from rudimentary evolutionary traditions to modern systems and that these system cannot by dissociated from how parenting influences well-being. One of the prominent factors in social change is economic factor. Thus, we argue that parents' income is likely to be associated with their well-being. Because of the psychological attachment to families among Africans, we equally identified love of family as a possible intervening factor along the parenthood-well-being link. Importantly, and in line with Barths (1968) view that some concepts needs to be reconceptualised for us to properly understand the process of social change, and also given how families in Africa are organized, we argued that using the concept of family size rather than number of children is more likely to reveal the actual impact of parenthood on well-being. Thus, our aim here is to examine the direct and joint effects of family size, parents' income, and love of family on the parents' well-being. Diagrammatic representation of the explored paths between family size/number of children and parents' well-being are shown in Figure 1.

Figure 1: Conceptual diagram of the examined paths from family size/number of children to parents' wellbeing



Method

Participants

Participants were employees in a federal university located in the South-Eastern part of Nigeria. A total of 223 parents participated in the study. Male parents were one hundred and two (102, 45.7%), and female parents constituted 54.3% (121) of the total participants. Single parents were 37 (16.6%), whereas married parents were 186 (83.4%). The majority of the participants were Christians (209, 93.7%). Ten (10, 4.5%) participants indicated they were Moslems. Two (2, 0.9%) participants were practitioners of African Traditional Religions (ATRs), whereas two (2) participants failed to indicate their religion. One hundred and fifty-three (153, 68.6%) participants indicated they were living with their partners, whereas 70 (31.4%) were living without their partners. One hundred and twenty-seven (127, 57%) were junior staff, whereas 96 (43%) were senior staff members of the University.

One hundred and twenty-three (123, 55.2%) earned below ₦100 000 00 (one hundred thousand naira) a month, approximately equivalent to two hundred and seven dollars ($207), estimating with an exchange rate of a dollar to ₦485 (four hundred and eighty-five naira). Sixty-one (61, 27.4%) earned between ₦100 000 00 and ₦200 000 00 (two hundred thousand naira). Twenty-one (21, 9.4%) earned between ₦201 000 00 (two hundred and one thousand naira) and ₦300 000 00 (three hundred thousand naira). The remaining eighteen (18, 8.0%) earned above three hundred thousand naira (₦300 000 00).

They were aged between 21years and 69 years, with a mean age of 38.94 (SD = 9.41). The average number of biological children per family was 3.4, with a minimum of one child and a maximum of 11 children. The average number of other people living with parents was 0.8, with a minimum of zero (0) and a maximum of 8 persons.

Materials

Parents' well-being: Parents well-being was measured with a global measure of life satisfaction, the *Riverside Live Satisfaction Scale* (RLSS). The scale was recently developed by Margolis et al. (2019) to address some observed shortcomings in the commonly used *Satisfaction With Life Scale* (SWLS). It is made-up of six items, with three reverse-scored items (e.g., I want to change the path my life is on) and three directly scored items (e.g., I like

how my life is going). Participants rated their agreement with each item on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Composite scores were formed by adding the sum of the responses on the directly scored items to the sum of the reversed scores on the indirectly scored items. Hence, higher scores reflected higher feelings of life satisfaction, whereas lower scores indicated poor satisfaction with life, generally.

*Love of family***:** We developed a 10-item scale *Love of Family Scale* (LFS, e.g., I love being around my family) to assess parents' intrinsic attachment to their families. Participants rated their agreement with each item on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). We ran reliability and validity analysis of the scale. The complete set of items are shown the Appendix. A confirmatory factor analysis of the data obtained with scale was performed in LISREL 10 version environment. Specifically, a one-factor model of the scale was examined. The Model was fit with the robust diagonal weighted least square (RDWLS), given that it has been shown to perform better than other traditional methods, such as the Maximum Likelihood, especially if the input data was obtained with a Likert-type scale. Result of the CFA produced the following model indicators: χ^2(df) = 35.46 (20.1), p = .02; NNFI = .97; CFI = .98; SRMR = .04; and RMSEA = 0.11 (90% Confidence interval = .08; 0.13). In accordance with several recommendations, it is clear that the scale is appreciably one-dimensional. Importantly, the items demonstrated high levels of internal consistency. The following factor-loading coefficients were obtained for the items: item1 = .75(.44); item2 = .80(.37); item3 = .65 (.58); item4 = 79(.38); item5 = .74 (.45); item6 = .77(.40); item7 = .76(.42); item8 = .71(.49); item9 = .79(.43) and item10 = .72 (.48). Values in parenthesis are error variances, and both the factor-loading coefficients and the error variances are completely standardized estimates.

Demographic variables

*Family size***:** Some of the demographic data were combined to get the actual family size. First, a respondent who was living with the partner got two (2) scores, representing the respondent and the partner. Living with a partner here means partners who are not divorced or separated. Single parents were scored one (1). These scores were then added to the number of children and the number of other people (OP) aside from the children living within the family. Hence, family size = number of parents + number of children + number of other people living with the parents.

*Income***:** Income was measured as an ordinal variable. Insight for the ordering was gained from the pattern of wages in Nigeria and the institution where the study was conducted. The minimum wage in Nigeria is ₦30 000 00 (Thirty thousand naira), which is approximately equivalent to 62 dollars, estimated with the open market exchange rate of ₦485 to 1 dollar at the time the study was carried out. Given other allowances that are usually added to the wages, the minimum monthly wage for the lowest worker in the institution is between the minimum wage and ₦100 000 00 (One hundred thousand naira). With this hindsight, seven (7) categories of income were provided for respondents to chose: (1) ₦0 00 - ₦100 000 00; (2) ₦101 000 00 - ₦200 000 00; (3) ₦201 000 00 - ₦300 000 00; (4) ₦301 000 00 - ₦400 000 00; (5) ₦401 000 - ₦500 000 00; (6) ₦501 000 - ₦600 000; and (7) ₦601 000 and above. Participants were required to choose the option that best described their family's monthly income.

Statistical Analysis

The Statistical Packages for the Social Sciences (SPSS version 20) and the PROCESS software were used for the data analyses. Whereas the SPSS is a popular statistical tool, the PROCESS is a relatively recent program developed by Hayes (2012) for moderation and

mediation analyses. The software allows users to choose the nature of their data (e.g ordinal) and make appropriate specifications. Importantly, it produces a handful of outputs that users can combine to make informed decisions on the substantiality of every tested path. For instance, in addition to the normal significant level test, it produces bias-corrected confidence interval around every coefficient. We centred variables around their means before forming interaction terms. Categorized variables, such as income were imputed as ordered categories. The Scales (life satisfaction and love of family), number of children, and family size were imputed as continuous variables. We relied on both the normal significant level testing and confidence intervals to assess the substantiality of obtained path coefficients, although we placed more emphasis on the bias-corrected confidence interval given recent findings and suggestions in the literature (see Hayes & Scharkow, 2013).

Result

Descriptive and demographic statistics

Table 1 shows the descriptive statistics of the study variables. The differences in the means were tested with *t*-test for variables that had only two categories and analysis of variance for those that had more than two categories.

Table 1: Descriptive statistics

Source	*n*	Age	NofC	OP	FS	LF	SWL
		Mean(SD)	**Mean(SD)**	**Mean(SD)**	**Mean(SD)**	**Mean(SD)**	**Mean(SD)**
Gender							
Males	102	40.08(8.31)	3.34(2.03)	0.77(1.31)	5.83(2.42)	55.13(10.77)	25.55(7.06)
Females	121	37.98(10.18)	3.46(1.83)	1.00(1.27)	6.12(2.67)	57.54(11.31)	26.69(7.42)
Marital Status							
Single	37	33.78(7.14)	1.95(1.69)	0.92(1.9)	4.05(2.15)	56.02(12.04)	26.35(7.35)
Married	187	39.96(9.41)	3.69(1.88)	0.89(1.20)	6.37(2.45)	55.96(11.52)	26.25(7.33)
Cohabitation							
Living with partner	153	40.51(9.64)	3.79(1.89)	0.92(1.18)	6.71(2.34)	56.03(12.04)	26.34(7.34)
Living alone	70	35.51(7.92)	2.56(1.89)	0.86(1.53)	4.41(2.27)	57.34(8.74)	25.79(7.11)
Job position							
Junior	127	41.62(9.38)	3.81(1.99)	1.10(1.34)	6.69(2.66)	57.08(10.42)	26.38(7.50)
Senior	96	35.39(8.23)	2.86(1.69)	0.63(1.17)	5.05(2.09)	55.59(11.95)	25.90(6.97)
Income							
00-100	123	36.38(8.45)	3.20(1.93)	0.76(1.21)	5.59(2.36)	55.85(12.33)	25.64(7.30)
101-200	61	41.77(8.95)	3.71(1.83)	1.07(1.42)	6.51(2.61)	57.10(9.39)	25.97(7.42)
201-300	21	43.76(10.95)	3.90(1.79)	1.19(1.32)	6.81(2.79)	55.57(10.62)	31.57(5.35)
301-above	18	41.22(10.46)	3.17(2.15)	0.94(1.30)	6.00(2.95)	59.28(7.86)	24.17(5.97)
Total	**223**	**38.94(9.41)**	**3.40(1.92)**	**0.90(1.29)**	**5.99(2.54)**	**56.44(11.11)**	**26.17(7.26)**

Note: NofC = Number of Children; OP = Number of other people living with the parents aside of the children; FS = Family Size; LF = Love of Family; SWL = Satisfaction With Life

Demographic Differences

Gender

The result revealed insignificant gender differences in age, number of children (NC), number of other people in the home (NOP), family size (FS), love of family (LoF), and satisfaction with life (SWL).

Marital Status

Given that the number of married parents was substantially higher than the number of single parents, a test of equality of variances between the two groups on the outcome variables was performed with Levene's test. The result revealed significant unequal variances in age, NC, and LoF. Consequently, mean differences between the two groups on the variables were examined under the different assumptions of equal and unequal variances. On age, married parents (M = 39.96, SD = 9.41) were significantly older than unmarried parents (M = 33.78, SD = 7.14) when equal variances was assumed, t (df) = 3.75(221), p = .00, and when it was not assumed, t (df) = 4.53(64.20), p = .00. Similarly, married parents had significantly more children (M = 3.69, SD = 1.88) than unmarried parents (1.95, SD = 1.69) under the assumptions of equal variances, t (df) = 5.37(221), p = .00, and unequal variances, t (df) = 6.60(66.14), p = .00. Married parents also reported bigger family size than unmarried parents, t (df) = 5.36(221), p = .00. Both groups of parents, however, did not differ significantly on NOP, LoF, and SWL.

Cohabitation status

Levene's test of equality of variances revealed significant unequal variances between cohabiting and non-cohabiting parents on LoF. Hence, the extent both groups differed on the variable was examined under both assumptions of equal and unequal variances. On age, result showed that cohabiting partners were significantly older (M = 40, SD = 9.64) than parents living alone (M = 35.51, SD = 7.92), t (df) = 3.79(221), p = .00. Cohabiting parents were equally more likely to have more children (M = 3.79, SD = 1.89) than separately living parents (M = 2.56, SD = 1.89), t (df) = 4.66(221), p = .00. Similarly, cohabiting parents reported significantly larger family size (M = 6.71, SD = 2.34) than non-cohabiting parents (M = 4. 41, SD = 2.27), t (df) = 6.85(221), p = .00. Both groups of parents, however, did not differ substantially on LoF, NOP, and SWL.

Job position

The test of equality of variance revealed unequal variances between senior and junior workers on age and FS. Again, we examined how much both groups differed on the variables under both assumptions of equal and unequal variances. Result revealed that parents with senior job positions were significantly older (M = 41.62, SD = 9.38) than parents with junior job positions (M = 35, SD = 8.23) under both assumptions of equal variances, t (df) = 5.18(221), p = .00, and unequal variances, t (df) = 5. 28(216.09), p = .00. Also parents on senior job positions were more likely to have more children than those on lower job positions, t (df) = 3.75(221), p = .00. However, parents on junior job positions had significantly NOP (M = 1.10, SD = 1.34) than those on senior job positions (M = 0.63, SD = 1.17) under both assumptions of equal, t (df) = 2.77(221), p = .00, and unequal variances, t (df) = 2.83(216.48), p = .00. Similarly, parents on lower job positions were more likely to have larger family size (M = 6.69, SD = 2.66) than their counterparts on senior job positions (M = 5.05, SD = 2.09) under the assumptions of equal, t (df) = 5.01(221), p = .00, and unequal, t (df) = 5.20(220.929), p = .00, variances. Both groups of parents, however, did not differ significantly on LoF and SWL.

Income status

Before the various income groups were compared on the various outcome variables, some adjustments were made given the observed pattern of the income distribution. Descriptive statistics showed that some categories had a very small number of participants. The seven categories were therefore re-categorized into four categories - (1) 00-100 thousand naira (n = 123); (2) 101 thousand - 200 thousand naira (n = 61); (3) 201 thousand -300 thousand naira (n = 21); and (4) 301thousand naira and above (n = 18). The homogeneity of variances across the groups was first examined. The result revealed significant group differences in variances on SWL, only, $F(3, 219) = 2.96$, $p = .03$. Consequently, group differences on the SWL were examined under both unweighted and weighted means.

The result revealed significant differences amongst the groups on SWL, $F(3, 219) = 4.79$, $p = .00$. However, the result did not replicate under unweigthed linear method. Consequently, the post-hoc test was conducted with Donnett C test. The result revealed that parents who earned between 201 and 300 thousand were significantly more satisfied with their lives (M = 31.57, SD = 5.35) than parents who earned between 00 and 100 thousand naira (M = 25.96, SD = 7.30); and those who earned between 101 and 200 thousand naira (M = 25.64, SD = 7.41). The groups also differed significantly on age, F (3, 219) = 7.70, $p = .00$. Post-hoc analysis with the Benferoni method showed that parents that earned between 101 and 200 thousand naira (41.77, SD = 8.95), between 201 and 300 thousand (M = 43, 76, SD = 10.95), and above 300 thousand naira (M= 41.22, SD = 10.45) were all significantly older than parents who earned between 00 and 100 thousand naira. Result revealed overall insignificant differences among the income categories on NC, F (3, 219) = 5.59, $p = .21$, NOP, F (3, 219) = 1.21, $p = .30$, and LoF, $F(3, 219) = .62$, $p = .60$.

Number of children, love of family, and life satisfaction

Analysis showed that older parents were more likely to have more children, B = 2.44 (SE = 0.29), $t = 8.52$, $p = .00$. There were no significant relationship between number of children and NOP, B = 0.05 (SE = 0.07), $t = 1.09$, $p = .28$. Understandably, there was a significant positive relationship between NC and FS, B = 1.12 (SE = 0.05), $t = 23.49$, $p = .00$. Interestingly, the result revealed an inverse relationship between the NC and LoF, although it didn't reach significant levels, B = - .25 (SE = 0.39), $t = -.63$, $p = .53$. Interestingly also, result revealed a marginally significant inverse relationship between NC and SWL, B = -.44 (SE = 0.25), $t = -1.75$, $p = .08$, meaning that higher number of children undermined the parents experience of life satisfaction.

Next we examined the moderating roles of some of the variables on the relationships between NC, FS, and SWL. First we explored the moderating role LoF on the relationship between NC and SWL. Analysis revealed an overall significant model, $R^2 = .06$, F (3, 219) = 5.50, $p = .00$. Number of children remained inversely associated with parents' life satisfaction. Love of family significantly potentiated parents' life satisfaction, B = .13 (SE = .04), $t = 3.05$, $p = .00$ [95% CI; LLCI; ULCI = .05; .22], but it failed to moderate the relationship between NC and SWL, B = .02 (SE = .02), $t = 0.95$, $p = .34$ [95% CI; LLCI; ULCI = -.02; .07]. Similarly, age, gender, cohabitation status, marital status, and NoP did not tamper with the relationship between NC and parents' SWL.

However, income appeared to have exerted a marginal moderating effect on the link between NC and parent's LS, $R^2 = .02$, F (3, 215) = 2.28, $p = .08$. Deconstruction of the interaction showed that NC was negatively associated with parent's SWL for the lowest earning parents (parents who earned between 0 and 100 thousand naira), B = -.95 (SE = .33), $t = -2.90$, $p = .00$ [95% CI; LLCI; ULCI = -1.59; -.30]. Job status equally moderated the link between NC and parent's SWL, $R^2 = .04$, F (1, 219) = 8.69, $p = .00$. Further exploration of

the interaction showed that parents on lower job positions experienced lower levels of SWL than their senior counterparts, B = -1.49 (SE = .40), *t* = -3.77, *p* = .00 [95% CI; LLCI; ULCI = -2.28; -.71].

Family size, love of family, and life satisfaction

Analysis revealed an overall significant model, R^2 = 07, F (3, 219) = 5.65, *p* = .00. A breakdown of the result showed that family size adversely affect parents experience of life satisfaction, B = -.43 (SE = .322), *t* = -1.99, *p* = .05 [95% CI; LLCI; ULCI = -.86; .00]. Love of family remained positively associated with parents experience of life satisfaction, B = .14 (SE = .04), *t* = 3.19, *p* = .00 [95% CI; LLCI; ULCI = .05; .22]. Further breakdown of the interaction term showed that LoF did not moderate the relationship between FS and parent's SWL for parents with lower family size, B = .08 (SE = .08), *t* = -.97, *p* = .33 [95% CI; LLCI; ULCI = -.08; .23]. On the other hand, LoF undermined the adverse effect of family size on SWL for parents with moderate (Mean) family size, B = .14 (SE = .04), *t* = 3.19, *p* = .00 [95% CI; LLCI; ULCI = .05; .22], and high (above the mean) family size, B = .20 (SE = .07), *t* = 2.84, *p* = .00 [95% CI; LLCI; ULCI = .06; .33].

Income also played a significant moderating role on the link between FS and parents' life satisfaction, R^2 = .03, *F* (3, 215) = 4.05, *p* = .01. A breakdown of the interaction showed that the adverse effect of family size on parents' life satisfaction was more pronounced for the lowest earning parents (00 – 100 thousand naira), B = -.87 (SE = .30), *t* = -2.94, *p* = .00 [95% CI; LLCI; ULCI = -1.46; -.29]. On the other hand, the adverse effect of FS on parents' SWL declined as income increased. The adverse effect of FS became insignificant for parents who earned between 101 – 200 thousand naira, B = -.33 (SE = .50), *t* = -.65, *p* = .52 [95% CI; LLCI; ULCI = -1.32; -.7]. Interestingly, higher levels of income (parents who earned between 201-300 thousand naira) completely eliminated the adverse effect of family size on parents' SWL, B = .72 (SE = .36), *t* = 2.03, *p* = .04 [95% CI; LLCI; ULCI = .02; 1.43]. Similar effect was also observed for parents who earned above 300 thousand naira, although it did reach significant level, B = .10 (SE = .63), *t* = .16, *p* = .87 [95% CI; LLCI; ULCI = -1.15; 1.35].

Job status also moderated the relationship between FS and parents' SWL, R^2 = .05, *F* (1, 219) = 11.08, *p* = .00. A breakdown of the interaction effect showed that parents who occupied lower job positions experienced significantly lower SWL, B = -1.37 (SE = .30), *t* = -4.49, *p* = .00 [95% CI; LLCI; ULCI = -1.97; -.77], whereas FS was insignificantly related to life satisfaction for parents who were holding higher job positions, B = .02 (SE = .28), *t* = .06, *p* = .95 [95% CI; LLCI; ULCI = -.54; .58]. Age, gender of parents, cohabitation status, and marital statuses failed to moderate the link between FS and parent's LS.

Discussion

Anchoring on the theory of social change, as espoused by Barth (1967), we argued that it is unacceptably simplistic to explain parents' well-being among Africans solely on the basis of evolutionarily engendered fertility desirability. Although evolutionarily engendered motivations, such as the desire for children, are still significant influencers of behaviours in Africa and other parts of the world, we, however, argued that several factors, emanating from changes in societal traditions and systems, are capable of attenuating the relationship between having children and parents' life satisfaction. We specifically argued that most African societies, like other developing continents, are rapidly transiting agrarian societies to modern societies where paid employment predominates. One of the consequences of this change is that economic matters become central to the survival of most families, and the well-being of

parents cannot be dissociated from their ability to meet the economic needs of their families vis-à-vis the number of children and family size they cater for.

Consistent with the above line of thought and in line with previous works (see Cooper & Pugh, 2020; Darin-Mattsson et al., 2018; Gao et a., 2022; Guzzo & Hayford, 2020; Luo & Waite, 2005), the result of the present study clearly revealed that lower earning parents and parents who hold lower job positions experience significantly lower levels of life satisfaction than their counterparts who earned higher income and occupied higher job positions. Furthermore, and importantly too, in addition to its direct effect on parents' life satisfaction, this economically related factor defines how the number of children and family size influence parents' life satisfaction. Lower-income and lower-job positions exacerbated the adverse effect of both the number of children and family size on parents' life satisfaction. From these results, it is obvious that fertility desirability, although still strong in Africa, cannot be used in isolation to explain African parents' satisfaction with their lives. Not only that the present result is in line with other studies (see Gao et al., 2022), it is intuitionally cogent to believe that parents' well-being cannot be dissociated from their economic status. Things have changed and are still changing such that people's lives have become interwoven with economic factors. For instance, as we observed earlier, the lives of parents living in the cities are extensively defined by their income. Almost everything that they need to take care of their families requires fund. The implication is that their standard of living, although is also tied to their psychological dispositions, such as contentment, is strongly connected to their financial status. Therefore, the need to integrate the prevailing economic condition of a population in any attempt to understand the influence of parenthood on well-being cannot be overemphasized, especially among poorer countries like Nigeria as suggested by Diener and Lucas (2000). The authors had argued that the impact of financial status on well-being is likely to be more pronounced among poor countries where high level of non-attainment of basic human needs, such as food, shelter and health care, all of which require financial obligations remains endemic.

We also suggested that the use of family size is more likely to reveal the actual impact of parenthood on parents' well-being in Africa than the use of the number of children. This line of thought was equally supported by the result. Family size, unlike the number of children, significantly affected parents' experience of life satisfaction. Recall that, following Barth's (1967) argument that some social constructs require redefinition in order to capture progressive social changes and help researchers decode actual impact of social changes on people's behaviour, we argued that the use of the construct of number of children to understand how family activities impact African parents well-being is deficient. We explained that African families are organised in a manner that it is uncommon to find partners living only with their biological or legal children. We opined that the family structure across most African cultures are organized in such a manner that parents, in addition to their biological and legal children, are often likely to live with other relatives and their own parents, including their grandparents in some instances, and several factors contribute to such family organization. For instance, the concept of old people's home has remained alien to several African societies. Hence, older parents continue to live with their children or grandchildren till death. Furthermore, given the high rate of poverty in the continent, those in paid employment are often constrained to invite and live with other relatives in order to feed, carter for their schooling, or help them find sources of livelihood. Therefore, African parents are not only burdened by the needs of their biological or legal children, but by the needs of dependents, especially dependents that reside with them. One important thing to note, as we observed earlier, is that this pattern of family structure is rooted in cultural beliefs and social expectations. The implication is that parents are not usually in the position to make decision on whether to accept such obligations or not. It is literally imposed on them by the culture

and social expectations. Evidences abound to show that social comparison, expectations, and culture foist behavioural responses and attitudes on individuals (see Cassidy & Boulos, 2023; Schwarz & Fritz, 1991). Obviously, therefore, a broader concept that captures not only individual peculiarities, but also culturally infused systems is more likely to deepen our understanding of how parenthood conditions well-being among Africans.

We also reasoned that any negative impact of the number of children or family size on parents' well-being can be mitigated by the psychological construct of love of family, which we defined as an intrinsic satisfaction one derives from having a family. Our hunch came from the overarching findings that intrinsically motivated attitudes and behaviours are beneficial to well-being and, in many instances, attenuate the negative influences of adverse factors on well-being (Deci & Ryan, 2008; Diener & Lucas, 2000). It was also inspired by the enormous findings pointing to the fact that how people feel about their families has significant effect on their health and well-being (see Skinner, et al., 2000). As suspected, the love of family potentiated parents' experience of life satisfaction. Parents with higher love of family reported higher levels of life satisfaction. Although, the love of family failed to moderate the link between the number of children and life satisfaction, it undermined the negative influence of family size on life satisfaction for parents with moderately to larger family sizes. This is a clear indication that whereas external factors do have potent influence on how parenthood influences well-being, psychological factors are equally important not only in contributing directly to parents' well-being but in defining how other factors can influence parents' well-being. Therefore, as encouraged by Nelson et al. (2014), a nuanced understanding of when and how parenthood influences well-being needs an enlarged approach that takes into cognizance both objective and subjective factors surrounding the population of interest.

Implications of Findings, Limitations of the Study, and Suggestions for Future Studies

The present study, in addition to providing support for existing perspectives, have provided some vistas for future studies on the influence of parenthood on well-being among Africans. The study has shown that evolutionary engendered motivations do not account for all the variances in the relationship between parenthood and well-being. It clearly shows that economic and other socio-cultural factors are important variables in the relationship. Thus, rather than ruling them out as may have been implied in Onyishi et al. (2012), additional effort are required to identify those intervening factors and their direction of intervention as such will help not only in broadening our knowledge in this area but will equally help the practitioners in designing family intervention strategies.

However, there are some noteworthy limitations in the current study that future studies may need to address. First, we employed only the construct of life satisfaction. Although it has been argued that life satisfaction is a strong and robust indicator of well-being, studies equally show that other constructs, such as affect and happiness, are also important measures of well-being. Hence, a thorough understanding of the effect of parenthood on the well-being of African parents might require the inclusion of more well-being constructs. Again, the sample of the present study included only employed parents, a situation that makes it difficult to generalize the current findings across all the parents, such as self-employed and unemployed parents. Nevertheless, whereas we expect future studies to shed more light on this area by addressing these observed shortfalls, the result of the present study clearly reveals the non-negligible influences of other factors in determining African parents' well-being aside from the role of fertility desirability.

References

Aassve, A., Goisis, A., & Sironi, M. (2012). Happiness and childbearing across Europe. *Social Indicators Research, 108*(1), 65-86. https://doi.org/10.1007/s11205-011-9866-x

Ashton-James, C. E., Kushlev, K., & Dunn, E. W. (2013). Parents reap what they sow: Child-centrism and parental well-being. *Social Psychological and Personality Science, 4*(6), 635-642. https://doi.org/10.1177/1948550613479804

Barth, F. (1967). On the study of social change. *American Anthropologist, 69*(6), 661-669. https://doi.org/10.1525/aa.1967.69.6.02a0002.

Blais, M. R., Sabourin, S., Boucher, C., & Vallerand, R. J. (1990). Toward a motivational model of couple happiness. *Journal of Personality and Social Psychology, 59*(5), 1021–1031. https://doi.org/10.1037/0022-3514.59.5.1021

Bledsoe, C. H., & Isiugo-Abanihe, U. C. (1989). Strategies of child-fosterage among Mende grannies in Sierra Leone. In, R. J. Lesthaeghe (ed.). *Reproduction and Social Organization in Sub-Saharan Africa* (pp. 442-474). California: University of California Press

Bonneville-Roussy, A., Evans, P., Verner-Filion, J., Vallerand, R. J., & Bouffard, T. (2017). Motivation and coping with the stress of assessment: Gender differences in outcomes for university students. *Contemporary Educational Psychology, 48*, 28-42. https://doi.org/10.1016/j.cedpsych.2016.08.003

Bradley, C., & Weisner, T. S. (1997). Introduction: Crisis in the African family in Weisner, T. S., Bradley, C., Kilbride, P. L., & Kilbride, P. L. (Eds.) *African families and the crisis of social change*. London: Greenwood Publishing Group.

Brenning, K., Soenens, B., & Vansteenkiste, M. (2015). What's your motivation to be pregnant? Relations between motives for parenthood and women's prenatal functioning. *Journal of Family Psychology, 29*(5), 755–765. https://doi.org/10.1037/fam0000110.

Cassidy, T., & Boulos, A. (February 2023, online first). Academic expectations and well-being in school children. *Journal of Child and Family Issues*. https//doi.org/10.1007/s10826-023-02548-6.

Cassidy, T., & Sintrovani, P. (2008). Motives for parenthood, psychosocial factors and health

in women undergoing IVF. *Journal of Reproductive and Infant Psychology, 26*(1), 4-17. https://doi.org/10.1080/02646830701691392

Cooper, M., & Pugh, A. J. (2020). Families across the income spectrum: A decade in review. *Journal of Marriage and Family, 82*(1), 272-299. https://doi.org/10.1111/jomf.12623

Darin-Mattsson, A., Andel, R., Celeste, R. K., & Kåreholt, I. (2018). Linking financial hardship throughout the life-course with psychological distress in old age: Sensitive period, accumulation of risks, and chain of risks hypotheses. *Social Science & Medicine, 201*, 111-119. https://doi.org/10.1016/j.socscimed.2018.02.012.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne, 49*(3), 182–185. https://doi.org/10.1037/a0012801

Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of Happiness Studies, 1*, 41-78. https://doi.org/10.1023/A:1010076127199.

Evenson, R. J., & Simon, R. W. (2005). Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behavior, 46*(4), 341-358. https://doi.org/10.1177/002214650504600403.

Furlong, A. and Cartmel, F. (2007). *Young People and Social Change: New Perspectives* (2nd edition). Maidenhead : Open University Press.

Furstenberg, F. F. (2019). Family change in global perspective: How and why family systems change. *Family Relations: Interdisciplinary Journal of Applied Family Science, 68(3),* 326-341. https://doi.org/10.1111/fare.12361

Gaine, G. S., & La Guardia, J. G. (2009). The unique contributions of motivations to maintain a relationship and motivations toward relational activities to relationship well-being. *Motivation and Emotion, 33*(2), 184-202. https://doi.org/10.1007/s11031-009-9120-x

Gao, X., Lee, K., Permpoonputtana, K., & Plitponkarnpim, A. (September 2022, online first). Earning too little and worrying too much: The role of income and financial worries on parents' well-being in Hong Kong And Bangkok. *Journal of Family and Economic Issues*. https://doi.org/10.1007/s10834-022-09863-y

Gauthier, L., Guay, F., Senécal, C., & Pierce, T. (2010). Women's depressive symptoms

during the transition to motherhood: The role of competence, relatedness, and autonomy. *Journal of Health Psychology*, *15*(8), 1145-1156. https://doi.org/10.1177/1359105310364170

Glenn, S. S. (2004). Individual behavior, culture, and social change. *The Behavior Analyst*, *27*, 133-151. https://doi.org/10.1007/BF03393175.

Güneralp, B., Lwasa, S., Masundire, H., Parnell, S., & Seto, K. C. (2017). Urbanization in Africa: challenges and opportunities for conservation. *Environmental Research Letters*, *13*(1), 015002. https://doi.org/10.1088/1748-9326/aa94fe

Guzzo, K. B., & Hayford, S. R. (2020). Pathways to parenthood in social and family contexts: Decade in review, 2020. *Journal of Marriage and Family*, *82*(1), 117-144. https://doi.org/10.1111/jomf.12618

Hansen, T. (2012). Parenthood and happiness: A review of folk theories versus empirical evidence. *Social Indicators Research*, *108*, 29-64. https://doi.org/10.1007/s11205-011-9865-y.

Ibrahim, F. M. (2020). "Everyone tries to avoid responsibility" The attenuating role of financial obligations in fertility change among Yorùbá farmers of southwestern Nigeria. *Demographic Research*, *43*, 745-778. DOI: 10.4054/DemRes.2020.43.26

Kaiser T, Li J, Pollmann-Schult M, Song AY. Poverty and Child Behavioral Problems: The Mediating Role of Parenting and Parental Well-Being. *International Journal of Environmental Research and Public Health*. 2017; 14(9):981. https://doi.org/10.3390/ijerph14090981.

Karney, B. R., & Bradbury, T. N. (2020). Research on marital satisfaction and stability in the 2010s: Challenging conventional wisdom. *Journal of Marriage and Family*, *82*(1), 100-116. https://doi.org/10.1111/jomf.12635

Knee, C. R., Lonsbary, C., Canevello, A., & Patrick, H. (2005). Self-determination and conflict in romantic relationships. *Journal of Personality and Social Psychology, 89*(6), 997–1009. https://doi.org/10.1037/0022-3514.89.6.997

Kohler, H. P., Behrman, J. R., & Skytthe, A. (2005). Partner+ children= happiness? The effects of partnerships and fertility on well-being. *Population and Development*

Review, *31*(3), 407-445. https://doi.org/10.1111/j.1728-4457.2005.00078.x.

Kvalevaag, A. L., Ramchandani, P. G., Hove, O., Assmus, J., Eberhard-Gran, M., & Biringer, E. (2013). Paternal mental health and socioemotional and behavioral development in their children. *Pediatrics*, *131*(2), e463-e469. DOI: https://doi.org/10.1542/peds.2012-0804.

La Guardia, J. G., & Patrick, H. (2008). Self-determination theory as a fundamental theory of close relationships. *Canadian Psychology/Psychologie canadienne*, *49*(3), 201–209. https://doi.org/10.1037/a0012760

Luo, Y., & Waite, L. J. (2005). The impact of childhood and adult SES on physical, mental, and cognitive well-being in later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *60*(2), S93-S101. https://doi.org/10.1093/geronb/60.2.S93.

Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2019). A new measure of life satisfaction: The Riverside Life Satisfaction Scale. *Journal of Personality Assessment*, *101*(6), 621-630. DOI: 10.1080/00223891.2018.1464457.

Nelson, S. K., Kushlev, K., & Lyubomirsky, S. (2014). The pains and pleasures of parenting: When, why, and how is parenthood associated with more or less well-being? *Psychological Bulletin, 140*(3), 846–895. https://doi.org/10.1037/a0035444.

Nwakaeze-Ogugua, I. (2007). Feminism and African cultural heritage. *Gender and Behaviour*, *5*(1), 1022-1041. https://hdl.handle.net/10520/EJC34516

Onyishi, E. I., Sorokowski, P., Sorokowska, A., & Pipitone, R. N. (2012). Children and marital satisfaction in a non-Western sample: having more children increases marital satisfaction among the Igbo people of Nigeria. *Evolution and Human Behavior*, *33*(6), 771-774. https://doi.org/10.1016/j.evolhumbehav.2012.06.005

Renzaho, A. M., Green, J., Mellor, D., & Swinburn, B. (2011). Parenting, family functioning and lifestyle in a new culture: the case of African migrants in Melbourne, Victoria, Australia. *Child and Family Social Work*, *16*(2), 228-240. https://doi.org/10.1111/j.1365-2206.2010.00736.x

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54-67.

https://doi.org/10.1006/ceps.1999.1020

Schwarz, N., & Fritz, S. (1991). Evaluating one's life: A judgment model of subjective well-being. In F. Strack, M. Argyle, and N. Schwarz (Eds.), *Subjective well-being. An interdisciplinary perspectives* (pp. 27-47). Oxford: Pergamon.

Skinner, H., Steinhauer, P., & Sitarenios, G. (2000). Family assessment measure (FAM) and process model of family functioning. *Journal of Family Therapy*, *22*(2), 190-210. https://doi.org/10.1111/1467-6427.00146.

Stein, A., Pearson, R. M., Goodman, S. H., Rapa, E., Rahman, A., McCallum, M., Howard, L. M., & Pariante, C. M. (2014). Effects of perinatal mental disorders on the fetus and child. *The Lancet*, *384*(9956), 1800-1819. https://doi.org/10.1016/S0140-6736(14)61277-0.

Thornton, A., Binstock, G., Abbasi-Shavazi, M. J., Ghimire, D., Gjonca, A., Melegh, A., Mitchell, C., Moaddel, M., Xie, Y., Yang, L., Young-DeMarco, L., & Yount, K. M. (2012). Knowledge and beliefs about national development and developmental hierarchies: The viewpoints of ordinary people in thirteen countries. *Social Science Research*, *41*(5), 1053-1068. https://doi.org/10.1016/j.ssresearch.2012.03.005

Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A life course perspective. *Journal of Marriage and Family, 72*(3), 612-629. https://doi.org/10.1111/j.1741-3737.2010.00721.x.

Appendix: Love of Family Scale (LoFS)

1. I love being around my family

3. I always desire to be with my family

4. When I am with my family

5. I forget about every other thing

6. The thought of my family makes me feel happy

7. Being around my family makes me feel fulfilled

8. I don’t mind spending on my family

9. I love interacting with members of my family

10. I see my family as a gift from God; I often have tender feelings for my family

11. I feel great pain when I see any member of my family suffer.

Note: Responses are made on a 7-point response scale, ranging from strongly disagree (1) to strongly disagree (7).