



Original Research Article

PARENTHOOD AND CHILDLESSNESS: AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERCEPTION AND DEMOGRAPHIC FACTORS

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ABSTRACT

In Nigeria, cultural norms and values encourage reproduction and celebration of parenthood. Childlessness with its potentially stigmatizing status can adversely affect the identities and interpersonal relationships of couples. This study investigated the factors that constitute perception towards infertility and the relationship between perception scores and demographic factors in a sample of Nigerians resident in Abuja. A cross-sectional study was conducted with the aid of a self-administered structured questionnaire. The questionnaire reliability was determined by Cronbach alpha and it consists of two (2) sections. Section A consists of sociodemographic factors such as sex, age, income, occupation, the length of time the respondents have been trying to have children amongst others. Section B described how individuals feel about infertility. Systematic sampling method was employed. Every third person was approached to be part of the study in two selected study sites in each of the six council areas in Abuja, Nigeria. The collected data were loaded into SPSS version 27 for the calculation of percentages, mean, standard deviation, factor loading and Cronbach alpha. Student t-test and One Way ANOVA were used for inferential analysis as appropriate at < 0.05 level of significance. Most of the respondents 254(42.4%) were aged between 35-44 years. About 327(54.5%) were females while 392(65.3%) were married. One hundred and fifty (25%) had an income between #40,000-79,999 while 387(64.5%) had tertiary level of education. Most (382; 63.7%) had children while 86(14.3%) had been trying for a baby for more than 2 years. The perceived benefit of parenthood had a mean perception score of 3.39 ± 1.29 . The negative consequences of having children had a mean value of 2.90 ± 1.32 . The psychological aspects of childlessness had a mean value of 4.52 ± 0.92 while the economic benefits of having children had a mean value of 3.17 ± 1.13 . The total mean scores were significantly different among the four (4) components extracted ($p < 0.001$, $F = 220.09$). The perception of respondents was mainly made up of factors that constitute the psychological aspects of childlessness and benefits of parenthood. The demographic characteristics influenced the respondent's perception of childlessness and parenthood.

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INTRODUCTION

In recent times, there has been an increase in inability to bear children either willingly or unwillingly in most developing countries [1]. Infertility has become a public health problem as it affects millions of people globally [2]. About 8-12% of individuals in their child-bearing age experience infertility, affecting approximately 50% each of males and females [2]. Based on a 2023 World Health Organization (WHO) meta-analysis, Africa is estimated to experience 13.1% of infertility, with an estimated infertility period (the proportion of individuals/couples with infertility at a specific point in time) of 16.4%, the highest globally [3, 4].

Infertility is defined as the "lack of clinical pregnancy after 12 months of regular intercourse (at least three times every week) in a couple who are living together" [5]. Infertility is classified as primary or secondary. Primary infertility is when a woman has never experienced conception since she became sexually active [6]; while secondary infertility is when there is a history of at least one conception, prior to current infertility condition [7]. Infertility can result from both male and female related factors. These factors account for 35% cases of infertility of couples in a 2019 study [8]. Male infertility could result from testicular or ejaculatory dysfunction, hormonal disturbances, or genetic disorders; while female infertility can be due to ovarian dysfunction, tubal obstruction, or an abnormal uterine structure [8]. Genetic and environmental factors including infectious or parasitic diseases, lifestyle, stress, postponing parenthood, and obesity can also be a contributory factor of infertility [9–12]. Childlessness is one of the consequences of infertility.

Childlessness is when an individual does not have a child or children in his/her life [13]. Childlessness can be involuntary when an individual is unable to have children for medical reasons, whether known or unexplained and voluntary when an individual deliberately decides not to have children [14]. Childlessness is an unpleasant experience in many African societies; and causes some 'unexpected life transition' [15].

Parenthood is a state of being a parent. Becoming a parent is one of the most essential and life-changing experience [16]. In many African countries, parenthood is expected from every adult, and it attracts lots of respect. An individual may not be given certain responsibilities if he/she is not a parent. It is believed that a parent is responsible and can be trusted with some key responsibilities and decisions in the society. Hence, childlessness is worrisome and frowned at in so many cultures.

In Sub-Saharan African countries, much value is attributed to childbearing and childlessness attracts great stigmatization [17]. Childlessness in marriage has diverse impacts on the couple [18]. Childless couples are faced with lots of psychological problems such as estrangement, lack of interest in marital intimacy, sexual dissatisfaction, and social relationship disturbance [19,20], with associated impulsive, angry behaviors, feelings of isolation, low self-efficacy, and physical complaints [21,22]. The stress on couples due to childlessness could be attributed mainly to the need for

parenthood, rejection of a child-free lifestyle, social concerns, marital relationship problems, and sexual concerns [23].

In Sub-Saharan Africa, childlessness is highly gender biased. The women are often blamed for infertility or childlessness even in cases where she is clinically fertile, or it has been medically proven that a male partner may be infertile [24, 25]. Childless females are often stigmatized and are perceived to have indulged in risky health or lifestyle behaviors and these are usually justifications for divorce, abandonment, male polygamy, social stigma, and instances of violence against women. These myths and misconceptions towards childlessness results in confusion, judgment, and ostracization of women, men or couples who are childless [26-31]. This has contributed to economic hardship, psychosocial distress, and social well-being of these couples [32]. Hence, there is need to assess the influence of these individual myths, misconceptions, and social norms on the perception of parenthood and childlessness in Sub-Saharan Africa. Therefore, this study aimed to identify the factors that constitute perception towards parenthood and childlessness and the relationship between perception scores and demographic factors in a sample of Nigerians resident in Abuja.

METHODS

Study Design

A cross-section study to investigate the factors that constitute perception towards infertility and the relationship between perception scores and demographic factors in a sample of Nigerians resident in Abuja using systematic sampling method with the aid of a self-administered structured questionnaire.

Study Setting

This study was conducted in the six-area councils of Abuja, the federal capital city of Nigeria. Abuja is approximately 300 miles (480km) northeast of Lagos and is located at 9.0563oN and 7.4985oE of Nigeria [33]. The city is metropolitan with several residents coming from a diverse cultural background with different belief system and marriage related practices that may influence how they perceive infertility.

Eligibility Criteria

The study participants were males or females aged 18 years and above who were visiting the health facility and had given their consent to participate in this study after the details have been explained to them.

The Instrument

A two-section questionnaire was developed for this study. The first section consists of sociodemographic factors such as sex, age, income, occupation, the length of time the respondents have been trying to have children amongst others. The second section consists of items that describes how individuals feel about infertility. In developing the items, a female and a male were each invited from each of the council areas in Abuja to

discuss the possible effects of childlessness based on either their experience or perception. Thus, a panel comprising six men and six women was assembled. Items agreed on by the panel such as having children attracts respect in the society that is believed will influence how individuals perceive parenthood were included in the second section of the instrument. Some items were also derived from literature [26-32] giving a total of 21 items for the second section of the questionnaire. The more the items, the more the reliability. All items were discussed by the panel to ensure face and content validity. Reliability study was conducted using Cronbach Alpha. The responses were anchored on a 5-point Likert scale; Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD) and scored as 5,4,3,2,1 respectively. Some of the items were negatively worded to prevent mechanical responses. A pilot study was conducted in a nearby city away from Abuja (though the data obtained from the study was not used) and the questionnaire was found useable since it was easily understood and obtained the desired information.

Sample Size

The sample size was determined to be 583 with the aid of Raosoft [34] at a margin of error of 4% with a confidence interval of 95%. However, to account for attrition 720 were sent out for administration.

Ethical Considerations

Administrative approval was obtained for this study from the Ministry of Health FCT Abuja after they had gone through the research protocol, since this study is non-invasive. However, verbal consent was obtained from each respondent before they were given the questionnaire to fill and confidentiality of their responses was ensured.

Data Collection

A government hospital and a randomly selected pharmacy were chosen using a lottery technique as study site for administration of the questionnaire from each of the six council areas. An attempt was made to recruit every third person that enters the waiting area of the study sites. Where an individual declined to participate the next person was approached for recruitment.

Data Analysis

The returned questionnaires were coded, entered into Microsoft excel and crossed checked for accuracy. Scores of negatively worded items in the second section of the instrument were reversed such that the higher the score the greater is the influence of the item on the perception of the respondents. The data were loaded into SPSS version 27 for the calculation of percentages, mean, standard deviation, factor loading and Cronbach alpha. Principal component analysis employed Varimax rotation with Kaiser normalization with listwise deletion of missing data. None of the 21 items loaded less than approximately 0.4 hence were contributing

adequately to the summary scores. Where appropriate, Student t-test and One Way ANOVA were used for inferential analysis at < 0.05 level of significance

RESULTS

The instrument reliability as determined by Cronbach alpha was 0.719 for the 21 statement items and none of them had a loading factor less than 0.39. The loading factor ranged from 0.393 to 0.668. Of the 720 questionnaires sent out 600 were returned giving a response rate of 83.3%. Most of the respondents 254(42.4%) were aged 35-44 yrs. About 55% (327) were females while 392(65.3%) were married. One hundred and fifty (25%) had an income between ₦40,000-₦79,999 while 387(64.5%) had tertiary level of education. Most of the study participants (382, 63.7%) had children while 86(14.3%) had been trying to have a baby for more than 2 years. The socio-demographic characteristics of the respondents is as shown in Table 1.

Table 2 shows the questionnaire's item statements expressing the respondent's perception of parenthood and childlessness with mean scores that expressed their extent of agreement.

"Having children attracts respect in the society" and "Not having children creates family problems for the woman" had the highest mean scores of 4.68 ± 0.74 and 4.58 ± 0.78 respectively, showing that these are the most influential perception that the respondents have towards infertility while "Childless men are usually secret cult members" and "Having children will make your partner not to cheat on you with someone else" has the lowest mean score, which implies they are the least worrisome perception the respondents have towards infertility.

Principle component analysis extracted four subscales. The largest component consists of 10 items (component 1 in Table 2) and is identified as Benefits of Parenthood with a mean score of 3.39 ± 1.29 . Component 2 was named negative consequences of having children since it has items such as having children can create health, career, and financial problems. Component 2 has the lowest mean score of 2.90 ± 1.32 . Component 3 is identified as the psychological aspects of childlessness with a mean value of 4.52 ± 0.92 while component 4 shows the economic benefits of having children (3.17 ± 1.13). The total mean scores were significantly different among the four (4) components extracted ($p < 0.001$, $F = 220.09$).

There was a relationship between gender and the psychological aspects of childlessness ($p = 0.0002$). Age was related to the perceived benefit of parenthood ($p = 0.0002$) and negative consequences of having children ($p = 0.0014$). Marital status and income of the respondents was associated with the negative consequences of having children ($p = 0.0406$), however, marital status was also associated with the psychological aspect of childlessness ($p = 0.0001$), while occupation was associated with perceived benefit of parenthood and the negative consequences of having children ($p = 0.002$) (Table 3).

Table 1: Sociodemographic Variables of Respondents (N=600)

Variables	Frequency (n)	Percentage (%)
GENDER		
Male	273	45.5
female	327	54.5
AGE		
18-24	54	9.0
25-34	173	28.8
35-44	254	42.3
45-54	81	13.5
≥55	38	6.3
MARITAL STATUS		
Married	392	65.3
Single	156	26.0
Others	52	8.7
OCCUPATION		
Student	35	5.8
Government worker	115	19.2
Self-employed	224	37.3
Private sector	137	22.8
Unemployed	58	9.7
Retired	31	5.2
INCOME (₦)		
<10,000	31	5.2
10,000-39,999	105	17.5
40,000-79,999	150	25
80,000-119,999	98	16.3
120,000-159,999	62	10.3
160,000-199,999	32	5.3
200,000-239,999	36	6
≥240,000	86	14.3
EDUCATIONAL LEVEL		
None	33	5.5
Primary	31	5.2
Secondary	149	24.8
Tertiary	387	64.5
DO YOU HAVE CHILDREN		
No	218	36.3
Yes	382	63.7
HOW LONG HAVE YOU BEEN TRYING?		
Not trying	424	70.7
<2yrs	90	15
>2yrs	86	14.3

Table 2: Factor loading and mean the respondents perception (N=600)

ITEMS	FACTOR LOADING	MEAN±SD
Component 1: Benefits of parenthood		
Children takes away loneliness and depression	0.549	4.28±0.99
Having children makes one feel confident in a polygamous marriage	0.548	3.88±1.48
You fit in better (flow well) with your peers when you have children	0.487	4.19±1.27
Having children attracts respect in society	0.427	4.68±0.74
Having children will make your partner not to cheat on you with someone else	0.530	2.07±1.48
People without children do not get a befitting burial when they die	0.572	3.01±1.66
No one will take care of you at old age if you do not have children	0.653	3.11±1.65
A childless person usually feels sick and unhappy	0.611	4.28±0.92
People without children cannot inherit property	0.646	2.77±1.63
Not having children is a woman's problem	0.387	1.67±1.09
Mean Total		3.39±1.29
Component 2: Negative consequences of having children		
Not having children gives you enough time to take care of yourself and enjoy life	0.651	3.20±1.34
Children slow down one's career development	0.668	2.99±1.31
Children make married life less enjoyable	0.617	2.19±1.10
Children create financial issues	0.450	3.86±1.12
Having children can cause health problems	0.400	2.83±1.28
Witches and wizard can make someone not to have children	0.464	2.62±1.49
Sin can make you childless	0.393	2.59±1.58
Mean Total		2.90±1.32
Component 3: Psychological Aspects of Childlessness		
Anyone without a child will feel bad when others talk about their children	0.488	4.45±1.05
Not having children creates family problems for the woman	0.574	4.58±0.78
Mean Total		4.52±0.92
Component 4: Economic Benefits of Having Children		
Children usually help with farm work and house chores	0.5114	4.08±1.09
Childless men are secret cult members	0.495	2.25±1.17
Mean Total		3.17±1.13

Table 3: Relationship between the demographic variables and the components (N=600)

Variables	Frequency (n)	Perceived benefits of parenthood	Negative consequences of having children	Psychological Aspects of Childlessness	Economic Benefits of Having Children
SEX					
Male	273	3.35±0.76	2.86±0.75	4.39±0.84	3.11±0.89
Female	327	3.43±0.76	2.93±0.75	4.62±0.64	3.20±0.90
P-value		0.1996**	0.2554**	0.0002**	0.2207**
AGE(YRS.)					
18-24	54	3.78±0.70	3.30±0.67	4.31±0.75	3.5±1.07
25-34	173	3.42±0.76	2.86±0.78	4.49±0.74	3.13±0.94
35-44	254	3.35±0.75	2.85±0.73	4.55±0.75	3.10±0.86
45-55	81	3.38±0.73	2.91±0.69	4.61±0.70	3.21±0.83
≥55	38	3.08±0.80	2.82±0.79	4.46±0.80	3.07±0.81
P-value		0.0002***	0.0014***	0.1736***	0.0468***
MARITAL STATUS					
Married	392	3.45±0.72	2.79±0.73	4.60±0.71	3.16±0.88
Single	156	3.29±0.86	3.11±0.77	4.27±0.83	3.17±0.91
*Others	52	3.3±0.68	3.09±0.69	4.64±0.59	3.17±0.93

P-value		0.0528***	0.0001***	0.0001***	0.9915***
OCCUPATION					
Student	35	3.46±0.69	3.33±0.66	4.36±0.64	3.3±1.89
Govt worker	115	3.13±0.59	2.83±0.71	4.55±0.68	3.04±0.85
Self-employed	224	3.51±0.80	2.90±0.75	4.55±0.73	3.15±0.96
Private sector	137	3.41±0.82	2.89±0.79	4.38±0.86	3.14±0.80
Unemployed	58	3.50±0.68	2.80±0.71	4.66±0.69	3.48±0.74
Retired	31	3.11±0.66	2.84±0.72	4.60±0.69	2.98±0.89
P-value		0.0001***	0.0017***	0.3192***	0.3990***
EDUCATIONAL LEVEL					
None	33	3.74±0.56	2.20±0.62	4.52±0.69	3.63±0.66
Primary	31	3.91±0.60	2.74±0.65	4.65±0.69	3.90±0.91
Secondary	149	3.72±0.72	3.01±0.78	4.59±0.65	3.29±1.00
Tertiary	387	3.20±0.73	2.93±0.72	4.47±0.79	3.01±0.81
P-value		0.3689***	0.0001***	0.7333***	0.0023***
INCOME (₦)					
<10,000	31	3.69±0.63	3.13±0.74	4.35±0.69	3.48±0.88
10,000-39,999	105	3.79±0.66	2.82±0.77	4.57±0.66	3.43±1.00
40,000-79,999	150	3.59±0.73	2.74±0.79	4.50±0.79	3.26±0.90
80,000-119,999	98	3.45±0.72	2.88±0.77	4.56±0.67	2.94±0.86
120,000-159,999	62	3.10±0.76	2.93±0.75	4.58±0.77	2.95±0.84
160,000-199,999	32	3.21±0.54	3.04±0.75	4.83±0.37	3.11±1.00
200,000-239,999	36	3.00±0.57	3.07±0.77	4.56±0.63	3.01±1.00
≥240,000	86	2.85±0.67	3.05±0.65	4.31±0.94	3.03±0.59
P-value		0.0785***	0.0406***	0.3342***	0.2548***

DISCUSSION

Childlessness and parenthood could bring about diverse experiences and consequences in an individual's life [16]. It also affects various dimensions of social life including labor force participation, socio-economic development, marital quality, gender equality, leisure activities and social integration which are important determinants of physical and mental health for both men and women [13].

In this study, most of the respondents' perception were geared toward perceived benefit of parenthood and economic benefits attributed to having children. In those eras when most Nigerians were farmers, having children had economic benefits since the farmers utilize their children's manpower to increase their farm produce which they sell to generate income. Like findings from previous studies, the perceived benefit attributed to being a parent includes respect in the society, ability to fit in well with peers in the society and childless couple feels sick and are unhappy; most of the time being a parent can be perceived as a cure to loneliness and depression [35].

This study revealed that the respondent's perception tilted towards the psychological aspects of childlessness. Studies have confirmed that childlessness is associated with lots of psychological stress and emotional disorder [18-23]. However, the perception of 'childlessness being the woman's problem' and 'childless men being secret cult members' had low

perception ratings by respondents in this study. This may be due to some awareness of male infertility in the society and the recognition that childless men may suffer from different forms of trauma and stigma. Childlessness for men is emasculating. Men without children may be regarded as not man enough or not regarded as full adults as having children can mark adulthood status [36]. In some cultures, they have lesser status in the community than their peers with children and their views may not be considered or they may not be allowed to contribute to societal discussions [37]. Furthermore, it appears that the perception of "children slowing down career progress", "children create financial problems and makes life less enjoyable" which are the negative consequences of having children are least considered by the respondents as problematic as revealed in this study.

This study revealed that marital status and gender have an association with the psychological aspects of childlessness. The married respondents are of perception that childlessness creates problems for the women in marriage and that childless couples feel bad when others talk about their children. The perception regarding childlessness especially in a woman is often derogatory and judgmental. Regardless of the cause, social and gender norms often blame the woman for childlessness [24-31], while male infertility is not identified as an issue [38]. Childless men are not usually stigmatized [39]. In this study, age and occupation was associated with perceived benefit of parenthood. Younger respondents are of

the opinion that parenthood attracts more respect from the society, makes you measure up with peers and that having children cures loneliness and makes one happy. The unemployed respondents have the perception that if you do not have children that no one will take care of you at old age and that people without children do not get a befitting burial. Parenthood on the other hand furnishes the young and unemployed with a sense of purpose [40-42].

Marital status, age, occupation, educational level and income are associated with the negative consequences of having children as revealed in this study. Previous studies have revealed that being a parent at a young age have a negative impact on the individual's socio-economic development, also young parents are more likely to have marital crisis [43,44]. It has been stated in previous studies that delaying parenthood is beneficial to both the mother and the father [45] because at a later age, an individual would have acquired educational, financial, and social resources that help them to cope with the costs and stresses of parenthood. The respondents who are single, self-employed, had obtained secondary and tertiary level of education and have an income between (₦)160,000 to 240,000 perceive that not having children gives you enough time to take care of yourself and enjoy life, children slow down one's career development, make married life less enjoyable and can cause health problems [16]. However, the respondents who have an income of less than (₦)10,000 perceive that having children creates financial problems. This is simply because the income is low and not sufficient to take care of him/herself. Hence, having a child will create lots of financial problems for him/her.

Findings from this study revealed that educational level of an individual is significantly associated with the economic benefits of having children. The respondents who had primary education believe that having children provides lots of economic benefits. Economic benefits of having children could manifest in the form of children helping with farm work since most respondents with primary level of education are farmers and do not practice mechanized farming and they may not have sufficient income to hire laborers. Also having lots of male children will provide the opportunity to acquire lands and properties as inheritance and money that will be acquired as dowry from the female children could make one wealthier.

LIMITATION OF STUDY

A cross-sectional study conducted with a questionnaire is subject to bias since it may be the respondents may not express his/her actual feeling because they are to choose from the options provided.

CONCLUSION

Marital status, age, occupation, educational level and income were contributory factors to the perceived negative consequences of having children. Marital status and gender influenced the psychological aspect of childlessness while age

and occupation contributed to the perceived benefit of parenthood. Educational level also influenced the respondents perceived economic benefits of having children in Abuja, Nigeria. There is need to educate residents in Abuja especially the females and increase their awareness on parenthood and childlessness

AUTHORS' CONTRIBUTION

Study Design: Udezi AW & Bello MA; Literature Review: Aguiyi-Ikeanyi CN; Data Collection: Bello MA; Data Analysis: Aguiyi-Ikeanyi CN; Writing of Manuscript: Aguiyi-Ikeanyi CN; Supervision: Udezi AW.

CONFLICT OF INTEREST

None

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