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What does the future hold for Nigerian adolescents? Initial development and validation of adolescents' future orientation scale.

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Abstract

Three studies examined construct validity of Adolescents' Future Orientation Scale (hope & fear) in Nigeria sample. Study one utilized qualitative method to establish items of Adolescents' Future Orientation Scale with 300 adolescents selected from three ethnic groups Igbo, Hausa and Yoruba in Nigeria. Second study examined exploratory factor analysis (EFA), internal consistency (Cronbach Alpha) with 150 participants, while study three assessed criterion related validity, concurrent, divergent and predictive validity of the scale utilizing 97 sample. Result of study one showed that percentage of agreement for hope for future among assessed sample of three ethnic groups was 97% and 98% for fear of future. Also, results of study two indicated that kmo was adequate .91, Bartlett test was significant at P < 0.000. Two factors loading (hope for the future & fear of the future) was clearly extracted. Total Cronbach Alpha α = .94; sub-scale of hope for the future α = .76 and sub-scale of fear of future α = .97 and item-total correlation (itc) ranged from .35 to .88. Study three provided additional evidence for concurrent, divergent and predictive validity. When hope sub-scale of AFOS was correlated with fear of future sub-scale (n = 97, -.24*) yielding reasonable divergent validity, while hope was correlated with motivation persistence (n = 97, .25*).

Discussion was based on the general utility of the scale, limitation and suggestions for further studies.

Keyword: Future orientation, hope for future, fear of future, adolescents, Scale.

Introduction

The future orientation of adolescents seems to be one of the vital dynamics that can help in preparing the adolescents to be socially, psychologically and emotionally balanced to take responsibilities of the next transitional stage (adulthood) (Larson & Wilson, 2004). Generally, development of a particular behavior orientation may be dependent on the socio-cultural factors within an ecological system of an individual. Thus, it may be difficult to form universally acceptable indicators of future orientations for adolescents across countries. This is because future orientation may be characterized by the levels of hopes and fears an individual expresses for the future, which could be influenced by both immediate and universal environment.

Markus & Nurius (1986),Unemori, Omoregie, & Markus (2004) posited that future orientation is comprised of three distinct cognitions: hoped selves, expected selves and feared selves. In the same vein, Emmons, (1986); Little (1983) conceptualized future orientations as personal projects and personal striving. These personal striving may be translated to either hope or fear of the future. Some of the common denominators found in the descriptions in future orientation include the fact that it could be the expression of hope or fear in the following domains; defining future needs, personal future plans and actualization of future goals. In other words, assessment of future orientation should include these perspectives (hope and fear) according to their social-cultural importance in the population assessed.

Some researchers made hypothetical assumptions on the origin and sustenance of future orientation among individuals, which may act as guidance for designing of assessment tool for future orientation. One of such notable theory was possible self theory propounded by Markus and Nurius (1986); Unemori, Omoregie, & Markus (2004). The theory conceptualized future orientation as the process by which future thoughts regarding the self motivate behavior to achieve desired outcomes. Possible selves are comprised of three distinct cognitions: hoped for selves, expected selves, and feared selves. The hope for self is the most desired or idealistic view of the self in the future and is not necessarily realistic. The expected self is what one anticipates becoming in the future and feared selves are what one wants to avoid in the future. Accordingly, possible selves' theory assumed that individuals are motivated to engage in behaviors that move them toward attaining the hoped for self and away from the feared self.

Empirical evidences have confirmed that these theoretical assumptions have consequences for individual in the following areas: psychological wellbeing, future education, occupation, parental well-being, marriage and family, leisure activities, wealth creation, and interpersonal relationships (Akhilendra, Sadhanah, Singh and Srivastava 2013; Ciarrochi, Parker, Kashdan, Heaven and Barkus 2015; Kirmani, Sharma, Anas and Sanam 2015; Zhang et al 2016). Many other researchers found positive relation between future orientations (hope for future and fear of future) and other constructs such as resilience, adjustment, motivational persistence, attachment, growth mindset, career choice etc (Carvalho 2015; Hejazi, Naghsh, Moghadam, & Saki 2013; Dalzell and Theron 2006; Steyn, Badenhorst & Kamper 2010; Seginer 2003). Given the consequences of future orientation (hope for future and fear of future) among

adolescents, it is pertinent for scholars to develop an empirically based scale that has cultural importance for assessing future orientation.

Presents study

The present study considered that future orientation is critical for the realization of sustainable wellbeing among adolescents. Also, it anticipated that the process of forming future orientations may be influenced by social-environmental circumstances (Bronfenbrenner 1979). Thus, makes it possible to expect that adolescents in this country (e.g. Nigeria) may have a combination of characteristics that is both universal and unique in their future orientations (hope and fear). To explore these possible unique features, the present study utilized two techniques: qualitative technique in study one, where items that translated to unique future orientations where generated through interviews and were thematically analyzed; a method that has been previously used by Zhang, Chen, Yu, Wang, & Nurmi (2016). Study two utilized quantitative method to assess the psychometric properties of the generated items in measuring future orientations. Why study three assessed the predictive validity of the instrument.

Study One

Participants

Three hundred (300) senior secondary school grade four and five (SS1 & SS2) students participated in the study. They comprised boys (150, 50 %) and girls (150, 50 %). Their ages range from 14-18 (M=15.6 years, SD= 1.3). Their ethnic groups include Igbo (n = 100, 33.5%), Yoruba (n = 100, 33.3%) and Hausa (n = 100, 33.3%). They were randomly selected from two secondary schools each, in Awka metropolis (Igbo), Ibadan

Metropolis(Yoruba) and Katsina metropolis(Hausa). These groups are the three major ethnic groups in Nigeria. All the participates could write and speak English language.

Procedure

Fifty participants were randomly selected from each of the participating two secondary schools in Awka metropolis, Ibadan metropolis and Katsina metropolis. Ethical approval for the study was obtained from Nnamdi Azikiwe University Awka. Permission to conduct the study was obtained from the post primary education board of each metropolis and assents were obtained from all the principals and participants in the selected secondary schools. Two plain sheet of papers were distributed to the randomly selected participants to write down as many hopes for the future as come to mind (those events individuals believe will be desirable and fulfilling, and they are looking forward to actualizing them) and fears of the future (fear of the future refers to issues or events that adolescents believe will be undesirable and unfulfilling, and they are not looking forward at encountering them in the future. They are those things that the adolescents wish will never occur in their lives either now or in the future). Also, focus group discussion (fgd) was conducted with fifty participants to further obtain objective and direct information about future orientations. Participants were required to write down their gender, age and class of study. In the course of the administration of the plain sheet, the researchers ensured that no clue was given to participants. The concept of future orientation (hope and fear) was explained to participants to the level that they wrote what they thought without copying others.

Thematic Analysis

The data collected were systematically grouped into themes. In each of the students' papers, those that matched other people's theme were grouped together. Total of

seventeen themes were established in both hope for the future and fear of future. The generated hopes and fears were subjected to further analysis. After thematic analysis, various themes were matched across ethnic groups and the themes were found to be same.

The generated data were given to psychometric experts for face validity and content validity assessment. Out of the twenty assessors, eighteen experts rated it at ninety seven percent (97 %). The generated themes were converted to items or indicators of future orientation. Each theme of hopes and fears of future formed items in the questionnaire. Five point likert response patterns were assigned to it ranging from: Not very Important =1, Not Important =2, Don't Know =3, Important =4, and Very Important =5.

Results of study one

The results of the thematic analysis showed that themes that reached ninety five percent agreements and above were accepted. The themes and there percentages were listed below.

Table 1, showing the themes and percentages of agreement in Hope for Future

S/NO	THEMES	Number of percentage
1.	To enter a good university	98
2.	To be successful in my examinations e.g. WAEC, NECO, NABTEB, JAMB etc	98
3.	To be able to get job after school	98
4.	To enter a desired career e.g. Teacher, Doctor, Engineer, Lawyer, Farmer, Business etc	97

5. To become very wealthy after school	98
6. Hope I will bear my own children	96
7. Hope that my parents can continue to pay my school fees	95
8. Hope my parents will have enough wealth	95
9. Hope to help my parents financially and materially after school	97
10. Hope one day I will be happily married	98
11. Hope my parents will live longer	98
12. Hope to continue doing what God commanded	97
13. Hope that my parents will continue to love me	97
14. Hope there will be peace in Nigeria	95
15. Hope Nigeria economy will be good again	97
16. Hope to continue with schooling	98
17. Hope not to join cult/bad gang	96

The descriptive results showing themes and percentages of agreement of themes in Hope for the Future among Nigerian Adolescents in the three ethnic groups.

Table 2, Showing the Themes and Percentages of Agreement in Fear of Future

S/no	Themes	Percentages of Agreement %
1.	Unable to enter a good university	98
2.	Unable to pass my examinations e.g. WAEC, NECO, NABTEB, JAMB etc	97
3.	Unable to get a job after school	98
4.	Unable to enter a desired career e.g. Teaching, Nursing, Law etc	97
5.	Unable to make it after school	98
6.	Unable to get a good life partner	95
7.	Parents not having enough money	96
8.	Parents not being able to pay my school fees	96
9.	Unable to help my parents financially or materially after school	98
10	Parents dying	96
11.	Unable to do what God/Allah commanded	95
12.	Family/ parents reject me	99
13.	I fear there will be conflict	96
14.	I fear Nigeria economy will be worse	97
15.	To lose good friends	98
16.	Untimely death	95
17.	Fear to drop-out of school	98

The descriptive results showing themes and percentages of agreement of themes in Fear of Future among Adolescents in three ethnic groups in Nigeria.

STUDY TWO

Study two formed the major thematic items into objective questions and assessed the reliability and validity parameters of the items.

PARTICIPANTS:

One hundred and fifty (N = 150) senior secondary school students were randomly selected from three ethnic groups (Igbo =50, Hausa =50 and Yoruba = 50). They comprised boys (75) and girls (75). Their ages range from 14-18 (M=15.6 years, SD= 1.5). They were randomly selected from two secondary schools each, in Awka metropolis, Ibadan Metropolis and Katsina metropolis.

PROCEDURE

The researchers sought permission from all the principals of selected secondary schools to allow their students participate in the research as well as grant oral assent since prospective participants were below eighteen years. Twenty five participants were selected each from all the secondary schools. Participants in each school were addressed in group, where the aims, objectives and relevance of the study were explained after which the questionnaire was administered to them. The questionnaire has three parts: part A contained demographic variables, part B contained hope for the future and part C fear of future.

Design and Statistics

The design used to gather data for the study was cross-sectional survey design and statistics tool used for analysis was SPSS.

Exploratory Factor Analyses

The Kaiser- Meyer-Olkin (KMO) was used to assess how suited the data were for factor analysis, which the acceptable value must be greater than .05 (Kaiser, 1974). Equally, Bartlett test was used to assess whether the variables were correlated highly enough for factor analysis. The scree plot was used to determine the appropriate number of factors to extract. The internal consistency of the variables was assessed using Cronbach alpha values, which must be .70 and above to be considered adequate (Nwafor, Obi-Nwosu, Atalor & Okoye, 2016).

Results and Discussion

The result of Kaiser-Meyer-Olkin (KMO) that assessed the suited nature of the items was adequate enough for factor analysis showed that the *KMO = .91*. The Bartlett test result, which was used to assess whether the variables are correlated highly enough to provide a reasonable basis for factor analysis was significant at $P < 0.000$. The scree plot showed clearly two factors were extracted (see table 3). The factor extraction showed that the items loaded significantly onto the first two factors.
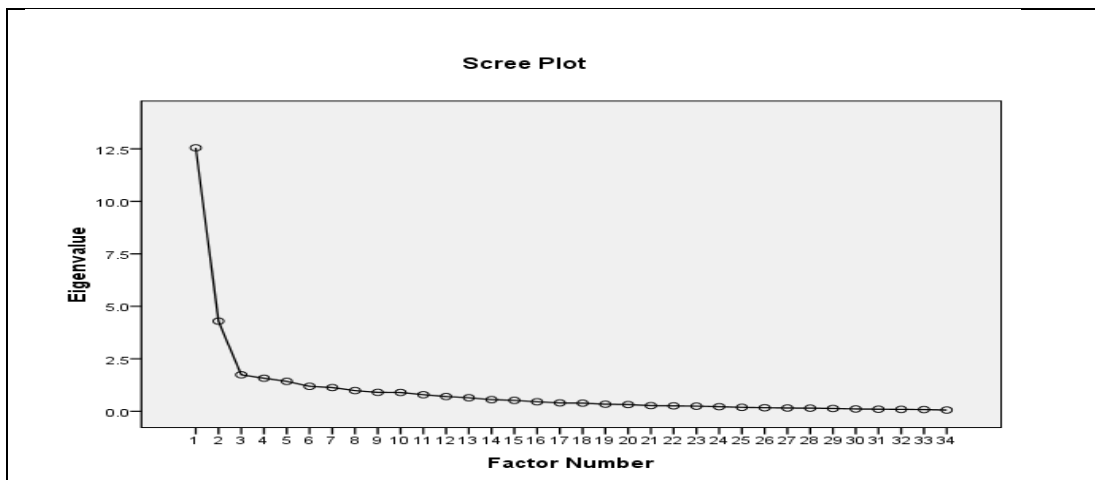

Figure 1, showing scree plot and number of factors in Hope and Fear of Future among Adolescents

Internal consistency

The total Cronbach alpha for the thirty four (34) item scale was α = .94. For the seventeen (17) items hope for the future factor α = .76, while the seventeen (17) items fear of future factor α = .97.

Table 3, showing the Cronbach alpha coefficient for Hope for future, Fear of Future and Total value of Adolescents future orientation scale.

Variables	α	m	SD
Hope for the Future	.76	81.2	4.6
Fear of the Future	.97	48.8	25.0
Total Future Orientation	.94	1.3	25.5

Table 4, showing Item Loadings, following maximum likelihood extraction and oblique rotation in the exploratory factor analysis from Study 2

Items	Factor	
Hope	1	2
1. To enter a good university	.001	.077
2. To be successful in my examinations e.g. WAEC, NECO, NABTEB, JAMB etc	.002	.125
3. To be able to get job after school	.003	.111
4. To enter a desired career e.g. Teacher, Doctor, Engineer, Lawyer, Farmer, Business etc	.000	.053
5. To become very wealthy after school	.001	.145
6. Hope I will bear my own children	.001	.088
7. Hope that my parents will can continue to pay my school fees	.002	.057
8. Hope my parents will have enough wealth	.001	.154
9. Hope to help my parents financially, materially	.003	.129

after school

10 . Hope one day I will be happily married		.001	.087
11 Hope my parents will live longer		.001	.095
12. Hope to continue doing what God commanded		.002	.082
13. Hope that my parents will continue to love me		.005	.148
14. Hope there will be peace in Nigeria		.001	.079
15. Hope Nigeria economy will be good again		.004	.105
16. Hope to continue with schooling		.004	.102
17. Hope not to join cult/bad gang		.004	.062

FEAR Factor

1. Unable to enter a good university		.042	.025
2. Unable to pass my examinations e.g. WAEC, NECO, NABTEB, JAMB etc		.073	.037
3. Unable to get a job after school		.077	.001
4. Unable to enter a desired career e.g. Teaching, Nursing, Law etc		.089	.001
5. Unable to make it after school .		.093	-.012
6. Unable to get a good life partner		.107	-.033
7. Parents not having enough		.081	-029
8. Parents not being able to pay my school fees		.080	-.042
9. Unable to help my parents financially or materially after school		.082	-.009
10. Parents dying		.037	.007
11. Unable to do what God/Allah commanded		.093	-.043
12. Family/ parents reject me		.044	.017
13. I fear there will be conflict		.049	.020
14. I fear Nigeria economy will be worse		.060	.032
15. To lose good friends		.043	.057
16. Untimely death		.043	.057
17. Fear to drop-out of school		.043	.048

Extraction method: Maximum likelihood. Oblimin rotation method with Kaiser Normalization of Hope and fear items.

Study Three

Although study two above provided acceptable psychometric properties, there is still need to conduct concurrent and divergent validity. The concurrent validity analyzed the correlation between Hope for future, general self-efficacy and motivational persistence while divergent validity was obtained when fear of future was correlated with general self-efficacy and motivation persistence.

Method

Participants

The participants in study three (3) comprised ninety seven (97) secondary school students (classes five and six) randomly selected from two secondary schools in Awka metropolis. They were fifty two (52) boys and forty five (45) girls, ages range from 14 to 18 with mean age of 15.09 and standard deviation .99.

Instruments

Adolescents Future Orientation Scale (Hope and Fear)

This has already been described in study two (2). The current study found Cronbach alphas for Hope for the future α=.79 and α = .95 for fear of future.

Motivational Persistent Scale

Thirteen items that measure motivational persistent, which consists of long-term purposes pursuing (**LTPP),** current purpose pursuing (**CPP);** and recurrence of unattained purposes (**RUP)**. The scale was developed by Constatin, Holman and Hojbota (2011). The authors found alpha of α =.78. The scale was designed in five point likert format ranging from: In a very low degree =**1**, In a low degree =**2**, Moderately =**3**, In a very high degree =**4**, and In a very high degree =**5.** In the present study, Cronbach alpha of α = 75 was found.

Table 5, showing the correlation coefficient of Adolescents' Future Orientation scale (Hope for Future and Fear of Future) and Motivational Persistence.

	Hope	Fear	Motivational Persistent
1. Hope for the Future	1	-.24*	.25*
2. Fear of future	-.24*	1	-.15

*= P < 0.05

Result and Discussion

The results indicated that the two subscales of adolescents future orientation scale (Hope for the future and fear of the future) have sufficient concurrent and divergent validity with other related personality measures. Thus, hope for the future scale was significant and negatively correlated with fear of future at r = -.24, n =97, p < .05. Hope for the future equally has significant and positive correlation between with motivational persistent at r = .25, n = 97, p < .05. Fear of future has negative and significant correlation with hope for the future at r = -.24, n = 97, p < .05. Fear of future was negative but did not have significant relationship with motivational persistence. The results above provided basis to assert that Adolescents Future Orientation Scale (AFOS) indeed has criterion validity. The significant and positive relationship between hope for the future and motivational persistence showed the scale measure related construct and no significant relationship with fear of future showed divergent validity.

General Discussion

The reported studies provided the background of what constitutes Nigerian adolescents future orientation, validity, reliability and usefulness of the scale. In study one, factors of what constituted adolescents future orientation was elicited through qualitative approach, which was in tandem with the study of Zhang et al (2016). It was thematically analyzed and results were presented in percentages (see table 1). Study two provided accepted psychometric properties such as: Kmo = .91 and barttlet test was significant at $p < .0.000$. The result was acceptable haven exceeded the normative value of .50 according to Kaiser (1974).The Cronbach alphas reliability for hope for the future α = .76, fear of the future α = .97 and the total adolescents' future orientation scale α = .94 (see table 3). The scores were adequate and within the acceptable values for factor analyses. Two factors clearly loaded and were extracted. Though study two established credible psychometric properties, study three provided criterion validity with related personality measure. When hope for the future was correlated with motivational persistent a related personality measure; it was positively significant r = .25, p < .05, which showed that there concurred but fear of the future, which does not relate to the construct was negative and did not significantly relate to motivational persistence r = .-15, p < .05, which entails divergent validity (see table 5).

The major limitation of the study is the selection participants in study three from one ethnic group (adolescents of Igbo ethnic group) whereas Nigeria has many ethnic groups. That may hinder the generalization of the findings. However, studies one and two drew participants from other ethnic groups.

The systematic approaches utilized in the three studies and the robust findings provided a platform for researchers who may be interested in adolescents' future plans,

actualization pathways and adjustment to failure to realize such goals. The universal nature of adolescence transition (Super, 1980; Erickson, 2007) call for a standard measure for such behaviours across cultures, which this scale Adolescents Future Orientation Scale (AFOS) has provided. Also, the combination of qualitative and quantitative designs enriched the outcome of the results and indeed confirm the reliability, validity and utility robustness of the scale.

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