VALIDATION AND ADAPTATION OF PERCEIVED SOCIETAL MARGINALIZATION SCALE AMONG THE SAMPLE OF IGBO NATION INHABITING SOUTH EAST, NIGERIA.

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Abstract

This study aimed to validate a measure of perceived societal marginalization (PSM, - Bollerk, Schlipphak & Back, 2021) that can be commensurate in measuring perceived marginalization in Nigeria, in three domains of economy, culture and politics. The development of the instrument targeted, particularly the Igbos (the tribe that predominately inhabits the Southeast part of Nigeria). Using a simple convenient sampling method, 164 participants validly responded to the online questionnaire, and these data were subjected to confirmatory factor analysis (CFA), where principal component analysis was conducted to verify the factor structure. SPSS software version 23 was used to analyze the data. Result confirmed the PSM three factors (perceived economic, cultural, and political, factor), but with great changes. For cultural factor, only one item (item 8 in the questionnaire) survived, other items of this dimension had double-loading with factor 1 (economic factor), Because of this, we decided to expunged the cultural dimension. Thus, the final version of the perceived societal marginalization Questionnaire included a 10-items with two subscales (perceived economic marginalization and perceived political marginalization), that explained a cumulative variance of 68.32. Further evaluation of the psychometric properties provided support for the reliability and validity of the measure. Thus, PSM scale can serve as an effective measurement tool for assessing the extent of marginalization as perceived by individuals, particularly the Igbo extraction in Nigeria

Key words: Perceived Societal Marginalization, scale validation; economic marginalization, political marginalization

Introduction

Perceived societal marginalization (PSM) can be defined as the subjective and cognitive perception that one's own social group is unappreciated and treated as unimportant by society. It has been established that the feeling of being marginalized or excluded predispose the individuals or group living with it to anxiously struggle with identity status and discontent in the current globalization and modernization (Goodhart, 2017). Variety of studies have provided evidence indicating that such perceived societal marginalization can evoke

aggression in the individual or group towards the society (Issmer & Wagner, 2014), makes individual or group exhibit violet behavior ((Bolwert at.al, 2021), and increase threat perceptions in the face of ethnic diversity, nationalist movement, anti-immigration attitude, and anti-multilateralism (Eaaes et. al., 2017; Landmann et. al., 2019; Norris & Inglehart, 2017; ptitz et. al., 2018; Raines et. al., 2017; Stephen and Stephen, 2017). All of these reflect condition of Nigeria today, where Igbos agitates against marginalization of the Igbos in Nigeria political activities. Knowing these consequences, identifying a compressive measure of perceives societal marginalization that cut across cultures become a predominant interest of research in recent time. However, while measures of perceived societal marginalization has been developed (Bollerk, Schlipphak & Back, 2021), research still recognize that marginalization perception differs from one content to another, and from one cultural context to another. While the literature identifies several psychological determinants of perceived marginalization, systematic measurement approaches based on well-defined constructs that cut across cultures are rare. Here, we tried to validate and adapt perceived societal marginalization (Bollerk, Schlipphak & Back, 2021) that can be commensurate in measuring perceived societal marginalization for the different tribes in Nigeria. In the study, we carried out content validity, first by giving it to different experts from social psychology to rate the items at phase validity. (2) We conducted an exploratory factor analysis and confirmatory factor analysis to statistically and empirically determine the content structure of perceived marginalization scale. Further, we make evaluation of its psychometric properties by testing the following, (3) the concurrent validity of the scale by correlating it with other similar construct, (4) the divergent and convergent validity using the correlation matrix and Pearson correlation to determine the correlation among the items and the factors respectively, and (5) carried out Cronbach alphas reliability analysis to test the internal consistency of the PSM scale.

Method
Sampling procedures
Data collection method
The method used for data collection was a cross sectional online survey method. The sample for the study were recruited via the online whatsapp platform and Facebook groups. These participants varied in terms of socio-demographic variables (gender, age, marital status, and educational qualification). Participants name were not required, and therefore, ethical confidentiality was ensured as recommended by Rabiee (2004). In total, 325 individuals sampled from the five states of the south-east region completed the 15 PSM items online surveys and allowed the use of their data by approving their informant consent. We excluded 161 participants from the analysis (63 due to non-Igbo extraction and 98 due to age below 25 years). Exclusion due to non-Igbo indigene allowed us to investigate PSM among sample from the Igbo ethnicity only, whereas participants excluded based on age was to ensure that we select participants who might have had enough experience of social rejections.

Participants
The final sample consisted of 164 participants (59.1% female, n = 97) and (40.9% male, n = 67), between 25 and 67 years of age (Mean age = 37.98, SD age = 9.88), with 56.1% (n = 92) of them having B.Sc/HND degree. However, greater number

of the respondents (57.9%) came from Anambra state. Table 1 contains the overview of the sample characteristics as reported by the participants.

Table 1: Frequency distribution analysis on the data for participant characteristics

Demographics:	No	Percentage %	Mean	Std Dev.	minimum	maximum
Gender: Male	67	40.9				
Female	97	59.1	1.59	.49	1	2
Total	164	100				
Age	164		37.98	9.88	25	67
Marital stat:						
Married	103	62.8				
Single	48	16.6				
Divorced	7	2.4	1.49	.74	1	4
Widowed	6	2.1				
Total	164	100				
Academic qual.						
SSCE/WAESCE	3	1.8				
B.SC/HND	92	56.1				
Masters	46	28.0	2.54	.75	1	4
Ph.D	23	14.0				
Total	164	100				
State of origin:						
Enugu	24	14.6				
Anambra	95	57.9				
Imo	21	12.8				
Abia	14	8.5	2.35	1.07	1	5
Ebonyi	8	4.9				
Others	2	1.2				
Total	16	100				

Measures

Perceived Societal Marginalization (PSM) scale: 15-item PSM scale (Bollwerk, Schlipphak & Beck, 2021) was used. The propensity of the instrument measures people's subjective perceptions of the lack of recognition of their own social groups in the

domains of economy, culture, and politic. It has a 5-point likert response format ranging from minimum of 1 (strongly disagree) to maximum of 5 (strongly agree). One example of the sample item for each of the three dimensions reads "The work of people like me is not valued enough by society" (perceived economic marginalization), "It is

not important to society to maintain the traditions of people like me" (perceived cultural marginalization), and lastly, "Most politicians do not care what people like me think" (perceived political marginalization).

Perceived social rejection: Perceived social rejection scale was measured with 7 items curled from fear of rejection scale measuring social rejection (Yawar et. al, 2020). It is a five-point likert scale (1 = strongly disagree, 5 = strongly agree) and is unidimensional. One sample item is "I face fear of rejection due my feeling of less experience than others". The author found a Cronbach alpha reliability of this scale to be .93.

Rejection sensitivity scale: We measured rejection sensitivity using 5-item rejection sensitivity scale developed by Nafees and Jahan (2019), rated on a 5-point likert scale (1 = strongly disagree to 5 = strongly agree).

one sample item of this scale reads "I become depressed when someone criticize me"

Preliminary Analysis:
All analysis were performed using SPSS version 23. First, we tried to verifiy the sampling adequacy of the data for the factor analysis. Prior to the Exploratory Factor Analysis (EFA), the sample's adequacy and sphericity were confirmed with the KaiserMeyer-Olkin procedure (KMO) and Barlett's test of sphericity. The result of the Kaiser-Meyer-Olkin (KMO) measure was satisfactory (.879) (Kaiser, 1974 old). All the KMO values for individual items were above 0.50 except item 14, supporting their retention in the analysis. Bartlett's Sphericity (chi-square = 1425.07) was also significant (P < .001), supporting the factor-ability of the correlation matrix.

Table 2. KMO and Bartlett's Test (N= 307)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.88
Bartlett's Test of Sphericity	Approx. Chi-Square	1425.07
	df	105
	Sig.	.000

Result

Applying principal component analysis, both correlation matrix set at eigenvalue of 1, rotational varimax matrix extracted and scree plot suggest a 3-factor solution. Further, based on exclusion criterion in line with cross loading and cutoff criterion loading of > .3, a total of 4 items were dropped, and all were

cultural dimension items, leaving only one item to measure culture subscale of perceived societal marginalization (PSM). Three items (cultural items; 6, 7, and 9 in the questionnaire – Appexdic 1) were removed due to their double loading with factor 1 (economic factor), one other item (item 10) loaded high on factor one (economic factor) instead of factor 2 proper (cultural factor).

This result suggested a 3-factor solution, explaining a 69.98 percent of the total cumulative variance. At this point, a total of 11 items were left to measure perceived societal marginalization (PSM) construct; with cultural dimension to be measured with only one item (item cult 3 reads – it is not important to society to maintain the traditions of people like me), economic = 5 items, and political = 5 items (see table 4 in the appendix).

Confirmatory Factor Analysis and psychometric properties for the 10 items: Then, we ran a confirmatory analysis with this 11-item to further confirm the three-dimensional structure of the questionnaire (a 11- item PSM scale). This time, the result yielded a two factors solution (economic and political factors). Cultural dimension score for the analysis of the principal component extracted (value = .173), and eigenvalue score (.908) were lower than the cutoff criterion set at eigenvalue of 1 and above, and communality value greater or equal to .40. On the basis of this, the culture dimension was totally removed, leaving perceived societal marginalization (PSM) scale contained a 2-factor solution (economic factor and political factor), explaining 68.32% of the total cumulative variance extracted.

Reliability (Internal Consistency): Reliability analysis was performed after the validation analysis including the remaining 10 items. The Cronbach's alpha values for each of the perceived societal marginalization subscales and the overall reliability are good. Whereas the Cronbach's α for economic dimension is 0.90, the political dimension Cronbach's α = 0.85, and the overall reliability's Cronbach's α = 0.85

(see Table 3). According to Ferketich (1990) and Hair et al., (2006), cronbach alpha of .60 are acceptable (Ferketich, 1990; Hair et al., 2006). Therefore, our data displays adequate internal consistency of PSM scale for research purposes (Funk, 2004).

Testing for the convergent and divergent validity of the 10 item : For the convergent validity, we expected strong positive correlations between the composite scale and its two dimensions. As expected, high correlation coefficient was found between PSM and its two dimensions, with r ranged between .85 and .67 for economic and political factors respectively. This high correlation score shows that the two dimension actually measure same mother construct, therefore, showing support for convergent validity. Between the two dimensions, the correlation was moderately low (r = .28), indicating that, though they measure same construct, they are distinct from each other. This provides evidence for divergent validity.

Criterion- related validity: Criterion related validity refers to what extent a measure is connected to an outcome. It evaluates how good one measure expects an outcome for another measure (Taherdoost, 2016). Criterion related validity has two types, which are predictive validity and concurrent validity. We only tested concurrent validity. To obtain the concurrent validity, we expected the PSM and its two subsets to positively correlate with perceived social rejection, as well as rejection sensitivity. Indeed, we found significant positive correlations with perceived social rejection (r = 0.31), and rejection sensitivity (r = 0.22), but only for economic dimension but not political dimension. Pearson Moment

Product correlation result presented in table 3 showed that economic dimension (r = .26, p < .001) correlates significantly with perceived social rejection scale of Yawar et. al (2020) and rejection sensitivity scale (r = .23, p < .01) of Nafees and Jahan (2019). This shows evidence of concurrent validity, only for economic dimension when separated.

Table 3: Reliability and Correlation results of the adapted 2- dimensions of PSM

Variables:	M	Std Dev.	1	2	3	4	5
PSM	3.06	.78	(.85)				
Economic	2.77	1.07	.85***	(.90)			
Political	3.81	1.01	.67***	.28***	(,85)		
PSR	2.26	.97	.31***	.26***	14	(.76)	
RS	3,27	.89	.22**	.23**	.06	.31***	(.66)

M and SD are used to represent mean score per item and standard deviation respectively. Values in brackets along the diagonal represent Cronbach alpha reliability for each item, *** indicates p < .001

Discussion

We validated and adapt a 15-item perceived societal marginalization scale (PSM) of Schipphak and Beck (2012) in three domains of economy, culture, and politics; here in this validation study, designed for its relevance in measuring this concept (perceive societal marginalization) from Igbo perspective in Nigeria socio-economic and political context, at individual level perception. At the confirmatory factor analysis, a total of five out of 15 items (all measured cultural domain) were deleted from the scale because of the cross, and low factor loadings, whereas, according to Samuels (2017) at least loading score of .3 should be present in a component or factor. Therefore, the final version of the perceived societal marginalization (PSM) Scale survived with 10 items, and of two dimensions: perceived economic marginalization, and perceived

political marginalization. The Cronbach's alpha values of this scale for its reliability are very good (.85), even at its subset (economic = .90, and political = .85). The item total correlation for each factor is also within the acceptable range. In general, 67.% of the variances were explained by these two factors (perceived economic marginalization and perceived political marginalization). This 10-item PSM scale demonstrate good internal consistency across its two dimensions (economic and political dimensions). This scale demonstrates good internal consistency across its two dimensions (perceive economic and political dimensions). In addition, we provide evidence for the PSM's convergent and discriminant validity with related constructs (perceived social rejection and rejection sensitivity), as well as criterion validity with these two variables. However, this scale demonstrates good internal consistency across its two dimensions. We conceptualized perceived societal marginalization (PSM) as the subjective and cognitive perception that one's own social group is unappreciated and treated as unimportant by society in the domain of economy, culture and politics. PSM may contribute to explaining negative reactions to social change in groups that would not otherwise be perceived as marginalized, as a result of being cognitively subjectively sensitive to rejection. Therefore, for criterion validity, we expected PSM scale to correlate with both perceived social rejection scale and rejection sensitivity scale. Indeed, our study found strong evidence of criterion related validity, as correlation result show strong relations of PSM with perceived social rejection (Yawar et. al., 2020) and rejection sensitivity (Nafees & Jahan,, 2019) scales, but only for economic dimension, not political, Further, the PSM contributed

significant percentage variance in these two outcome variables, to demonstrate strong predictive validity of the PSM scale in the present research. Here, the psychometric properties of the adapted scale, which includes validity and reliability, have been established. Construct validity was assessed by EFA and CFA analysis which resulted in two factor structures for PSM. Internal consistency was examined by the Cronbach coefficient. Hence, it is evident that the scale that claims to measure perceived psychological rejection is successful in measuring the construct in Nigeria context.

Limitations

Although psychometric properties of PSM are well-established but this scale is not appropriate for different age groups like children, young adult age individuals. There are many other social factors that cause societal marginalization upon which later researches can be done. This is an indigenous scale and is not applicable to people living in other countries and in different cultures. The scale does not highlight the causes of the perceived societal marginalization among individuals.

Recommendation

The present scale, perceived societal marginalization, is adapted for use among marginalized Igbo nation, to access their experiences of political and economic marginalization. It can be used for further research and can serve as a guide for development of intervention program concerning marginalization crisis in Nigeria, with the aim to build an integrated and peaceful development of the new nation

Conclusion

Based on the eigenvalue greater than 1, varimax rotated matrix of the principal component analysis, and distribution of item in the factor loading scree plot, the results showed that all the items loaded on two factors, suggesting that a model with two-factor solution may be adequate to represent the data. This two-factor solution explained 68% of the variance of the sample in total. This result did not lend support to the original assumption that this 15-item questionnaire measures three dimensions, but in this data set, it yielded two factor dimensions only. However, it reports a Cronbach'a alpha value of .85 for the composite construct, and .90 and .85 for economic and political dimensions respectively; showing high internally consistency of the item in measuring the construct. It is therefore concluded that the new 10-item perceived societal marginalization measure is valid and reliable among marginalized Igbo people of Eastern Nigeria
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Appendices 1
Table 4. Factor loadings for the items of the PSM on the initial 15-item (phase 1a), and later 11-item (phase 1b)

Econ dimes	Item statement	PCA (phase 1a =15 items) Components			PCA - (phase 1b =11 items) Components	
		1	2	3	1	2
Item 1	The work of people like me is not valued enough in society	.832	.100	.096	.831	.092
Item 2	People like me do not get enough recognition for their work	.879	.055	.119	.880	.053
Item 3	No matter how hard we work, people like me are not appreciated	.797	.121	.241	.851	.124
Item 4	The work of people like me is not recognized enough in the society	.814	.018	.227	.872	.023
Item 5	The job situation of people like me received too little attention in society.	.733	.232	.103	.709	.148
Cult dimes						
Item 6	The cultural interests of people like me are given too little attention in society	.728	.034	.525	Cross loading removed	
Item 7	The values of people like me are becoming less and less important in society	.528	.061	.601	Cross loading removed	
Item 8	It is not important to society to maintain the traditions of people like me	.098	.065	.669		
Item 9	The customs, traditions and manners of people like me are less and less appreciated	.518	.119	.651	.099	
Item 10	People like me are no longer allowed to express their opinions freely in public	.632	.262	.276	Loaded on factor 1 removed instead of factor 2	
Politics dim						
Item 11	Most politicians do not care what people like me think	.238	.801	,015	.214	.794
Item 12	The problems of people like me are unimportant to most politicians	.164	.817	.160	.189	.823
Item 13	The concerns of people like me are not noticed by politicians	.082	.887	.145	.128	.895
Item 14	The problems of people like me are not heard by most politicians	.027	.833	.107	.073	.838
Item 15	Politicians pay too little attention to the interests of people like me	.041	.566	-.075	-.005	.560