

Validation and Adaptation of Perceived Societal Marginalization Scale among the Sample of Igbo Ethnic Group of South East, Nigeria

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Abstract

The present study tries to validate and develop a sound psychometric scale that can be used to measure perceived societal marginalization (PSM) in Nigerian context, particularly among Igbo sample. Perceived societal marginalization, defined as people's subjective perceptions of the lack of recognition of their own social groups in the domains of economy, culture, and politic, is known to be a predisposition that individuals or group living with it anxiously struggle with identity status and discontent in the current globalization and modernization. While the literature identifies several psychological determinants of this discontent, systematic measurement approaches based on well-defined constructs that cut across cultures are rare. Here, we tried to validate and adapt perceived societal marginalization of Bollerck, Schlipphak and Back (2021) to suit Nigeria context. We administered the questionnaire to 160 respondents (valid) to determine its factor structure and the data collected were subjected to factor analysis (validity and reliability) using SPSS 23. Principal Component Analysis (PCA) was carried out and varimax rotation technique was used for rotating the factors. PCA yielded two instead of three-factor structure, with cultural dimensions removed due to cross and low loading of the items. The two remaining factors accounted for .68% of the variance. The present scale can be used for further research and can serve as a guide for development of intervention program concerning marginalization crisis in Nigeria to build an integrated and peaceful developed nation.

Keywords: Perceived societal marginalization, scale validation, ideology, societal cleavage

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 in the domains of economy, culture, and politics. In the face of globalization and modernization, some people who perceive being marginalized or depreciated either as group or individual, often cognitively feel loss of identity status (Goodhart, 2017). Research

findings have shown that such perceived societal marginalization has strong association with threat perceptions in the face of ethnic diversity (as in case of Nigeria society), nationalist movement, anti-immigration attitude, and anti-multilateralism (Eaees et. al., 2017; Landmann et. al., 2019; Norris & Inglehart, 2017; ptitz et. al., 2018; Raines et. al., 2017; Stephen and Stephen, 2017). Also its consequences at individual level has been linked to physical and mental health (Bolwert at.al, 2021) as well as intentional engagement in violent behaviors. Therefore, it is crucial to develop a sound psychometrical measure of PSM to understand the nature of perceived collective unimportance and lack of recognition in Nigeria socio-economic and political context. While several conceptualizations of perceived societal disadvantage exist (disintegration, relative deprivation, and marginalization), understanding of these individual differences and the social groups that perceive themselves as disadvantaged by society is still limited. This is because there is no construct and measurement approach specifically focusing on the perceived lack of recognition and unimportance of one's own social group (Issmer & Wagner, 2015; Smith et al., 2012; Bollwerk et. al., 2021). These perceptions are often discussed as determinants of societal discontent (e.g., Inglehart & Norris, 2016) and collective political action (Jetten et al., 2001).

Furthermore, most existing constructs focus only on specific societal content areas and minority groups (Riele, 2006). Finally, comprehensive measurement approaches (i.e., a systematic operationalization of well-defined and cross-validated constructs) with sufficiently large samples are rare. Closing this gap in the literature may foster our understanding of societal discontent and its destructive consequences, especially in the present ethnic political crisis and economic hardship resulting from destructive reaction of those individuals or groups that perceived that they are being deprived by others in the same society. In this study, we present the development and validation of the Perceived Societal Marginalization (PSM) scale, which aims at assessing individual differences in the perceived insignificance and lack of recognition of individuals or one's own social groups in the domains of economy, culture, and politics in Nigeria society.

Aims of the Study

This study aims to validate and adapt a scale that measures perceived societal marginalization (PSM - Schlipphak, & Back; 2021) in Nigeria context, in a way that aligns with its multifaceted nature in three domain of economy, cultural and political, and their dynamic relationship with similar construct of perceive social rejection and rejection sensitivity. The procedure and hypotheses of the study are: (1) investigating and confirming the psychometric properties of multidimensional PSM scale, testing hypothesis (1) The PSM is a multidimensional scale, for which a 3-factor structure provides a good fit in Nigeria sample.

(2) Investigating the convergent and divergent validity by testing the relations among the dimensions of PSM (hypothesis 2)

(3) Investigating PSM's homological network validity by testing the relations with related constructs in hypothesis 2: a positive relation of PSM is expected with (a) perceived social rejection, and (b) rejection sensitivity. Hypothesis 3.

Method

Validation procedure

Construct validation and scale adaptation is a process involving multiple steps, in which each step contributes to increasing the evidence for the scale validity in the used novel culture. We followed multiple validation steps when adapting PSM scale among the Igbo sample in Nigeria socio-economic and political context.

Participants

The method used for data collection was online survey. A Google form was made with all the items on a Likert-scale. 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). As we expected some participants' data to be invalid due to the exclusion criteria (not coming from Igbo ethnicity, and age below 25 years) and other likely occurrences beyond researcher's control. However, in order to overcome this and provide a statistically powerful test of the PSM scale, we

aimed to oversample considerably by recruiting 500 participants. 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.

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 | 164 | 100 | | | | |

Instruments

Perceived Societal Marginalization (PSM) scale

PSM scale consistent of 15 items measured in three dimensions of economy, culture and political marginalization (Bollwerk, Schlipphak & Beck, 2021). 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) at the individual level.

Measures of related construct

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 verify 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). 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 factorability of the correlation matrix.

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

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

Result

Testing hypothesis one: that PSM is a 3-factor construct.

Exploratory Factor Analysis

Exploratory factor analysis was conducted to test for hypothesis one. 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; 1, 2, and 4) were removed due to their double loading with factor 1 (economic factor), one other item (item 5 - people like me are no longer allowed to express their opinion freely in public) 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).

Phase 1b: 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), yielding a total of 67.36 percent variance explained. Therefore, hypothesis one; testing the multidimensional for a 3-factor structure of PSM construct was not confirmed in the adaptation study of the PSM psychometric scale among the Igbo population in Nigeria socio-cultural and political context.

Phase 2: Reliability (Internal Consistency)

Reliability analysis was performed after the validation analysis including the remaining 10 items result of the CFA. Reliability was performed on each of the subscales and the total scale of the PSM in order to ascertain the consistency of the construct by using Cronbach's alpha. Cronbach's alpha coefficient is one of the most common methods to evaluate internal consistency. The Cronbach's alpha values for each of the perceived societal marginalization subscales and the overall reliability are good. According to Ferretich (1990) and Hair et al., (2006), cronbach alpha of .60 are acceptable (Ferretich, 1990; Hair et al., 2006).

Whereas the Cronbach's α for economic dimension is 0.900, the political dimension Cronbach's $\alpha = 0.85$, and the overall reliability's Cronbach's $\alpha = 0.85$ (see Table 3). These coefficients suggest that the total scale score displays adequate internal consistency for research purposes (Funk, 2004)

Phase 3: Testing for the convergent and divergent validity of the 10 item PSM.

For the convergent validity, we expected strong positive correlations among the two remaining dimensions of PSM. As expected, high correlation coefficient was found between PSM and its two dimensions, with r ranged between .85 and .67 for economic and political 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 (Hypothesis 2). 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, but 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 adapted 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.

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. However, it reports a Cronbach's 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 said construct. It is therefore concluded that the new 10-item perceived societal marginalization measure is valid and reliable, and it is rather a two-dimensional construct not three as originally stipulated by the author.

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