



VALIDATION AND ADAPTATION OF PERCEIVED SOCIAL REJECTION SCALE AMONG IGBO SAMPLE IN SOUTH-EAST REGION OF NIGERIA

Dike Adannia Amalachukwu

Department of Psychology, Nnamdi Azikiwe University
a.dike@unizik.edu.ng

Dr. Charles O. Anazonwu

Department of Psychology, Nnamdi Azikiwe University
co.anazonwu@unizik.edu.ng

Abstract

The present study tries to define the construct of perceived social rejection (PSR) and describes the development of the PSR scale. Perceived social rejection, defined as people's subjective perceptions of the lack of recognition, and devaluation of oneself; 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. Perceived social rejection can hamper the daily functioning of the person and hence affecting the overall physical and psychological health. It is a grave social problem getting its roots deepening in the lives of people to be dealt with. While the literature identifies several psychological determinants of perceived social rejection systematic measurement approaches based on well-defined constructs that cut across cultures are rare. Here, we tried to validate and adapt perceived social rejection scale of Yawar et. al (2020) to suit Nigeria context. We administered the questionnaire to 164 respondents (valid) to determine its psychometric strength and the data collected were subjected to factor analysis (validity and reliability) using SPSS 23. Principal Component Analysis (PCA) was carried out and the result yielded one factor structure. The one factors accounted for 68% of the variance in total. The present scale can be used for further research and for development programs in school/universities and organizations.

Key words: Perceived Social rejection; scale validation; principle component analysis, single factor solution.

Introduction

In daily life, people encounter rejection either on a wide scale or in small ways. Rejection has been defined as the action of rejecting or the state of being rejected (The Oxford English Dictionary, 1989). Rejection is a looming threat in everyone's life; with every attempt at something new or difficult, there is always the possibility that one will be

rejected. Schrier (2012) reported that 'perceived social rejection is an irrational belief that no one will accept you for the person you are, what you stand for and how you behave', and this may be the result of continuous rejection in the past. It is a kind of extreme stress felt in response to a number of factors in a person's environment. These factors can be perceived rejection from a



particular community, group of friends, ethnic discrimination and so on. Rejection is an imminent threat in everybody's life. Whenever one would try to attempt something new or difficult, there would definitely be a possibility that the person can be rejected (Nafees & Jahan, 2018). Perceived rejection is a feeling and experience of not being accepted; loved or cared as well as feeling of being unwanted when an individual is not approved by someone else (Hunt, 2013). It can lead to emotional responses of sadness, grief, anger and loneliness (Buckley et al., 2004). Rejection perception left individual to live with the feeling that they are less important, are not recognized, and are of little or no value to society. Scholars posit that people who routinely feel rejected don't function compared with those with strong social connection. Perceived social rejection can make people develop a number of negative feelings that may eventually result in lower self-esteem, aggression and other antisocial behaviors. Perceived social rejection decreases the intergroup interaction and also reduces the tendency of an individual to be socially active (Shapiro et al., 2011), and has been found to affect people's subjective wellbeing (Windle & Woods, 2004). Why there is actually research studies on perceived social rejection by researchers from socially related disciplines, there is no common conceptualization of this concept as construct. Thus, measurement of perceived social rejection has not been universally conceptualized. Actually, perceived social rejection is a broad and complex concept with various interpretations across different contexts. A number of researchers have developed measures that are available to measure ethnic discrimination (Perceived Ethnic Discrimination Questionnaire PEDQ; Brondolo et al., 2001), security-insecurity (Maslow, 1952), threat perception and

prejudice. While scholars conceptualize perceived rejection to suit their imminent context, no such measures exist that can be used to measure perceived social rejection within Nigeria context. This calls for the interest of this study. Finally, comprehensive measurement approaches (i.e., a systematic operationalization of well-defined and cross-validated constructs) with sufficiently large samples are rare. We reviewed various literature trying to generate items to developed or adapt an existing scale measuring perceived social rejection Nigeria context. We pool items from literature, mainly from the work of Yawar (2020) on the fear of rejection among young adult in Pakistan, and we statistically adapted the scale for its use in Nigeria for measure of perceived social rejection

The importance of the new measure: To evaluate the effects of fear of rejection or perceived social rejection within the stress model, it is necessary to have reliable and valid measures of this construct (perceived social rejection). A number of investigators have developed measures for other dimensions but a recent review has pointed out that there are still limited published data on this dimension. Specifically, an instrument that can be used to assess it. The paper describes a new instrument, perceived social rejection scale used in Nigeria. The scale is a new work towards dealing with the important social problem, especially among the Igbo ethnic population, prevailing in Nigeria socio-economic and political system. The actual items of the scale inquired about a varied number of everyday experiences, especially related to intergroup interaction. The scale can be used with any ethnic group in Nigeria.

Aims of the study

This study aims to validate and adapt a scale that measures perceived social rejection (PSR



– Yawar et. al., 2020) in Nigeria context, The procedure and aims of the study are: (1) investigating and confirming the psychometric properties of PSR scale relating to (a) its factor structure: here, we hypothesize that PSR is a one dimensional scale, for which a one-factor structure provides a good fit in Nigeria sample.(2) investigating the concurrent validity by testing the relations among the 7 items of the scale. (3) Investigating PSR's nomological network validity by testing the relations with related constructs. Here, we proposed a positive relation of PSR with (a) perceived societal Marginalization scale, and (b) rejection sensitivity scale.

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 PSR scale among the Igbo sample in Nigeria.

Participants

Procedure for data collection

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 whatsapp platform and Facebook groups. These participants varied in terms of sociodemographic variables (gender, age,

marital status, and educational qualification). The scope of this study covered only people from the Igbo ethnicity regardless of the location of their residence. As we expected some participants' data to be invalid due to the exclusion criteria (not coming from Igbo ethnicity, and age below 25 years), we deliberately oversampled by recruiting more than 500 participants. For ethical and confidential purpose, participants name were not required, as recommended by Rabiee (2004).

Participant's characteristics

In total, 325 individuals sampled from the five states of the south-east region completed the 7 items statements of PSR in the online surveys, who 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 indigen allowed us to investigate PSR 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	16	100				

Measures

Perceived social rejection: Perceived social rejection scale was measured with 7 items curled from aspect of fear of rejection scale that measured social rejection in the work of Yawar et. al, (2020). It was a five-point likert scale (1 = strongly disagree, 5 = strongly agree) that assess the degree to which individual participants have a subjective feeling of being rejected by others. One example of sample item is “I face fear of rejection due my feeling of less experience than others”. However, PSR as used by the original author is a single dimensional

construct. 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”

Perceived societal marginalization (PSM) scale: We used 15 items PSM scale measured in three dimensions of economy, culture and political marginalization (Bollwerk,



Schlipphak & Beck, 2021) to assess individual perceived societal marginalization. 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).

Data Analysis and Item Screening:

All the analysis was performed using SPSS. Following the item refinement process we used exploratory factor analyses (EFA) to investigate the clustering of the items, checking if there is underlying dimension of the PSR with our data. Prior to the EFA, the sample's adequacy and sphericity were confirmed with the Kaiser Meyer-Olkin procedure (KMO score of 0.82) and Bartlett's test of sphericity. We conducted a correlation matrix to check if the items highly correlated (above 0.3) since we expect the items to correlate to prove that they align to measure the same construct. Then, checking for the psychometric properties of PSR, we employee principal component analyzing to explore the structure of the construct, using scree plot and factor loading to estimate the number of factors, items to retain and those to remove. In line with this, we set a criterion or cutoff for item exclusion. Items with loading lower than 0.50 and items with cross loading of over half of the primary factor (0.25) were excluded. Further, the internal consistency of the PSR was assessed by computing cronbach's alpha. According to some authors, a Cronbach alpha coefficient score of 0.60 is acceptable (Ferketich, 1090;

Hair et. al., 2006). Two validity tests including content and construct validity were well assessed.

Results

Sample adequacy

The Kaiser–Meyer–Olkin (KMO) value obtained confirmed the sampling adequacy for the EFA being conducted. In Table 2, the KMO value obtained was .83 which is ‘superb’ (Field, 2009). The significance ‘p’ value for Bartlett’s test of sphericity was .00 which revealed that correlations between items which are also displayed in Table 3 of correlation matrix were adequately high for PCA. Therefore, this significant value suggests that the correlations between the items of the scale are overall notably different from zero (Field, 2009), and they indeed assess the same construct (Tabri & Elliott, 2012) - perceived social rejection.

Construct Validity.

Construct validity of PSR was achieved by running exploratory factor analysis (EFA) with principle component analysis (PCA) method. Based on the eigenvalue greater than 1 as recommended by Kaiser (1960), scree plot graph, loading score cutoff of 0.5 minimum, and communality score of .3 and above in the principal component analysis result, one factor assessing PSR was extracted. However, all the 7 items were retained, as each of the item score was above 0.5 in the factor loading component matrix, and were all loaded on one factor, suggesting that the 7 items assessed PSR as a single factor, accounting for 48% of the variance in total (see table 4).

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 simultaneously correlated PSR scale with other two similar scales called rejection sensitivity scale and perceived societal marginalization scale using Pearson Moment Product correlation analysis (Yawar et. al 2020). Since the three variables assessed negative individual subjective life experiences, we expected positive significant correlation among them for establishing concurrent validity. Indeed, we found significant positive correlations of PSR scale with perceived rejection sensitivity scale ($r = 0.22$), and perceived societal marginalization scale ($r = 0.31$). In the relationship with PSM, a significant correlation was found only for economic, but not political, dimension. This

demonstrates current validity of PSR scale validated in this study with Nigeria sample.

Reliability

Finally, we estimated the reliability of PSR scale. Table 4 also present the reliability of the 7-item PSR assessed with a Cronbach alpha analysis to estimate and confirm the internal consistency of the items of PSR scale. Conventionally, an alpha coefficient value of .60 are acceptable (Ferketich, 1990; Hair et al., 2006). In this study, we obtained α coefficient score of .86 for the PSR scale. These coefficients suggest that the total scale score displays adequate internal consistency for research purposes (Funk, 2004). Table 5 in the appendix displays the final items of the PSR scale with their factor loading component and their communality values.

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

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.84
	Approx. Chi-Square	489.63
Bartlett's Test of Sphericity	df	21
	Sig.	.000

Table 3: Correlation Matrix

	SR1	SR2	SR3	SR4	SR5	SR6	SR7
SR1	1.000	.564	.455	.437	.365	.324	.429
SR2	.564	1.000	.500	.452	.418	.330	.401
SR3	.455	.500	1.000	.543	.435	.379	.576
SR4	.437	.452	.543	1.000	.584	.516	.471
SR5	.365	.418	.435	.584	1.000	.635	.573
SR6	.324	.330	.379	.516	.635	1.000	.641
SR7	.429	.401	.576	.471	.573	.641	1.000



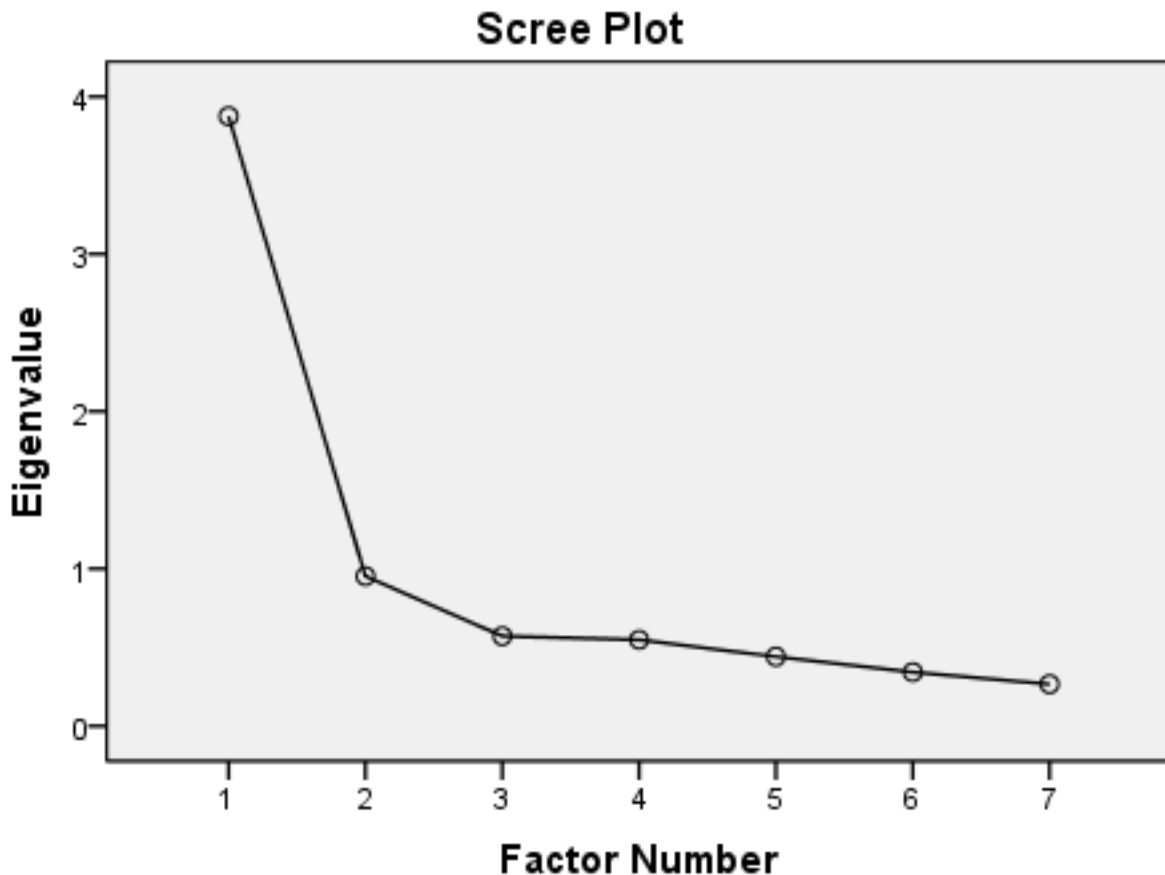
Table 4: Reliability and Correlation results of the adapted 2- dimensions of PSM

Variables:	M	Std Dev.	1	2	3	4	5
<i>PSR</i>	2.26	.97	1				
<i>RS</i>	3.227	.89	.37***	1			
<i>PSM</i>	3.06	.78	.37***	.22**	1		
<i>Economic</i>	2.77	1.07	.33***	.23**	.85***	1	
<i>Political</i>	3.81	1.01	.15	.06	.67***	.28***	1

M and SD are used to represent mean score per item and standard deviation respectively, *** indicates $p < .001$, ** = $p < .01$

Table 5. Factor loading of the 7 items scale through the principal component analysis (N= 164)

Items S/No	Item statement	Factor Loading component	Communality
Item 1	<i>I face fear of rejection due my feeling of less experience than others</i>	.602	.362
Item 2	<i>My confidence makes me afraid of rejection</i>	.624	.390
Item 3	<i>I do thing that I do not like because I fear that society / people will reject me</i>	.695	.482
Item 4	<i>My actions are in accordance with my friends because I have fear that I will not be accepted by them</i>	.730	.532
Item 5	<i>I fear that my friend will reject me if he/she is getting closer to someone else</i>	.738	.542
Item 6	<i>I fear that I will be rejected if my partner think that I am weak</i>	.691	.475
Item 7	<i>I compromise a lot in my romantic relationship because I have a fear of rejection</i>	.759	.574
	<i>Eigenvalue</i>	3.875	
	<i>% of cumulative variance</i>	48.13	
	<i>Reliability value</i>	.863	



Discussion

We validated and adapt perceived social rejection scale (PSR) of Yawar et. al. (2020), designed for its relevance in measuring feeling of social rejection in rehabilitation institutes. The scale so explored with Principle component analysis yielded one factor solution, and the 7 items all were retained and demonstrate strong internal consistency (reliability), assessed with Cronbach's alpha analysis (coefficient = .86). We conceptualized perceived social rejection (PSR) as the degree to which individuals feel that others are excluding them in the same system, with feeling of not being accepted; loved or cared as well as feeling of being

unwanted. Behaviorally, such people tend to devalue themselves in their relationship with others, and consequently go with low self-confidence, and concede to be a weak person. In line with this view, we selected 7 items aligning with fear of rejection scale of Yawar et. al (2020). During content analysis the 7 items were approved by different rater to reflect measure of perceived social rejection construct. Here, we run several analyses including validity and reliability, as we as the factor structure of the scale to establish sound psychometric properties of the adapted scale. During principle component of factor analysis, the 7 items form a cluster to measure PSR as a single factor. Construct validity was assessed by



EFA analysis which resulted in one factor structures for PSR. Internal consistency was examined with the coefficient value of the Cronbach alpha analysis, and concurrent validity was evident in the strong relationship with the other related variable scales such as perceived societal marginalization and rejection sensitivity scale. All these statistics provide evidence that the scale that claims to measure perceived social 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 sound psychometric properties of this scale, which aligned with that of the original authors, we conclude that this PSR measure can help psychotherapist, counsellors, social workers and clinician including psychiatrists to better understand the clients experience of rejection that mitigate against their wellbeing. Therefore, it is a measurement scale that can be used in research and clinical settings, and has potential applications in study of wellbeing in the field of psychology and social work.

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