



DEVELOPMENT AND CONSTRUCTION OF JOB FRUSTRATION SCALE

OJO, Adeshina Akinwumi Edwin and ALARAPE, Ismail Aderemi

Department of Psychology,
Faculty of the Social Sciences,
University of Ibadan.

pivotwvs1@gmail.com, adeshina.ojo@dlc.ui.edu.ng
ai.alarape@gmail.com

ABSTRACT

This paper reports the development and construction of a 15-item job frustration scale. Job frustration is one of the psychological climate problems confronting bank employees in Nigeria. The scale was developed to measure employees' perception of job frustration in the banking industry in Nigeria. A total of 165 bank employees (112 males, 53 females) responded to the job frustration scale (JFS). Results indicate an adequate internal consistency ($\alpha = .97$) and a Spearman Brown split-half reliability coefficient of .95. Factor analysis with Varimax rotation resulted in a one factor structure with eigen value of 69.6. Results supporting the intended measure's reliability and the implications for employees in banking institution were discussed.

INTRODUCTION

Turnover intention amongst employees is a major problem in the banking industry in Nigeria, especially in the post-consolidation era. However, very few studies have attempted to determine the role of job frustration on employees negative job attitude. In particular, little research attention was paid to the influence of job satisfaction, social support, and emotional intelligence on turnover intention among bank employees in Nigeria. Job Frustration refers to an emotional psychological construct experienced by an employee when dissatisfied or when set goals are continually thwarted.

Frustration can simply be defined as an interface with the occurrence of an instigated goal response at its proper time in the behavior sequence (Dollard Miller, Mourer and Sear (1939)). Frustration is an emotional psychological construct experienced by an employee when dissatisfied or set goals are continually thwarted. Organizations set corporate goals requiring some degree of competence, skills, and commitment. Inconsistencies in promotion, favoritism in promotion whereby incompetent newly recruited staff are promoted in lieu of highly competent and qualified bankers is a major source of frustration that may result in quitting the job.

Frustration is measured in various ways. In psychology, frustration is seen as occurring when an anticipated reward or outcome is blocked (Berkowitz, 1989). The block can be either internal (the person's lack of skill, knowledge) or external (situational factors) (Shorkey & Crocker, 1981). Some measures focus on the block itself (Dollard et al, 1939), while others focus on the individual's reaction to the block (Amsel, 1958). Others focus on frustration tolerance, which is the degree to which a person can tolerate being frustrated and persist in that situation. Frustration tolerance is more trait-like (measuring a consistent way someone handles challenging situations, which is stable over time).

According to role conflict theory, role conflict results from two or more sets of incompatible demands involving work-related issues (Kahn et al., 1964; Katz and Kahn, 1978). Farr and Ford (1990) stated that stress produces routine behavioral patterns and generally interferes with novel or creative responses. Jex (1998) noted that stress and strain particularly hamper the motivational aspects of performance, such as manifest effort or going beyond routine job responsibilities. Taggar (2002) demonstrated that teams have difficulty in assigning tasks, and the roles of team/members could indirectly distract an individual and directly from a team's ability to perform



creatively. Role conflict as well as role ambiguity can reduce self-efficacy (Jex & Gudanowski, 1992). Bandura (1997) asserted that role conflict and ambiguity may negatively affect self-efficacy. Thus, experiencing role conflict may decrease self-efficacy. Martinko and Gardner (1982) and Gist and Mitchell (1992) reached a similar consensus. Evidence from several empirical studies supports this argument. For instance, Hartline and Ferrell (1996) and Chebat and Kollias (2000) found that a higher level of customer-contact employee role conflicts imply a lower level of customer-contact employee self-efficacy.

Wright, Lam, and Brown (2009) developed a five items Frustration Non-reward Responsiveness Scale that assesses the likelihood that an individual will quit or lose interest in a task when they cannot meet their goal, but does not seem to tap the emotion of anger. (This is a good reminder that the frustration “block” can precede many emotions such as anger, sadness, and boredom). The response format provided to respondent is a four point scale ranging from “very true for me” to “very false for me.” Questions were phrased in a way that asks the person to predict how they will respond to a frustrating situation.

Peters, O’Connor and Rudolf (1980) developed a frustration scale which consists of 3 items asking how frustrating a particular job or task has been. Response format provided to respondents is a 7-point Likert scale, with higher scores indicating more frustration. Questions were asked in the past tense. *If the scale was administered immediately following the task it may provide information on frustrating aspects of the work.* The scale was designed for work place in general and is quite short, and there are no data on validation.

Other scales were designed to measure how frustrating a job is in general but not to measure job frustration specifically in the banking industry (e.g., Peters, O’Connor and Rudolf, 1980; Wright, Lam, and Brown, 2009). Also the problem of (supposedly low) reliability and the impossibility to estimate their reliability by means of some standard procedures (e.g., Cronbach’s alpha) and Inaccurate understanding of dimensionality peculiar to brief or few item scales can produce scores that are empirically and psychologically meaningless. Therefore, this study sought to develop a new scale with items that will address these shortcomings. All the 30 statements generated were created by considering the most important issues in job frustration in the banking industry.

Objective of the study

The main purpose for carrying out this study was to develop a scale measuring Job frustration.

Method

Scale development

Expectancy theory in attainment of desired performance was chosen as a model to predict the intention to perform on the assigned bank duties. Expectancy theory is a relevant predictive model of employees’ intention to perform that explains behavior as a final act anticipated by logical thinking.

Thirty relevant statements were generated to form the items for the scale. They were written in English and generated from Job frustration research articles. The statements were given to six expert judges (industrial organizational and social psychologists) in the Department of



Psychology, University of Ibadan for both face and content validity. Items with similar or equivalent meaning were removed and those that were unclear or ambiguous were reworked. Response to all statements were offered on a five-point Likert-type scale, where 1 indicated “strongly agree,” 2 – “agree,” 3 – “neither agree nor disagree (undecided),” 4 – “disagree,” and 5 – “strongly disagree.”

Participants

For validation, the scale was administered to a sample of 165 bank employees (112 males (67.9%) and 53 females (32.1%). Participants age range from 26 years to 51 years with a mean age of 35.21 years (S.D = 6.28). The job tenure of participants range from 1 to 22 years with a mean of 5.09 years (SD = 3.37). The average number of times that participants have had a salary increase in the last three years was 2.80 (SD = 2.03). While, the number of times they were promoted in the same period was 1.98 (SD = 1.48). Data was collected from 5 out of the 25 commercial banks through random sampling technique. This includes, First Bank Nigeria Plc, Guaranty Trust Bank Plc, United Bank of Africa Plc., Union Bank of Nigeria Plc and Stanbic Bank Nigeria Plc.

Procedure

The questionnaire was administered by 3 trained research assistants. All participants were given the same instruction to fill the questionnaire. The questionnaire was administered to 200 respondents, but only 165 properly filled questionnaires were used in the study. Participation was voluntary and completely anonymous, and the completion rate was 82.5%.

Scale validation

Copies of the Scale were administered to ascertain its psychometric properties. Thirty items were responded to which was further reduced based on the least item total correlation of .41. Coefficient alpha reliability of the remaining 15 items chosen by the above criteria was .97 and a Spearman Brown split half of .95. A high score on the scale indicate a high level of job frustration, while a low score indicate a low level of job frustration. The newly developed scale was subject to factor analysis. Principal component analysis yielded 1 factor with eigenvalues of 69.58 and cumulative percentage variance of 56.97.

Result

This section deals with data analysis, presentation and interpretation of result of the findings. Specifically, the study provided answers to research questions. The statistical tests used include Principal Component Analysis, Cronbach alpha (Table 1), and split-half reliability (Table 2).

**Table 1: Summary of Cronbach alpha, total-item correlation and reliability of the job frustration scale**

Cronbach's Alpha	N of Items
.968	15

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I don't have feeling of security on my job	43.7576	393.904	.745	.966
There is no opportunity in my job to help other people	44.0182	387.359	.733	.967
The opportunity in my position to develop close friendship is not certain	43.9879	378.536	.840	.965
I don't have the feeling of self-esteem resulting from doing my job	44.0000	383.598	.821	.965
The regard received from others in the organization is very frustrating	44.1333	382.897	.864	.964
The regard received from my work from the public is a very frustrating one	44.3636	383.282	.825	.965
The authority resulting from my work is a frustrating one	44.4121	389.756	.718	.967
The opportunity for independent taught and action in my job is nil.	44.2364	385.462	.850	.965
The authority for the participation in the setting of goals and procedures in my job is not worthwhile	44.0364	382.608	.911	.964
The opportunity for participation in the determination of work method in my job is not certain	44.0970	386.003	.833	.965
The opportunity for personal growth and development in my job is not certain	43.8970	378.752	.889	.964
I don't have the feeling of self-fulfilment resulting from my job (Fulfilment of personal duties and aspirations)	43.9515	382.059	.869	.964
The feeling of work accomplishment in my job is not certain	43.9818	382.884	.824	.965
The good pay for my job is not satisfactory	44.3273	392.892	.738	.966
The feeling of been an expert is uncertain	44.4485	396.432	.597	.969



Table 2: Summary of split-half reliability statistics

Cronbach's Alpha	Part 1	Value	.942
		N of Items	8 ^a
	Part 2	Value	.939
		N of Items	7 ^b
	Total N of Items		15
Correlation Between Forms			.910
Spearman-Brown Coefficient	Equal Length		.953
	Unequal Length		.953
Guttman Split-Half Coefficient			.948

a. The items are: I don't have feeling of security on my job, There is no opportunity in my job to help other people, The opportunity in my position to develop close friendship is not certain, I don't have the feeling of self esteem resulting from doing my job, The regard received from others in the organization is very frustrating , The regard received from my work from the public is a very frustrating one, The authority resulting from my work is a frustrating one, The opportunity for independent taught and action in my job is nil..

b. The items are: The opportunity for independent taught and action in my job is nil., The authority for the participation in the setting of goals and procedures in my job is not worthwhile, The opportunity for participation in the determination of work method in my job is not certain, The opportunity for personal growth and development in my job is not certain, I don't have the feeling of self fulfilment resulting from my job (Fulfilment of personal duties and aspirations), The feeling of work accomplishment in my job is not certain, The good pay for my job is not satisfactory, The feeling of been an expert is uncertain.

Reliability

The reliability of the factor analysis conducted revealed a cronbach alpha value of 0.97. Total item correlation following 0.3 standard set by scholars (Nunally, 1979; Anastasi, 1999). The split half reliability which is another measure of reliability revealed that the spearman brown co-efficient was 0.95. When divided into two groups, the first half of the scale had an alpha of 0.94 and the second half consisting of 8 items had an alpha of 0.94. The correlation between forms of 0.91 reveals a sound level of internal homogeneity and strong reliability.

Norm

The norm was set using the average score of the job frustration scale (M= 36.33) high score above the mean suggest that the respondents have high job frustration while lower scores equal or below the mean suggests low job frustration.



Validity

In terms of construct validity, the generally accepted process of instrument development was followed, in that the pattern of inter-item correlations was examined for the influence of underlying latent variables using factor analysis. Exploratory, rather than confirmatory factor analysis was used as this method of factor extraction is considered by many as more appropriate in the early stages of scale development. The criterion used to determine how many factors to retain was that of Kaiser (i.e. eigenvalues greater than 1 are retained), which is one of the most widely used.

The scale was analysed using exploratory factor analysis using the principal factor analysis, using Varimax rotation to address the dimensionality of the scale. An Exploratory factor analysis was applied to explore the underlying dimensions of factors affecting Job frustration. First, the covariance contained in the correlation matrix was tested by using the Bartlett test and Measure of Sampling Adequacy (MSA). In this test, the Bartlett test of sphericity ($p = 0.00$) indicates the statistical probability that the correlation matrix has significant correlations, and the Kaiser-Meyer measure of MSA was 0.589 showing meritorious sampling adequacy. Next, the 16-item battery was factor analyzed using Principle Axis Factoring (PAF) with Varimax rotation. A factor structure explaining 80.27% of the variance was obtained. Job frustration items were submitted to an analysis of their principal components in line with Kaiser's method—eigenvalue >1 . As verified by $KMO = .917$, $df = 105$, $p < .000$. This suggests that the data matrix could be factorized. The principal component analysis extraction with Varimax rotation produced a single factor solution that accounted for 69.58% of the variance. The factor loading for the items ranged from 0.632 to 0.911 which indicated that all the items loaded well on the factor precipitated.



Table 3: Summary of Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.917
Bartlett's Test of Sphericity	Approx. Chi-Square	2751.880
	Df	105
	Sig.	.000

Communalities

	Initial	Extraction
I don't have feeling of security on my job	1.000	.604
There is no opportunity in my job to help other people	1.000	.587
The opportunity in my position to develop close friendship is not certain	1.000	.751
I don't have the feeling of self esteem resulting from doing my job	1.000	.725
The regard received from others in the organization is very frustrating	1.000	.791
The regard received from my work from the public is a very frustrating one	1.000	.724
The authority resulting from my work is a frustrating one	1.000	.560
The opportunity for independent taught and action in my job is nil.	1.000	.764
The authority for the participation in the setting of goals and procedures in my job is not worthwhile	1.000	.856
The opportunity for participation in the determination of work method in my job is not certain	1.000	.741
The opportunity for personal growth and development in my job is not certain	1.000	.829
I don't have the feeling of self-fulfilment resulting from my job (Fulfilment of personal duties and aspirations)	1.000	.797
The feeling of work accomplishment in my job is not certain	1.000	.723
The good pay for my job is not satisfactory	1.000	.586
The feeling of been an expert is uncertain	1.000	.400

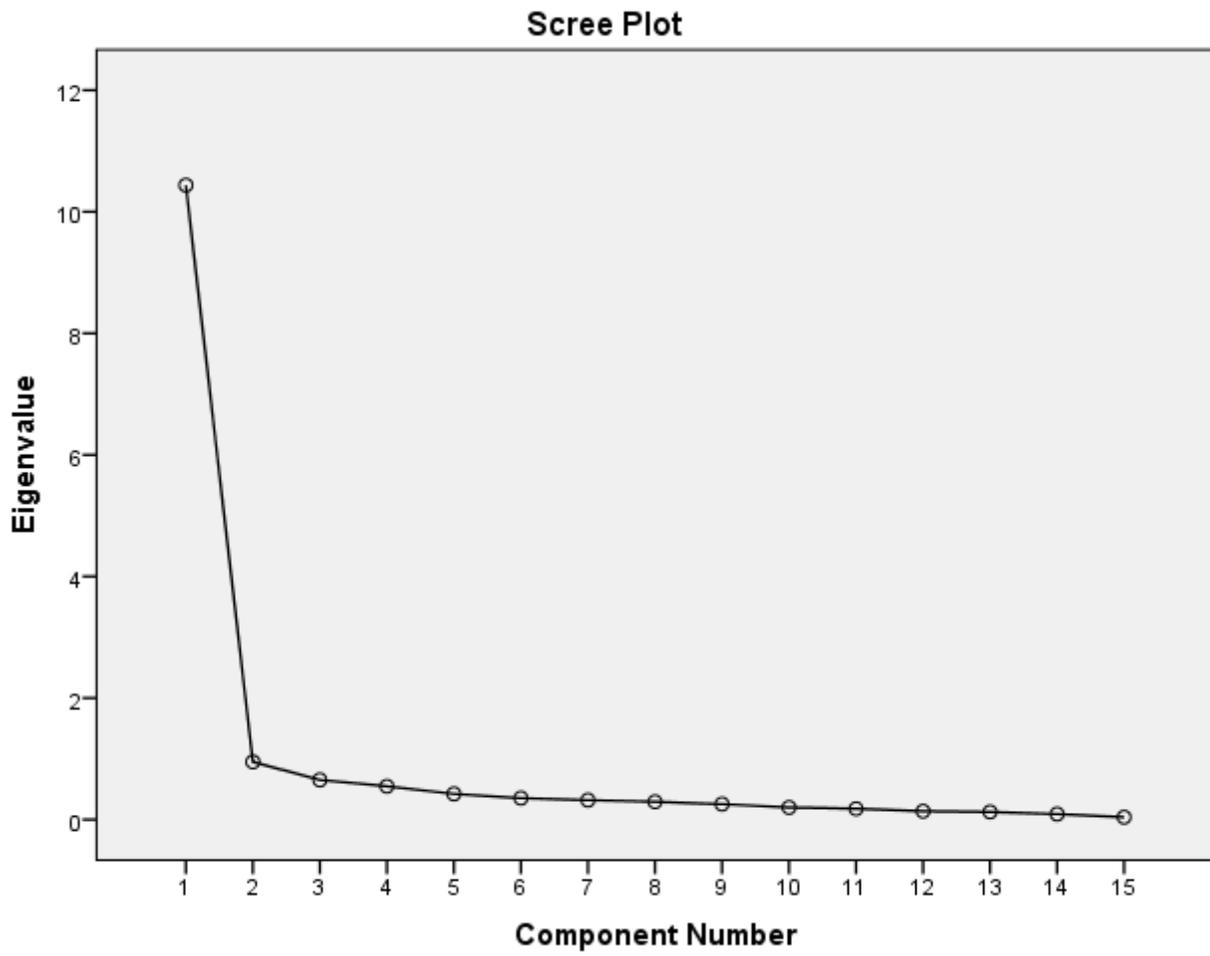
Extraction Method: Principal Component Analysis.



Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.437	69.582	69.582	10.437	69.582	69.582
2	.949	6.328	75.910			
3	.653	4.351	80.261			
4	.548	3.653	83.914			
5	.423	2.817	86.731			
6	.352	2.349	89.080			
7	.321	2.137	91.217			
8	.292	1.948	93.164			
9	.254	1.691	94.855			
10	.200	1.332	96.187			
11	.178	1.189	97.376			
12	.138	.920	98.296			
13	.125	.835	99.131			
14	.091	.604	99.735			
15	.040	.265	100.000			

Extraction Method: Principal Component Analysis.





Component Matrix^a

	Component
	1
I don't have feeling of security on my job	.777
There is no opportunity in my job to help other people	.766
The opportunity in my position to develop close friendship is not certain	.866
I don't have the feeling of self esteem resulting from doing my job	.851
The regard received from others in the organization is very frustrating	.889
The regard received from my work from the public is a very frustrating one	.851
The authority resulting from my work is a frustrating one	.748
The opportunity for independent taught and action in my job is nil.	.874
The authority for the participation in the setting of goals and procedures in my job is not worthwhile	.925
The opportunity for participation in the determination of work method in my job is not certain	.861
The opportunity for personal growth and development in my job is not certain	.911
I don't have the feeling of self-fulfilment resulting from my job (Fulfilment of personal duties and aspirations)	.893
The feeling of work accomplishment in my job is not certain	.850
The good pay for my job is not satisfactory	.765
The feeling of been an expert is uncertain	.632

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Discussion

We developed the JF Scale as a useful tool for measuring attitudes toward Job Frustration. The result of the factor analysis of the questionnaire confirmed its psychometric characteristics: good internal consistency and good construct validity.

For the development of the JF Scale, the Expectancy model was chosen for its powerful and predictive value in explaining human behavior. The Expectancy theory has proven to be suitable for evaluation of behavioral intentions and behavior in public relation and our banking institutions; Most theories explain behavior through the individual cognitive space, while the expectancy theory takes into consideration social influence based on culture-related variables .

The limitations of the present study originate mainly from general limitation of the Expectancy theory model and limitations of collecting data using questionnaires. Questionnaire data are based on self assessments instead of objective measurement. In addition, the Expectancy theory overlooks the influence of emotional factors that affect behavior. Nevertheless, although emotional factors have proven to be important for predicting health-related behaviors, In our questionnaire, we examined the cognitive processing excluding the irrational and emotional



factors. However the power of irrational and emotional factors is questionable in prediction of Job frustration.

In developing the instrument, perceived behavioral control was not examined for various reasons. Perceived behavioral control presumes that an individual believes himself capable of carrying out a specific behavior. The ease with which job frustration is practiced within the banking institution as a result of the state of the economy further confirms that any organization can be involved in job frustration. Many studies confirmed that attitudes and subjective norms correlated with behavioral intention, and subsequently with behavior itself. Another limitation of the study is the fact that validation of the JFinstrument was done using only the bank setting which implies that it might be more relevant to the psychological and organizational climate of the banking institutions than other organizational settings.

The discernible rate of Job frustration among the banks and financial institutions employees suggests that banks and other financial institutions may engage in the same behavior. Clear guidelines, target education in scientific integrity, and awareness of the possible consequences seem to be very important steps in maintaining research and academic integrity. In order to prevent job frustration, we are still trying to identify the reasons why bank employees are experiencing more of job frustration. All human behaviors are influenced by normative, control, and behavioral beliefs that affect subjective norms, perceived behavioral control, and attitudes. Favorable or unfavorable attitudes toward job frustration are the product of personal behavioral beliefs and cultural environment. In the scientific community, we can be almost certain that perceived behavioral control is substantial and subjective norms are thought to be unfavorable. Therefore, to have a better understanding of job frustration, we should examine attitudes toward job frustration. Because attitudes cannot be directly observed (such as behavior), they have to be inferred from observable responses from standardized questionnaires. Finally, the objective assessment of prevalence of job frustration and of attitudes toward job frustration must be carried out simultaneously to develop a predictive model that can be used for preventing the practice of job frustration. The construction of a standardized questionnaire that assesses attitudes toward job frustration and subjective norms is a step forward toward job frustration prevention. Thus, results obtained from studies using this questionnaire should provide evidence for better understanding of this type of misconduct.

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JOB FRUSTRATION QUESTIONNAIRE

NO		SA	A	U	D	SD
1.	I don't have feeling of security on my job					
2.	There is no opportunity in my job to help other people					
3.	The opportunity in my position to develop close friendship is not certain					
4.	I don't have the feeling of self esteem resulting from doing my job					
5.	The regard received from others in the organization is very frustrating					
6.	The regard received from my work from the public is a very frustrating one					
7.	. The authority resulting from my work is a frustrating one					
8.	The opportunity for independent taught and action in my job is nil.					
9.	The authority for the participation in the setting of goals and procedures in my job is not worthwhile					
10.	The opportunity for participation in the determination of work method in my job is not certain					
11.	The opportunity for personal growth and development in my job is not certain					
12.	I don't have the feeling of self fulfillment resulting from my job (Fulfilment of personal duties and aspirations)					
13.	The feeling of work accomplishment in my job is not certain					
14.	The good pay for my job is not satisfactory					
15.	The feeling of been an expert is uncertain					