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**The Career Adapt-Abilities Scale-Nigeria Form: Psychometric Properties and
Construct Validity**

By

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1. Introduction

Some of the significant issues in a developing country such as Nigeria include the understandings and attitudes of people regarding career choice and development. This is because the economic climate and challenges in the labor market require individuals to take responsibility for their own career management, especially emphasizing adaptability and other personal resources. Despite the progress in the technology, there is no clear platform where career development and industrial opportunities are discussed. Thus, individual workers must strive to acquire the necessary skills that prepare them to adapt to changing career environments and deal with frequent transitions.

1.1. The Nigeria Context

Nigeria is Africa's most populous country, with a population of approximately 173 million people (World Bank, 2014). As one of the developing Sub-Sahara African countries, Nigeria gained independence from Great Britain in 1960, and was declared a federal republic in 1963 (Karatepe & Mogaji, 2008).

Nigeria is noted for a rich ethnic diversity of over 250 ethnic groups with different customs, languages, and traditions. The three dominant ethnic groups are the Hausa, Igbo and Yoruba (Okpara, 2006; Karatepe & Mogaji, 2008). Despite this diversity, English is the common language throughout the nation.

Known for its oil-richness, Nigeria has been marred for years by corruption, inadequate infrastructure, political instability, high unemployment rate, zero welfare system (Okpara, 2006; Karatepe & Mogaji, 2008) and currently, the violent sectarian conflict in the Northern part of the country. An irregular work environment has led to various problems such as gender inequality, job insecurity, inadequate pay, and long working hours (Adeyemi, Ojo, Aina, & Olanipekun

2006; Aryee 2005). Considering the potential impact of the unpredictable environment and a gloomy economy on career-related outcomes, individual workers must take responsibility for their own career management. Specifically, they need to possess skills and personal resources that will help them respond to different career development opportunities in such unpredictable work environment.

1.2. Career Adaptability

As an emerging construct in vocational literature, career adaptability is defined as a psychosocial construct that denotes an individual's resources for coping with current and anticipated tasks, transitions, traumas in their occupational roles that, to some degree large or small, alter their social integration (Savickas, 1997). Career construction theory represents career adaptability resources as self-regulatory abilities that may change depending on the time and situations emanating from the person - environment interaction (Savickas, 2005, 2013). These are important personal resources that individuals may draw on during career and work-related experience. Career adaptability consists of four dimensions- concern, control, curiosity and confidence. Individual workers depend on these resources to shape their careers as they cope with unpredictable work-related tasks, transitions, and traumas.

1.3. The Purpose of the Study

Twenty-nine vocational psychologists from 18 countries, defined and constructed an international form of the Career Adapt-Abilities Scale (CAAS-International Version 2.0) that is applicable in different countries with comparable outcomes (Savickas & Porfeli, 2012). The CAAS-International form (Savickas & Porfeli, 2012) has demonstrated excellent reliability and appropriate cross-national measurement equivalence (Öncel, 2014; Tien, Lin, Hsieh, & Jin, 2014; Maree, 2012; Porfeli & Savickas, 2012). However, reports have revealed that cross-

cultural differences might significantly affect its validity and reliability (Savickas & Porfeli, 2012; Johnston, Luciano, Maggiori, Ruch, & Rossier, 2013). The purpose of this study was to examine psychometric properties such as item statistics and internal consistency estimates of CAAS-Nigeria form to determine its usefulness with the large ethnic diversity in Nigeria.

1.4. Method

1.4.1. Participants

The study participants included 271 employees in the bank (N= 143) and hotel (N= 128) sectors in Nigeria. The sample comprised 134 (49.4%) male and 137 (50.6%) female with their ages ranging from 18 to 58 years ($M = 29.19$, $SD = 6.67$). While the majority of the participants 148 (54.6%) had a university first degree, 150 (55.4%) of the participants have been working in the organizations between 1 and 5 years. The majority of the participants, 200 (73.8%), were either single or divorced.

1.4.2. Procedure

Data were collected through the e-mail addresses provided by the human resources managers in both sectors after explaining the purpose of the study and promising confidentiality. Potential participants were contacted via the e-mails to explain the purpose of the study. Two hundred and seventy one questionnaires were sent to those who responded at the expiration date stipulated in the initial e-mails.

1.5. Measures

1.5.1. Career Adapt-Abilities Inventory — Nigeria form (CAAS -Nigeria)

The 24-item Career Adaptabilities Inventory — International Version 2.0 (Savickas & Porfeli, 2012) produces a total score indicating individuals' adaptability. The 24 items are divided equally into four subscales that measure the adapt-ability resources of concern, control, curiosity, and confidence. Responses to items were elicited on a five point scale ranging from 5

(strongest) to 1 (not strong). Table 1 shows the item loadings and descriptive statistics from the confirmatory factor model. The total score for the CAAS-International has a reported reliability of .92, which are higher than the subscale scores of concern (.83), control (.74), curiosity (.79) and confidence (.85) (Savickas & Porfeli, 2012). Table 1 also reported the reliabilities of the subscales for this sample, which are slightly higher than those for the total international sample. The reliability of the overall scale from the CAAS-Nigeria was (.91), higher than the subscale alphas for concern ($\alpha = .88$), control ($\alpha = .88$), curiosity ($\alpha = .87$) and confidence ($\alpha = .90$).

(Insert table 1 about here)

2. Results

The CAAS-Nigeria items mean scores and standard deviations reported in Table 1 suggest that the typical response was in the range of strong to very strong. Skewness and kurtosis values for the 24 CAAS-Nigeria items ranged from (−1.22 to −.50) and from (1.7 to .03), an indication that the items conform to the assumptions of confirmatory factor analysis for this sample. The subscale mean scores and standard deviations for the CAAS-Nigeria are reported in Table 1.

Similar to the International form, the mean score for concern was 3.98, control was 3.83, curiosity was 3.83 and confidence was 3.87 in the Nigerian form respectively. Skewness and kurtosis values for the four CAAS-Nigeria subscales ranged from (−1.07 to −.61) and from (1.57 to .44), an indication that the subscales conform to the assumptions of correlation-based statistics for this sample.

Table 2 reported the mean scores and standard deviations for age, gender, education, and the four dimensions of CAAS-Nigeria form. Correlation coefficients are also reported. The correlations between the four subscales are all significant at $p < .01$ level. While the correlation between age and confidence was significant at $p < .05$ level, the correlations between the

education, gender and the four subscales were not significant. In addition, the correlations between the four subscales and the adaptability total score ranged from .88 to .89 and were all significant at $p < .01$ level.

(Insert table 2 about here)

2.1. Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) revealed that data for the CAAS-Nigeria fit the theoretical model well. The fit indices were RMSEA= 0.086 and SRMR= 0.053, which conform to the established joint fit criteria (Hu & Bentler, 1999). Although the fit indices indicate that the Nigeria data shows the acceptable fit to the model, but were not as good when compared to the fit indices for the CAAS-International model (RMSEA=0.053 and SRMR=0.039) (Savickas & Porfeli, 2012, Table 2, row M1b). The standardized loadings reported in Table 1 suggest that all items are strong indicators of the second-order constructs, the second-order constructs in turn are strong indicators of the third-order adaptability construct.

2.2. CAAS-Nigeria factor model and the international factor model comparison

The loadings of the first-order items on the second-order factors (concern, control, curiosity and confidence) of adaptability in the CAAS-Nigeria hierarchical factor model was similar to that of CAAS-International model. The concern scale number 1 (Thinking about what my future will be like) (.79), the control scale number 1 (Keeping upbeat) (.62), the curiosity scale number 1 (Exploring my surroundings) (.67), and the confidence scale number 1 (Performing tasks efficiently) (.76) in the CAAS-Nigeria sample (see Table 1) showed stronger loadings compared to that of international sample- concern (.65), control (.48), curiosity (.62) and confidence (.60) respectively (see Table 1 in Savickas & Porfeli, 2012).

The loadings of the second-order constructs on adaptability in the CAAS-Nigeria sample also showed slight differences compared to the international sample. While the concern (.87), control (.92) and curiosity (.94) loadings in CAAS-Nigeria sample are higher than the CAAS-international sample- concern (.78), control (.86) and curiosity (.88), the confidence loading in the CAAS-international sample (.90) was higher than the CAAS-Nigeria sample (.89).

3. Discussion

The result of this study indicate that the CAAS-Nigeria performs similarly to the CAAS-International in terms of psychometric characteristics and factor structure. The total scale and four subscales each demonstrate excellent internal consistency estimates, indicating an acceptable fit to the proposed hierarchical theoretical model to describe the relation between the four subscales that make up career adaptability resources. However, confirmatory factor analysis of the CAAS-Nigeria data with a lower fit (when compared with CAAS-International sample) to the theoretical model might be a reflection of the ethnic diversity, participants characteristics, unemployment or labor market conditions that influence career adaptability. The result shows that curiosity had the highest score among the four subscales. It appears that employees in Nigeria are more curious about their career rather than being concerned or taking control of their career-related outcomes. This might be as a result of unpredictable work environment, high unemployment rate and the current state of the economy. Specifically, it appears that individual employees are more interested in seeking various work opportunities that will promote their career-related outcomes.

To examine the relationship between demographic variables and four subscale, I included age, gender and education. Age was found to be positively and significantly related to confidence. It seems that the older they are, the more confident they become. However, further examination in other sectors with CAAS-Nigeria scale is needed to ascertain the relationships.

In conclusion, the result of this study showed that CAAS-Nigeria and CAAS international function similarly, and as such, it appears that CAAS-Nigeria is ready for use by both researchers and practitioners who are interested in measuring the adaptability resources among employees. Accordingly, given the successful application of the CAAS-International with employees in Nigeria, I believe the researchers will further use the scale to examine employees' career adaptability resources in other sectors, which will help practitioners to develop strategies that encourage career development.

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Table 1: Career Adapt-Abilities Scale: items, descriptive statistics, standardized loadings, and internal consistency reliabilities

Construct	Item (first-order factor loadings)	Mean	SD	Loadings
Concern	1. Thinking about what my future will be like	3.94	1.04	.79
	2. Realizing that today's choices shape my future	3.92	0.97	.79
	3. Preparing for the future	3.97	0.97	.78
	4. Becoming aware of the educational and career choices that I must make	3.90	1.05	.76
	5. Planning how to achieve my goals	4.08	0.94	.71
	6. Concerned about my career	4.07	0.89	.72
Control	1. Keeping upbeat	3.70	0.99	.62
	2. Making decisions by myself	3.75	1.03	.70
	3. Taking responsibility for my actions	3.91	1.05	.75
	4. Sticking up for my beliefs	3.89	0.96	.67
	5. Counting on myself	3.89	0.99	.74
	6. Doing what's right for me	3.87	1.07	.84
Curiosity	1. Exploring my surroundings	3.78	0.99	.61
	2. Looking for opportunities to grow as a person	4.06	0.98	.74
	3. Investigating options before making a choice	3.91	1.01	.77
	4. Observing different ways of doing things	3.83	1.09	.78
	5. Probing deeply into questions I have	3.66	0.98	.64
	6. Becoming curious about new opportunities	3.76	1.04	.76
Confidence	1. Performing tasks efficiently	3.85	1.01	.76
	2. Taking care to do things well	3.92	1.02	.88
	3. Learning new skills	3.92	1.05	.86
	4. Working up to my ability	3.91	0.99	.79
	5. Overcoming obstacles	3.83	0.94	.78
	6. Solving problems	3.81	1.07	.72
Construct	(second-order factor loadings)	Mean	SD	Loadings
Adaptability	1. Concern	3.98	3.98	.87
	2. Control	3.83	3.83	.92
	3. Curiosity	3.83	3.83	.94
	4. Confidence	3.87	3.87	.89

Note: N = 271; all of the loadings are statistically significant at $\alpha = 0.001$ (two-tailed).

Table 2: Means, Standard Deviations and Correlations of Study Variables

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Age	1.67	0.67	-							
2. Gender	.51	0.51	-.07	-						
3. Education	3.62	0.78	.24**	.16**	-					
4. Concern	3.98	0.78	.09	.04	.04	-				
5. Control	3.83	0.80	.06	.02	.03	.74**	-			
6. Curiosity	3.83	0.79	.09	-.01	-.08	.72**	.73**	-		
7. Confidence	3.87	0.86	.13*	-.04	-.03	.68**	.74**	.73**	-	
8. Adaptability	3.88	0.72	.11	.01	-.01	.88**	.89**	.89**	.88**	-

Note: Composite scores for each variable were computed by averaging respective item scores. SD denotes standard deviation.

* Correlations are significant at the .05 level (two-tailed).

** Correlations are significant at the .01 level (two-tailed).

Highlights

- Testing and reporting the psychometric properties of CAAS-Nigeria Form
- CAAS-Nigeria factor structure performed similar to that of CAAS-International Form
- CAAS-Nigeria scale will help formulate strategies and enhance career development