

## An exploration of confirmatory factor analysis of career adaptability skill among technical and vocational education students in Nigeria

### ABSTRACT

This paper explored confirmatory factor analysis (CFA) of the measurement scales of vocational identity, career future concern, personal goal orientation, perceived social support, career self-efficacy, in relation to career adaptability skill among technical and vocational education (TVE) students in colleges of education in Nigeria. This enabled the researchers to understand how well the theoretical specifications of these key career-related factors match the reality of actual data of the study. The participants were 603 TVE students selected from six colleges of education in Nigeria. The selected students were from all the three levels of agricultural, business, and technical education programs of the colleges in the second semester of 2014/2015 academic session. A total of 353 were males representing 58.5%, and 250 were females. A set of structured self-reported questionnaire was used for data collection, and CFA aspect of structural equation modeling (SEM) was used for data analysis. Results indicated that the measurement model fits the data. For absolute fit, the relative chi-square (CMIN/DF) was 1.338, which is  $< 5.0$ , for incremental fit, IFI = 0.960, TLI = 0.959, and CFI = 0.960 which are  $> 0.90$  needed to meet the requirement, for parsimony fit, CFI = 0.960 which is  $> 0.90$ , and RMSEA = 0.023 which is  $< 0.08$  required. All the factor loadings were above .50, and all the values of AVE were  $> .50$  showing strong convergent validity. The requirement for discriminant validity was met, and both construct and Cronbach alpha internal consistency reliabilities were  $> .70$ . Conclusion was drawn, and a suggestion for further studies covering polytechnics and university students in Nigeria was offered.

**Keyword:** Career adaptability skill; Confirmatory factor analysis; Exploration; Nigeria; Students; Technical and vocational education