

## **Influential Determinants of Capacity Building to Cope With Stress among University Students**

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**Abstract:** *This study is a survey to find out the influential determinants of capacity building to cope with stress among university students. Descriptive survey research design was employed for the study while self-structured modified questionnaire was used to elicit information from the respondents. A total of nine hundred and five (905) respondents participated in the study forming the sample size for the study. The statistical tools used for the study includes; percentage counts, frequency, mean, regression analysis, spearman rank and Mann-Whitney U test. The statistical results of the multiple regression analysis showed that the predictors (age, sex, religion, college, family financial status and academic performance) had 92% ( $adjR^2=.092$ ,  $F_{(7,896)}=14.02$ ,  $P=.000$ ,  $P<0.05$ ) joint contribution in the dependent variable (perceived ability to cope with stress). The linear regression analysis showed that only age ( $\beta=-.112$ ,  $p=.001$ ), sex ( $\beta=.124$ ,  $p=.000$ ), religion ( $\beta=.084$ ,  $p=.009$ ), college ( $\beta=-.088$ ,  $p=.007$ ) and academic performance ( $\beta=.249$ ,  $p=.000$ ) had significant relative contribution to the dependent variable. The Mann-Whitney U results showed that there is significant difference in the perceived ability to cope with stress between both male and female ( $H=84552$ ,  $Z=-3.78$ ,  $p=.000$ ). The result of the findings revealed that age, sex, religion, college of study, academic performance could significantly predict perceived ability to cope with stress. And also showed that the way male and female perceived their abilities to cope with stress differ.*

**Keywords:** *academic performance, stress, family financial status, capacity building.*

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### **I. Introduction**

The university education period, corresponding to ages 18-25, is one in which pronounced and rapid psychological and social developments are seen and physiological development is completed, that involves various developmental tasks and expresses the passage to adulthood (Renk and Creasey, 2003; Dyson and Renk, 2006). In this period, young people face a great many stressful situations, such as integrating a rise in cognitive capacities, achieving expectations of increased independence of the family and adulthood, developing social roles with oneself and the opposite sex, meeting academic requirements, planning together with selection of profession and preparing for adult roles (Arnett, 2000). These are objectives that a young person will consider seriously for the first time and that society expects to be accomplished. Coping patterns employed in this period are therefore important since they will directly affect the individual's subjective well-being and life satisfaction.

Stress, regarded as an inescapable phenomenon in modern society (Hung, 2011), is defined as a psychological state that emerges when individuals encounter physical or psychological difficulties (Atkinson et al., 2002). Ibrahim (1998) defined stress as a severe emotional response resulted from internal or external change. According to Greenberge and Baroon (2000) stress is personal, physiological and emotional reactions against stimulus. Hussien and Hussien (2006) defined stress as the situation by which the individual suffers from physical and psychological hypertension resulted from factors that can't be handled and exceeds human ability to cope with. When the stress that emerges at different times of life and in different spheres becomes excessive, it leads to various diseases and tensions, and can consume the individual's attention and energy. However, once the essential source of stress is identified, it is possible to develop strategies to control these or to keep sources of stress under effective control (Hatice and Özkan, 2012).

Folkman and Lazarus (1986) defined coping as the cognitive and behavioral efforts made by individuals in order to meet the requirements and overcome the difficulties created by their internal and external worlds, to keep these under control and reduce tensions. Generally, the function of coping is to protect the individual against negative physical or psychological consequences. Coping refers to the way a person responds to his appraisal. If his appraisal tends to arouse his nervous system, his coping will be affected, sometimes negatively. A series of personal characteristics, such as the individual's beliefs regarding himself and his social surroundings, his values and objectives, influence ways of coping (Folkman & Lazarus, 1985).

Coping with stress is classified under three general categories in literature; problem focused coping, emotional focused coping (Coyne & Downey, 1991; Snyder, 1999) and avoidance patterns. It is impossible to make a good or bad distinction regarding these patterns, although good or bad results emerge in association with the coping required by the situation and the suitability of the coping employed by the individual (Lazarus, 1993). And this affects the meaning the individual attaches to life. In general, action-based coping strategies, for

example exercise emotion-based strategies; distraction and social strategies, such as support from friends, family etc. are good coping skills to have (Weidner et al., 1996). Apart from the direct active coping strategies there are also the indirect active coping strategies, that university students can adopt in an attempt to reduce their stress by releasing it or engaging in activities known to reduce stress. Those strategies do not, however, attempt to change the source of the stress (Cosden et al., 1997).

It has been suggested that some individual differences among university students can produce differential responses to stressors and the coping mechanisms employed. Older students, final-year students, female students, and students living alone have been found to have more problems than younger ones, those in lower years in their program, male students, and those living with others, respectively (Bjorksten, Sutherland, Millerand Stewart, 1983). Stressful reactions can include emotional or psychological responses such as hostility, anger, anxiety disorders, and depression (Lazarus and Folkman, 1984), (Gullette et al, 1997); physical problems such as headaches, fatigue, sleep difficulties, and gastric disorders; behavioral and cognitive problems resulting, for instance, in impaired job or academic performance; substance use; (Rivkin & Taylor, 1999) and social problems, such as discord in interpersonal relationships and social withdrawal.

Coping mechanisms are seen as adaptive when they act to reduce stress and promote long-term benefits. Everley and Lating(2002) identified that maladaptive coping may reduce the level of stress in the short term (e.g. through the use of alcohol or drugs, or through withdrawal from social interaction) but threaten physical and psychological health in the long term. Effective coping is likely to reduce the level of stress experienced, while ineffective coping is associated with higher levels of stress. Individual factors also influence the way a person copes with stressors, including his or her health and energy level, problem-solving skills, social skills, social support, intelligence, education, material resources needed for taking action, and thinking style.

## II. Materials and Methods

### Participants

A total of 905 students of Afe Babalola University were randomly selected from four colleges and participated in the study. The study involved 354 (39.2%) male, and 550 (60.8%) female students in proportion of 170 (18.8%) from college of law, 258 (28.5%) from college of medicine and health sciences, 320 (35.4%) from college of social and management sciences and 156 (17.3%) from college of sciences respectively.

### Procedure

The purpose of the study was to find out the influential determinants of university students' capacity building to cope with stress. Descriptive survey research design was adopted for the study. The population comprised the undergraduate students of Afe Babalola University, Ado Ekiti. Proportionate and simple random sampling techniques were used to select the respondents for the study. A total of nine hundred and five (905) respondents made up of male and female undergraduate students were used for the study. A modified questionnaire was used to collect information on the influence of academic pursuits and financial constraints in the management of stress among the undergraduate students. The instrument was validated through construct and content validity. Reliability of the instrument ( $r=0.67$ ) was done through Chronbach Alpha.

Descriptive statistics of frequency and percent counts were used to summarize the data collected. Regression analysis, Spearman rank and Mann-Whitney U tests were used to test the level of significance of the questions on the influential determinants of university students' capacity building to cope with stress. The significance level was set at 0.05 alpha level.

## III. Results

**Table 1: Frequency Distribution Of Respondents By Age**

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13-15	3	.3	.3	.3
	16-18	471	52.1	52.1	52.4
	19-21	392	43.4	43.4	95.8
	22 and above	38	4.2	4.2	100.0
	Total	904	100.0	100.0	

**Table 2: Frequency Distribution Of Respondents By Sex**

		Sex			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	354	39.2	39.2	39.2
	female	550	60.8	60.8	100.0
	Total	904	100.0	100.0	

**Table : Frequency Distribution Of Respondents By Religion**

		religion			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	christianity	770	85.2	85.2	85.2
	islam	124	13.7	13.7	98.9
	others	10	1.1	1.1	100.0
	Total	904	100.0	100.0	

**Table 4: Frequency Distribution Of Respondents By College**

		college			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	law	170	18.8	18.8	18.8
	medicine and health sciences	258	28.5	28.5	47.3
	social and management sciences	320	35.4	35.4	82.7
	sciences	156	17.3	17.3	100.0
	Total	904	100.0	100.0	

**Table 5: Frequency Distribution Of Respondents By Family Financial Status**

		family financial status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high	326	36.1	36.1	36.1
	middle	556	61.5	61.5	97.6
	low	22	2.4	2.4	100.0
	Total	904	100.0	100.0	

**Table 6: Frequency Distribution Of Respondents By Academic Performance**

		Perceived academic performance			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	excellent	214	23.7	23.7	23.7
	very good	528	58.4	58.4	82.1
	good	138	15.3	15.3	97.3
	fair	24	2.7	2.7	100.0
	Total	904	100.0	100.0	

**Table 7: Frequency Distribution Of Respondents By Perceived Ability To Cope With Stress**

		perceived ability to cope with stress			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high	272	30.1	30.1	30.1
	middle	518	57.3	57.3	87.4
	low	114	12.6	12.6	100.0
	Total	904	100.0	100.0	

**Table 8: Frequency Distribution Of Respondents By Perceived Ability To Cope With Stress**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.350	.164		8.240	.000
	Age	-.121	.036	-.112	-3.370	.001
	sex	.161	.043	.124	3.755	.000
	religion	.134	.052	.084	2.599	.009
	college	-.043	.016	-.088	-2.682	.007
	family financial status	.030	.039	.025	.769	.442
	academic performance	.223	.029	.249	7.670	.000

a. Dependent Variable: perceived ability to cope with stress

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.314 <sup>a</sup>	.099	.092	.600

a. Predictors: (Constant), academic performance, Age, college, family financial status, religion, department, sex

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.380	7	5.054	14.021	.000 <sup>a</sup>
	Residual	323.005	896	.360		
	Total	358.385	903			

a. Predictors: (Constant), academic performance, Age, college, family financial status, religion, department, sex  
b. Dependent Variable: perceived ability to cope with stress

**Table 9: Frequency Distribution Of Respondents By Perceived Ability To Cope With Stress**

	sex	Age	religion	college	family financial status	academic performance	perceived ability to cope with stress
sex	1.000						
Age	-.246**	1.000					
religion	-.087**	.147**	1.000				
college	.015	-.006	.050	1.000			
family financial status	.043	-.042	.003	-.016	1.000		
academic performance	-.121**	.036	.079*	.070*	.115**	1.000	
perceived ability to cope with stress	.126**	-.127**	.046	-.050	.045	.207**	1.000

**IV. Discussion**

Table 1 showed that 52.1% of the respondents for the study fell into the age category of 16-18years and 43.4% belonged to the age category of 19-21years, forming the 92.8% of the total respondents for the study sample size. This is to show that students in the modern day university are of the average age, ranging from 16-21years. This is in agreement with Renk and Creasy (2003) and Dyson and Renk (2006) that the corresponding age of university education period is 18-25years. Table 2 showed that 60.8% of the respondents that participated in the study were female and male counterparts formed 39.2%. Table 3 showed that 85.2% of the respondents belonged to Christianity religion. Table 4 revealed that 18.8% of the respondents were from the college of law, 28.5% were from the college of medicine and health sciences, 35.4% were from the college of social and management sciences and 17.3% from were from the college of sciences.

Table 5 on the frequency distribution of respondents by family financial status showed that 36.1% of the respondents are from high class, 61.5% are from middle class while 2.4% are from low class. This study revealed that private universities are not only attended by the children of the wealthy class of the society. The unstable academic calendar of the public higher institution of learning is major factor responsible for public-private migration of young secondary school leavers. Willingness of private individuals to invest in state of the art infrastructure for quality university education is another factor motivating parents from middle class of the society to divert their income into stable and quality control private university education. Table 6 revealed the perceived academic performance of the respondents. Most of the respondents (58.4%) perceived that they have

very good performance and 2.7% perceived they are fair academically. Table 7 showed that 30.1% of the respondents had high perceived ability to cope with stress, 57.3% had average ability while 12.6% had low ability.

Table 8 showed the regression analysis of the study. Age, sex, religion, college, family financial status and academic performance were considered as predictors while perceived ability to cope with stress were the dependent variable. In linear regression, age ( $\beta = -.112$ ,  $p = .001$ ), sex ( $\beta = .124$ ,  $p = .000$ ), religion ( $\beta = .084$ ,  $p = .009$ ), college ( $\beta = -.088$ ,  $p = .007$ ) and academic performance ( $\beta = .249$ ,  $p = .000$ ) had significant relative contribution to the dependent variable while family financial status was not significant ( $\beta = -.025$ ,  $p = .442$ ). In multiple regression, the predictors jointly contributed 92% ( $\text{adj}R^2 = .092$ ,  $F_{(7,896)} = 14.02$ ,  $P = .000$ ,  $P < 0.05$ ) to the dependent variable.

Table 9 showed the Spearman Rank correlation coefficient of sex, age, religion, college, family financial status, academic performance and perceived ability to cope with stress. The following variables were correlated with perceived ability to cope with stress: Age ( $r = -.127$ ) negative perfect correlation, sex (.126) positive perfect correlation, religion (.046) positive moderate correlation, college (-.05) negative moderate correlation, family financial (.045) status positive moderate correlation, academic performance (.207) perfect positive correlation. This study corroborated with the study of Hamaideh (2011) which indicated that the highest group of stressors experienced by students was self-imposed stressors followed by pressure. Cognitive responses were found to be the highest responses to stressors experienced by students.

The Mann-Whitney U results showed there is significant difference in the perceived ability to cope with stress between both male and female ( $H = 84552$ ,  $Z = -3.78$ ,  $p = .000$ ). This study is in agreement with Dwyer & Cummings (2001) who reported that female students used social support more than males in coping with stress. Dyson & Renk (2006) in a study reported that male and female gender role was a significant predictor for problem focused coping and that female gender role was a predictor for emotional based coping. Matud (2004) also emphasized that the gender factor is correlated with both gender components in the process from perception of stress to the reactions displayed to it. Tajularipin, Vizata and Saifuddin (2009) in their study found that 29% of the students experienced medium stress, and that there is a significant difference in the level of stress attributed to gender.

## **V. Conclusion**

It is therefore concluded that age, sex, religion, college of study and academic performance could play a significant role in the capacity building of university students in coping with stress generally. Stress is everyday affair and the need for increased capacity and self-perception to cope with attending stress is paramount. The also revealed that male and female perceived ability to cope with stress differ therefore there is need to consider gender predispositions to stress in the university curriculum.

## **VI. Recommendation**

Based on the findings of the study the following were recommended:

1. Measures should be designed and incorporated into the university systemic policies to help students cope with stress;
2. Survey should be carried out annually to monitor the stress level of the students and university staff to prevent stress related diseases and other comorbid problems;
3. If the identified variables could predict stress, then the university managements should pay more attention to these variables to modify, moderate or eliminate them.

## **Limitations of the study**

One important limitation of this study was used of sample of students, drawn from just one university. This finding cannot be generalized for students in other university degree programs. Repeat of this study with a larger, stratified random sample would expand knowledge of stress among university students.

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