Adjustment Tendencies Among Transiting Students: A Mediation Analysis Using Psychological Wellbeing Indices

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Most students have difficulties in getting use to the new environment that they find themselves especially when the settings of their previous school is different from where they are admitted newly. The study sought to carry out a mediation analysis of the link between psychological wellbeing and adjustment of transiting students. The study adopted a quantitative approach with a total of 1560 students used for the study. The instrument used for the study was a question that was validated appropriately. Data collected were analysed using the partial least squares structural equation modelling (PLS-SEM) to examine the direct and indirect effect of the psychological wellbeing on adjustment tendencies as well and variance explained by the variables. The results showed that there exist a direct effect of environmental mastery and self-acceptance on academic, emotional, and social adjustment. Personal relations have a direct effect on emotional adjustment and social adjustment but not for academic adjustment. Self-acceptance has a negative direct effect on environmental mastery. A significant direct effect exists between environmental mastery and positive relations (PR), self-acceptance has a direct effect on environmental mastery and self-acceptance (SEA) on positive relations. A partial mediation effect exists between self-acceptance and academic adjustment as mediated by environmental mastery but not with self-acceptance and academic adjustment as mediated by positive relations among others. Psychological wellbeing when combined, contribute to the variances in adjustment tendencies. Conclusions and further implication of the findings were discussed.

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1. Introduction

Secondary level of education environment is different from the tertiary institution settings. (Al-Mseidin1i, et al, 2017). This is because the characteristics of the school system at the tertiary level in terms of social relationships, academic assignments, tasks, and independent habituation are quite alien to most of new students. They struggle to do virtually everything that was very easy for them at the secondary level of education (Ernest & Ayodeji, 2021). This is why most researchers conclude that transiting from high school to a tertiary institution constitutes one of the major changes of life that many adolescents go through (Friedlander, et al, 2007; Tao, et al, 2000). For example, the new students must build relationships, adapt to the rules and regulations of the school, cope with the demands of the schoolwork load, handle emotional situations that may be impeding on oneself, develop new learning or study habits that are different from what they were exposed to at the secondary level of education, among others. At this level of the learning, academic task increases, there are new social relationships, reduced contacts and support from family and friends, but the capabilities to cope with such demands places a burden on the learner and may cause psychological stress (Dwyer & Cummings, 2001). Similarly, researchers have noted that transitioning to university education might constitute strain and stress (Friedlander et al., 2007; Wong and Power, 2019). There is therefore every need for the students to adjust to the demands of the new system to cope with responsibilities that may be presented to him or her. This has posed a challenge to many Nigeria students who are admitted in tertiary institutions of learning.

The issue of maladjustment among students in institutions of higher learning is not peculiar to Nigeria and Cross River State in particular, where this study is situated. Evidence abounds that there are plethora of issues that transiting students face in higher institution of learning. In Sweden (Vaez, Kristenson, & Laflamme, 2004), Canada (Adlaf, et al, 2001), America (Blanco, et al, 2008), the United Kingdom (Denovan & Macaskill, 2013), and New Zealand (Manthei & Gilmore, 2005), all noted that students go through a lot in a bid to get acclimatised to the environment in which they find themselves

The maladjustment of students transiting to universities have raised a lot of concerns about what will be responsible for these problems. Researchers have diverse views on the causes of maladjustment in students. These factors incudes, family type and parental care (Poyrazli &

Graham, 2007), classroom experience and parental occupation (Rahman & Bahurudin, 2009), peer rejection, anxiety and previous experiences in schools (Zhou, Frey & Bang, 2011). Other are transitional shocks' (Nilsson & Anderson, 2004) feelings of insecurity (Reid & Dixon, 2012), loneliness (Guo, et al, 2014), academic task (Zhou, et al 2011), emotional distress (Hyun & colleagues, 2007) age , level of education, and gender differences (Yi, et al 2003).The effect of this problem on the learner is multidimensional as they face a lot of challenges that may affect their mental and academic development (Moilanen et al., 2010; Virtanen et al., 2019). Most students who feel that they cannot cope with the academic task withdraw from school (Longobardi et al., 2016b, 2019b). Others develop inferiority complex and antisocial behaviour (Marengo et al., 2018a); some contemplate suicide (Rueger, et al, 2014); poor academic achievement (Cappella et al., 2019); dropout from school (Scalera & Alivernini, 2010; Marengo et al., 2018b); reliance on external factors for academic achievement (Mruk, 2006); and low self-esteem (Jindal-Snape & Miller, 2008).

Previous research have shown that there is a nexus between psychological wellbeing and school adjustment (Perry, et al, 2001; Quaglia et al., 2013; Wong, 2018). However , what is not clear is the extent to which various dimensions of these constructs are directly or indirectly affecting each other. Many researchers have not spent time to look at adjustment of the students from a multidimensional perspective. The composite structure of adjustment has not been extensively worked on in order to decipher the dynamics of the factors that impede the learner's maladjustment tendencies. Studies related to students in higher education are limited. This provides the impetus for this study so that policy development and decision making targeted at addressing this problem will be holistic. the following research questions were raised for the study

Research question 1

1a. what is the direct effect of environmental mastery on academic , social, and emotional adjustment of transiting students?

1b.What is the direct effect of personal relations on academic , social, and emotional adjustment of transiting students?

1c.What is the direct effect of self-acceptance on academic , social, and emotional adjustment of transiting students?

Research question two

2a. What is the direct effect of environmental mastery on positive relation; self-acceptance on environmental mastery and self-acceptance on positive relations among transiting students?

Research question three

3a. What is the indirect effect of self-acceptance on academic adjustment when mediated by environmental mastery and Positive relations.?

3b. What is the indirect effect of self-acceptance on academic adjustment when mediated by environmental mastery and Positive relations ?

3c. What is the indirect effect of self-acceptance on social adjustment when mediated by environmental mastery and Positive relations is not significant?

Research question four

What is the composite contribution of self-acceptance ,positive relations and environmental mastery on academic adjustment , social and emotional adjustment

Literature review

Studies on psychological wellbeing and adjustments

Research has established that there is a link between psychological wellbeing and adjustments among students (Longobardi, et al, 2016b; Virtanen, et al, 2019; Reddy, et al, 2003; Cooke, et al, 2006., Fritz, et al, 2000). Psychological wellbeing has been identified as a muti dimensional concept that includes a lot of factors such as one's attitude to life, optimism, self-acceptance, efficacy, mental disposition among others (Awang, et al, 2014.). It is a state that determines not only the career success of a learner but a deposition to be good or bad in one's entire life. This is why it is often considered a measure of the quality of an individual's life. Ryff (1989; 1991) proposes six components of psychological well-being based on his research into happy living and human performance. These are self-acceptance, environmental mastery, positive relation, autonomy, personal development, and purpose in life. In this study, three variables were selected such as environmental mastery, self-acceptance, and positive relations.

Al-Hendawi, et al, (2022) examined the influence of school adjustment and academic success using association between wellbeing and emotional and behavioural problems of students in Qatari secondary school. The study result showed that students wellbeing relates with school adjustment. However , additional information revealed that wellbeing helped males to perform better

than females' students. Ahmet, et al (2021) carried out a similar study on eleven types of adjustment problems and psychological well-being among international students. The findings showed that psychological wellbeing correlates negatively with adjustments and that areas that are identified as reasons for the maladjustment by international students are language barrier, financial constraint, and admission selection rigidity. Mualifah1, et al (2019) examined the influence of Self-acceptance and social adjustment on senior high school students' self-concept. The result obtained showed that self-acceptance relates strongly with social adjustments. self-acceptance and social support significantly affect student's self-concept. Pasha and Munaf (2013) examined the relationship of self-esteem and adjustment in traditional university students. The results obtained showed that variables of self-esteem as selected in the study such as moral self-approval, lovability , persona power and body functioning were related significantly with adjustment. Other factors identified that relates with adjustments were likability , body appearance , and defensive self-enhancements. Similarly , other studies that were carried out in respect of self-acceptance and adjustment tendencies have been empirically documented (Friedlander, et al, 2007, Burris, et al, 2009; Cooke, et al, 2006;, Fritz, et al, 2008).

Agrawal (2015) examined the influence of variables such as self-esteem and psychological well-being on performance. The result of the study showed that self-esteem and psychological wellbeing significantly relate to academic performance at school. However, no relationship existed between adjustment and performance. Raymond and Chi-K (2020) examined psychological wellbeing among Chinese college students. The role of positive thinking and school adjustment. The result of the study showed that there was a negative relationship between school adjustment and stress. Positive thinking as a moderated factors influenced the relationship between school adjustment and stress as well as the relationship between life satisfaction and school adjustment. Davida and Nit (2014) examined Adjustment to first year of college – relations among self-perception, trust, mastery, and alienation. The result showed that 50% of the variables contributed to the variance in the students' adjustments. Ababu, et al (2018) examined the prevalence of adjustment problems and their predictors among first-year undergraduate

students at an Ethiopian university: a cross-sectional institution-based study. The results obtained revealed that, homesickness, difficulties in socialising, difficulties in managing time and study skill were significant factors influencing adjustment downside.

Awan and Hanif (2021) examined foreign students' status of autonomy, environmental mastery, personal growth, positive relations, and purpose in life, and the association of all these with using the library as a third/community place. The study results showed that environmental mastery influences social adjustments, and that frequency of library visits leads to acceptance among students. Mustafa et al. (2020) modelled a study on the relationship between psychological wellbeing and academic achievement among university students. The results of the study showed that there is a positive and significant relationship between the subcomponents of psychological well-being used in the study and academic achievement. More so, the findings showed that environmental mastery, positive relationship, personal growth, and acceptance jointly predict academic performance among university students. The study did not show whether there are other factors other than the identified factors that may have contributed to the findings Yousef, et al (2020) carried out a study on the mediating role of self-efficacy on social adjustment and hope on the educational well-being of students. The result of the study showed that a significant correlation exists between social adjustment and educational wellbeing. Similarly, self-efficacy as a mediator variable showed a positive relationship between social adjustment, hope and educational wellbeing.

Abdul, et al (2014) examined the role of social support in the predictive relationship between psychological adjustment and academic performance among international students. The findings of the study showed that there is a significant predictive effect of cognitive adjustment on academic performance. Similarly, variables such as family, friends, and lecturers support were found to strongly predict the relationship between affective adjustment and academic performance among international students. Grera et al. (2022) examined the impact of psychological well-being, social adjustment, and social responsibility as predictors of achievement motivation among Arab postgraduate students in Malaysia. The findings of the study revealed that students from Syria, Yemen and Libya differ significant in terms of psychological wellbeing, social adjustment, and achievement motivation.

Similarly, other studies have also shown that the relationship between psychological wellbeing and adjustment is not positive(Ostrove & Long, 2007; Wintre et al., 2011; Thomas, et al, 2019; Credé and Niehorster, 2012; Padgett, et al, 2012; Abdullah, et al 2009). In a study by Thomas, et al (2019), the result of the study showed that . However , these studies are few, but their findings have raised issues of debate as to whether such finding can be true or not. This research study is therefore necessary in that it will be the first study in modelling psychological wellbeing and adjustment of students in the Nigeria context. It will close the empirical gaps hat previous inconsistencies have created in findings and help Nigeria administrators and policies understand what affects the adjustments of the learners.
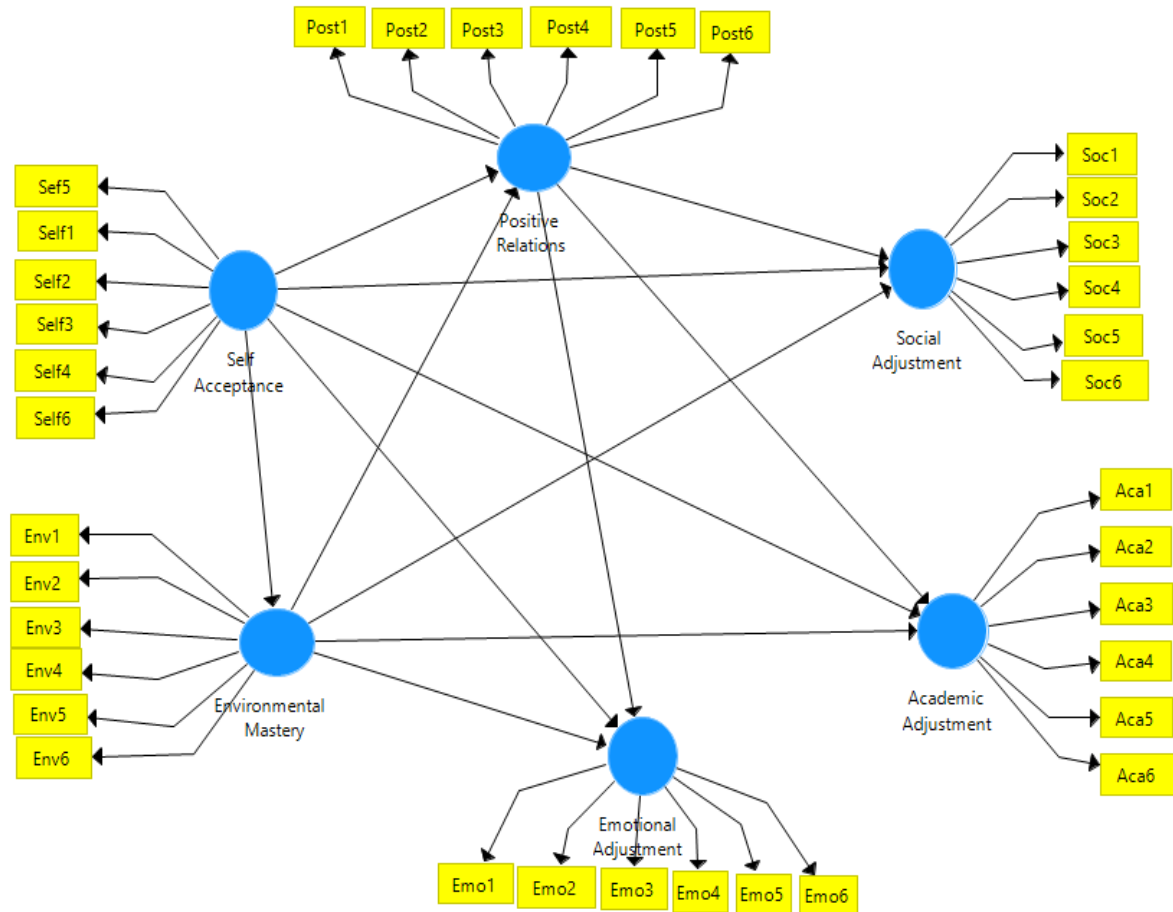
Figure 1. Conceptual Framework and hypothesized relations among variables.

Methodology

Research design and section of participants

The study adopted a quantitative approach with a cross-sectional survey as the research design for the study. The population of the study was made up of 7,802 first-year students at two public universities in Cross River State. The study adopted a cluster sampling technique based on how these two schools are located. A total of 20% was applied to determine the total number of participants that were selected for the study. Custer 1-University of Calabar (N=4382, n=876) while cluster 2-University of Cross River State (N=3420, n=684). The total number of participants selected for the study was 1,560 first-year students. The selection of these students followed a random approach, where the balloting method was option to select the students from the population of the study. The balloting was done with replacement to give each respondent an equal opportunity to be represented in the study. This was done to select the total number of students used in the study. Out of the 1560 respondents

selected for the study, 787 (50.45%) were males while 773(49.55%) were females. More so, 457(29.29%) were below the age of 20, 721(46.22%) were within 20-30yrs and 422(27.05%) were within the age of 31-above yrs. Similarly , 879 representing 56.34% were from urban centres while 681 representing 43.65% were from rural areas.

Instrumentation

The instrument used for data collection was a questionnaire developed by the researchers. The instrument titled 'Psychological Wellbeing and Adjustment Scale (PWAS) were divided into three sections. The development of the instrument was based on the knowledge of the constructs obtained by the researchers, literature reviews and group discussions that were carried out at various times, together with experts' opinions on what should constitute the measures of the constructs. The instrument was divided into three sections. Section A was designed to provide information on the demographic characteristics of the respondents,

such as gender, age, and occupation of parents. Section B and C were for psychological wellbeing and adjustment tendencies of students.

Psychological wellbeing scale (PWS)
The researchers developed the psychological wellbeing scale due to its nonexistence in the context of the area that this study was carried out. Three measures of psychological wellbeing such as environmental mastery . self-acceptance and positive relations (See Ryff, 1989) were considered for this study. The measure was developed with eighteen items. Each of the three variables was measured with six items: environmental mastery (n=6), self-acceptance (n=6) and positive relations (n=6). The fifteen items were placed in a continuous six-point Likert Scale of Very Strongly Agree (VSA), Strongly Agree(SA), Agree(A), Disagree(D), Strongly Disagree (SD) and very Strongly Disagree(VSD). Environmental mastery has sample items such as: ' I understand the school environment very well'. I know where to attend lectures'; ' I do not have difficulties in locating my venue for classes' among others. The Self-acceptance has sample items such as : ' I do not feel bad about myself'; I am happy with the way I look'; ' I am not worried with my body shape among other items. For positive relations , sample items include' ' I relate well my colleagues ' , I don't have problem with speaking with my friends'; I join my friends in having charts in school among other items . The development of items for this scale is by no means a measure of invalidating existing scales for this construct.

Adjustment tendencies
The adjustment tendencies of transiting students were measured using the *Student Adjustment to College Questionnaire* (SACQ), developed by Baker & Siryk (1984). The SACQ as developed was made up of 67 items on a 9-point Likert Scale ranging from 1-9(does not apply to me at all to apply me). The scale was adjusted to have high psychometric properties. However , the context with which these ,measures were developed is quite different from where this study was carried out. Thus , an adjustment was made to the number of items that were used as well as the range of response options provided. The new SACQ was made up of three sub variables which are social adjustment , academic and emotional adjustment in the new six (6) items were selected for each of the sub dimension due to the peculiarities of the participants that the instrument was applied to. That is social adjustment (n=6), academic

adjustment (n=6) and emotional adjustment (n=6). The Eighteen items were placed in a continuous six-point Likert Scale of Very Strongly Agree (VSA), Strongly Agree(SA), Agree(A), Disagree(D), Strongly Disagree (SD) and very Strongly Disagree(VSD). The sample items for social adjustment include : ' I participate in group work with my colleague ' I ask and answer questions in class , I feel like been always on my own , ' I have no pleasure in engaging in any class interaction'. For academic adjustment : ' I attend classes no matter the pressure', I do my assignments even if there are so many', ' I sometimes get tired of the workload in my department 'among others. other items in the emotional adjustment perspective are : ' I sometimes get easily so worried about what I am going through in school' , ' I easily feel like giving up on my studies', ' I keep myself moving no matter what happens in my life ' among others.

Validation process
The content and construct validities of the scale was established using quantitative approach. Both instruments, the psychological wellbeing scale (PWS) and the Student Adjustment to College Questionnaire (SACQ), were subjected first to face and content validation. The validation was done using nine experts drawn from three professional areas: educational psychology (n = 4), guidance and counselling (n = 3), and measurement and evaluation (n = 2). Each of the experts was a specialist that have spent more than10 years as professors in his/her field. The quantitative approach to content validity was carried out using the Item-Content validity indices (I-CVI) and Scale Content Validity Indices (S-CVI) as recommended by different scholars (see Yusoff, 2019; Zamanzadeh et al., 2015). Three criterion for this exercise were relevance , suitability and clarity. For the psychological wellbeing scale, the I-CVI for self-acceptance ranged from 0.78 to 0.89; for environmental mastery, it ranged from 0.75-0.90; and for positive relations, it ranged from 0.79 to 0.95. Similarly, the scale-content validity indices (S-CVI) ranged from 0.88 to 0.95. The average proportion of items considered relevant for the three scales is 0.89. This implies that on aggregate, 89.0% of the validators considered that the items in the PWS was relevant, suitable and clear for the study. This range of values obtained were sufficient to establish content validity for both instruments (see Lynn, 1986; Yusof, 2019). The approach was adopted for the SCAQ. The Item-Content Validity Indices for social adjustment ranged from 0.77

to 0.87, the I-CVI for academic adjustment ranged from 0.89 to 0.96, and the I-CVI for emotional adjustment ranged from 0.79 to 0.88. The scale-content validity indices (SCVI) for the SCAQ ranged from 0.88–0.94. The average proportion of items considered relevant for the three scales is 0.85. This implies that on aggregate , 85.0 % of the validators considered that the items in the SCAQ was relevant, suitable and clear for the study.

A pilot study was further carried out to determine the reliability and construct validity of the two scales, PWS and SCAQ. The instrument was made up of 36 items measuring both constructs. Exploratory Factor Analysis (EFA) was carried out using 300 students who were not part of the main study from universities that were not participating in the study. The copies were distributed, coded and analysed for dimensionality checks. The analysis of the EFA was done using the principal axis factor (PAF) with promax as the rotation option, and all factors that were less than 0.50 were suppressed. The extraction criteria was the eigen value greater than one (1). SPSS and Jamovi were used for the analysis to ascertain the factors and the internal consistencies of the scales using Cronbach alpha, Omega, and composite reliability techniques. The outcome of the results is presented in the subsections below. However, the result was suitable for the study.

Procedure for data collection
The data was collected in phases. First, the researchers sent an email to students, inviting them to participate in the study. The email contained the goals of the study, the benefits of the study to the students, and the measures for privacy and confidentiality of the data provided by the respondents. The students who were willing to participate in the study sent their consent. Only 121 students refused to give consent to the study, and they were removed from it immediately. The questionnaires were administered to 1435 students, and all instruments administered in various classes were successfully retrieved.

Findings
Exploratory Factor Analysis
The results of the exploratory factor analysis (EFA) for psychological wellbeing (PWS) produced a KMO value of .819 with Bartlett's test of sphericity, $\chi^2(153) = 16774.258$, $p < .001$. Though these values showed that the sample size was adequate for EFA to be carried out, some items were dysfunctional, such as item 6 (self-acceptance), item 2, item 4, item 6 (environmental mastery), and items 4, 5, and 6 (personal relations) for loading lower than 0.5; sole loading and cross loading on multiple factors However, three factors whose eigen values were greater than 1, with a total variance explained at 54.24%, were retained. Each of the variable percentage contributions showed that for positive relations (29.17%), self-acceptance (20.20%), and environmental mastery (11.83%). This is an indication that the PWS is a multidimensional construct with different sub variables.

For the adjustment tendencies, the result of the EFA produced a KMO value of .884 with a significant Bartlett's test of sphericity: $\chi^2(120) = 35674.317$, $p < .01$. A total of three factors were extracted after preliminary screening of factors that cross-loaded with multiple factors; factors with single loading were deleted from the data set. Two items were deleted from the data set due to cross-loading and factor loading less than 0.50. Cumulatively, the variable accounted for 45.711% of the total variance. Assessment of each of the construct variance explained showed that social adjustment (8.07%), academic adjustment (26.94%), and emotional adjustment (10.70%). A summary of the factors and their item loadings are presented in Tables 1 and 2.

Table 1. Exploratory factor analysis of psychological wellbeing variables and reliability coefficients using Cronbach, omega and Composite reliability score.

Items	Mean	Std Dev	Factor loadings	Reliabilities
Positive relations				
PR1	2.3803	.48562	.857	α=0.736
PR 3	2.3919	.48833	.831	ɯ =0.747
PR 2	2.3996	.48998	.784	CR=0.967
Environmental mastery				

ENM 3	2.5508	.67923	.765	α=0.875
ENM 5	2.5740	.72664	.629	ɯ =0.876
ENM 1	2.7426	.78255	.760	CR=0.970
Self-acceptance				
SEA5	2.4852	.49994	.588	α= 0.813
SEA 3	2.4356	.49600	.705	ɯ =0.816
SEA 2	2.3835	.48640	.771	CR=0.821
SEA 4	2.4556	.49818	.792	
SEA 1	2.4363	.49608	.765	

α=Cronbach alpha reliability, ɯ=MacDonalds Omega reliability estimate, CR=Composite reliability

Table 2. Exploratory factor analysis of adjustment tendencies variables and reliability coefficients using Cronbach, omega and Composite reliability score.

Items	Mean	Std Dev	Factor loadings	Reliabilities
Social adjustment				
Soc5	2.3662	.48191	.849	α=0.851
Soc 2	2.4788	.49971	.966	ɯ =0.853
Soc 6	2.4247	.49446	.920	CR=0.821
Soc 4	2.3095	.46245	.723	
Soc 1	2.4382	.49633	.902	
Soc 3	2.4440	.49702	.906	
Academic Adjustment				
Aca 4	2.1621	.7852	.970	
Aca 3	2.0882	.84273	.708	α=0.814
Aca 2	2.4421	.52576	.969	ɯ =0.825
Aca 5	2.4350	.52493	.961	CR= 0.830
Aca 6	2.3790	.51491	.921	
Emotional adjustment				
Emo 6	2.4395	.52669	.911	α= 0.935
Emo 5	2.0882	.84273	.887	ɯ =0.947
Emo 4	2.4421	.52576	.968	CR=0.959
Emo 3	2.4350	.52493	.951	
Emo 2	2.3790	.51491	.890	

α=Cronbach alpha reliability, ɯ=MacDonalds Omega reliability estimate , CR=Composite reliability

Convergent and discriminant validity

The convergent and discriminant validities of the scale were established using the Fornell-Larcker criterion. The Fornell-Larcker criterion (1981) uses the average variance extracted (AVE) per factor to determine the convergent validity. The criterion is that where the AVE is higher or greater than 0.50, convergent validity exists (Eriksson et al., 2019; Lee, 2019). In this study, the PWS has an AVE value of 0.711–0.855, which is higher than the 0.50 kept as the threshold. Therefore, it is statistically correct to say that the 11 items retained, are theoretically related to the construct that they measure. Similarly, for the Adjustment Tendencies Scale, the result in Table 2 showed that the 18 items, although two (2) were deleted, measured the construct, and had an

AVE of 0.721–0.798, which is greater than the 0.50 that is kept as the threshold. These imply that all the items when converged measure the same construct, even though it is multidimensional **(**Hair et al., 2021; Lam, 2012**).**

More so, discriminant validity was performed for the PWS and SCAQ even though both are factors with multidimensional subscales. The result in Table 3 showed the values in bold letters for discriminant validity. According to the Fornell-Larcker criterion as explained by Ab Hamid et al (2017); Hilkenmeier et al.

(2020), where the squared average variance (AVE) extracted for each factor is greater than their correlation with other factors, then , discriminant validity is achieved. The result in Table 3 showed that all the bolded values (squared AVE) of the six latent factors are greater than the correlation coefficients and their correlations with other factors. Therefore, it is true that variables that are not related theoretically are not related when measuring various constructs and used together. Therefore, discriminate validity is achieved.

Table 3: Convergent and discriminate validities of the measures of the study

Variables	AVE	CR	1	2	3	4	5	6
Positive relations (1)	0.855	0.967	0.731					
Environmental Mastery(2)	0.868	0.970	0.088	0.753				
Self-acceptance (3)	0.711	0.821	-0.225	-0.225	0.510			
Academic adjustment (4)	0.721	0.830	0.174	0.275	0.155	0.519		
Social adjustment(5)	0.740	0.934	0.618	0.3	-0.141	0.360	0.548	
Emotional adjustment()6	0.798	0.959	0.644	0.327	-0.174	0.389	0.516	0.636

The bolded values in the diagonal are Fornell-Larcker Discriminant validity coefficients.
The values below the diagonals are the correlation coefficients of the construct. The values under CR=composite reliability coefficients

Hypothesis one

The first research question sought to determine whether a direct and significant effect exists for environmental mastery (ENM), positive relation (PR), and self-acceptance (SEA) on social adjustment (SA), academic adjustment (AA), and emotional adjustment (EA) among students. The results in **Table 4** showed that for a negative effect of environmental mastery (ENM) on academic adjustment (AA) (β = -0.135, 95% CI [–0.173, –0.092], p .000), emotional adjustment (EA) (β = –0.239, 95% CI [–0.239, –0.179], p .001), and social adjustment (SA) (β = -0.063, 95% CI [–0.088, –.0038], p .000). Thus, the direct of environmental mastery on academic adjustment , social adjustment , and emotional adjustment was negatively significant. Thus, the hypothesis is rejected.

Similarly, the results (See Table 4) showed that for positive relations (PR) on the three dimensions of adjustment, a negative non-direct effect only exists for PR on academic adjustment, AA (β= -0.024, 95%CI{–

0.065, –.0.018], p >.05), but not for PR on emotional adjustment, EA (β = -0.248, 95%*CI*[0.192,.0.305], p< .000), and for PR on social adjustment, SA (β = 0.082, 95%CI [–0.06, –.0.103], p < .000). This showed that there is a direct significant negative effect of personal relations on emotional adjustment , and social adjustment. Thus , the hypothesis was rejected for personal relations on emotional adjustment and social adjustment but not for academic adjustment.

Furthermore, for self-acceptance on the three dimensions of adjustment and on environmental mastery and positive relations among students, the results in Table 4 showed that for self-acceptance (SEA) on academic adjustment, AA (β = 0.607, 95%CI [0.566, 0.646], p.000), for self-acceptance (SEA) on emotional adjustment, EA (β = 0.777, 95%CI[0.129, 0.233], p.000), self-acceptance on environmental master. Thus, a positive direct effect exist between self-acceptance and adjustment from three dimensions assessed. Therefore, it can be said that the null hypothesis is rejected for self-acceptance in academic, social, and emotional adjustment.

Hypothesis two

There is no direct effect of environmental mastery on positive relation, self-acceptance on environmental

mastery and self-acceptance on positive relations among students. The results (See Table 4) showed that for environmental mastery on positive relation (β = -0.239, 95%*CI*[–0.288, –.0.179], *p* < .05), for self-acceptance on environmental mastery(β = -0.142, 95%*CI*[–0.222, –0.006], *p* < .05) and for self-acceptance on Positive relations(β = 0.390, 95%*CI*[0.344, 0.435], *p* < .05).

The result showed that the direct effect of environmental mastery on positive relation was positive , self-acceptance on environmental mastery was negative and self-acceptance on positive relations was positive and significant. Hence , the hypothesis is rejected.

Table 4: Direct effect

Hypothesis	β	(M)	STDEV	t (β/STDEV)	Confidence interval		P-val
ENM -> AA	-0.135**	-0.135	0.022	6.145	-0.173	-0.092	0.000
ENM -> EA	-0.237**	-0.237	0.029	8.198	-0.288	-0.179	0.000
ENM -> PR	0.208**	0.208	0.027	7.779	0.157	0.259	0.000
ENM -> SA	-0.063**	-0.063	0.014	4.498	-0.088	-0.038	0.000
PR -> AA	-0.024	-0.024	0.021	1.14	-0.065	0.018	0.254
PR -> EA	0.248**	0.248	0.029	8.634	0.192	0.305	0.000
PR -> SA	0.182**	0.182	0.011	7.437	0.06	0.103	0.000
SEA -> AA	0.607**	0.607	0.020	30.243	0.566	0.646	0.000
SEA -> EA	0.177**	0.177	0.024	7.239	0.129	0.223	0.000
SEA -> ENM	-0.142**	-0.142	0.056	2.537	-0.222	-0.006	0.011
SEA -> PR	0.390**	0.39	0.023	17.036	0.344	0.435	0.000
SEA -> SA	0.877**	0.877	0.009	103.156	0.861	0.894	0.000

** = significant at .05 level

ENM=Environmental mastery , PR=personal relations , SEA=Self-acceptance , AA=academic adjustment , SA=social adjustment and EA=emotional adjustment

Hypothesis three

There is no significant the relationship between self-acceptance and academic adjustment when mediated by environmental mastery and Positive relations. The relationship between self-acceptance and emotional adjustment when mediated by environmental mastery and Positive relations is not significant and the relationship between self-acceptance and social adjustment when mediated by environmental mastery and Positive relations is not significant. Mediation analysis was carried to test this hypothesis and the result as presented in Table 5 showed that the indirect effect of self-acceptance and academic adjustment as mediated by environmental mastery(β = 0.019, t-value=2.596 *p* < .05) and self-acceptance and academic adjustment as mediated by personal relations(β = - 0.009, t-value=1.13, *p* > .05). Similarly, for the indirect effect

self-acceptance and emotional adjustment when mediated by environmental mastery(β = 0.034, t-value=3.049, *p*<.05) and Positive relations(β = 0.097, t-value=7.4455 *p* < .05). the result for relationship between self-acceptance and social adjustment when mediated by environmental mastery showed that (β = 0.009, t-value=2.143, *p*<.05) and for Positive relations(β = 0.032, t-value=6.546, *p*<.05). This showed that the hypothesis was supported for the indirect effect of self-acceptance and academic adjustment when mediated by environmental mastery but rejected for the relationship between self-acceptance and academic adjustment when mediated by Positive relations. Similarly, the hypothesis was supported for the relationship between self-acceptance and emotional adjustment when mediated by environmental mastery and Positive relations. Finally , the hypothesis of the indirect effect of self-acceptance and social adjustment when mediated by environmental mastery and Positive relations was supported.

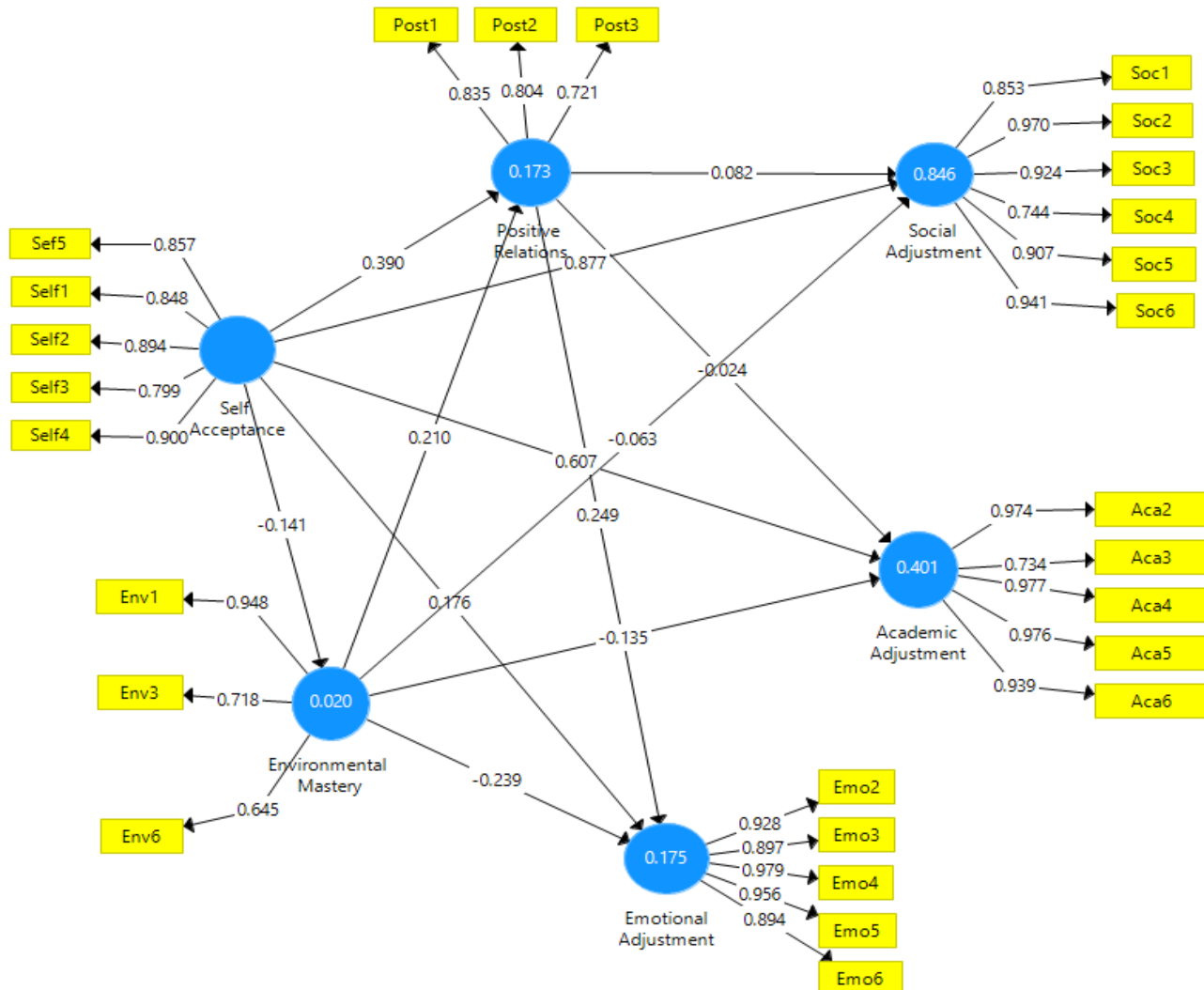Table 5: Mediation effect of Environmental mastery and Positive relations

Hypothesis	β	(M)	STDEV	t (β/STDEV)	Confidence interval	P-val

SEA -> ENM -> AA	0.019**	0.02	0.007	2.597	0.002	0.033	0.009
ENM -> PR -> AA	-0.005	-0.005	0.004	1.13	-0.014	0.003	0.259
SEA -> PR -> AA	-0.009	-0.009	0.008	1.135	-0.026	0.007	0.256
SEA -> ENM -> EA	0.034**	0.033	0.011	3.049	0.004	0.048	0.002
ENM -> PR -> EA	0.052**	0.052	0.009	5.871	0.036	0.07	0.000
SEA -> PR -> EA	0.097**	0.097	0.013	7.455	0.073	0.124	0.000
SEA -> ENM -> PR	-0.03**	-0.029	0.01	2.925	-0.045	-0.007	0.003
SEA -> ENM -> SA	0.009**	0.009	0.004	2.143	0.001	0.018	0.032
ENM -> PR -> SA	0.017**	0.017	0.003	5.729	0.012	0.023	0.000
SEA -> PR -> SA	0.032**	0.032	0.005	6.546	0.023	0.042	0.000

** = significant at .05 level

ENM=Environmental mastery , PR=personal relations , SEA=Self-acceptance , AA=academic adjustment , SA=social adjustment and EA=emotional adjustment

The result in Table 5 also revealed that for the indirect effect of environmental mastery on academic adjustment when mediated by Positive relations (β = - 0.005, t-value=1.13, p > .05). For the indirect effect of environmental mastery on emotional adjustment when

mediated by Positive relations(β = 0.052, t-value=5.871, $p < .05$) and finally, the indirect effect of environmental mastery on social adjustment when mediated by Positive relations (β = 0.017, t-value=5.729, $p > .05$). This implies that the hypothesis that the indirect effect of environmental mastery on academic, emotional and academic Fig 2. Fitted structural equation model showing the direct and mediation effects of SEA, PR, ENM, AA, SA and EM adjustment is not significant when mediated by Positive relations is supported only for the environmental mastery on academic adjustment when mediated by Positive relations.

Hypothesis four

There is no composite contribution of self-acceptance ,positive relations and environmental mastery on academic adjustment , social and emotional adjustment. The result in Table 6 showed that for the contributive effect of self-acceptance ,positive relations, and environmental mastery on academic adjustment, ($R^2 = .762$, F=1525.636*, p<.05), which implies that the variation in academic adjustment can be explained using 76.2% contribution of the independent variables. Similarly, for composite contribution of self-acceptance , positive relations and environmental mastery on social adjustment, ($R^2 = 0.308$, F= 212.496 $p < .05$) which implies that the variations in social adjustment among the students is explained by 30.8% of joint contribution of the independent variables(self-acceptance ,Positive relations and environmental mastery) and for the joint contribution of self-acceptance ,positive relations and environmental mastery on emotional adjustment, ($R^2 = 0.179$, F= 103.923*, $p < .05$)which implies that the variation in emotional adjustment is explained using 17.9% joint contribution of self-acceptance ,Positive relations and environmental mastery. Hence, the hypothesis that there is no composite contribution of self-acceptance ,positive relations and environmental mastery on academic adjustment , social and emotional adjustment was rejected for all the dimensions.

Table 6: Multiple regression analysis of the contributive effect of predictor variables on the academic, social and emotional adjustment

Dependent variables	Source of variation	SS	df	MS	f-ratio	Sig	Other statistics
Academic adjustment	Regression	4584.020	3	1528.007	1525.636*	.000[b]	R=.873[a] R^2=.762
	Residual	1433.223	1431	1.002			Adj R^2=.761
	Total	6017.243	1434				Std Error =1.00078
Social adjustment	Regression	2969.208	3	989.736	212.496*	.000[b]	R=.555[a] R^2=.308
	Residual	6665.123	1431	4.658			Adj. R^2=.307
	Total	9634.332	1434				Std Error =2.15816
Emotional adjustment	Regression	784.835	3	261.612	103.923*	.000[b]	R=.423[a] R^2=.179
	Residual	3602.333	1431	2.517			Adj. R^2=.177
	Total	4387.168	1434				Std Error =1.58662

The result in hypothesis one that sought to examine directs significant effect of environmental mastery(ENM), positive relation(PR) and self-acceptance(SEA) on social adjustment (SA), academic adjustment(AA) and emotional adjustment(EA) among students showed that direct significant exist between environmental mastery(ENM), positive relation(PR) and self-acceptance(SEA) on social adjustment (SA), academic adjustment(AA) and emotional adjustment(EA) except for personal relation (PR) that has no direct effect on academic adjustment. This is not surprising because previous studies have already established that environmental mastery relates with the adjustment of the students especially , the new students

in a school setting(Van, et al, 2017). The findings of th study could be since where a student has mastery of the physical location of the school in terms of identifying where and where to do registration, among other things. This to a great extent helps in reducing the anxiety that is associated with coming to an environment that is new. The findings of the study were in line with that of researchers that attempted to examine psychological wellbeing indices and adjustment of fresh students (Ostrove & Long, 2007; Wintre et al., 2011).

Another significant direct effect was the relations between positive relations on emotional adjustment and social adjustment but not for academic adjustment. The result implies that students who have positive relationship capacity can adjust to social and emotional demands. This could be due to the fact that for a student to adjust socially, such must form the capacity to get along with others, take active part in class interactions, answer and ask questions and be able to make friends. This is a function of the Positive relationships that the learner can build. The findings collaborate with earlier studies carried out that asserts that persona relations relates with adjustment tendencies of learners (Grera et al, 2022 ; Abdullah, et al, 2009). The study results also showed that persona relations have a direct effect on emotional adjustment. This could simply be due to that relating with others may help the students understand that they are not the only one's going through such challenges in school. Thus , what will have been frustrating and depressing can be resolved to help the learner become more focused and avoid moods and dispositions that may affect his/her academic activities. The result also collaborates with earlier researchers' findings that have noted that personal relation is important in the transiting process of the learner to higher institutions (Abdul, et al, 2014, Ogunsola, Osuolale, & Ojo, 2014)

The findings of the study also revealed that self-acceptance has a direct effect on academic, social, and emotional adjustment of the learners. The findings align with that outcome of earlier researchers(Pasha, & Munaf, 2013, Paradise, & Kernis, 2005). This could be due to the fact that where students accepts themselves irrespective of whatever deformity , limitation or condition associated with them can value who they are in relations to others and do what they are supposed to do. They see themselves competent and capable in handling whatever situation that presents itself in order to maximize their environment. More so, the individual goes beyond the physical to the inner psychological person to develop confidence that a take decision that will facilitate their goals attainments. The evidence of the second hypothesis which basically was on the mediation effect of environmental mastery in the relationship between self-acceptance and academic adjustment was upheld , For the relationship between self-acceptance and academic adjustment when mediated by Positive relations, the hypothesis was rejected and   for the relationship between self-acceptance and emotional adjustment when mediated by environmental mastery and Positive relations was rejected . Finally , the hypothesis of the indirect effect of self-acceptance and social adjustment when mediated by environmental mastery and positive relations was rejected . This could be since self-acceptance without knowledge of the environment may not help the learner adjust well to the academic demands in the school. The earner as pointed out earlier must be able to know the location of the offices as well as venues of the class so as not to feel frustrated looking for classes when others are learning. Thus, when the students develop self-acceptance spirits, they need to understand where they are in order for them to meet up with the requirement in the class the intricacy of the course loads, they are to offer as well as the demands of the teachers in schools. The findings of the study align with that previous studies that states that a partial mediation effect exist between psychological wellbeing and adjustment in school (Davida and Nit, 2014).

The study results also showed that relationship between self-acceptance and academic adjustment when mediated by Positive relations, the hypothesis was rejected. This could be due to the fact that Positive relations plays a strong role in adolescents' development. The relationship environment that the students create helps in academic adjustment. They interact among themselves even though they must accept whatever condition they have in to cope with the demands in the class. The results collaborate with that Raymond and Chi-K (2020) that carried out a study on psychological wellbeing among Chinese college students. The role of positive thinking and school adjustment. The study of the findings showed that positive thinking, self-acceptance jointly predict adjustment to school in all ramifications. The study also aligns with other previous studies that stated that even

though a strong relationship exists between self-acceptance and academic adjustment, other factors also contribute in explaining the variations in academic adjustments among fresh students. The evidence of the hypothesis also showed that the relationship between self-acceptance and social adjustment when mediated by environmental mastery was rejected. This showed that in the presence of environmental mastery, the students with self-acceptance can adjust adequate to the social demands of the school. That is , it is not enough for the learner to accept his/herself to function well socially in the environment, but also require that the students master the geography of the school as well as the location of various areas of importance in order to cope well in the social environment. The findings of the study align with the findings of that of previous researcher that have stated that in academic and social adjustment of students, the knowledge of the environment is important **(** Friedlander, et al, 2007, Burris, et al , 2009**)**

Hypothesis three result showed that there is a composite contribution of self-acceptance ,Positive relations and environmental mastery on academic adjustment , social and emotional adjustment was rejected for all the dimensions. That is s self-acceptance ,Positive relations and environmental mastery when taken together influences each of the dimension of adjustment tendencies in terms of social, academic, and emotional adjustment. Although , the percentage contribution differs, the result showed that a student who can accept him/herself, develop positive relation skills as well as master the environment in the school, can adjust academically. That the students will be able to cope with the demands of the class work and other academic responsibilities that will be assigned to him or her. Similarly, the variables when combined showed that they influence social adjustments . The findings were in line with that of Ababu, et al (2018) that examined prevalence of adjustment problem and its predictors among first-year undergraduate students in Ethiopian University: A Cross-Sectional Institution Based Study. The results obtained revealed that, homesickness , difficulties in socializing, positive relations, environmental mastery , difficulties in managing time and study skill were significant factors influencing adjustment in school.

Limitations and future research implications

This study like any other study is not without some challenges or limitations. The study was a cross sectional study that utilizes individual in two school withing a specified academic section . this implies that if the care is not taken, the generalization of the result will be faulty. For the example, the cross-sectional design adopted for this study may not be able to state the connection between temperamental mastery, persona relations and self-acceptance and the sub scales of the adjustment's tendencies among students in the long run. What the data provides now may change drastically in the future. Thus , it is better for longitudinal studies to be carried out to examine such links. However, this study is vital in providing information for such studies. Similarly , the scope of this study does not provide a basis for making a further study of the demographic characteristics of the respondents in terms of how they adjust to social, academic, and emotional situations. It is not out of place therefore that a multigroup analysis be carried out in another study using structural equation modelling (SEM) to provide solution to these limitations. Finally , the outcome of this study is applied in the Nigeria context and may differ when such are applied in another context. More so, only two universities were used in the study, and such may not be used to generalize to entire Nigeria setting with over 45 public universities. It is important that such findings should be revalidated to provide a basis for externa generalization.

Conclusion

The study examined the mediation effect of psychological wellbeing with three sub variables such as environmental mastery, self-acceptance, and positive relations on adjustments with three sub dimensions such as academic , social and emotional adjustment using Partial Least Square Structural Equation Model (PL-SEM). The study showed that there exists a direct effect of Environmental mastery (ENM) on academic adjustment, (AA), social adjustment (SA) and emotional adjustment , (EA) . More so persona relations (PR) have a direct effect on emotional adjustment and social adjustment but not for academic adjustment. The result also showed that a direct effect occurs for self-acceptance(SEA) on academic , social, and emotional adjustment(AA,SA and EA). Although , the direct effect of self-acceptance(SEA) on environmental mastery (ENM) was negative. The result also showed a significant direct effect occurred for environmental mastery(ENM) on positive relation(PR), self-acceptance(SEA) on environmental mastery(ENM) and self-acceptance(SEA) on positive relations(PR). More so . the hypothesis for the indirect effect of self-acceptance(SEA) on academic adjustment(AA) when mediated by environmental mastery(ENM) was

supported but rejected for the relationship between self-acceptance and academic adjustment when mediated by positive relations. Similarly, the hypothesis was supported for the relationship between self-acceptance and emotional adjustment when mediated by environmental mastery and positive relations. Finally , the hypothesis of the indirect effect of self-acceptance and social adjustment when mediated by environmental mastery and Positive relations was supported. This implies that the hypothesis that the indirect effect of environmental mastery on academic, emotional, and academic adjustment is not significant when mediated by positive relations. Finally , the result showed that self-acceptance , environmental mastery, and personal relation jointly contribute to the variations in the social academic and emotional adjustment.

The outcome of this work will help freshers to adjust adequately to the new environment and other demands that are placed on them even though the study revealed some negative predictors. The study will help psychologist and school counsellors to develop some measures t ensure that what causes maladjustment among students is reduced. Such programmes might be to ensure that orientation programmes are organized, and counselling centres are funded for such services to frequent in the school. Students should be encouraged to join cubs such as JETs, academic and religious clubs that will help them understand themselves and obtain information about the school.

Conflict of interest
The researchers have no conflict of interest to declare.

References
Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series*, *890*, 12163. https://doi.org/10.1088/1742-6596/890/1/012163

Ababu, Y., Yihunbelay , D and Wondale A. (2018) . Prevalence of Adjustment Problem and Its Predictors among First-Year Undergraduate Students in Ethiopian University: A Cross-Sectional Institution Based Study. https://doi.org/10.1155/2018/5919743

Abdullah, M.C., Elias, H., Uli, J., & Mahyrudin, R. (2009).Relationship between coping and university adjustment and academic achievement amongst first year undergraduates in a Malaysian public university. *International Journal of Arts and Sciences,* 3 (11), 379 − 392. Available at http://a.xueshu.baidu.com/

Adlaf, E. M., Gliksman, L., Demers, A., & Newton-Taylor, B. (2001). The Prevalence of Elevated Psychological Distress amongst Canadian Undergraduates. Journal of American College Health, 50, 67-72. https://doi.org/10.1080/07448480109596009

Agrawal, B (2015) The influence of variables such as self-esteem, psychological well-being on performance. Ilkogretim Online - Elementary Education Online, 19 (3) 4778-4797. doi: 10.17051/ilkonline.2020.03.735632.

Ahmet, C., Senell P. and Yegan, P. (2021) Eleven types of adjustment problems and psychological well-being among international students. Eurasian Journal of Educational Research, 91, 1-20. Available at DOI: 10.14689/ejer.2021.91.1

Al-Hendawi, M.; Kliewer, W.; Hussein, E. School Adjustment and Academic Success in Qatari Secondary School Students: Associations with Well-Being and Emotional and Behavioral Problems. Educ. Sci. 2022, 12, 934. https://doi.org/10.3390/educsci12120934

Al-Mseidin1i, K., Omar-Fauzee2, M and Kaur, A. (2017) The relationship between social and academic adjustment among secondary females students in Jordan Amholt, T., Dammeyer, J., Carter, R., and Niclasen, J. (2020,)PsychologicalWell-Being and Academic Achievement among School-Aged Children: A Systematic Review. Child Indic. Res.13, 1523–1548. DOI: 10.1007/s12187-020-09725-9

Anyogo, R. (2021) *Psychological wellbeing and academic adjustment among students. Unpublished M.Ed Works submitted Graduate School, University of Calabar, Calabar.*

Aspelmeier, J. E., Love, M. M., McGill, L. A., Elliott, A. N., & Pierce, T. W. (2012). Self-esteem, locus of control, college adjustment, and GPA among first- and continuing-generation students: A moderator model of generational status. *Research in Higher Education, 53*(7), 755–781. https://doi.org/10.1007/s11162-011-9252-1

Awang, M. M., Kutty, F. M., & Ahmad, A. R. (2014). Perceived Social Support and Well-Being: First-Year Student Experience in University. International Education Studies, 7, 261-270. https://doi.org/10.5539/ies.v7n13p261

Blanco, C., Okuda, M., Wright, C., Hasin, D. S., Grant, B. F., Liu, S., & Wolfson, M. (2008). Mental Health of College Students and Their Non-College Attending Peers.Archives of General Psychiatry, 65, 1429-1437. https://doi.org/10.1001/archpsyc.65.12.1429

Bowman, N. A. (2010). The Development of Psychological Well-Being among First-Ear College Students. Journal of College Student Development, 51, 180-200. https://doi.org/10.1353/csd.0.0118

Burris, J. L., Brechting, E. H., Salsman, J., & Carlson, C. R. (2009). Factors associated with the psychological well-being and distress of university students. *Journal of American college health*, *57*(5), 536-544. DOI: 10.3200/JACH.57.5.536-544

Campbell-Sills, L., & Stein, M. B. (2007). Psychometric Analysis and Refinement of the Conor-Davidson Resilience Scale (CD-RISC): Validation of a 10-Item Measure of Resilience. Journal of Traumatic Stress, 20, 1019-1028. https://doi.org/10.1002/jts.20271

Cooke, R., Bewick, B. M., Barkham, M., Bradley, M., & Audin, K. (2006). Measuring, monitoring and managing the psychological well-being of first year university students. *British Journal of Guidance & Counselling, 34*(4), 505–517. https://doi.org/10.1080/03069880600942624

Credé, M., & Niehorster, S. (2012). Adjustment to college as measured by the Student Adaptation to College Questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review, 24*(1), 133–165. https://doi.org/10.1007/s10648-011-9184-5

David, L.T. and Nita, G.L. (2014) Adjustment to First Year of College—Relations among Self-Perception, Trust, Mastery and Alienation. Procedia—Social and Behavioral Sciences, 127, 139-143. https://doi.org/10.1016/j.sbspro.2014.03.228

De La Barrera, U.; Schoeps, K.; Gil-Gómez, J.A (2019). Montoya-Castilla, I. Predicting adolescent adjustment and well-being: The interplay between socio-emotional and personal factors. Int. J. Environ. Res. Public Health ,16, 4650. DOI: 10.3390/ijerph16234650

Denovan, A., & Macaskill, A. (2013). An Interpretative Phenomenological Analysis of Stress and Coping in First Year Undergraduates. British Educational Research Journal, 39, 1002-1024. https://doi.org/10.1002/berj.3019

Dwyer, A. L., & Cummings, A. L. (2001). Stress, self-efficacy, social support, and coping strategies in university students. *Canadian Journal of Counseling, 35*(3), 208-220. Available at https://psycnet.apa.org/record/2001-07949-002

Eriksson, L. J., Jansson, B., & Sundin, Ö. (2019). Psychometric properties of a Swedish version of the reinforcement sensitivity theory of personality questionnaire. *Nordic Psychology, 71*(2), 134-145. https://doi.org/10.1080/19012276.2018.1516563

Ernest O. and , Fehintola V. (2012) Academic Adjustment: Predictive Influence of Some Psychological Factors among Tertiary Institution Students in Ibadan, Nigeria. Asia Pacific Journal of Educational Perspectives, 8, (1). Available at https://research.lpubatangas.edu.ph/wp-content/uploads/2022/02/APJEAS-2021.8.1.04.pdf

European Journal of Education Studies, 3(2). doi:10.5281/zenodo.260346

Fava, G. A., & Tomba, E. (2009). Increasing Psychological Well-Being and Resilience by Psychotherapeutic Methods. Journal of Personality, 77, 1903-1934. https://doi.org/10.1111/j.1467-6494.2009.00604.x

Fernández, M., Araújo, A., Vacas, C., Almeida, L. and González, M. (2017) Predictors of students' adjustment during transition to university in Spain. *Psicothema. 29, (1), 67-72.* doi: 10.7334/psicothema2016.40

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.2307/3151312

Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social Support, Self-Esteem, and Stress as Predictors of Adjustment to University among First-Year Undergraduates. Journal of College Student Development, 48, 259-274. https://doi.org/10.1353/csd.2007.0024

Fritz, M. V., Chin, D., & DeMarinis, V. (2008). Stressors, anxiety, acculturation and adjustment among international and North American students. *International Journal of Intercultural Relations, 32*(3), 244–259. https://doi.org/10.1016/j.ijintrel.2008.01.001

Glaser, N., Hall, R., & Halperin, S. (2006). Students Supporting Students: The Effects of Peer Mentoring on the Experiences of First Year University Students. Journal of the Australia and New Zealand Student Services Association, 27, 4-19. doi: 10.1016/j.ijintrel.2008.01.001

Grera,M,, Abdallah, S., Abdul Hamed (2022) The impact of psychological well-being, social adjustment, and social responsibility as predictors of achievement motivation among Arab Postgraduate Students in Malaysia. *International Journal of Acdemic Research in Progressive Education and* Students in Malaysia. 11(1), 386-387. http://dx.doi.org/10.6007/IJARPED/v11-i1/11886

Guo, Y., Li, Y., & Ito, N. (2012). Exploring the predicted effect of social networking site use on perceived social capital and psychological well-being of Chinese international students in Japan. *Cyberpsychology, Behavior, and Social Networking, 17*(1), 52-58. DOI: 10.1089/cyber.2012.0537

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage publications. https://doi.org/10.1007/978-3-030-80519-7

Hilkenmeier, F., Bohndick, C., Bohndick, T., & Hilkenmeier, J. (2020). Assessing distinctiveness in multidimensional instruments without access to raw data–A manifest Fornell-Larcker criterion. *Frontiers in Psychology, 11*, 223. https://doi.org/10.3389/fpsyg.2020.00223

Hyun, J., Quinn, B., Madon, T., & Lustig, S. (2007). Mental health need, awareness, and use of counseling services among international graduate students. *Journal of American College Health, 56*(2), 109-118. DOI: 10.3200/JACH.56.2.109-118

Jindal-Snape, D., and Miller, D. J. (2008). A challenge of living? Understanding the psycho-social processes of the child during primary-secondary transition through resilience and self-esteem theories. *Educ. Psychol. Rev.* 20, 217–236. doi: 10.1007/s10648-008-9074-7

Lam, L. W. (2012). Impact of competitiveness on salespeople's commitment and performance. *Journal of Business Research, 65*(9), 1328–1334. https://doi.org/10.1016/j.jbusres.2011.10.026

Lee, D. (2019). The convergent, discriminant, and nomological validity of the depression anxiety stress scales-21 (DASS-21). *Journal of Affective Disorders, 259*, 136-142. https://doi.org/10.1016/j.jad.2019.06.036

Longobardi, C., Badenes-Ribera, L., Gastaldi, F. G. M., and Prino, L. E. (2019a). The student-teacher relationship quality in children with selective mutism. *Psychol. Sch.* 56, 32–41. doi: 10.1002/pits.22175

Longobardi, C., Gastaldi, F. G. M., Prino, L. E., Pasta, T., and Settanni, M. (2016a). Examining student-teacher relationship from students' point of view: Italian adaptation and validation of the young children's appraisal of teacher support questionnaire. *Open Psychol. J.* 9, 176–187. doi: 10.2174/1874350101609010176

Longobardi, C., Iotti, N. O., Jungert, T., and Settanni, M. (2018a). Student-teacher relationships and bullying: the role of student social status. *J. Adolesc.* 63, 1–10. doi: 10.1016/j.adolescence.2017.12.001

Longobardi, C., Pasta, T., Marengo, D., Prino, L. E., and Settanni, M. (2018b). Measuring quality of classroom interactions in Italian primary school: structural validity of the CLASS K−3. *J. Exp. Educ.* 1–20. doi: 10.1080/00220973.2018.1533795

Longobardi, C., Prino, L. E., Fabris, M. A., and Settanni, M. (2017). School violence in two Mediterranean countries: Italy and Albania. *Child Youth Serv. Rev.* 82, 254–261. doi: 10.1016/j.childyouth.2017.09.037

Longobardi, C., Prino, L. E., Fabris, M. A., and Settanni, M. (2019b). Violence in school: an investigation of physical, psychological, and sexual victimization reported by Italian adolescents. *J. Sch. Violence* 18, 49–61. doi: 10.1080/15388220.2017.1387128

Longobardi, C., Prino, L. E., Marengo, D., and Settanni, M. (2016b). Student-teacher relationships as a protective factor for school adjustment during the transition from middle to high school. *Front. Psychol.* 7:1988. doi: 10.3389/fpsyg.2016.01988

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research, 35*(6), 381–385. https://doi.org/10.1097/00006199-198611000-00017

Magnavita, N. and Chiorri, C. (, 2018.), "Academic stress and active learning of nursing students: A cross-

sectional study," *Nurse Education Today* , 68, 128–133. DOI: 10.1016/j.nedt.2018.06.003

Mak, W. W. S., Ng, I. S. W., & Wong, C. C. Y. (2011). Resilience: Enhancing Well-Being through the Positive Cognitive Triad. Journal of Counseling Psychology, 58, 610-617. https://doi.org/10.1037/a0025195

Marengo, D., Jungert, T., Iotti, N. O., Settanni, M., Thornberg, R., and Longobardi, C. (2018a). Conflictual student–teacher relationship, emotional and behavioral problems, prosocial behavior, and their associations with bullies, victims, and bullies/victims. *Educ. Psychol.* 38, 1201–1217. doi: 10.1080/01443410.2018.1481199

Marengo, D., Rabaglietti, E., and Tani, F. (2018b). Internalizing symptoms and friendship stability: longitudinal actor-partner effects in early adolescent best friend dyads. *J. Early Adolesc.* 38, 947–965. doi: 10.1177/0272431617704953

Moilanen, K. L., Shaw, D. S., and Maxwell, K. L. (2010). Developmental cascades: externalizing, internalizing, and academic competence from middle childhood to early adolescence. *Dev. Psychopathol.* 22, 635–653. Doi: 10.1017/ S0954579410000337

Mruk, C. J. (2006). *Self-esteem research, theory, and practice: Toward a positive psychology of self-esteem. 3rd Edn.* (New York, NY, US: Springer Publishing Co).

Mualifah, A, Barida, M and Farhana, L. (2019) Self-acceptance and social adjustment on senior high school students' self-concept. International Journal of Educational Research Review, ,719-724. DOI:10.24331/ijere.628712

Mustafa, M. B., Rani, N. H. M., Bistaman, M. N., Salim, S. S. S., Ahmad, A., Zakaria, N. H., & Safian, N. A. A. (2020). The Relationship between Psychological Well-Being and University Students Academic Achievement. *International Journal of Academic Research in Business and Social Sciences*, *10*(7), 518–525. http://dx.doi.org/10.6007/IJARBSS/v10-i7/7454

Nilsson, J. E., & Anderson, M. Z. (2004). Supervising international students: The role of acculturation, role ambiguity, and multicultural discussions. *Professional Psychology: Research and Practice, 35,* 306-312. DOI:10.1037/0735-7028.35.3.306

Ogunsola, O. K., Osuolale, K. A., & Ojo, A. O. (2014). Parental and Related Factors Affecting Students' Academic Achievement in Oyo State, Nigeria. World Academy of Science, Engineering and Technology International Journal of Educational and Pedagogical Sciences, 8(9), 3137-3144. Retrieved from https://publications.waset.org/10001503/p

Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *The Review of Higher Education, 30*(4), 363-389. http://dx.doi.org/10.1353/rhe.2007.0028

Padgett, R.., Johnson, M.., & Pascarella, E. (2012). First-generation undergraduate students and the impacts of the fi rst-year of college: Additional evidence. *Journal of College Student Development, 53*(2), 243-266. DOI:10.1353/csd.2012.0032

Paradise, A. & Kernis, M. H., (2005). Self-esteem and Psychological Well-being: Implications of Fragile Self-esteem. Journal of Social and Clinical Pscyhology, 21(4), 345-361. https://doi.org/10.1521/jscp.21.4.345.22598

Pasha, H. S. & Munaf, S., (2013). Relationship of self-esteem and adjustment in traditional university students. Procedia – Social and Behavioural Sciences, 84, 999-1004. DOI:10.1016/j.sbspro.2013.06.688

Perry, R. P., Hladkyj, S., Pekrun, R. H., & Pelletier, S. T. (2001). Academic control and action control in the achievement of college students: A longitudinal field study. *Journal of Educational Psychology, 93*(4), 776–789. https://doi.org/10.1037/0022-0663.93.4.776

Poyrazli, S., & Lopez, M.Z. (2007). An exploratory study of perceived discrimination and homesickness: A comparison of international students and American students. *The Journal of Psychology, 141*(3), 263–280. DOI: 10.3200/JRLP.141.3.263-280

Quaglia, R., Gastaldi, F. G. M., Prino, L. E., Pasta, T., and Longobardi, C. (2013). The pupil-teacher relationship and gender differences in primary school. *Open Psychol. J.* 6, 69–75. doi: 10.2174/1874350101306010069

Raymond C and Chi-K. C (2020).Positive Thinking, School Adjustment and Psychological Well-being among Chinese College Students. The Open Psychology Journal. Content list available at: https://openpsychologyjournal.com

Reddy, R., Rhodes, J. E., and Mulhall, P. (2003). The influence of teacher support on student adjustment in the middle school years: a latent growth curve study. *Dev. Psychopathol.* 15, 119–138. doi: 10.1017/S0954579403000075

Reid, L. M., & Dixon, A. L. (2012). The counseling supervision needs of international students in U.S. institutions of higher education: A culturally-sensitive supervision model for counselor educators. *Journal for International Counselor Education, 4,* 29-41. Available at Available at https://digitalscholarship.unlv.edu/jice/vol4/iss1/2/

Rodríguez, M. S., Tinajero, C., Guisande, M. A., & Páramo, M. F. (2012). The student adaptation to College Questionnaire (SACQ) for use with Spanish students. *Psychological Reports, 111*(2), 624-640. DOI: 10.2466/08.10.20.PR0.111.5.624-640

Rueger, S. Y., Chen, P., Jenkins, L. N., and Choe, H. J. (2014). Effects of perceived support from mothers, fathers, and teachers on depressive symptoms during the transition to middle school. *J. Youth Adolesc.* 43, 655–670. doi: 10.1007/s10964-013-0039-x

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069-1081. DOI: 10.1037/0022-3514.57.6.1069

Scalera, V., and Alivernini, F. (2010). La transizione alla scuola superiore: modello teorico, costruzione e validazione della Scala di Difficoltà di Transizione (SDIT). *J. Educ. Cult. Psychol. Stud.* 1, 55–94. https://www.ledonline.it/ECPs-Journal/allegati/ECPS-2010-2_Scalera.pdf

Tao, S., Dong, Q., Pratt, M. W., Hunsberger, B., & Pancer, S. M. (2000). Social support: Relations to coping and adjustment during the transition to university in the Peoples Republic of China. *Journal of Adolescent Research, 15*(1), 123-144. https://doi.org/10.1177/0743558400151007

Vaez, M., Kristenson, M., & Laflamme, L. (2004). Perceived Quality of Life and Self-Rated Health among First-Year University Students. A Comparison with Their Same Age Working Peers. Social Indicators Research, 68, 221-234. https://doi.org/10.1023/B:SOCI.0000025594.76886.56

Virtanen, T. E., Vasalampi, K., Torppa, M., Lerkkanen, M.-K., and Nurmi, J.-E. (2019). Changes in students' psychological well-being during transition from primary school to lower secondary school: a person-centered approach. *Learn. Individ. Differ.* 69, 138–149. doi: 10.1016/j.lindif.2018.12.001

Virtanen, T. E., Vasalampi, K., Torppa, M., Lerkkanen, M.-K., and Nurmi, J.-E. (2019). Changes in students' psychological well-being during transition from primary school to lower secondary school: a person-centered approach. *Learn. Individ. Differ.* 69, 138–149. doi: 10.1016/j.lindif.2018.12.001

Wintre, M. G., Dilouya, B., Pancer, S. M., Pratt, M. W., Birnie-Lefcovitch, S., Polivy, J., & Adams, G. (2011). Academic achievement in first-year university: who maintains their high school average? High Educ (2011) 62:467–481. DOI 10.1007/s10734-010-9399-2

Wong, M. (2018). Perceptions of school life among a sample of Chinese children in Hong Kong. *Early Child Dev. Care* 188, 800–818. doi: 10.1080/03004430.2016.1238361

Wong, M., and Power, T. G. (2019). Links between coping strategies and depressive symptoms among girls and boys during the transition to primary school. *Early Educ. Dev.* 30, 178–195. doi: 10.1080/10409289.2018.1544811

Yi, J. K., Lin, J. C. G., & Kishimoto, Y. (2003). Utilization of counseling services by international *students. Journal of Instructional Psychology, 30,* 333-342.

Yousef J, Davood, T. and Zabih P. (2020). The effect of Social Adjustment and Hope on the Educational Well-being of Students: The Mediating Role of Self-Efficacy. International Journal of Pharmaceutical and Phytopharmacological Research,10(4),191-198. Availabe at https://eijppr.com/ByaCcv8.

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Resource, 11*(2), 49–54. https://doi.org/10.21315/eimj2019.11.2.6Z

Zhou, Y., Frey, C., & Bang, H. (2011). Understanding of international graduate students' academic adaptation to a U.S. graduate school. *International Education, 41*(1), 76-94. Available at https://www.proquest.com/docview/911991616