

## EDU007    Accounting students' adaption to university at a large African university

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### Abstract

**Orientation:** The transition from school to higher education is an exciting experience for some students but it could be a stressful and overwhelming period for some students admitted to higher education institutions. Students need to 'adapt or die' to face different kinds of difficulties on their journey from school to higher education.

**Purpose/objective of the study:** The purpose of this study was to investigate the concurrent and predictive validity of the Student Adaption to College Questionnaire (SACQ) scores to explore if the adaption from school to university is evident in a sample of South African university accounting students. Factors that were explored that may have an influence on the adaption of students to university were; age, gender, race, choice of degree, the school the student attended prior to the university, university tuition fees and place of residence while studying at the university.

**Research questions:** In order to achieve the aim of the study the following questions were addressed; 'What is the current 'make up' of accounting students that could influence the adaption of students to university attainment?' and 'What is the relationship between the adaption of accounting students to university and academic performance by investigating the concurrent and predictive validity of the Student Adaption to College Questionnaire (SACQ) scores?'

**Research method:** The research method was quantitative in nature; an exploratory study and data was collected in administering an electronic questionnaire.

### Main findings and contribution:

The findings offer accounting lecturers the opportunity to have a better understanding and greater sensitivity of their students' 'make-up' and that there are adjustment problems that influence students' academic performance.

**Key words:** Accounting, adaption, SACQ, South Africa, student adjustment, university

### INTRODUCTION

The transition from school to higher education is the most stressful period of first year university students (Ligadu, Abbas and Han, 2012). According to Yazedjian, Toews and Navarro (2009) a large percentage of students are unsuccessful in navigation this transition. Woollacott, Snell and Laher (2013) furthermore added that students who performed poorly or

dropped out start with or are intensified by the difficulties in adjusting quickly and effectively to the social and academic demands in higher education.

In a South African context part of the transitional difficulties are high drop-out rates that cause a threat to the future of the country since a 15% graduation rate is one of the lowest in the world (Letseka and Maile, 2008). Toews and Yazedjian (2007) confirmed that when students withdraw from the university it is often for personal reasons. Also Byrne and Flood (2005) state that transition to higher education can be stressful for students as their ability to both adapt to the type of learning required and to adjust to the environment are affected by their preparedness for higher education. Ligadu et al. (2012) confirm that students will experience many unexpected circumstances adjusting to the new environment including coping with workload, assignments, different teaching methods, working with lecturers and other students.

There are currently 23 universities in South Africa, 11 universities are research-intensive that conduct pure and applied research, six universities are technology based and the remaining six universities are comprehensive universities offering traditional universities programmes (Pitso 2013). The university under review is a public, urban and comprehensive university in South Africa ranked as the highest ranked university in Africa according to the Center for World University Rankings (CWUR) (Wits 2014). This paper reflects on an investigation into the adaptation of accounting students at a large African university where there are extremely large classes, large cultural differences and diverse ranges of prior knowledge (Scott, Yeld and Hendry, 2007; Müller, Prinsloo and Du Plessis, 2007; Steenkamp, Baard and Frick, 2009; Marburger, 2010 and Winebrenner, 2007; Fraser and Killen, 2003). These issues together with socio-economic and financial factors have resulted in many challenges in academic institutions. (Scott *et al.*, 2007). This situation also occurs in other countries, like Australia that has shifted the focus of higher education from elitism to mass opportunity (McKenzie and Schweitzer, 2001). The main objective of the paper was to engage in a discussion which focuses on the adaptation of accounting students to higher education.

## **Fields of study**

### ***Medical***

Sherina, Rampal and Kaneson (2004) confirmed that first year students enrolling into the medical field are entering a stressful environment that often leads to poor academic performance, psychological, physical and adjustment problems. Smith, Peterson, Degenhardt, and Johnson (2007) state that medical students are the most distressed in their first year of medical school. The study of Nyamayaro and Saravanan (2013) concluded that 99 first year medical students at a private medical university faced negative emotional states of depression, stress and anxiety as medical students are more prone to maladjustment to the university.

### ***Accounting***

Arquero and Rioja (2009) examined 619 students enrolled for different degrees in a university in Spain, of which 59.1% are accounting students, to determine how well accounting students adapt to learning styles in comparison with other social science students. Results indicated

that accounting students had differences in learning styles comparing to social science students as accounting students are less independent and more competitive. The study of Byrne and Flood (2005) explored 129 accounting students' motives, expectations and preparedness for higher education at an Irish university. The findings indicated that students are primarily motivated to enter higher education, have very positive expectations, well prepared to handle course content and want to perform very well comparing to other studies that reported a lack of preparedness and poor motivation among students (Ozga and Surhanandan, 1998; Boyle, Carter and Clark, 2002). Gul and Fong (1993) examined factors that predict success of 443 first year accounting students at a university in Hong Kong. The findings reports that English grade, personality, being enrolled for a business degree, previous knowledge of accounting, Mathematics grade and self-expectation of examination results were significantly positive associated with academic performance. Akenbor and Ibanichuka, (2014) examined institutional factors influencing academic performance of first year accounting students at a university in Nigeria. They concluded that class size, entry requirement, access to functional library, semester duration, contact hours, and curriculum contents affecting students' achievement in principles of accounting (Akenbor and Ibanichuka, 2014). Hosal-Akman and Simga-Mugan (2010) explored the assessment of the effect of teaching methods on academic performance of second-year accounting students at a Turkish university. The results were expected that the academic performance of the students who actively participated in the accounting course through cooperative learning was to be higher than pervious school learning but no significance effects were observed. A possible reason is that students might have not been ready for the adaptation from school to university (Hosal-Akman and Simga-Mugan, 2010).

### ***Education***

Ligadu et al. (2012) investigated the perceptions of first year education and social science students' coping skills at a university and concluded that students indicated that both learning support and social emotional support are needed to cope at universities. Tao, Dong, Pratt, Hunsberger and Pancer (2000) investigated coping and adjustment of 358 freshmen who enrolled at three universities in China, were mostly students in the education field. Findings related to changes in social support during transition indicated that both anxiety and depression increased over the course of the first term of the university (Tao et al., 2000).

### ***Psychology***

In the study of Beyers and Goossens (2002) 368 freshmen psychology students from a large European university in Belgium were examined to determine validity of student adaptation. Findings related to predictive validity indicated that attachment and social adjustment subscales were negatively correlated with student attrition. Furthermore concurrent validity indicated that social adjustment and personal-emotional adjustment subscales indicated significant associations with independent real-life criteria (Beyers and Goossens, 2002).

### ***No field of study specified, only a sample of freshmen/first year students***

Toews and Yazedjian (2007) indicate that maladjustment is a major problem for university students in most countries that lead to students discontinuing their studies. Sennetta,

Finchilescua, Gibsona and Straussa (2003) confirmed that black African participants reported significantly poorer levels of social adjustment and somewhat poorer levels of personal-emotional adjustment than White students in their study which explored the adjustment of Black Students at a Historically White South African University.

### **Research Instrument**

The Student Adaption to College Questionnaire (SACQ) is an instrument that was designed by Baker and Siryk (1984) to assess students' adjustment to college. The purpose of this study is to investigate the adaptation of accounting students to university in using the Student Adaption to College Questionnaire (SACQ) developed by Robert W. Baker, Ph.D. and Bohdan Siryk, M.A. (1989). The SACQ is a 67-item questionnaire designed to measure the effectiveness of student adjustment to college. For the purpose of this research the SACQ has been adapted and the word 'college' was replaced by 'university' as 'university' is used for higher education institutions in a South African context in relation to America. Some questions have been adapted to accommodate the South African context. The SACQ consists of four sections; Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment and Attachment. The Academic Adjustment measures a student's success at coping with the various educational demands characteristic of the university experience. The Social Adjustment subscale contains items relevant to the interpersonal-societal demands of university. The Personal-Emotional subscale is designed to examine how a student is feeling psychologically and physically. The Attachment subscale focuses on a student's satisfaction with the university experience in general and with the university he or she is attending in particular. According to Baker and Siryk (1989) the SACQ is appropriate for use with students at any time during their undergraduate career.

Prior studies using SACQ involve freshmen from colleges or universities in North America (Dahmus, Bernardin, and Bernardin, 1992), Chinese exchange students in Japan (Jou and Fukada, 1995), college students in China (Tao et al., 2000), psychology university students in Belgium (Beyers and Goossens, 2002) and African black and white freshmen attending a historically white South African university (Sennetta et al., 2003). The study of Sennetta et al. (2003) included 339 freshmen from five different first year courses spread across three faculties at a South African university. No studies have been conducted with first and/or second year accounting university students in Africa.

The name 'University' is widely used in South Africa and not 'College' as referred to in the SACQ but for the purpose of this study the researcher will refer to 'University'. The purpose of this study is to investigate the concurrent and predictive validity of the SACQ scores to determine whether the adaptation from school to university (student life, study experience, social adjustment etc.) is obvious in a sample of South African university accounting students. Factors that were explored that may have an influence on the adaptation of students to university were; age, gender, race, choice of degree, the school the student attended prior to the university, university tuition fees and place of residence while studying at the university. In order to achieve the aim of the study the following two questions were addressed: What is the current 'make up' of accounting students that could influence the

adaptation of students to university attainment?’ and ‘What is the relationship between the adaptation of accounting students to university and academic performance by investigating the concurrent and predictive validity of the Student Adaption to College Questionnaire (SACQ) scores?’

## **RESEARCH METHODOLOGY**

The research method was quantitative, an exploratory study (Leedy and Ormrod, 2010) and data was collected in administering an electronic questionnaire (Bryman and Bell, 2011).

### **Participants**

The sampling frame included all students enrolled for the Accounting I and Financial Accounting II courses in their first and second year of study at a large South African university. The number of students that had registered for Accounting I were 1134 students and for Financial Accounting II 453 students, a total of 1587 accounting students. Both the Accounting I and Financial Accounting II courses are one year courses offered over an academic year. Students were assessed during the year. Each accounting course consists of three tests (April, June and September) and one final exam in November. For each course students attended lectures (four to five periods a week) and tutorials (three periods a week). Lectures and tutorials are compulsory and electronic card readers register students’ lecture attendance and manual attendance registers are kept for students attending tutorials. Students also submit projects and assignments as part of the accounting curriculum and write *ad hoc* concept tests in tutorial periods. For the purpose of the study the validity was assessed after the students attended six months of lectures and tutorials in their first and second year of study.

### **Data Collection**

Two sources were used to collect data. Firstly, data was collected from a university computerised database and secondly, data was collected from an on-line electronic questionnaire via the university portal.

#### ***Computerised database***

For the first source, data was collected from a university computerised database that was made available in a spreadsheet per student number with their academic marks for the April and June tests. Students’ marks were expressed as a percentage for both tests. Ethics clearance was obtained from the university’s ethics committee validating and approving the empirical study.

#### ***Questionnaire***

For the second source, data was collected from an on-line electronic questionnaire via the university portal. The SACQ (Baker and Siryk, 1989) was used to measure students’ adaptation to university with reference to accounting students. The results provided valuable empirical information into the adaptation of accounting students to university. The SACQ questionnaire was adapted and tailored for accounting students with diverse backgrounds and cultures. The questionnaire consists of two sections; Section 1, biographical data of students

including the school attended, who is paying for their university tuition fees and place of residence and Section 2, the adapted SACQ that relates to statements to the adaptation of students to university. The adapted SACQ provided the same subscales as the original SACQ designed by Baker and Siryk (1989) on four aspects or subscales of students' adjustment to university; Academic Adjustment (AC), Social Adjustment (SOC), Personal-emotional Adjustment (PE) and Attachment Adjustment (AT). A 5-point Likert Scale was used, ranging from, 'not at all true for me' to 'very much true for me'. The same scale was used by earlier adaptations of the SACQ (Beyers and Goossens, 2002; Tao et al., 2000; Jou and Fukada, 1995) in comparison to the original 9-point scale used by Baker and Siryk (1989). As per the SACQ manual guidelines (Baker and Siryk, 1989) the scores are divided into high, average and low indicating that higher scores on this scale indicate that the person is well adjusted, while the low scores indicate adjustment problems.

The original SACQ questions were adapted as follows in the four aspects of adjustments:

- Academic Adjustment (AC) (12 items, originally 24 items): Under the motivation and application clusters; questions were selected that portray a more positive student than asking questions that are negatively inclined like 'Doubts value of college degree' and 'Does not work hard'. Under the performance cluster; questions were excluded that indicated the exam because students at the time of collecting the data had not yet had exams. Questions in the questionnaire on writing papers were excluded since the accounting course does not include writing papers and questions on homework were replaced by emphasizing studying. Under the academic environment cluster, questions were included that dealt with the accounting course and not with neither the program nor the variety of courses. The 12 items selected created a broad framework of the accounting students' academic adjustment.
- Social Adjustment (SOC) (7 items, originally 20 items): Under the general cluster; questions were included that refer to the university life and not the general social activities. Under the other people cluster; the question related to 'roommates' was replaced with 'work in groups' and the question related to 'difficultly feeling at ease with others' was adjusted to 'feel inferior to my fellow class mates' to obtain information from students with different backgrounds and cultures. Under the cluster nostalgia; the lonely and lonesome questions were excluded to not portray a deserted or isolated feeling among students. The social environment cluster was omitted as most students commute to the university, do not stay in hostels and are not involved in extracurricular activities due to the long hours traveling to the university. The 7 items selected created a broad framework of the accounting students' social adjustment.
- Personal-emotional (PE) Adjustment (6 items, originally 15 items): Under the psychological cluster; questions were included that deal with worries about university expenses and related actions thereof as some students tuition fees are paid by the National Student Financial Aid Scheme (NSFAS). Under the physical cluster; the 'lot of headaches' question was replaced by 'spend more than two hours travelling to the university' and questions relating to weight and feeling tired were excluded. The 6



items selected created a broad framework of the accounting students' personal-emotional adjustment.

- Attachment Adjustment (AT) (2 items, originally 15 items): Only two questions were included 'I think a lot about dropping out of university permanently' and 'I am pleased about attending this university'. The 2 items selected created summary of the accounting students' attachment adjustment referring to the university.

The total number of items in the adapted SACQ is 27 items (compared to the 67 items as per Baker and Siryk, 1989) and in the study of Tao et al. (2000) 28 items were used. The word 'college' was replaced with 'university' throughout the questionnaire. Another reason for adapting the original SACQ questionnaire was due to time constraints as the first year accounting students were also required to complete, the Parental Authority Questionnaire (PAQ) and the Big Five Inventory (BFI) questionnaire. According to Sennett et al. (2003) the completion time for the 67-item SACQ was approximately 25-50 minutes but according to Nyamayaro and Saravanan (2013) it took 15 to 20 minutes to complete.

Students were briefed by the lecturer in the Accounting I and Financial Accounting II lectures to complete the on-line questionnaire on 'Adaptation of students to university' and the link to the questionnaire was posted on the university portal. The lecturer explained the purpose and value of the research and ensured that the data will be treated as confidential. Students were asked to provide their student numbers to link the questionnaire results and academic marks. Students were assured that the data would be reported anonymously in a group and not as individuals.

### **Data analysis**

A spreadsheet was extracted from the server containing the results of the questionnaire and thereafter the marks were captured on the spreadsheet. The SPSS statistical package was used to analyse the data. A statistical analysis was conducted and basic frequencies were used to describe the sample. Cross tabulations with an appropriate test for independence was conducted to determine whether two categorical variables were related. Descriptive analysis provided a very useful initial examination of the data. Multiple linear regression analysis was used to determine associations for Academic Adjustment. The relationship between the different variables was tested using the Pearson's rho value.

## **RESULTS AND DISCUSSION**

A response rate of 83.8% (n = 951) was achieved from the number of Accounting I students sampled (1134) and a response rate of 94.7% (n = 429) was achieved from the number of Financial Accounting II students sampled (453). A total response rate of 92.6% (n = 1470) was achieved from the Accounting students sampled (1587). Of these, 1380 usable responses were included in the analysis. Descriptive statistics are; 55% were male students, student's mean age of 19,48 years, 75.6% of students were registered for the Chartered Accountant (CA) degree and 22.3% of the students were registered for the General Commerce degree, 67.1% are African, 19.3% Indian, 10.7% White and 2.9% Other (Coloured and Asian); 67,6% of the students were in their first year, 29.7% in second and 2.7% in their third year of study

due to students that have repeated the Accounting I or Financial Accounting II course. The majority of students attended government schools, (70.3%) while the rest of the students attended private schools, 29.7%. Most students stay at home (39.4%), 31.5% of the students stay in university hostels, 18.0% stay in a Braamfontein and other students make use of private accommodation. Nearly 50% of the students' parents pay for their tuition fees, while other fees are paid mainly by National Student Financial Aid Scheme (NSFAS) (15.2%) followed by a family member and the bank, both 2.6%. The NSFAS loans to students increased fivefold from 1995 to 2005 (Letseka and Maile, 2008).

**Table 1: Total Student Adjustment Items**

Items	Mean	Median	Mode	Std. Dev
I have well-defined academic goals	1.72	2	1	0.782
I consider a university degree important	1.24	1	1	0.523
I enjoy academic work	2.23	2	2	0.911
<b>Motivation</b>	5.19	5	4	2.216
I keep up-to-date with academic work	2.42	2	2	0.899
I am not motivated to study	3.43	3	3	1.17
I attend most of my lectures regularly	1.59	1	1	0.836
<b>Application</b>	7.44	6	6	2.905
I found academic work difficult	4.12	4	4	0.979
I do not feel smart enough for the course work	3.51	3	3	1.166
I do not use study time efficiently	4.09	4	5	1.113
I have trouble concentrating when studying	4.05	4	5	1.156
<b>Performance</b>	15.77	15	17	4.414
I am satisfied with the quality of the courses	2.18	2	2	0.947
I am satisfied with the lectures	2.33	2	2	0.938
<b>Academic environment</b>	4.51	4	4	1.885
<b>TOTAL ACADEMIC ADJUSTMENT</b>	32.91	30	31	11.42
I am very involved with university social activities	3.55	4	4	1.13
I am adjusting well to the university	2.32	2	2	0.915
<b>General Social Adjustment</b>	5.87	6	6	2.045
I work well in random selected groups	2.6	2	2	1.123
I am meeting people and making friends	2.2	2	2	0.997
I do not mix well with opposite sex	2.96	3	2	1.027
I feel inferior to my fellow class mates	3.24	3	3	1.132
<b>Social Adjustment People</b>	11.00	10	9	4.279
I would rather be home	3.323	3	3	1.2404
<b>Social Adjustment Nostalgia</b>				
<b>TOTAL SOCIAL ADJUSTMENT</b>	20.19	19	18	7.56



Being independent has not been easy	3.91	4	3	1.232
Gets angry too easily lately	3.46	3	3	1.203
Worries a lot about university expenses	4.18	4	5	1.362
<b>Psychological</b>	11.55	11	11	3.80
Is not sleeping well	3.78	4	3	1.239
Feels in good health	2.44	2	2	1.0724
Spend more than 2 hours to travel to the university	2.78	2	2	1.198
<b>Physical</b>	9.00	8	7	3.5094
<b>TOTAL PERSONAL EMOTIONAL ADJUSTMENT</b>	20.55	19	18	7.31
I think a lot about dropping out of university permanently	2.58	2	2	0.929
I am pleased about attending this university	1.72	1	1	0.93
<b>TOTAL ATTACHMENT</b>	4.3	3	3	1.859
<b>TOTAL ENTIRE ADJUSTMENT</b>	77.95	71	70	28.15

The study of Sennetta et al. (2003) confirmed that no significant differences were found between black African and White participants on academic adjustment or institutional commitment. However Sennetta et al. (2003) found that black African participants reported significantly poorer levels of social adjustment, and somewhat poorer levels of personal-emotional adjustment. Further investigations found relationships between academic performance, race and additional variables hypothesised to be associated with adjustment (Sennetta et al., 2003).

Levels of academic adjustment were regressed on the set of antecedents derived from the literature, namely age, gender, race, choice of degree, the type of school the student attended prior to university (government versus private), who paid the student's university tuition fees and place of residence while studying at the university. Backward elimination was used, in order to avoid suppressor variables, and in order to derive an exploratory model of associations that were all significant within the model.

**Table 2: Significant Multiple Linear Regression Analysis Associations for Academic Adjustment**

	<b>Motivation</b>	<b>Application</b>	<b>Performance</b>	<b>Academic Environment</b>	<b>Total Academic Adjustment</b>
Constant	5.211**	4.477***	12.348***	3.047***	25.934***
Gender	.188(.092)*		.347(.072)**	-.226(-.067)*	.464(.064)*
Age		.155(.110)***	-.163(-.075)**		
Indian				.453(.107)***	

Asian	1.084(.088)**			.845(.07)**	1.585(.061)*
Coloured			-.883(-.062)*		
BCom	.302(.072)**				
BCom Law			-1.42(-.067)*		-1.806(-.057)*
Other Degree			-2.260(-.076)**		
Parent Payment		.190(.055)*	.307(.058)*		.991(.126)***
Payment Father		.331(.061)*			.765(.065)*
NSFAS	-.547(-.116)***				
Other Finance	-.322(-.087)**				
F Value	9.507***	6.8***	5.807***	5.451***	6.735***
Durbin-Watson	1.970	2.156	1.97	1.942	2.027
R-Squared	.033	.019	.029	.023	.029
Adjusted R-Squared	.03	.017	.024	.019	.024

Notes: \*p< .05; \*\*p<.01;\*\*\* p<.001

The results confirmed that females seem better adjusted in terms of motivation and performance (measures a student's success at coping with motivational and academic performance demands), but less adjusted in terms of the academic environment (coping of students adjustment to university life other than academic performance). Older students report being better adjusted in terms of application yet less well-adjusted in terms of performance. Of the different ethnic groups, Indian students report higher levels of adjustment to the academic environment. Asian students reported higher levels of motivational and performance adjustment. Coloured students reported lower levels of performance adjustment. Students doing the BCom degree were found to report high levels of motivation adjustment. However, students studying BCom Law and degrees other than Accountancy or Commerce degrees were found to report lower levels of performance adjustment. Students who had their fees paid by a parent or by a father were found to report higher levels of application adjustment. Parental payment was found to be positively associated with performance adjustment. Students who reported paying their fees using NSFAS or using other sources of finance other than bank finance or parental support were found to report lower levels of motivation adjustment.

**Table 3: Social Adjustment**

	General	People	Nostalgia	Total Social Adjustment
Constant	6.335***	10.751***	3.646***	21.36***
Gender	-.413(-.128)***			-.551**
Indian				-.900(-.099)**
Asian		1.256(.062)*		
African		.618(.104)***		
Coloured		1.082(.065)*		
White	-.385(-.074)*		.525(.131)***	-1.714(-.149)***
BCom Law			.567(.052)*	
Parent Payment		-.404(-.066)*		-.593(-.076)**
Payment Father				
Payment Family Member			-.461(-.057)*	
NSFAS			-.256(-.075)**	
Bank			.586(.074)**	
Hostel Residence	-.617(-.180)***		-.211(-.079)**	
Stay-Other			.560(-.054)*	
F Value	11.837***	7.022***	11.232***	11.189***
Durbin-Watson	1.952	1.98	1.921	2.032
R-Squared	.049	.025	.054	.047
Adjusted R-Squared	.045	.021	.049	.042

Notes: \*p< .05; \*\*p<.01;\*\*\* p<.001

Females were found to report lower levels of general social adjustment. Asian, African and Coloured students were found to report higher levels of people-related social adjustment. White students were found to report lower levels of general social adjustment and higher levels of nostalgia-related adjustment. Students that reported that their parents paid their fees were found to have lower levels of people-related social adjustment. Students who reported that their fees were paid by a family member or by NSFAS, or who stayed at a hostel or residence were found to have lower levels of nostalgia-related social adjustment. Student staying in a hostel or residence were also found to report lower levels of general social adjustment. Students who reported financing their studies using a bank were found to have higher levels of nostalgia-related social adjustment. Students who reported 'other' in terms of their residence category were found to have higher levels of nostalgia-related social adjustment.

**Table 4: Personal-Emotional Adjustment (PE), Attachment (AT), and Total Student Adjustment**

	Psychological PE Adjustment	Physical PE Adjustment	Total PE Adjustment	Attachment (AT)	Total Student Adjustment
Constant	12.058	6.912	16.261	2.858***	45.869***
Age				.076(.056)*	.289(.059)*
African		.944(.188)***	1.633(.180)***	-.268(-.084)**	
Indian		.719(.120)**	1.26(.117)**		
White	-.530(-.062)*				-1.005(-.055)*
Asian		.942(.055)*	1.89(.061)*	.826(.076)**	3.042(.074)**
Coloured	.878(.055)*		1.931(.076)**		
Private School	-.359(-.062)*				
Other Degree		1.693*	2.837(.054)*		
Parent Payment	-.725(-.124)***	-.432(-.083)**	-1.075(-.115)***		
Payment Other	-.895(-.155)***		-.983(-.101)**		
Stay Hostel/Residence		-1.145(-.226)***	-.927(-.101)**		
Stay Braamfontein	.635(.091)**	-.891(-.145)***		.249(.064)*	
Stay Private		-.784(-.096)**			
Stay Other		1.317(.067)*	2.461(.069)**		
F Value	8.432***	7.718***	7.130***	5.329***	4.855***
Durbin-Watson	1.952	2.108	1.983	1.976	2.051
R-Squared	.052	.053	.05	.026	.017
Adjusted R-Squared	.046	.046	.042	.021	.014

Notes: \*p< .05; \*\*p<.01;\*\*\* p<.001

Students who classified themselves into the 'Black' category were found to report higher levels of physical personal-emotional adjustment yet lower levels of attachment. Students who classified themselves into the 'Indian' category were found to report higher levels of physical personal-emotional adjustment. Students who classified themselves as 'White' were found to report having lower levels of psychological personal-emotional adjustment whereas those identifying themselves as 'Coloured' reported having significantly higher levels of psychological personal-emotional adjustment. Students from public (non-private) schools as well as those reporting that their fees were paid by parents or 'other' forms of payment were found to report lower levels of psychological personal-emotional adjustment. Students studying degrees other than those in Accountancy or Commerce were found to report higher levels of physical personal-emotional adjustment. Students who reported that their parents

paid their fees were found to have lower levels of physical personal-emotional adjustment. Students staying in hostel/residence were found to have lower levels of physical personal-emotional adjustment and those residing in Braamfontein were found to have higher levels of psychological personal-emotional adjustment and attachment-related adjustment but lower levels of physical personal-emotional adjustment.

**Table 5: Pearson product-moment correlations between measures of marks obtained (April and June tests) and total adjustment**

		Academic Adjustment	Social Adjustment	Personal-Emotional Adjustment	Attachment Adjustment	Total Student Adjustment
April Marks	Pearson Correlation	.053*	.010	.096**	.041	.088**
	Sig. (2-tailed)	.049	.719	.000	.134	.001
	N	1380	1380	1380	1380	1380
		Academic Adjustment	Social Adjustment	Personal-Emotional Adjustment	Attachment Adjustment	Total Adjustment
June Marks	Pearson Correlation	.082**	-.039	.211**	.086**	.149**
	Sig. (2-tailed)	.002	.148	.000	.001	.000
	N	1380	1380	1380	1380	1380

\*Correlation is significant at the 0.05 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed).

The relationship between April and June marks (measured as the marks obtained in the two tests) and total student adjustment (Academic, Social, Personal-emotional and Attachment) was investigated using the Pearson product-moment correlation coefficient. The mean scores for the April test was 49.14 and for the June test 53.03. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a very strong, positive correlation between total student adjustment and both tests, April,  $r = .088$ ,  $n=1380$ ,  $p < .05$  and June,  $r = .149$ ,  $n=1380$ ,  $p < .05$ . A further investigation between the correlation of the two tests and the four aspects of adjustments are now discussed. There was a strong positive correlation between the twelve total academic adjustments items and both tests, April  $r = .058$ ,  $n=1380$ ,  $p < .05$  and June,  $r = .082$ ,  $n=1380$ ,  $p < .05$ : seven items had a strong positive correlation for both April and the June tests; one item, 'I consider a university degree important' had no correlation with either test; three items, 'I enjoy academic work', 'I am satisfied with the quality of the courses' and 'I am satisfied with the lectures' had no correlation with the April test but a very strong correlation with the June test and one item, 'I am not motivated to study' had a stronger correlation with the June test than the April test.

There was a no correlation between the seven total social adjustments items and both tests, April  $r = .010$ ,  $n=1380$ ,  $p < .05$  and June,  $r = -.039$ ,  $n=1380$ ,  $p < .05$  but after a further analysis two items indicted a correlation; one item 'I am adjusting well to the university' had a very strong negative correlation for both April and June tests and one item, 'I feel inferior to my fellow class mates' had no correlation with the April test but had a very strong positive correlation with the June test.

There was a very strong positive correlation between the six total personal-emotional adjustments items and both tests, April  $r = .096$ ,  $n=1380$ ,  $p < .05$  and June,  $r = .221$ ,  $n=1380$ ,  $p < .05$ . Further analysis found three items 'Being independent has not been easy', 'Is not sleeping well' and 'Worries a lot about university expenses' that had a strong positive correlation for both the April and the June tests, two items, 'Gets angry too easily lately' and 'Feels in good health' had no correlation with the April test but a very strong correlation with the June test and one item 'Spend more than 2 hours to travel to the university' had no correlation with either tests.

There was no correlation between the two total attachment adjustment with the April test,  $r = .041$ ,  $n=1380$ ,  $p < .05$  but a very strong positive correlation with the June test,  $r = .086$ ,  $n=1380$ ,  $p < .05$ . A further breakdown of the two adjustment items indicted that the one item 'I think a lot about dropping out of university permanently' had a very strong positive correlation for both the April and the June tests and the second item 'I am pleased about attending this university' had a very strong correlation with the April test and a less strong correlation with the June tests.

## CONCLUSION

The purpose of this study was to investigate the concurrent and predictive validity of the Student Adaption to College Questionnaire (SACQ) scores to explore if the adaptation from school to university is evident in a sample of South African university accounting students. The following two questions were addressed; What is the current 'make up' of accounting students that could influence the adaptation of students to university attainment?' and 'What is the relationship between the adaptation of accounting students to university and academic performance by investigating the concurrent and predictive validity of the Student Adaption to College Questionnaire (SACQ) scores?'

To address the first question multiple linear regression analysis was used to determine associations between four aspects of adjustment to university (academic, social, personal-emotional and attachment) and the age, gender, race, choice of degree, the school the student attended prior to the university, university tuition fees and place of residence while studying at the university of accounting students.

The results of the SACQ indicted the scales scores of the individual items, total of each of the four aspects and the full-scale score. Older students report to be better adjusted in terms of application but not in term of performance. Female students seem better adjusted in terms of



motivation and performance but less adjusted and general social adjustment. Indian students report higher levels of in terms of academic adjustment, Indian and Black students report higher levels of physical personal-emotional adjustment and Black students had lower levels of attachment. In contrast Sennetta et al. (2003) confirmed that black African participants reported significantly with lower levels of social adjustment and somewhat poorer levels of personal-emotional adjustment. White students were found to report lower levels of general social adjustment and psychological personal-emotional adjustment but higher level s of nostalgia-related adjustments. BCom degree students were found to report high levels of motivation adjustment and both Accountancy and Commerce degree students were found to report higher levels of physical personal-emotional adjustment. Students from public (non-private) schools as well fees were paid by parents or 'other' forms of payment were found to report lower levels of psychological personal-emotional adjustment but parental payment was found to be positively associated with performance adjustment. Student staying in a hostel or residence were also found to report lower levels of general social adjustment.

For the second question, the Pearson product-moment correlation coefficient was used to determine the relationship between April and June marks (measured as the marks obtained in the two tests) and total student adjustment (Academic, Social, Personal-emotional and Attachment using the SACQ scores). The mean scores for the April test was 49.14 and for the June test 53.03. The total academic adjustment scores indicated that accounting students are confident in having well-defined academic goals, keep up-to-date with academic goals, attend lecturers, found academic work difficult, do not feel smart enough for their course work, do not use study time effectively and have trouble concentrating when studying. These finding correlate with the findings of Byrne and Flood (2005) that accounting students enter higher education, have very positive expectations, well prepared to handle course content and want to perform very well comparing. This study further concluded that there was a very strong, positive correlation between total student and academic adjustment with both April and June tests.

Furthermore no correlation was found between the April test and the quality of the course, satisfaction with lecturers and enjoyment of academic work in relation with a very strong significance with the June test. In addition students indicated they were less motivated to study for the April test and after the April marks' test were released student were more motivated to study due to a lower mean score obtained in the April test. No relationship was found of the social adjustment item 'I feel inferior to their fellow class mates' and the personal-emotional adjustment item 'Gets angry too easily lately' after the first test but and after the second test in June students had a very strong relationship. Students also indicated they worry a lot about university expenses and higher levels of adjustment were reported with both tests. The total attachment adjustment item 'I think a lot about dropping out of university permanently' had a very strong positive correlation for both the April and the June tests.

## LIMITATIONS AND FUTURE RESEARCH

The study includes some important limitations. The SACQ was adapted for this study and did not include all the questions as per the original questionnaire of Baker and Siryk (1984). The study only includes accounting students at a single university. In spite of these limitations this study represents an important step in the ongoing debate on the adaptation of first year accounting students at an academic institution.

Future research could be conducted consisting of both the first and second semester to compare the relationships between the adjustment items. Another area of further research could be to explore other reasons why accounting student do not cope other than the listed adjustment items.

## REFERENCES

- Akenbor, C.O. and Ibanichuka, E. A. L. (2014), Institutional Factors Influencing the Academic Performance of Students in Principles of Accounting, *International Journal of Higher Education Management (IJHEM)*, Vol. 1 No. 1, pp.15-26
- Arquero, J.L. and Rioja, C.T. (2009), How well adapted are accounting student of Bologna? A comparative analysis of learning styles of Spanish social science students, *The Spanish Journal of Accounting*, 2, pp. 125-156.
- Baker, R.W. and Siryk, B. (1984), Measuring adjustment to college. *Journal of Counseling Psychology*, 31, pp. 170-189.
- Boyle, R., Carter, J. and Clark, M. (2002), What makes them succeed? Entry progression and graduation in computers science, *Journal of further and higher education*, Vol. 26 No. 1, pp. 2-18.
- Bryman, A. and Bell, E. (2011), *Business Research Methods*. 3<sup>rd</sup> Ed. Oxford University Press. Oxford.
- Byrne, M and Flood, B. (2005), A study of accounting students' motives, expectations and preparedness for higher education. *Journal of Further and Higher Education*, Vol. 29 No. 2, pp. 111-124.
- Dahmus, S., Bernardin, H. J. and Bernardin, K. (1992), Student Adaption to College Questionnaire. Measurement and Evaluation in Counseling and Development, Vol. 25 No.3, pp. 139-142.
- Fraser, W.J. and Killen, R. (2003), Factors influencing academic success or failure of first-year and senior university students: Do education students and lecturers perceive things differently? *South African Journal of Education*, Vol. 23 No. 4, pp. 254-260.

Gul, F.A. and Fong, S.C.C. (1993), Predicting success for introductory accounting students: some further Hong Kong evidence, *Accounting Education*, Vol. 2 No. 1, pp. 22-42.

Hosal-Akman, N. and Simga-Mugan, C. (2010). An assessment of the effects of teaching methods on academic performance of students in accounting courses, *Innovations in Education and Teaching International*, Vol. 47, No. 3, pp. 251–260.

Jou, Y. H., and Fukada, H. (1995). Effects of social support on adjustment of Chinese students in Japan. *Journal of Social Psychology*, 135, pp. 39-47.

Leedy P.D. and Ormrod J.E. (2010), *Practical Research*. Pearson, Boston

Letseka, M. and Maile, S. (2008), High university drop-out rates: a threat to South Africa's future, The Human Sciences Research Council (HSRC), Policy Brief.

Ligadu, C.P., Abbas, R.H. and Han, C. (2012), Perceptions of new students' coping skills during their first year in the university: A case study, International conference the future of education.

Marburger, D.R. (2010), Does Mandatory Attendance Improve Student Performance? The *Journal of Economic Education*, Vol. 37 No. 2, pp. 148-155.

McKenzie, K. and Schweitzer, R. (2001), Who succeeds at university? Factors predicting academic performance in first year Australian university students, *Higher Education Research and Development*, 20, pp. 21-33.

Müller, H., Prinsloo, P. and Du Plessis, A. (2007), Validating the profile of a successful first-year accounting students. *Meditari Accounting Research*. Vol. 15 No.1, pp. 19-33.

Nyamayaro, P.C. and Saravanan C. (2013), The relationship between adjustment and negative emotional states among first year medical students, *Asian Journal of social Science and Humanities*, Vol. 2 No. 3, pp. 270-278.

Ozga, J. and Surhanandan, I. (1998), Undergraduate non-completion: developing and exploratory model, *Higher Education Quarterly*, Vol. 52 No. 2, pp. 316-333.

Pitso, T. (2013), Status of Scholarship of teaching and learning in South Africa. South African, *Journal of Higher Education*, Vol. 27 No. 1, pp. 196-209.

Scott, I., Yeld, N. and Hendry, J. (2007), A case for improving teaching and learning in South African higher education. Higher Education Monitor No. 6. Pretoria; Council on Higher Education.

Sennetta, J. Finchilescu, G. Gibson, K. and Strauss R. (2003), Adjustment of Black Students at a Historically White South African University. *Educational Psychology: An International Journal of Experimental Educational Psychology*, Vol. 23 No. 1, pp. 107-116.

Sherina, M. S., Rampal, L. & Kaneson, N. (2004), Psychological stress among undergraduate medical students. *Medical Journal of Malaysia*, Vol. 59 No. 2, pp. 207-211.

Smith, C. K., Peterson, D. F., Degenhardt, B. F. & Johnson, J. C. (2007), Depression, anxiety, and perceived hassles among entering medical students. *Psychology, Health & Medicine*, Vol. 12 No. 1, pp. 31-39.

Steenkamp, L.P., Baard, R.S. and Frick, B.L. (2009), Factors influencing success in first-year accounting as a South African university: A comparison between lecturers' assumptions and students' perceptions. *South African Journal of Accounting Research*, Vol 23 No. 1, pp. 113-140.

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 People's Republic of China. *Journal of Adolescent Research*, Vol. 15, pp. 123-144.

Tempone, I. (2001), Variation in student learning in accounting. Doctoral dissertation, Swinburne University of Technology, Melbourne, Swinburne University of Technology.

Toews, M. L., & Yazedjian, A. (2007), College adjustment among freshmen: Predictors for White and Hispanic males and females. *College Student Journal*, Vol. 41 No. 4, pp. 891-900.

Yazedjian, A., Toews, M.L. and Navarro, A. (2009), Exploring Parental Factors, Adjustment, and Academic Achievement Among White and Hispanic College Students. *Journal of College Student Development*. Vol. 50 No. 4, pp. 458-467.

Winebrenner, S. (2007), *Teaching Kids with learning difficulties in the regular classroom* Free Spirit Publishing, Minneapolis.

University of the Witwatersrand Ranked (Wits), (2014), Wits ranked top university in Africa, available [http://www.wits.ac.za/newsroom/newsitems/201407/24117/news\\_item\\_24117.html](http://www.wits.ac.za/newsroom/newsitems/201407/24117/news_item_24117.html) (accessed 4 April 2015).

Woollacott, L., Snell, D., and Laher, S. (2013). Transitional distance: A new perspective for conceptualizing student difficulties in the transition from secondary to tertiary education, Proceedings of the 2<sup>nd</sup> Biennial Conference of the South African Society for Engineering Education, Cape Town, 11-12 June.