

Social-Background Factors Affecting the Academic Success of First Year Sociology Students at The University of Johannesburg, South Africa

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ABSTRACT The objective of the research was to explore the role of social-economic factors in the academic achievement of first year students at a South African University. A survey was conducted with a sample size of 210 students. The influence of the following variables were examined with inferential statistics: having English as a home language; being a first-generation student; quality of high school attended; size of physical living/study space of a student and household structure. Chi-square tests showed that in this sample home language, type of high school and living/study space impacted on students' performance.

INTRODUCTION

Various aspects can affect students' performance at university level, ranging from socio-economic, environmental to psychological factors. This paper concentrates on social-background factors that are outside the academic setting: specifically home language, type of high school attended, being a first-generation student, living/study space and family structure. Since the debates about the influence of social factors on academic achievement have been ongoing, especially in Western universities, it is essential to locate this paper and examine how the University of Johannesburg first year Sociology students perform against this background. The objective was to quantitatively test whether these factors are indeed affecting the academic performance of students.

Numerous studies (Anderson et al. 2001; Gillborn 2001; Hicks 2003; Ishitani 2003; Barry 2006; Clarkson 2008; Hossler et al. 2008; Hossler et al. 2009) point to the fact that the social background of students affects how they perform academically. However, most academic discourse on the factors affecting the academic success of students is based on American and European studies, therefore it is important to discuss such work

and compare it with the findings presented in this study.

Literature Review

Home Language

The first area of focus is on the difference in academic success between students with English as home language compared to those who do not have English as first language. South Africa has eleven official languages with English dominating as medium of instruction in universities. The majority of students at the University of Johannesburg are using other languages at home. As a result, most do not only have to master the content of a course, but also have to grasp the language and the terminology before understanding the basics of the curriculum.

Language also constitutes a huge barrier for parents in participating in their children's university education, when those children use a different language at school. Gillborn (2001: 23) affirms this notion, although the study was based in London, stating that parents who do not speak English cannot help their children with their studies or participate meaningful in the schools.

The communication process is a crucial element for students either for enabling understanding of the course content, or not at all. The University of Johannesburg developed a Writing Centre to help students with writing problems, but challenges remain. Some students may lose interest in a subject due to lack of comprehen-

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sion. Student dropout rates, not only on a specific subject, but on the whole programme, could be partly associated with the language of instruction used at the institution.

Various studies such as those of Amelink (2005), Gray et al. (1996), Hagy and Staniec (2002), Kiang (1992) and King (2002) give priority to the lack of efficiency in English as being a major contributor to low academic achievement for students, especially those from non-English speaking homes. These authors reveal that the inconsistency between the languages at school and at home creates a major upheaval for some students. They have to change languages (creating double-consciousness) often in adapting to different settings, at home and on campus. According to Crystal (2003: 15), "those (English-first language speakers) who have it as a mother tongue – will be more able to think and work quickly in it, and to manipulate it to their own advantage at the expense of those who do not have it, thus maintaining in a linguistic guise the chasm between rich and poor". This explains exactly the current South African context, where in universities, English-first language speakers constitute small numbers. It could be argued that this enables them to continue achieving high marks due to a clear understanding of the language in which the programmes in universities are presented.

Webb argued in 2000 that institutional monolingualism has increased, but there is limited language planning research and the absence of any coordination of existing research projects, too little effective support for linguistic pluralism from important decision-makers, continued emotional resistance to the Black languages, and the lack of public support among public leaders generally for the 11 language policy" (Webb 2000: 13). These are just a few of the effects experienced by having one dominant language over others. Unfortunately, students end up being victims of such a system.

One of the participants interviewed during a project done by Leibowitz (2005) in South Africa stated that:

It was hard for me because when . . . I was at high school most of the time we were using the first language. Just I think we were making a sandwich [code-switching] with the second language. Now when we came to the university I found it for me that it's hard even to hear what the lecturer is saying (Leibowitz 2005: 672).

Another one gave a description which was also significant:

And then for me that is negative because you see, our teachers, they don't allow us to have this critical evaluation and then when you come here to varsity [university or college] you have to analyse the work critically and then we have some difficulty. That is why you find most of the Africans, when they are given work, they just plagiarise that, they are giving you back what is in the book, because they were taught like that at high school (Leibowitz 2005: 669).

The above quotes do not only explain the low academic achievement of English second-language speakers, but also the reason why most cannot critically engage with their work. They are expected to communicate in a language they do not even know how to use. Therefore, they have to think in their indigenous languages and try to translate their thoughts into English to create meanings in their minds.

Quality of High School

Most studies maintain that students from schools with lower fees tend to perform poorer compared to those from schools which were more expensive to attend. The Clarkson (2008) study also showed a positive relationship between previous schooling (meaning the type of school the student attended) and current academic achievement. In this paper any school charging fees above R6000 per annum, is regarded as a high-fees institution. The focus on fees is based on the premise that schools which charge high fees can provide adequate resources to students, such as good teachers, computer classes, science laboratories, technical courses, and smaller teacher/pupil ratios.

What has been evident is the fact that most Black schools in South Africa do not charge much in terms of school fees. A large number of black students, which now comprises the majority of the student population in universities, come from schools either located in townships or urban areas. Most high schools where these students come from cannot offer good technological infrastructure and some of the students struggle when they get into universities. According to Lubienski and Lubienski (2006: 8), some (often private) schools in the USA are thought to be better resourced, on average, and private

school teachers and administrators are required to receive a certain level of training. If such factors are linked to better student achievement, then the expectation is that students from schools with higher fees should perform relatively well.

South African History of School Fees

In the South African context, many private and schools attended by White learners had been well resourced before 1994, and continued this pattern compared to schools which were designated for black students. Hence, these privileged schools had good pass rates, low teacher-pupil ratios, high teacher qualifications and teacher salaries, demonstrated greater effectiveness in terms of their outputs in order to attract families willing to pay tuition. In saying so, therefore, "White" schools tend to offer more facilities and opportunities to students compared to schools for other "races", and consequently attract a lot of families who earn more.

After the first democratic elections in 1994, inequalities had to be redressed and the education system had to be restructured. The new government had to decide on balancing reliance on public and private resources for education and made massive resource re-allocations to Black schools. The racially defined Departments of Education were replaced with a single education system and nine years of education was made compulsory for all (Fiske and Ladd 2003: 4; Van der Berg 2007: 849). Yet a division between public and private-type (formerly White public) schooling was created as the government has decided to encourage public schools to increase school fees. The private and private-type schools continued to flourish and producing different students compared to those in public schools (Fiske and Ladd 2004).

What has been noticed in South Africa post-1994, is an increase in the number of Black students enrolling in former White schools, in search of a better education. These schools are usually situated in former Whites-only suburbs, and many children are ferried from the townships to these schools. In addition, Bell and McKay (2011) have found that access to affluent former White schools in Sandton, Johannesburg, is now determined by income and socio-economic status, and they refer to this as 'class apartheid'. Anderson et al. (2001) infer

that as some families can send their children to better quality schools, the traditional township schools will end up with the learners from families who are financially less able or motivated. In these schools there may be little emphasis on independent thinking and decision-making and self-regulation (Fraser and Killen 2003).

According to Fiske and Ladd (2003: 4), fees policy remains a topic of current debate. During the past few years, the South African Department of Education has experienced mounting problems, like undelivered text books and poor sanitation facilities, which some scholars refer to as a sign of failure for the ordinary citizens.

First-generation Students

First-generation students are those from households where neither of their parents studied at tertiary level. Students who have someone in the family who attended university before them, tend to have better knowledge of what is happening and expected from them. These students have an advantage: their parents or relatives may help them in managing student life, getting financial help and how to deal with study and examination pressures. According to Ishitani (2003: 434), first-generation students in the USA had lower critical thinking abilities, less support from their family in attending college/university, and spent less time with their peers and talking with their teachers in high school about their future expectations at university level. Therefore, universities being places where students are constantly required to think critically, creates the dilemma that these students are faced with a huge challenge.

Confidence and ways to deal with emotional stress proved to be some of the coping mechanisms for a number of the students in the new university environment. For most first-generation students, as found by Amelink (2005: 34), their daily experiences with academic and student services on college campuses influence their academic success. All students have to possess analytical and problem-solving skills, learn about other cultures and races, how to satisfy study requirements, and simultaneously deal with external commitments. Unfortunately, for first-generation students, there is no one to guide them through such problems; rather they have to figure out themselves how to proceed with their studies while experiencing those problems.

Hicks (2003: 6) emphasises that first-generation university students often experience a form of culture shock when they begin their studies. They may feel that they do not fit in socially and that their families cannot offer them a lot of support. Non-first-generation students had an advantage, since they knew what to expect, and whom to ask for help. Hick's point is very important for a proportion of Black South African students, as well as most foreign students from Africa.

These foreign students bring their own values, ways of life and different academic expectations. Possessing these preconceived ideas, they often experience conflicts in values. Hicks' (2003) study in the USA is very relevant, because it conceptualises experiences similar to those at the University of Johannesburg, and was done with similar methods as the one at hand, viz distribution of a questionnaire to students electronically. In short, Hicks' (2003: 09) results confirmed the incorrect perceptions that students may have about attending university. Some of the results showed that students underestimated the value of outside help (external help from family members) in their academic progress; also that university became a source of extra stress for those students.

Orbe's (2004:138) research (also in the USA) was qualitatively based, thus it was able to capture both the feelings and opinions of these first-generation university students. They were at first year level, when these students were asked about any differences that exist between them and non-first-generation students. One of them gave the following response:

Those kids have their own computers in their rooms... you stand in a queue at computer lab forever – late at night whenever you can get on a computer. But they can get up whenever they want and work on their computer. Don't know... they just have that extra edge on everything. I mean they get their books right then and there, but we have to wait until the financial aid cheques come in. So, we have to usually spend extra money on the new books. I don't know... It's a lot of small things (Orbe 2004:138).

A few issues can be deduced from the above quote recorded by Orbe (2004: 138). The first is the resources that non-first-generation students have at their disposal and the financial burden they have to carry. These are just a few problems; others include constant fights with family

members. The same point was mentioned by Amelink (2005:40), that first-generation students receive less support from their families who do not see university as a priority. One more quote from Orbe's (2004: 142) work proving this point was provided by a student regarding communication:

I try to – to be honest with you – avoid acting like I've got all this new information in my head because they don't like it. I have a brother and we usually talk about different things. I can't remember the specific topic, but I asked him, "Where did you read that? Where did you get that statistic from?" "He just got up irate! "The big college woman wants proof!" He thinks I've changed, [and am] trying to act better than the rest of them.

Therefore, three matters emerge regarding first-generation students. Firstly, there is a huge chasm between home and university. Secondly, there is little known on how first-generation students deal with university studies in conjunction with cultural identity, race/ethnicity, age, family structure, socio-economic status, sexuality and gender. Lastly, first-generation students lack a sense of communication and belonging; at home they may be viewed as being 'better than everyone', or put under pressure to succeed. At university they experience a culture shock day by day, simultaneously trying to better their marks.

Living/Study Space

The focus in this paper is on the physical size of the study or living space at home or any accommodation in which the student resides. The need is to find if there is a relationship between the actual size of the room and students' academic achievement. Most literature emphasises the learning space at school or in the university, and not at home or the accommodation where the student resides. This includes Laiqa et al. (2011: 707) who maintain the opinion that the school facilities are important, both symbolic and functional, in support of the educational process. But, what about at home?

The important factor introduced by Laiqa et al. (2011: 706) is the fact that space plays an important role in students' academic achievement, therefore, "space can also impact on human and cultural behaviour, being an important factor in architecture... shape, scale, proportion,

colour, texture and quality of illumination affect the quality of space". Research, although the focus has been placed at the school level and not the place of residence, points out that building conditions related to human comfort have effects on students' academic achievement. Supporting this notion is Bacolod and Tobias (2005) and Lawson (2001), stating that the supply of basic services such as "electricity in learning space enhances the concentration of students and teachers" (Laiqa et al. 2011: 709). What needs to be remembered is that space is not static and absolute, meaning it is constructed out of social relations. What some people will consider as a standard room conducive to a learning environment, others may not see as fit surroundings for studying.

In order to appreciate the writings outlined on the integration of space into learning, there is a need to understand how learning itself is understood, how it takes place and the intersectionality of the two with space. Space on its own incorporates various dimensions, not only the size in measurement is integral, but also things like furniture, heating, etc. In certain instances, students' concentration may be distracted easily by various things found in the learning space, while at the same time, changing a few things like enlarging the physical space, may increase their concentration. A study by Montgomery (2008: 134) showed that "it is not merely a room in which learning takes place. The space itself, the people within it and their movement and organisation are all social constructions". Space as a variable in this paper is chosen because most Black students have less physical space available to them, whether in their parents' homes or lodging. In a study partly focusing on home educational resources by Strickland and Shumow (2008), the USA had lower scores than three other G8 countries for immigrant students having a place to study and a desk. Guo and Harris (2000) mention that the homes of poor students are likely to have structural faults, inadequate facilities like electricity and sanitation, and the neighbourhoods of these homes could be in high-crime areas. There seems to be a considerable gap in the academic discourse regarding living/study space and students' academic performance, especially in developing countries. Consequently, part of the aim of this paper is to investigate any relationship between study space and the academic achievement of students.

Family Structure

Family structure also plays a significant role in students' academic performance. According to Bankston and Caldas (1998: 717), single-headed families are six times more likely to be poor compared to other families. Therefore, students in such environments will not only have to deal with the absence of the father or mother figure, but the financial constraints it entails as well. According to Mulkey et al. (1992), family structure has an effect on school performance. This notion is also supported by Bankston and Caldas (1998: 716), adding that apart from socio-economic status, family structure has its own effects on educational success. These authors (1998) found that the performance of USA students from single-parent families was affected negatively by the 'unbalanced' home structure.

Biblarz and Gottainer (2000) took the family structure topic further, focusing not only on single-mothers, but divorced single-mother families. This means that the father is available, but does not have any involvement in the children's schooling. Therefore, given such a situation, divorced single mothers tend to hold lower occupations, and be financially stressed. As a result, students in such families may tend to perform poorly. There are mixed findings on whether students with widowed single mothers perform better than those from divorced single mothers.

However, the focus in this paper is on the differences between students with single mothers/fathers and those with intact families (both parents present). However, it will be erroneous to regard single-headed households as homogeneous. Families use different strategic survival tactics and to make sure that their children stay at school. Some of the factors identified by Pong and Dronkers (2003: 682) are also found on the entire spectrum of single-headed families. The same point is maintained by Milne et al. (1986: 125), that the literature on one-parent families almost exclusively addresses father absence (the most prevalent pattern) and relates it to a number of child outcomes, including cognitive performance. These authors also bring a very crucial element into this discussion: the complexity of the issue in cases where it intersects with race and sexuality, complicating the issue even further. Especially in South Africa, many Black students come from single-mother households

where living conditions may be totally different compared to those households where both parents are present.

Such students may have to apply for financial aid to be able to pay for studies and other resources to facilitate the learning process. Therefore, when looking into the issue of single-parent families, it is advisable to go beyond the economic status of such a household and determine the sociological perspectives into the issue. This paper aims at identifying exactly that, to locate a discussion beyond the financial status of single-headed households.

According to Jones in a newspaper article in the *Mercury* on the 5th of April 2011, "single-parent households have become the norm in South Africa, while nearly 100 000 children live in child-headed households". Snyders et al. (2006) maintain that single-headed households are not always suffering because there may be other adults present, or a co-habiting partner. "These household types are important to consider because they are such a common experience, but also because they have been found to improve economic well-being outcomes, at least in the short-run, for female-headed families". Therefore, the situation is not always as negative as some authors have stated.

METHODOLOGY

This paper reports on the findings of a quantitative study conducted to test the association between certain variables and the academic success of first year Sociology students. In gathering the data, a questionnaire was distributed to students through an E-learning system called Edulink, available free for students. The questionnaire consisted of 66 questions designed by the Sociology honours students of 2011, each

testing relationships between their individual chosen variables. Hence, the questions guiding this particular paper, are those concerning certain social-background factors. The effects of the variables were investigated by formulating hypotheses. Academic success as the dependent variable was defined in terms of the average mark for all the subjects an individual first-year Sociology student attained for the semester in question. The average mark obtained was grouped into three categories; fail, average and good performance.

At the time the University of Johannesburg had a population of 43 958 undergraduate students and, 1210 students taking Sociology as a first year subject. Table 1 indicates the race and gender distribution of the sample and the population of first-year Sociology students in 2011. Only 210 first year students successfully completed the survey; 26.2% of these were males while 73.8% were females, which correspond with the gender proportions in the total population. Similarly, the racial distribution of the sample also corresponds with the racial distribution of the population. African students made up the majority of the sample (77.6%), followed by White students at 16.2 per cent, coloureds at 4.3 per cent and Indians/Asians making up 1.9 per cent. This compares very well with the racial distribution in of first year students in the Department of Sociology. In 2011, 77.0 per cent of first years were African, 13.8 per cent were White and the Indians and coloureds combined made up 9.2 per cent of the total population of first year sociology students.

Hypotheses

There is a significant difference between students with English as home language and those

Table 1: Race and gender distribution of the sample and the population

Gender	Race						
	Sample		Population				
	<i>N</i>	%		<i>N</i>	%	<i>N</i>	%
<i>Sample</i>							
Male	55	26.2					
Female	155	73.8					
Total	210	100	African	163	77.6	932	77.0
<i>Population</i>	<i>N</i>	%	White	34	16.2	167	13.8
Male	343	28.3	Coloured	9	4.3	60	5
Female	867	71.7	Indian/Asian	4	1.9	51	4.2
Total	1210	100	Total	210	100	1210	100

Source: Department of Sociology, University of Johannesburg: Annual Report

who do not have English as a home language, regarding their academic success.

There is a significant difference between students who had attended schools with higher school fees and those who attended schools with lower school fees, regarding their academic performance.

There is a significant difference between students who are first-generation students at university and those who are not, regarding their academic success.

There is a significant relationship between size of living/study space and the academic success of students.

There is a significant difference between students who have a single parent and those with another type of parenting situation regarding their academic success.

Testing of the Hypotheses

All five hypotheses were tested using chi-square based on the level of measurement of the variables; nominal and ordinal. The independent variables tested were home language, type of high school, first-generation students, living/study space and family structure. All of these variables were tested with the dependent variable academic success, which was defined in terms of three categories on the questionnaire; fail $\leq 50\%$, average 51%-64% and good performance $\geq 65\%$.

Home Language

English as home language was determined by asking the question; what language do you predominantly (mostly) speak at home? Is English your mother tongue? Academic success was measured by using the question: "Thinking of the last semester, please indicate your marks for each of the subjects you were registered for." For both variables the level of measurement was ordinal, hence the Chi-square test was chosen to test for a significant relationship between the two variables.

Most students indicated that they speak Sotho at home, while only 22.4% predominantly speak English. When the mother tongue variable was tested against academic success, the chi-square produced a p-value of 0.023 (Table 2). Since the p-value was smaller than 0.05 that led to rejection of the null-hypotheses, home

language was found to influence academic success.

Table 2: Chi-square test between English as mother tongue and academic performance

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-square	7.578 ^a	2	0.023
Likelihood ratio	8.880	2	0.012
Linear-by-linear Association	7.475	1	0.006
N of valid cases	210		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.29

The results can be taken as valid since 0 cells 0% have an expected count less than 5, with a minimum of 5.29.

Quality of high school attended in terms of fees

School fees paid at high school was investigated using the question: "What were the school fees charged by your high school in your matric year?" While academic success remained the same as the above test with three categories; fail $\leq 50\%$, average 51%-64% and good performance $\geq 65\%$. Both variables were on the ordinal level. The p-value of the Chi-square test was 0.008 (Table 3) smaller than 0.05, hence the rejection of the null-hypotheses. Therefore, there is a significant difference in students who had attended schools with higher school fees and those who had attended schools with lower school fees regarding their academic performance.

Table 3: Chi-square tests for fees paid at school and academic performance

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-square	7.578 ^a	2	0.023
Likelihood ratio	8.880	2	0.012
Linear-by-linear Association	7.475	1	0.006
N of valid Cases	210		

a. 0 cells (0%) have expected count less than 5. The minimum expected count is 5.70.

First-generation Students

First-generation students were identified by the statement: "Please indicate the highest level

of your parent's/guardian's education". (Students had the opportunity to choose either Father's educational level or Mother's educational level). Therefore this study is comparing both types of students. First-generation students were measured at a nominal level of measurement, while academic success was ordinal, resulting in the choice of a Chi-square test. The chi-square tests performed resulted in the non-rejection of the null-hypothesis, that there is no significant difference between students who are first-generation and those who are not, regarding their academic success. The p-value was 0.208 (Table 4) with 10 cells (41.7%) having an expected count of less than 5 and the minimum expected count being 0.57.

Table 4: Chi-square tests for mother's and father's educational level and student's academic achievement

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-square	30.797 ^a	14	.006
Likelihood ratio	32.605	14	.003
Linear-by-linear Association	6.409	1	.011
N of valid cases	210		

a. Ten cells (41.7%) have expected count less than 5. The minimum expected count is 0.57

Size of Living/Study Space

Living/study space was operationalised with the question: "Due to the size (space) of my room/study area I find myself struggling to study". Academic success was measured at ordinal level as living/study space, resulting in choosing the Chi-square test. The p-value was 0.038 (Table 5), less than 0.05; therefore we reject the null-hypotheses that there is no signifi-

Table 5: Chi-square test for living space and academic performance

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-square	20.001 ^a	14	.130
Likelihood ratio	16.358 ^a	8	0.038
Linear-by-linear association	15.711	8	0.047
N of valid cases	8.321	1	0.004
	210		

a. Three cells (20.0%) have expected count less than 5. The minimum expected count is 3.4

cant relationship between size of living/study space and the academic success of students.

Single-parent Households and Other Parenting Situations

Household situation was investigated by the following question: "Under whose care were you during the last semester?" Students had the following options: single mother, single father, mother and father, guardian/care giver, no adult, or by specifying in case it was a different option. For data analysis purposes, the responses were recoded into three categories combining some of the options. Therefore, single mother and single father were combined in one option, both parents another, while other or no parents were combined as those students with "other forms" of family structure. Table 6 shows a p-value of 0.13 leading to the non-rejection of the null-hypotheses.

Table 6: Chi-square test for single-parent households

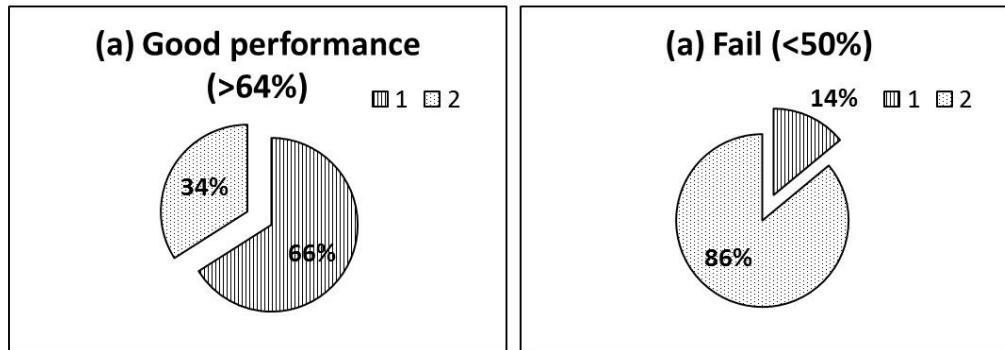
	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-square	20.001 ^a	14	.130
Likelihood ratio	22.334	14	.072
Linear-by-linear association	.025	1	.874
N of valid cases	209		

a. 14 cells (58.3%) have expected count less than 5. The minimum expected count is .14.

RESULTS

Home Language

The results showed a significant difference in academic performance between students who speak English as first language and those who do not. Just over 17 % (17.6%) indicated that English was their mother tongue, while 82.40% replied that it was not. The results show that those 82.40% for whom English is a second language, performed on average 15.6% worse compared to those with English as first language (29.7%). Figure 1 indicates the difference in students' performance with regard to home language. Therefore, 66% of the students with English as their mother tongue had a good performance compared to 34% of the students who said No. In comparison, a large proportion of



Key: English mother tongue; 2 English no mother tongue

Fig. 1. Home language and academic performance

those who failed (86%), were those who speak English as a second language. This demonstrates that there is a significant difference between students with English as home language and those not, regarding their academic success.

Quality of High School

In terms of significant difference in type of school attended regarding fees and academic success, the tests performed resulted in the rejection of the null-hypothesis that *there is no significant difference in students who had schools with higher school fees and those who attended schools with lower school fees regarding their academic performance*. Therefore, there was a significant difference between students from high-paying schools and those from low-paying schools on how they academically perform at the University of Johannesburg. As Figure 2 elaborates further, (a) the higher the amount paid in high school, the better the student's performance. While on the other side (b), the results showed that the highest proportion of students who failed, were those from low paid high schools.

The above results also correspond with the literature that the majority of the students from public schools where there is a lack of resources, are struggling in higher educational institutions. Some high schools do not offer the basic technological requirements for succeeding in universities.

First-generation Students

The third factor examined was the difference between first-generation students and those who

are not, regarding academic success. The chi-square tests performed resulted in the rejection of the alternative hypothesis that *there is significant difference between students who are first-generation and those who are not, regarding their academic success*. The p-value was 0.208; the data showed the following in comparison with the literature review: there is no link between the findings and the literature outlined earlier.

Hence, the findings showed different results; most of the students who indicated to be first-generation were performing well. Therefore, the results were inconclusive. From the p-value, it showed no significance difference.

Living/Study Space

Figure 3 indicates the relationship between size of living/study space and academic success. The p-value was 0.038, resulting in the rejection of the null-hypothesis that *there is no significant relationship between the size of living/study space and the academic success of students*. Therefore, from the data gathered at the University of Johannesburg, living/study space does affect the academic success of first year sociology students. Although the literature did not address this aspect, it is obvious from these findings that there is a relationship between these two variables.

The statement which appeared on the questionnaire was: *"Due to the size (space) of my room/study area I find myself struggling to study"*. The answer categories were 1 Strongly

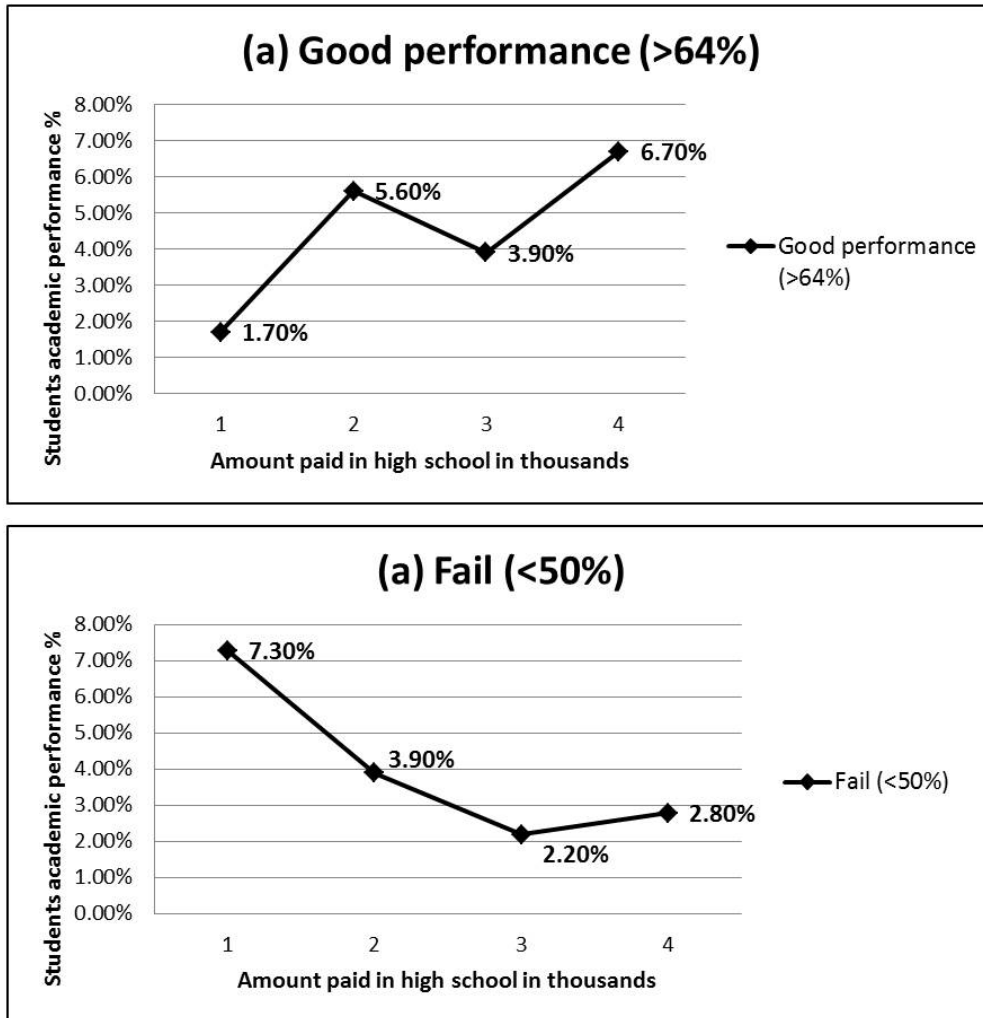


Fig. 2. Relationship between academic performance and fees paid in high school

disagree, 2 Disagree, 3 Partially agree, 4 Agree and 5 Strongly agree. Therefore, living/study space is a third factor proved in this paper to have an effect on the academic success of first year sociology students at the University of Johannesburg.

Family Structure

The last variable which was tested is *the difference in academic success between students from single-parent families, intact families and other types of households*. Students answered

the question; “Under whose care were you during the last semester?” The p-value was 0.130, bigger than 0.05 resulting in the rejection of the alternative hypothesis that *there is a significant difference between students who have a single parent and those with other type of households regarding their academic success*. The data showed that students from single-parent families do not perform significantly less well, compared with those from both parents or from other family structures. From Figure 4 (1 represents students from single-parent households, 2 represents students with both parents, while 3

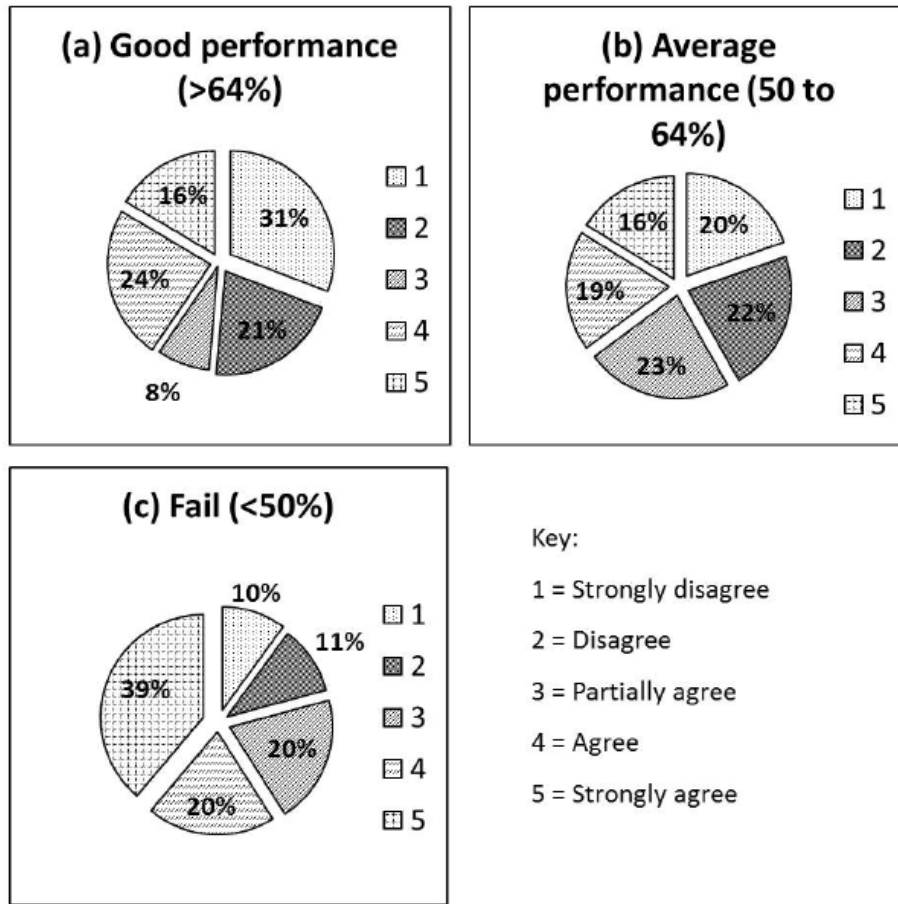
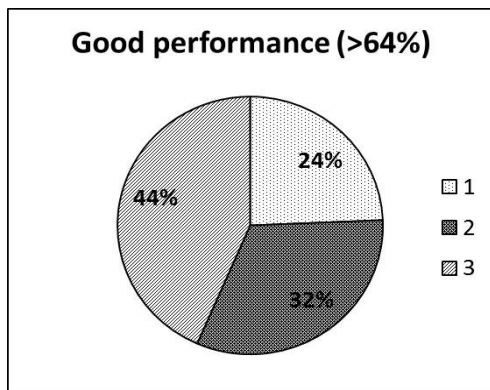


Fig. 3. Size of living/study space limiting academic success



Key: 1 students from single-parent households; 2 students with both parents; 3 students who had other types of family structure or no parents

Fig. 4. Single parent households and academic success

represents students who had other types of family structure and those who had no parents), the third group showed higher academic performance compared to the other two. Thus, amongst the sample of 210 students, 28.2% who had “other” types of family structure, or those with no parents, were performing better than those from the other two categories.

Combining single mother and father-parented families into one category for analysis, may have obscured some important differences in the academic success of students from different family structures. Most existing research on educational outcomes for children focussed on single-mother families, since that is usually the most prevalent situation in single parenting. It is for example known that children from female-headed households are more likely to be at school in South Africa, and those without moth-

ers are more likely to drop out (Nimubona and Vencatachellum in Heaton et al. 2014). Anderson et al. (2001) found a strong positive relationship between the education of mothers and the schooling of their children. In South Africa, the monthly Child Support Grant also aids mothers in keeping their children at school.

In many quarters there is some idealised view of intact families which provide the optimal opportunities for educational success of children. In reality, in many countries of the world, the household situations have had to adapt to day-to-day realities. South Africa's long history of migrant labour, the Group Areas Act, and the impact of HIV/AIDS, partly explain the relatively high number of students reportedly coming from "other" types of households, and the coping capabilities of such households over a long time. Many grandparents had to step in to care for grandchildren, and with most receiving a social grant, there is some level of social security.

Regarding success at university studies, people have proved themselves to be resilient and resourceful, and especially literature and reports about single mothers abound with personal accounts of continuous support, encouragement and sacrifice for their children.

DISCUSSION

Much research has focused on factors contributing to, or inhibiting the academic success of pupils and students on various levels of learning, from primary to tertiary education. A large number of studies specifically focused on conditions specific to learning as an individual process, learning environments, to nutritional status, types of teaching models, methods of assessment, and student expectations and perceptions. The vast majority of studies have been conducted in developed countries, or those referred to as the Global North.

It is also known that success in learning depends on factors other than those in the immediate learning environment, for example, the developmental status of a country, socio-economic factors, demographic variables, and broad patterns of gender and age relations.

Given that the University of Johannesburg is situated in a particular context of historical and race relations, it was decided to centre this study on social-background factors external to the academic setting, which could impact on successful learning outcomes.

Hence, this paper concentrates on social-background factors that are outside the academic environment: specifically home language, type of high school attended, being a first-generation student, living/study space, and family structure. The objective was to quantitatively test whether these factors are indeed affecting the academic performance of students.

CONCLUSION

In conclusion, this paper presented social background factors that may affect the academic success of first year Sociology students.

On home language, the focus was on the language the student speaks at home and the language used for academic purposes. Quality of schooling was measured by the fees paid at high school and it was observed that students who have a background of using different educational resources, tend to perform better than those who did not. First-generation students were defined as those students whose parents did not have a university qualification. This category of students has to deal with a number of problems: these factors range from shying away from challenges, the fear they will not be able to meet expectations, and fears of inadequate performance. Household structure is defined as the presence of one or more parents. With space, the focus point was to determine how crowded the space is where students reside and study.

From the findings it was clear that three out of five of the identified variables were the main factors affecting the academic success of first year Sociology students. These factors are home language, type of high school and living/study space. The objectives of this paper were to test whether the proposed factors mentioned are indeed affecting their academic performance, to specify any significant difference that exists between them and academic performance, or establishing any existing relationship with academic performance. Unfortunately, the restricted nature of the study due to the small sample size, the fact that the cross-sectional study was conducted among a single cohort in a single programme, and that only the first semester marks were used, limits the generalisability of the findings quite severely. Further research taking a longitudinal focus and employing more than one cohort, is therefore essential.

RECOMMENDATIONS

Several educational researchers emphasise the importance of conducting longitudinal studies in any kind of educational research. It could be added that this is especially important in South Africa, where political transition and changes in educational policy are of fairly recent origin, in order to closely monitor areas of concern and success. Better use can be made of existing annual household surveys, by including questions on factors such as repeated grades, and age of schooling completion.

For university students, institutions of higher education should be cognisant of the background characteristics, as well as educational and other needs of previously excluded students. This includes the pressing issue of “hungry students”, which is a fairly recently and addressed phenomenon in some universities.

Research found that particularly, first year students at two South African universities, had unrealistic expectations and perceptions of tertiary study, as well as differences between the perceptions of lecturers and students regarding success factors in study. These are the kinds of studies that should receive much more attention. Even institutions that have student learning support programmes in place may be placing emphasis and funding onto less efficient efforts at improvement of educational outcomes.

A last word: in the whole process of educational integration in South Africa, matters of maintaining cultural identity should be treated with great sensitivity.

REFERENCES

- Amelink CT 2005. *Predicting Academic Success Among First-Year, First Generation Students*. PhD Dissertation, Unpublished. USA: Virginia Polytechnic Institute and State University.
- Anderson KG, Case A, Lam D 2001. Causes and consequences of schooling outcomes in South Africa: Evidence from survey data. *Social Dynamics: A Journal of African Studies*, 27(1): 37-59.
- Bacolod M, Tobias JL 2005. School Quality and Achievement Growth: Evidence from Philippines. From <http://www.socsci.uci.edu/~mbacolod/cedu_schlrnk.pdf> (Retrieved on 15 August 2011).
- Barry T 2006. *The Effect of Socio-economic Status on Academic Achievement*. PhD Thesis. Wichita: Wichita State University.
- Bankston, CL, Caldas SJ 1998. Family structure, schoolmates, and racial inequalities in school achievement. *Journal of Marriage and the Family*, 60(3): 715-723.
- Bell J, McKay TM 2011. The rise of ‘class apartheid’ in accessing secondary schools in Sandton, Gauteng. *Southern African Review of Education*, 17: 27-48.
- Biblarz TJ, Gottainer G 2000. Family structure and children’s success: A comparison of widowed and divorced single-mother families. *Journal of Marriage and the Family*, 62: 533-548.
- Clarkson LMC 2008. Demographic data and immigrant student achievement. *Theory into Practice*, 47: 20-26.
- Crystal D 2003. *English as a Global Language*. 2nd Edition. Cambridge: Cambridge University Press.
- Fiske EB, Ladd HF 2003. Balancing Public and Private Resources for Basic Education School Fees in Post-Apartheid South Africa. *Working Paper Series SAN03-03*, USA: Sanford Institute of Public Policy.
- Fiske EB, Ladd HF 2004. *Elusive Equality: Education Reform in Post-Apartheid South Africa*. Washington DC: Brookings.
- Fraser WF, 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*, 23(4): 254-260.
- Fraser WF, Killen R 2005. The perceptions of students and lecturers of some factors influencing academic performance at two South African Universities. *Perspectives in Education*, 23(1): 25-39.
- Gillborn D 2001. Race equality and education policy. *Education Review*, 15(01): 21-26
- Gray MJ, Vernez G, Rolph E 1996. Student access and the “new” immigrants: Assessing their impact on institutions. *Change*, 41-47.
- Guo G, Harris KM 2000. The mechanisms mediating the effects of poverty on children’s intellectual development. *Demography*, 37(4): 431-447.
- Hagy AP, Staniec FO 2002. Immigrant status, race and institutional choice in Higher Education. *Economics of Education Review*, 21: 381-392.
- Heaton TB, Amoateng AY, Dufur M 2014. Race differences in educational attainment of youth aged 7-18 in post-apartheid South Africa: The role of family structure, resources and school quality. *SA Review of Sociology*, 45(1): 101-121.
- Hicks T 2003. First Generation and Non-First Generation Pre-College Students’ Expectations and Perceptions about Attending College. *Faculty Working Paper*, School of Education Paper 10, USA: Fayetteville State University.
- Hossler D, Ziskin M, Moore III JV, Wakhungu PK 2008. The Role of Institutional Practices in College Student Persistence. November. *Paper presented at the 2008 Annual Forum of the Association for Institutional Research (AIR)* in Seattle, WA.
- Hossler D, Ziskin M, Gross JPK, Kim S, Cekik O 2009. Student aid and its role in encouraging persistence. In: JC Smart (Ed.): *Higher Education: Handbook of Theory and Research*. New York: Springer.
- Ishitani T 2003. A longitudinal approach to assessing attrition behaviour among first-generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education*, 44(4): 433-449.
- Kiang P 1992. Issues in curriculum and community for first-generation Asian Americans in college. *New Directions for Community Colleges*, 80: 97-112.

- King JE 2002. Crucial Choices: How Students' Financial Decisions Affect their Academic Success. American Council on Education: Washington DC. From <http://www.acenet.edu/bookstore/pdf/2002_crucial_choices.pdf> (Retrieved on 15 August 2011).
- Laiqa R, Shah RU, Khan SM 2011. Impact of quality space on students' academic achievement. *International Journal of Academic Research*, 3(2): 706-711.
- Lawson BR 2001. *The Language of Space*. Boston: The Architectural Press.
- Leibowitz B 2005. Learning in an additional language in a multilingual society: A South African case study on university-level writing. *TESOL Quarterly*, 39(4): 661-681.
- Lubienski ST, Lubienski C 2006. Charter, Private, Public Schools and Academic Achievement: New Evidence from NAEP Mathematics Data. USA: National Centre for the Study of Privatisation in Education, *Research Report*.
- Milne AM, Meyers DE, Rosenthal AS, Ginsburg A 1986. Single parents, working mothers, and the educational achievement of school children. *American Sociological Association*, 59(3): 125-139.
- Montgomery T 2008. Space matters: Experiences of managing static formal learning spaces. *Active Learning in Higher Education*, 9(2): 122-138.
- Mulkey LM, Crain RL, Harrington AJ 1992. One-parent households and achievement: Economic and behavioural explanations of a small effect. *Sociology of Education*, 65: 48-65.
- Orbe MP 2004. Negotiating multiple identities within multiple frames: An analysis of first-generation college students. *Communication Education*, 53(2): 131-149.
- Pong SL, Dronkers J, Thompson GH 2003. Family policies and children's school achievement in single- versus two-parent families. *Journal of Marriage and Family*, 65: 681-699.
- Snyders AR, McLaughlin DK, Findeis J 2006. Household composition and poverty among female-headed households with children: Differences by race and residence. *Rural Sociological Society*, 71(4): 591-624.
- Soudien C 2010. The reconstitution of privilege: Integration in former white schools in South Africa. *Journal of Social Issues*, 66(2): 352-366.
- Strickland MJ, Shumow L 2008. Family matters: Exploring the complexities of families of immigrant adolescents and achievement in four G8 countries. *The Open Family Studies Journal*, 1: 39-48.
- Van der Berg S 2007. Apartheid's enduring legacy: Inequalities in education. *Journal of African Economies*, 16(5): 849-880.
- Webb VN 2000. Constitutional Principles and Challenges for Language Policy and Language Planning in Tertiary Education. *Keynote Lecture at the Seminar on Language Policy at the Tertiary Level*. September. Potchefstroom University for Higher Education, Vaal Triangle Campus, South Africa.