



University of Fort Hare
Together in Excellence

Identifying Success and/or Risk Factors for Student Success at the University of Fort Hare

by

Prof Roxanne Piderit

Associate Professor/Head of Department

Department of Information Systems

East London Campus

July 2016

Contents Page

1. Introduction and Background	1
2. Research Problem, Questions and Objectives	1
3. Research Approach	1
4. Similar Studies	2
5. Theoretical Perspective	2
6. Conceptual Framework.....	3
7. Findings and Discussion	3
8. Way forward (in Conclusion)	4
9. References	5

List of Figures

Figure 1: Bandura's Social Learning Theory (Bruning, 1999)	3
--	---

1. Introduction and Background

In a presentation to HESA in March 2014, Dr Badat notes that throughput and undergraduate success and graduations remain low, with 55% of all students entering higher education never graduating (Badat 2014). Further to this, the drop-out rates were higher among Black South African students (Badat, 2014), and only 5% of Black and Coloured students complete studies in regulation time. At historically disadvantaged institutions, such as the University of Fort Hare (UFH), this problem is exacerbated by various problems in the educational background of students entering such institutions (Brent & Felder, 2005). One such issue is the use of English as the medium of instruction, while this is often a second or third language for these students. Also, changes in the National Senior Certificate and various other challenges experienced in secondary schooling result in a large portion of the students being ill-prepared for tertiary education (Heaney, Lubbe & Swank, 1996).

Student success has been widely investigated, both nationally and internationally by various authors (Tinto, 2012; Kappe & van der Flier, 2012; Wilson-Strydom, 2010; Petersen, Louw & Dumont, 2009). These studies have provided many insights into factors which can impact on a student's success. Many of these have resulted in suggested frameworks for understanding student success, most of which have a lot in common (Hurtado, Carter & Spuler, 1996; Tinto, 2012). However, many of these do not consider the factors specifically for a disadvantaged institution such as UFH. This study, therefore, aims to investigate the various factors which underlie student success or risk in a disadvantaged institution. This is done in order to propose learning interventions specific to the underlying causes of student risk.

2. Research Problem, Questions and Objectives

Many interventions planned in terms of promoting student success have not been successful. This could be attributed to a lack of thorough investigation into the factors which positively impact on successful students (and conversely the factors which negatively impact on the 'unsuccessful'/'at-risk' students). In order to successfully plan interventions in terms of assessment plans, teaching methods, staff development, or academic literacy, a thorough investigation of the underlying conditions for student success needs to be undertaken. Thus, this study seeks to answer the question:

What are the success and/or risk factors impacting on student success/failure?

The objectives formulated for this study are:

1. Explore attributes common to successful/achieving students
2. Explore attributes common to at risk/excluded students
3. Reflect on identified attributes and the impact on interventions

3. Research Approach

This study is exploratory in nature and will make use of a multi-method approach drawing on a variety of sources, including: Interviews, Questionnaires, Existing Institutional Data and Reflective Practice. The description below details all steps of the project, however only the first two have been achieved thus far. The remaining steps will continue after the completion of TAU, towards the final outcome of recommendations to aid student success.

The *first step* in this project was to classify students into the four categories identified by the Faculty of Management and Commerce, namely:

1. *Achievers*: Attain 75% for 80% of the subjects for the level.
2. *Successful*: Attain pass grades in all subjects.
3. *At Risk*: Fail up to 3 subjects including a major subject.
4. *Exclusion Risk*: Not likely to avoid the exclusion criteria for the faculty (less than 40 credits in first year, 120 credits in second year, 180 credits in third year, 320 credits in fourth year, degree completed in 5th year).

Following this classification, the *second step* involved collecting the students' demographic and pre-entrance data was collected from institutional data and compared. Focus group interviews were carried out with students identified in the categories described above in order to explore the findings obtained from the initial data collection.

The remaining work to be done on this project is to conduct a survey with the identified students based on Hurtado, Carter and Spuler's (1996) survey to assess the impact of the identified factors on the success of their studies. The survey will investigate the environmental pull, family, study factors, socio-economic status, subjects, staff support, peer, fees, orientation, atmosphere and resource factors which impact on student performance.

From the survey results, the predominant issues can be identified. Staff will also be interviewed in order to determine staff support available and to assist in the development of interventions to overcome identified issues. Staff and students will, through a Delphi technique, refine and verify the findings through multiple iterations until no new issues are raised and all parties are satisfied that the findings are a true reflection of the situation.

4. Similar Studies

The investigation of student success/risk factors was largely based on Hurtado, Carter and Spuler's (1996) survey to investigate the difficulties experienced and factors which led to the successful transition into the 'college' environment among Latino students in the United States. This study was found to be the most applicable as it considered the perspective of students from disadvantaged backgrounds, which is the predominant feature of the UFH student body. This survey looked at factors such as socio-economic status, time management, financial resources, orientation into the college environment, level of difficulty in subject matter (perceived), family support, support from staff (perceived) – both academic and support, perceptions of racial/ethnic tension, social activities and interaction with other racial groups (Hurtado, Carter & Spuler, 1996). This survey provides a useful base for this study, however additional (context-specific) factors will need to be considered, these include: schooling background, NBT scores, language, age at first registration and study habits.

5. Theoretical Perspective

The factors mentioned above can be classified into three categories. As a theoretical base for this classification, Bandura's Social Learning Theory will be used. This theory is depicted in Figure 1 below.

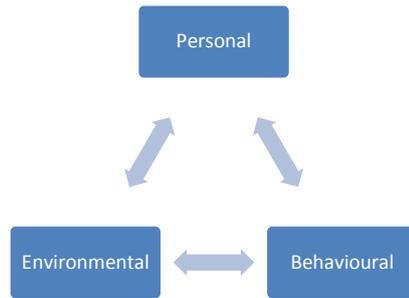


Figure 1: Bandura's Social Learning Theory (Bruning, 1999)

The three interacting variables in the Social Learning Theory can be defined as follows:

1. Personal: These factors are beliefs and attitudes affecting learning which can be influenced by past or current experiences and can affect future performance.
2. Environmental: These factors are influences from family, educators and peers.
3. Behavioural: These factors are how the student reacts to a given situation.

The classification of the factors identified earlier according to the three variables of Bandura's Social Learning Theory is provided in the conceptual framework (included as Appendix A).

6. Conceptual Framework

The conceptual framework (Appendix A) was derived from the literature described above, and factors were classified according to the Social Learning Theory. To date, the first four aspects of the "Personal" factors have been investigated. The remaining factors are yet to be considered.

7. Findings and Discussion

As mentioned above, due to the limited time to conduct this study, only the first four aspects of the "Personal" factors were investigated, namely: the Demographics, Environmental Pull, Pre-Entrance and Family. The population for this study is the first-year intake for 2015 in the Faculty of Management & Commerce. This forms a total of 221 students, distributed as follows:

- | | |
|-------------------------------|-------------|
| 1. 60001: Accounting | 96 students |
| 2. 60005: General | 44 students |
| 3. 60008: Economics | 35 students |
| 4. 60011: Information Systems | 46 students |

The first step was to classify the students according to their success/risk category. This breakdown was as follows:

- | | |
|-------------------|--------|
| 1. Achiever | 3.62% |
| 2. Successful | 43.44% |
| 3. At Risk | 23.98% |
| 4. Exclusion Risk | 9.95% |

The collected data was analysed using SPSS. A brief discussion of the various findings is provided below. Please note that this represents a summarised discussion as space did not permit a complete representation of the findings.

1. Nationality: The only noticeable difference is in the Achiever category where the split between South African and Other countries was 50% each. South African students made up the majority of each of the other categories, but this needs to be considered in relation to the institutional demographics, where only 10% of the student population is from foreign countries.
2. Gender: The only noticeable difference was in the Achiever category, where 75.00% of the category were male. This is in contrast to previous studies which assumed woman would be the higher achievers.
3. Home Language: This category was of particular interest due to the debate regarding language of instruction. There was no noticeable difference between the four categories regarding the home language. Upon further investigation, the students attribute success to language and writing interventions set up by the Faculty, however the sustainability of these interventions post-TDG is a concern.
4. Age in 1st Year: The only noticeable difference is the absence of students 30 years and older in the Achiever category. These students admit to be working students aiming to complete the degree and not concerned about top marks.
5. Student Funding: Exclusion Risk students are largely without bursaries, thus concerns about funding could be impacting on their study potential (requires further investigation). Achiever students have the lowest average bursary amount, yet this does not impact on their studies (also requires further investigation).
6. Work Status: Institutional Data reflects that all of the students are unemployed, however through interviews it was established that some students are employed during their studies. This aspect therefore requires input from all the students in order to verify.
7. Matric Results: An interesting observation is that the Exclusion Risk students had the highest average Mathematics mark. This seems to be contradictory to the expectations of the faculty, as high importance is placed on the Mathematics mark as an entrance requirement. For this reason, an investigation of the schooling background will be included in the next round of investigations in order to determine how this contributes to the students' success or risk.
8. Qualification Choice: Not being accepted into a first choice qualification was expected to be a factor, however the distribution was similar in all categories.
9. Distance from Home: It was expected that the further away from home a student is, the less familial support they are able to receive, and thus a resultant impact on their studies, however there was no obvious indicator in the results.
10. Residence Accommodation: Initial findings indicate that the majority of students in the Risk Categories do not have residence accommodation. This may impact on their studies, as there is no suitable alternative accommodation in the vicinity of the University.

8. Way forward (in Conclusion)

From the initial findings as described above, a few factors have already been identified which need further investigation, including student funding, work status and schooling background. These will be included in questionnaires distributed to the 221 students during the next phase of the study. The next phase will also investigate the Behavioural and Environmental elements of the conceptual framework. Upon completion of the data collection, the results will be analysed and recommendations made. The recommendations will be verified using the Delphi Technique.

9. References

- Badat, S (2014). Higher education challenges. Presentation to Higher Education South Africa (HESA). 5 March 2014. Available at: <https://pmg.org.za/committee-meeting/17037/>
- Brent, R. and Felder, R.M. (2005). Understanding student differences. *Journal of engineering education*. Volume 94, Issue 1, pp 57-72.
- Bruning, R. (1999). *Cognitive Psychology and Instruction*, 3rd Edition. Merrill Prentice hall, New Jersey.
- Heaney, L., Lubbe, S. and Swank, K. (1996). Introducing NIT to an Historically Disadvantaged Institution in South Africa. *Proceedings of the 9th International Conference on New Information Technology*. Pretoria, South Africa, 11-14 November 1996, p.283-292.
- Hurtado, S Carter,DF and Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education*, 37 (2) p 135-157.
- Kappe, R. and van der Flier, H. (2012). Predicting academic success in higher education: what's more important than being smart? *European Journal of Psychology Education*, 27, p 605–619.
- Petersen, I., Louw, J., Dumont, K., and Malope, N. (2010). Adjustment to university and academic performance: Brief report of a follow-up study. *Educational Psychology*, 30, p 369-375.
- Tinto, V. (2012) Enhancing student success: Taking the classroom success seriously. *The International Journal of the First Year in Higher Education*, 3 (1) p 1-8.
- Wilson-Strydom, M. (2010). Traversing the chasm from school to university in South Africa: A student perspective. *Tertiary Education and Management*, 16 (4), p 313-325.