

FACTORS INFLUENCING ACADEMIC SUCCESS OF FIRST
YEAR OCCUPATIONAL THERAPY STUDENTS AT THE
UNIVERSITY OF THE FREE STATE

by

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DECLARATION

I certify that the dissertation hereby submitted by me for the M (Occupational Therapy) degree at the University of the Free State is my independent effort and had not previously been submitted for a degree at another university/faculty. I furthermore waive copyright of the dissertation in favour of the University of the Free State.

AZETTE SWANEPOEL

DEDICATION

I dedicate this dissertation to my parents who always believed in me but sadly were not here to accompany me on this journey.

Acknowledgment

To God all the Glory. I am constantly aware of the Love and Commitment He has for me.

My sincere appreciation to the following:

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ABBREVIATIONS AND ACRONIMS

AL	Academic Literacy (NBT)
ADL	Activities of Daily Living
HE	Higher Education
HEQSF	Higher Education Qualifications Sub-Framework
HPCSA	Health Professions Council of South-Africa
IADL	Instructional Activities of Daily Living
MAT	Mathematics (NBT)
NATP	New Academic Tutorial Program
NBT	National Benchmark Test
NGT	Nominal Group Technique
NQF	National Qualifications Framework
NREM	Non-rapid eye movement
NSC	National Senior Certificate
OTPF	Occupational Therapy Practice Framework
QL	Quantitative Literacy (NBT)
REM	Rapid eye movement
SAQA	South African Qualifications Authority
UFS	University of the Free State

CONCEPT CLARIFICATION

- Academic success:** Academic success is viewed from different perspectives. In this study academic success is viewed as the through put rate of students in the occupational therapy program (Mentz: 2012:38).
- Activity:** The Occupational Therapy Practice Framework defines activity as: A class of human actions that are goal directed (AOTA 2008:669). Pierce expands on the definition and adds: An activity is an idea held in the minds of persons and in their shared cultural language. An activity is culturally defined and general class of human actions. (Pierce 2003:5).
- Clinical areas:** Clinical areas include all off campus areas where students go for fieldwork. These areas include schools, retirement facilities for the elderly, hospitals and rehabilitation units.
- Factors:** Factors in this study refer to the indicators of academic success. Factors are regarded as aspects influencing academic success for example emotional well-being and academic skills. The factors discussed were obtained from literature and students and do not represent all possible factors influencing academic success. Factors can have a positive and/or negative influence on academic success.

First year student:	First year students refer to students registered for a program at the UFS for the first time.
Independent learner:	For the purpose of this study independent learner refers to the student who is able engage in a student-centred learning approach and take responsibility for his/her own learning. The term self-directed learning is also used to describe the manner of engagement in academic occupations.
Occupation:	Occupation takes place at a specific time, in a specific context where individual meaning is attached to the experience of the occupation (Pierce 2003:4,5).
Residence:	Residences refer to campus accommodation for students as well as students staying off campus.
Students:	In the chapter discussing the findings "students" refers to the first year occupational therapy student at the UFS.
Senior student:	Student who already completed their first year in the occupational therapy or other program in HE. The senior students are students repeating their first year in the program.
Stage door and Sâr:	Residences compete annually in singing competitions and students participate voluntarily. Winners then compete in a national Universities serenade completion.

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SUMMARY OF THE STUDY

The Occupational Therapy program at the University of the Free State is academically and emotionally challenging. Prospective students who wish to study occupational therapy are selected primarily on their academic abilities in high school or in other programs in higher education institutions.

The selected first year students have provided evidence of their academic abilities. Thus, it is presumed that the students will be able to meet the demands set by the program and maintain their academic achievement levels. However, once entering higher education some students seem unable to meet the demands of the program while others deliver consistent academic achievements. The question arose as to which factors influence the first year occupational therapy students' academic success.

Literature points to various factors which influence academic success, but no study was found which included all possible factors influencing academic success. This study set out to investigate all the possible factors which influence academic success of first year occupational therapy students at the University of the Free State. A qualitative research approach was applied by making use of a Case study research design.

Eighteen first year occupational therapy students, with no prior higher education experience, were randomly selected to take part in the study. Nine students from the Afrikaans and nine students from the English class were included in the study. Data was collected from documentation and Nominal Group Technique discussions. The documentation data included the students' portfolio reflections by making use of the Kawa River model. Students reflected on all possible factors influencing their academic success by making use of the elements of the Kawa River model. In addition, students' reflection on their test and examination

writing skills was also included in the documentation data collection. The NGT discussions posed the following two questions to the participants:

- Which factors influence your academic success positively in the first year of occupational therapy?
- Which factors influence your academic success negatively in the first year of occupational therapy?

Thematic analysis of the portfolios, a content analysis and qualitative interpretation of the factors identified in the NGT discussion groups were done after which data was categorized according to the domains of the Occupational Therapy Practice Framework (OTPF). Factors were placed in all six domains of the OTPF namely:

- Areas of Occupation
- Context and Environment
- Client Factors
- Activity Demands
- Performance Skills
- Performance Patterns

The factors identified by the students were viewed holistically and were found to be interrelated thus, indicating the importance of acknowledging more than academic factors influence academic success in higher education. Academic-, social -, cultural-, physical -, cognitive - and psychological factors were identified as influencing academic success of first year occupational therapy students.

Key terms:

Academic success; First year Occupational Therapy students; Occupational Therapy Practice Framework; Adjustment; Case Study design

OPSOMMING VAN DIE STUDIE

Die Arbeidsterapie program aan die Universiteit van die Vrystaat stel akademiese en emosionele uitdagings aan die student. Voornemende studente wat beoog om arbeidsterapie te studeer word hoofsaaklik gekeur op grond van hul akademiese vermoëns op hoërskool of in ander programme van instellings van Hoër Onderwys.

Die eerstejaar studente wat gekeur word het dus bewys gelever van hul akademiese vermoëns. Daar word aangeneem dat die studente instaat sal wees om te voldoen aan die vereistes van die program en dat hul akademiese prestasie vlakke kan handhaaf. Desnieteenstaande blyk sommige studente nie instaat te wees om aan die vereistes van die program te voldoen nie, terwyl ander studente konstante prestasie lewer wanneer hulle toetredende maak tot opleiding in Hoër Onderwys. Die vraag ontstaan watter faktore het 'n invloed op die akademiese sukses van die eerstejaar studente se akademiese sukses.

Literatuur dui aan dat verskeie faktore 'n invloed het op akademiese sukses, maar geen studie kon gevind word wat alle faktore insluit wat akademiese sukses beïnvloed nie. Hierdie studie beoog om al die faktore te ondersoek wat moontlik die akademiese sukses van eerstejaar arbeidsterapie studente aan die Universiteit van die Vrystaat kan beïnvloed. 'n Kwalitatiewe navorsing benadering is gevolg deur gebruik te maak van 'n Gevallestudie navorsing ontwerp.

Agtien eerstejaar arbeidsterapie studente, met geen vorige ondervinding van opleiding in Hoër Onderwys, is ewekansig gekies om deel te neem aan die studie. Nege studente uit die Afrikaanse, en nege studente uit die Engelse klas is ingesluit in die studie. Data was verkry vanuit dokumentasie en Nominale Groep Tegniek (NGT) besprekings. Die dokumentasie data is verkry uit die studente se portfolio refleksies waartydens gebruik gemaak is van die Kawa River model.

Studeerders het gereflekteer op alle moontlike faktore wat akademiese sukses kon beïnvloed het, deur gebruik te maak van die Kawa River model. Bykomend is studeerders se refleksies op toets- en eksamen skryfvaardighede ook ingesluit in die dokumentasie data. Tydens NGT besprekings is die volgende twee vrae aan die studeerdeelnemers gestel:

- Watter faktore beïnvloed u akademiese sukses positief in die eerste jaar van arbeidsterapie?
- Watter faktore beïnvloed u akademiese sukses negatief in die eerste jaar van arbeidsterapie?

Tematiese analise van die portfolios, naamlik 'n inhouds analise en kwalitatiewe interpretasie van die faktore wat geïdentifiseer is tydens die NGT besprekings is gedoen, waarna data gekategoriseer is ooreenkomstig die "domains of the Occupational Therapy Practice Framework" (OTPF). Faktore is geplaas in al ses domeins van die OTPF naamlik:

- Areas van Aktiwiteitverrigting
- Konteks en Omgewing
- Klient Faktore
- Aktiwiteit Vereistes
- Prestasievaardighede
- PrestasiePatrone

Die faktore wat studeerders geïdentifiseer het is holisties beskou, en bevind om onderling met mekaar verband te hou. Hierdeur is die belang van die erkenning van meer as net akademiese faktore aangedui wat akademiese sukses beïnvloed in Hoër Onderwys. Akademiese -, sosiale -, kulturele -, kognitiewe – en sielkundige faktore is geïdentifiseer as faktore wat akademiese sukses beïnvloed by eerstejaar arbeidsterapie studeerders.

Sleutelwoorden:

Akademische succes; Eerstejaar Arbeidsterapie studente; *Occupational Therapy Practice Framework*; Aanpassing; Gevallestudie ontwerp

CHAPTER 1

INTRODUCTION AND ORIENTATION

1.1 INTRODUCTION AND BACKGROUND

Human beings are occupational beings. This is what occupational therapy students learn from the first day of their academic career. According to the Occupational Therapy Practice Framework (OTPF), occupation is taking part in “everyday activities” (AOTA 2008:628). First year occupational therapy students engage in activities associated with higher education (HE). Wilcock (1999:3) refers to this focused engagement as “doing”. This includes compulsory activities such as attending classes, practical skills training, clinical field work, completing assignments and writing of tests. The occupational therapy program at the University of the Free State (UFS) is challenging (cf. 2.2.3) thus, not all of the first year occupational therapy students are performing according to their presumed academic potential.

The first year occupational therapy student’s scholastic career was successful, particularly with regards to academic success. Scholastic academic success creates the expectation of a successful university career. However, not all of the first year occupational therapy students experience academic success in HE. Literature (Busato, Prins, Elshout & Hamanker 2000:1057; McGuire 2006:3) points to various factors which influence academic success in HE. A large proportion of the selected students enter HE for the first time, either straight from grade 12 or after taking a “gap” year. For these students the adjustment to university will be one of the biggest challenges they will face (Van Schalkwyk, Leibowitz & Van der Merwe 2009:3).

Academic programs presented in HE institutions are not designed according to the abilities of the students or with profession specific academic information in

mind. These programs are influenced and guided by various governing structures namely:

The South African Qualifications Authority (SAQA), National Qualifications Framework (NQF), and the Higher Education Qualifications Sub-Framework (HEQSF) (SANQF 2010:1).

The Occupational Therapy program at the University of the Free State (UFS) is also bound by the regulations set out by the above mentioned structures. The program is accredited by the Directorate for Institutional Research and Academic Planning (DIRAP) at the UFS and the Professional Board of the Health Professions Council of South Africa (HPCSA) who are responsible for ensuring that the program content complies with exit level outcomes prescribed by the Professional Council of Occupational Therapy (HPCSA: Addendum A 2008:1-5).

Annually, the Department of Occupational Therapy at UFS selects 45 applicants (SAHP Yearbook 2014:14). The students who are selected to the occupational therapy program at the UFS have shown a capacity to handle academic material when taking into account, among others, their scholastic or HE achievements. This is seen in the criteria which are used during the selection process, where a prospective student must present proof of his/her academic abilities. The program is academically as well as emotionally demanding. It is for this reason that the students are selected primarily on the basis of their academic achievements in secondary school or in Higher Education (HE). Despite the selected students' potential to handle the academic demands of the program certain factors can influence their academic success.

In South Africa (SA) not all students are adequately prepared for HE (Strydom, Mentz & Kuh 2010:2). Academic preparation includes study skills developed at school in preparation for HE. This lack of academic preparation is mainly due to the difference in academic focus between school systems and HE institutions (Foxcroft & Stumpf 2005:11). Lowe and Cook (2003:53) further report that students follow the same study habits in the first six months of their university

career that they did at school. Other authors (Busato *et al.* 2000:1057; McGuire 2006:3) have also identified study methods, learning styles and intellectual abilities as being influential in academic success.

Being ill-equipped for HE poses challenges and this is compounded by the adjustments first year students go through (Lowe & Cook 2003:53). The new academic environment requires students to be independent regarding their academic achievements without the support of extra classes as was the case in high school. Students living on campus, away from home, have to cope with additional adjustments; this may lead to further stress and anxiety (Lowe & Cook 2003:53). First year students who live on campus (in residence) are required to participate in all hostel activities regardless of their busy academic program. If the first year student lacks life skills such as time management, self-discipline and perseverance these activities can have a negative influence on their academic success (Lowe & Cook 2003:53). Emotional and social well-being plays an important role in the academic success of the first year student (Pritchard & Wilson 2003:18).

A factor that is not always focused on is the ability of the student to have realistic personal and academic goals (George, D. Dixon, S. Stansal, E. Gelb, L. S. & Pheri, T. 2008). Mentz (2012:60) mentions that having academic goals is a factor that is strongly influenced by student's perseverance and conscientiousness.

A further factor identified as influencing academic success is resilience. Occupational Therapy defines resilience as a characteristic of an individual who has the ability to experience stressful conditions without developing physiological or mental illness (Brown & Stoffel 2001:788). It is thus important to look at the occupational profiles of the first year occupational therapy student and the influential factors on their academic success, as identified by the students. In order to do this theoretical basis in occupational therapy is necessary.

The occupational therapy profession makes use of theoretical frameworks and models. One such a framework is the Occupational Therapy Practice Framework (OTPF). The framework was developed by members of the American Occupational Therapy Association (AOTA) (AOTA 2008:625). The OTPF document consists of six domains of occupation and a discussion on the occupational therapy evaluation, intervention and outcome processes (AOTA 2008:625,646). This framework is currently used within the Department of Occupational Therapy at the University of the Free State. I will therefore make use of the domains of the OTPF to further contextualise the study.

The OTPF describes human occupation holistically. The first year occupational therapy students' occupational engagement in the academic environment will thus be discussed from an occupational therapy perspective. Terminology specific to the OTPF will be used in this dissertation. The OTPF consists of the following six domains (AOTA 2008:628):

- Areas of Occupation
- Context and Environment
- Client Factors
- Activity Demands
- Performance Skill
- Performance Patterns

1.2 PROBLEM STATEMENT

Occupational therapy students are selected for the program primarily on their academic abilities in secondary school or in other programs in HE. This implies that they all have the intellectual ability to engage in the demanding academic activities this program presents.

However, the Occupational Therapy program is demanding not only in terms of the academic load and -standard but also poses emotional and social challenges.

An observation was made that not all the first year students were equally successful in the program (cf. 2.3). Academic preparation plays a major role in the abilities of the students. First year students are exposed to greater volumes of academic material than at school. Large volumes of work are a reality and overwhelm the newcomer in HE. Other factors such as study methods, time management, perseverance and the fast pace that prevail in HE can be problematic for the first year Occupational Therapy student. Finally, for many the adjustment to the first year in HE away from home in hostels or student houses can contribute to emotional factors which impact on their academic success.

All of the above led me to the following question: Which factors play a role in the academic success of the first year Occupational Therapy student at the UFS?

1.3 AIM OF THE STUDY

The aim of the study was to explore the factors that influence academic success among first year occupational therapy students at the University of the Free State.

1.4 OBJECTIVES OF THE STUDY

- 1.4.1 To explore the view point of first year occupational therapy students regarding their own academic success (portfolio reflections and NGT discussions).
- 1.4.2 To describe the factors influencing academic success as identified by the first year occupational therapy students.

1.5 METHODOLOGY

A qualitative approach with a collective, multiple case study research design was used during the execution of the study (Creswell 2007:13, Yin 2003:52). The

research population consisted of all first year students who were registered for the program in Occupational Therapy at the UFS in 2013. Only first year occupational therapy students with no previous HE training were included in the study. Randomized sampling (Flyvbjerg 2011:307) was done by the Department of Biostatistics at the UFS.

Data was collected by means of two sets of documentation and the Nominal Group Technique (NGT). Students from the Afrikaans and the English classes were included in the randomized sampling. The documentation analyzed were the reflection portfolios every student in the program submitted bi-annually for assessment by lecturers. The students made use of the Kawa River model (Iwama, Thomson & Macdonald 2009:1129) where the different structures in a River were used to reflect on learning experiences in their first year. Students' reflections on their test and examination writing skills were also included in the documentation data.

Thematic analysis of the portfolios, a content analysis and qualitative interpretation of the factors identified in the NGT discussion groups and documentation were done by making use of the OTPF domains as categories (Merriam 2009:178,179; Van Breda 2005:4-11).

1.6 SIGNIFICANCE AND ADDITIONAL VALUE OF THE STUDY

There are many support structures in place for students at the University of the Free State and especially in the Faculty of Health Sciences and the School of Allied Health Professions. This study will be of value to the present structures to support the occupational therapy students at this University. Adjustment problems can be addressed more purposefully and other emotional and social factors which might influence their success can now be addressed. The study should also provide a more holistic description of the first year occupational therapy student's engagement in HE activities and the influence thereof on academic success. This occupational profile could be used at other training

institutions of occupational therapists. By acknowledging the influencing factors of academic success, early intervention mechanisms can consequently be implemented where necessary.

Additionally the results of the study will provide valuable information which may influence selection of prospective students. This will demonstrate that success in the program is not only dependent upon academic proficiency alone.

The use of the OTPF and the Kawa River model are new and unique approaches to the study of academic success in Occupational Therapy. The study will also contribute to the discourse around the theoretical foundation of Occupational Therapy.

1.7 ETHICAL CONSIDERATIONS

Before implementation of the study, ethical approval from the Ethics Committee of the Faculty of Health Sciences, at the UFS was obtained (UFS: EC29 2012). All the necessary permissions were acquired as prescribed by this Committee.

Confidentiality and privacy were ensured. All the participants provided verbal and written consent to take part in the study. The principles of the Helsinki declaration were followed (WMA 2013:1,2).

1.8 OUTLINE OF CHAPTERS

Chapter 1 *Introduction and Background*: Introduces the reader to the study by providing an overview of the background, a problem statement followed by research question and a short description of the methodology implemented to meet the aims of the study. In addition, the significance of the study and an overview of ethical considerations were provided.

Chapter 2 *Literature review*. This chapter offers a review of relevant literature to the study. Occupation is defined; where after a distinction between occupation and activity is made followed by a description of the domains of the OTPF. Occupational participation in productivity, pleasure and restoration are discussed with reference to the occupation of students. The chapter furthermore includes the HE environment and the role of the regulating structure in the occupational therapy program at the UFS. A description of the student in HE with a focus on the Generation Y student and the school system from which they came are addressed. The reader is subsequently provided with information on the occupational therapy program with regards to the selection process and contents of the academic program, focusing on the first year. This is followed by a discussion on various factors influencing academic success as identified from literature.

Chapter 3 *Research Approach and Methodology*. This chapter provides a detailed description of the methodology followed for the study. A qualitative approach was used with a collective multiple case study design. First year occupational therapy students were randomly sampled to take part in the study. The methods of data collections were documentation and the NGT. A thematic analysis of the data was used.

Chapter 4 *Discussion of Findings*. A description of factors influencing academic success of the first year occupational therapy student is provided. These factors were identified by students as either positive or negative factors influential to their academic success. The named factors were discussed in each of the six domains of the OTPF. As the domains of the OTPF are interrelated a diagram is provided to illustrate the relationship and co-dependence of the various domains on each other.

Chapter 5 *Limitations, conclusions and recommendations*. The last chapter concludes this study by referring to the initial question that was posed. The methods used to investigate the question according to the aims are discussed.

The reader will find a discussion on the limitations of the study and recommendations for further studies are made. The chapter also reveals the aim of the study was achieved in that possible factors academic success of first year occupational therapy students were identified and described.

1.9 SUMMARY

This chapter provided the reader with background to the context of the study, the problem that lead to the study, the methodology and ethical considerations which were used. In chapter 2 an overview of the relevant literature to this study will be discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter introduced the reader to this study. The background to the problem was identified and a short summary of the relevant literature was provided. The introductory chapter also provided an overview of the methodology used in the study.

In this chapter an overview of the relevant literature will be provided. The chapter will also position the study in the higher education environment. Therefore, it is important to discuss factors regulating the program, as well as the expectations of the occupational therapy students to comply with the prescribed outcomes (HPCSA 2006). Occupation and occupational engagement in academics will be addressed by means of the subjective dimensions of occupation as described by Pierce (2003). This will be followed by an overview of the Kawa River model and the Occupational Therapy Practice Framework. Factors influencing academic success will also be discussed as appropriate in HE.

2.2 HIGHER EDUCATION ENVIRONMENT

In positioning this study it is important to consider the regulatory environment of HE as it pertains to occupational therapy. The regulations and prescriptions from the regulatory structures on the occupational therapy program do not have a direct influence on academic success of first year students. However, the study took place in HE and therefore it is important to have an understanding of HE regulations.

2.2.1 Regulatory structures of Higher Education

The Department of Occupational Therapy has to adhere to regulations from the South African Qualifications Authority (SAQA), the National Qualification Framework (NQF), the Higher Education Qualifications Sub Framework (HEQSF) as well as the Health Professions Council of South Africa (HPCSA).

2.2.1.1 South African Qualification Authority

The South African Qualifications Authority (SAQA) came to be in 1995 in a regulatory capacity to monitor the NQF (Isaacs 2000:3). The mission of SAQA reads as follow:

“To ensure the development and implementation of a National Qualifications Framework which contributes to the full development of each learner and to the social and economic development of the nation at large” (Isaacs 2000:4)

All national academic/training programs must be registered with SAQA(NQF 2010). The South African Qualifications Authority will approve a program only if it complies with the standards set out by the National Qualifications Framework. The UFS Occupational Therapy qualification was registered with SAQA as a 480 credit bearing program.

2.2.1.2 National Qualifications Framework

It is the responsibility of HE institutions to ensure that students engage in their learning processes with initiative and energy by developing their potential, talents and passion for the profession they are studying (Isaacs 2000:4). It is done by following the guidelines of the NQF (SA 2013:5). The NQF recommends that academic programs be compiled to allow for flexibility. This would allow a student to accumulate credits for prior learning presented in HE. However, the UFS Occupational Therapy program follows a fixed curriculum. The only

recognition for prior learning is for prescribed modules in the program. In other words, a student will not be able to present subjects which are not prescribed in the program to fill credits needed for the program. The curriculum is designed to comply with the qualification demands set out by the NQF as well as the exit level outcomes set by the Professional Board of Occupational Therapy (HPCSA Addendum A 2008:1-5).

All academic programs in HE are credit bearing. Credits refer to the time needed to master a certain amount of academic material (SA 2013:15). The NQF considers the credits of an academic program as the volume of academic material mastered and not the total years of study (SA 2013:15). Credits are presented as the notional study hours needed to achieve learning outcomes. Ten notional hours represents one credit (SA 2013:15). The first year Occupational therapy program consists of 140 credits. The total number of credits for the program is 540.

Additionally there are also ten levels of qualifications included in the NQF. Each level indicates a level of difficulty and demands placed on a learner to comply with grade demands. Levels 1 to 4 indicate academic achievements in primary- and secondary school. A learner completing grade 12 would have met the academic demands of Level 4 of the NQF.

Levels 5 to 7 represent the specific credits needed for a typical under graduate qualification. However, there is an exception: A professional Bachelor's Degree at Level 8 (SA 2013:17). At the completion of the Occupational Therapy program the student exits the program on Level 8 (SA 2013:33) whereas Level 9 represents a Masters qualification and Level 10 a Doctoral qualification (SA 2013:35,39).

2.2.1.3 Higher Education Qualifications Sub-Framework

The Higher Education Qualifications Sub-Framework (HEQSF) is part of the NQF and focuses on academic programs within all HE institutions. This body is responsible for regulating the above mentioned qualifications (SAQA 2007:2). The HEQSF is responsible for identifying qualification types; credits needed for the qualifications as well as the appropriate NQF levels for qualifications (SA 2013:11). The HEQSF provides level descriptors for each study year that serves as a guideline for the development of the program.

2.2.1.4 Health Professions Council of South Africa

The Professional Board for Occupational Therapy, Medical Orthotics/Prosthetics and Arts therapy are appointed by the Health Professions Council of South Africa (HPCSA). The above mentioned board is responsible for the minimum standards of occupational therapists and their training. To ensure the quality of the qualification the board has generated exit level outcomes. There are 11 exit level outcomes for all occupational therapy programs in SA (HPCSA 2006:4-11) namely:

Exit Level Outcome 1: Demonstrate the competence in the theoretical and philosophical base of occupational therapy through direct or indirect services, to meet the occupational needs of individuals, groups and communities in the South African context.

Exit Level Outcome 2: Demonstrate competence in adapting the occupational therapy process for individuals, groups and communities using clinical reasoning and critical thinking in order to deliver services to persons of all ages who are at risk or are occupationally dysfunctional.

Exit Level Outcome 3: Demonstrate competence in adapting occupational therapy intervention programmer to meet specific, cultural and unique needs I diverse settings

Exit Level Outcome 4: Demonstrate the capacity to operate effectively as an occupational therapist in complex, unfamiliar and ill-defined contexts.

Exit Level Outcome 5: Demonstrate competence to perform and collaborate as an effective team member.

Exit Level Outcome 6: Demonstrate critical awareness to act professionally, ethically and reflectively and be responsible for own competence and actions within the profession and legislative framework of South Africa.

Exit Level Outcome 7: Demonstrate awareness of the role of the occupational therapist in mediation and advocacy of occupational justice for the individual, group or community at risk of experiencing occupational imbalance, deprivation and/or alienation.

Exit level Outcome 8: Demonstrate critical awareness of the "Person-Occupation-Environment Relationship" relevant to the South African context of practice.

Exit Level Outcome 9: Demonstrate in-depth knowledge of occupational science and occupational therapy and its practice within the South African and global context acknowledging both indigenous and international knowledge or perspectives.

Exit Level Outcome 10: Demonstrate the ability to select and apply appropriate research methods, techniques and technologies appropriate to occupational therapy research questions.

Exit Level Outcome 11: Demonstrate a well-rounded and systematic knowledge base of management functions and skills.

Members of the professional board visit HE institutions who train occupational therapists once every five years. Accreditation of these programs is done according to HPCSA and SAQA regulations. The occupational therapy program at the UFS is also accredited regularly, to ensure the program adheres to the regulations set by the SAQA and the HPCSA.

2.2.2 The First Year Student

First year students currently registered in HE at UFS are the so called Generation Y students and were born in 1993 and 1994. According to literature, students belonging to Generation Y were born between 1980 and 1994 (Hills, Ryan, Smith & Warren-Forward 2012:156). The formative years influence how each generation functions throughout its life. Generation Y are influenced by various new technological developments. The youngsters spend a lot of their time in front of television sets and computer screens with a mobile telephone in one hand and a play station game control in the other (Hills *et al.* 2012: 156; Weiler 2005:46).

Generation Y is also referred to as the Internet Generation, Millennials, Generation Me and the Sunshine Generation (Hills *et al.* 2012:156; Twenge 2009:398), the latter description due to the generation's optimism.

How this generation was raised plays a significant role in their present behavior (Nimon 2007:26; Twenge 2009:398). Being surrounded by electronic devices which respond on demand, mistakes can be erased and feedback is immediate, results in the Millennials setting high expectations (Twenge 2009:398). The Millennials are more social and being part of a group is very important to them (Ninom 2007:27), which in turn meets their need of belonging according to Maslows hierarchy of needs (Weiler 2005:47). Having mobile telephones,

computers and other electronic devices with internet access makes communication and networking easy for this group (Ninom 2007:27). These findings concur with the viewpoint of occupational therapy and training that context of their occupational engagement of this generation goes further than the physical, cultural or social contexts but also includes the virtual contexts (AOTA 2008:645).

The Generation Y student is characterized as "ambitious, demanding and apparently born to rule" (Patterson 2007:1). This generation has also been described as being impatient (Patterson 2007:1) with a "short attention span and are easily bored" (Hills *et al.* 2012:157). Twenge (2009:398) refers to this generation as Generation Me and describes the students as "assertive, self-liking, shows narcissistic traits, having high expectations with various levels of stress and anxiety". This can pose a challenge to educators and Twenge (2009:398) suggests that assignments given to this group of students be well formulated with definite expectations. Twenge (2009:398) argues if expectations are vague the "entitle" students might use it to their advantage and manipulate the system. In addition to specific expectations and outcomes, feedback must be given on a regular basis. This has an implication on the structure of the time table of the occupational therapy program and the UFS. Lecturers should also be aware of the learning needs of this generation.

2.2.2.1 Changes posed by secondary schooling

The students currently in HE are also the product of constant changes in the public school system which some of them attended. As a counter measure for inequality of education during apartheid the new democratic government implemented Outcome Based Education (OBE) in March 1994 (Le Grange 2007:79). This curriculum was known as Curriculum 2005, which referred to the year when the curriculum would have been completely phased into the school system (Le Grange 2007:79). The OBE curriculum was met with resistance from the education community as reported by Le Grange (2007:80-81).

Outcome Based Education was replaced by the Revised National Curriculum Statement (NCS) in 2002. In 2008 the New Senior Certificate was implemented and on the 6th of July 2010 Minister Motshekaga announced a further improvement of the school curriculum which focused on the NSC.

Unfortunately, in spite of the improvements to the school curricula, first year students entering HE face many challenges. The matriculants entering HE do so with a certain expectation placed on their academic success according to their achievements in the National Senior Certificate (NSC) results. Unfortunately many of the first years enter HE without the necessary academic preparation and find adapting to HE very difficult (Mouton, Louw & Strydom 2013:285).

Foxcroft and Stumpf (2005:11) report that a Matric qualification represents the final assessment of twelve years of school training. The school system regards the students as being successful if the scholar passes the NSC. The NSC serves as the only statutory requirement for entry into higher education, although higher education institutions are allowed to set program specific entry requirements. Mouton *et al.* (2013:285) doubt the predictive ability of the NSC with regards to academic success in HE. Mouton and others (2013:285) base their doubt on the value of the NSC credibility. Firstly, adjustments are made to the final results of the matric examinations. This process is known as standardization of results (Mouton *et al.* 2013:287). As a result of the standardization process, the true academic achievements of matriculants will never be known (Mouton *et al.* 2013:287). The second concern, of equal importance, is the fact that no benchmark is available to measure the matriculation results. Due to the standardization process no accurate, true reflection will be available with which to benchmark subsequent matric results.

Consequently, the Faculty of Health Sciences not only uses the prospective student's NSC results as a predictor of success in the chosen program as measure for selection but also the results of the National Benchmark Test (NBT) (UFS 2014:10).

2.2.3 The Occupational Therapy student in Higher Education

The prospective occupational therapy student who wishes to study at the UFS needs to go through a selection process. All students in the School of Allied Health Professions (SAHP) are selected on the basis of their academic potential (UFS 2014:13). The applicants must supply the selection committee with their NSC results as well as their NBT results to be considered for selection. As mentioned in chapter 1, the applicant must present proof of academic achievements in life sciences or physical sciences as well as in mathematics. The prospective student's NBT marks for academic literacy (AC), quantitative literacy (QL) and mathematics (MAT) are all considered during the selection process. The students selected for the occupational therapy program have shown apparent academic proficiency in their academic skills (SAHP 2012). Prospective students must achieve a minimum of 60% in their NSC results with a total point (TP) score of 36 and in the NBT a minimum of 60% for AC, 50% for QL and 40% for MAT to be eligible for selection. The TP is a calculation of levels for academic marks at school.

Table 2.1 Numeric values of academic marks to calculate the TP

Academic percentage - %	Level indicator	Level descriptors
80 - 100	7	Outstanding achievement
70 - 79	6	Meritorious achievement
60 - 69	5	Substantial achievement
50 - 59	4	Adequate achievement
40 - 49	3	Moderate achievement
30 - 39	2	Elementary achievement
0 - 29	1	Not achieved

After being selected to the program the students' first year occupational therapy program consists of the following:

Table 2.2 Credits of modules in the occupational therapy first year program

Module	Credits	NQF level
Occupational Therapy	32 credit module	5
Clinical occupational therapy	12 credit module	6
Anatomy	32 credit module	6
Psychology	2 x 16 credit modules	5 & 6
Anthropology	16 credit module	6
Technology and activity	16 credit module	5

The above table manifests a discrepancy between the NQF levels of the different modules in the first year. As was pointed out earlier in this chapter, the NQF levels indicate the time needed to master the academic material. High academic demands on the first year occupational therapy student are thus evident. However, the majority of modules presented on NQF Level 5 are presented in the first semester with the exception of Anatomy, a year module, which is on Level 6. The Psychology and Anthropology modules are presented in the second semester. There is a gradual increase in the NQF levels and the coinciding demands on the students from the first semester where growth is intended towards the second semester and second academic year.

The Anatomy module has been identified as a high risk module. In this module, first year students perform below their expected academic achievements. During the planning phase of this study the anatomy marks of the 2011 first year occupational therapy students were scrutinized. The first year class of 2011 consisted of 42 students, 50% of the class achieved less than 60% for Anatomy in the final examination. The average class percentage for anatomy was 49%.

Upon registering for the program the first year students embark on new academic occupations with various factors that can influence their academic achievements.

2.3 OCCUPATION

Occupation will be the subject which introduces the rest of the literature review. Occupation has been defined by many occupational therapists and occupational scientists (AOTA 2008:628-629). Various themes can be identified from different definitions of occupation. Firstly, occupation is influenced by culture and the meaning a culture gives to an activity (Pierce 2003:5). Secondly, occupational engagement has meaning to the individual who engages herein (AOTA 2008:628-629). Thirdly, it is part of a person's everyday life (AOTA 2008:628-629). The occupation an individual engages in is specific to each person's needs and preferences. Finally, occupation has a purpose by adding value to the cultural, physical and social context (AOTA 2008:645) of the individual taking part in the occupation.

May it then be argued that activity and occupation are synonyms of each other? The answer is provided by Pierce (2003:4,5) who distinguishes between an activity and occupation. The individual will choose to engage in an occupation which can be observed by the person him/herself and by others. Occupational engagement takes place at a specific time, in a specific context where individual meaning is attached to the experience of the occupation. This is also the case with the first year occupational therapy students who engage in different occupations in the HE environment. Wilcock (1999:5) refers to this quality of engagement as "being true to ourselves". It is through doing what matters to us that we become occupational beings (Wilcock 1999:6).

Activity is "an idea held in the mind of a person and in their shared culture" (Pierce 2003:5). It is not experienced by a specific person, nor is it an occurrence. Activity is not located in the spatial, temporal or socio-cultural

context (AOTA 2008:645, Pierce 2003:5). Going to university to study is an activity with the potential of different ways of engaging in the occupations of a student, depending on a specific person. Furthermore, what one person views as an interesting activity might not be an occupation with which another person resonates(Pierce 2003:5).

Pierce (2003:45) therefore states that engaging in an occupation is a "subjective experience" for each individual. While engaging in an occupation an individual can experience restoration, pleasure and productivity simultaneously in varying degrees.

2.3.1 Productivity

Human beings want to be productive (Pierce 2003:58). Some cultures even put such high emphasis on productivity that it can become "overvalued". What we do defines who we are and productive occupational engagement is usually driven by the aspirations of an individual (Pierce 2003:58). The hardworking first year occupational therapy students are indicative of productivity. According to Pierce (2003:58) once a goal has been reached it provides pleasure to the specific individual.

The value of productivity is explained by making use of the flow theory (Pierce 2003:60,61). When individuals are challenged with an occupation and their abilities exceed the demands of the occupation, they will experience boredom. On the other hand, once the demands are higher than the individual's abilities it can cause the development of frustration. However, when the demands of the occupation meet the ability of the individual, flow will be experienced. The first year occupational therapy students enter HE with the expectation of meeting the challenges with the necessary academic ability. Still, the above mentioned students often experience frustration because their academic ability does not meet the demands of the academic occupations.

Work is regarded as a productive occupation. Pierce (2003:65) views studying as unpaid work. This is a highly demanding occupation. The student does not have an eight to five work day which stops when the day is over. Afterhours work continues as the student prepares for the following day's classes, completes assignments and studies for assessments. With many students in HE, including the occupational therapy first years, these after-hours activities sometimes stretch into weekends, long weekends and holidays.

Productive occupations also have a negative aspect. "Not all highly productive occupations are experienced as satisfying" (Pierce 2003:68). The pursuit of unrealistic goals or "over emphasis" of said goals may result in "productivity stress" (Pierce 2003:68,69). Unrealistic goals set by students and or family members with regards to studying and academic results can therefore potentially lead to productivity stress of the student in HE. Pierce (2003:69) furthermore identifies environmental factors such as noise and lack of guidelines with regards to engaging in productive occupations as potential causes of productivity stress. The different residential environments in which students live can influence their productivity (cf. 4.3.1). Occupational engagement is not only productive but has restorative functions as well.

2.3.2 Restoration

Restoration can take place when the individual takes part in the following (Pierce 2003:98-107):

a. Restoration from sleep

Time needed for rest and restoration is easily dominated by productive activities (Pierce 2003:98). This leads to an unbalanced occupational profile (cf. 4.3.1). Sleep or the lack thereof influences the individual's health and well-being. Health and well-being on the other hand are influenced by the different sleep cycles, namely rapid eye movement (REM) and non-rapid eye movement (NREM) (Pierce

2003:99,100). During the NREM sleep cycle the immune system is activated. If the individual's sleep cycle is constantly interrupted or not enough sleep cycles occur during a period of sleep the individual's immune system will be compromised. Cognitive function is another aspect which is negatively affected by lack of effective REM and NREM sleep cycles (Pierce 2003:101).

b. Restoration from eating and drinking

As with sleep and rest, making time for a meal experience is often overshadowed by productive occupations (Pierce 2003:106). Unfortunately restoration from eating is neglected due to pressure from work, studies or other responsibilities (cf. 4.3.1). This type of restoration can take place while the individual is alone, with friends or with colleagues. Traditionally, sharing a meal with others also has a social meaning when family and friends come together on special occasions. National holidays and cultural- and religious festivals are often associated with eating and drinking. It is through these times of relaxing with others that the individual can restore emotional energy needed to continue with productive occupations. Nonetheless, these are meaningful encounters which are often substituted with product activity engagement such as preparation for tests or assignments (Pierce 2003:106).

c. Restoration from self-care activities

Depending on the degree of engagement, self-care activities can offer various degrees of restoration (Pierce 2003:106). Obtaining enjoyment in self-care activities and experiencing sense of presence will contribute to the individual's well-being and restoration (Pierce 2003:106; Reid 2008:43). Unfortunately self-care activities are also periodically neglected due to pressure stemming from academic occupational engagement.

d. Restoration from quiet focus activity

The quiet focused activities are characterized by minimal physical demands where the individual's focus is on a single activity such as a craft, watching television, engaging in a spiritual activity etc. (Pierce 2003:107). Restoration from these focused activities varies from one person to another. Because of the meaning each individual places on the occupational engagement and the degree of flow experienced, restoration will take place (cf. 4.3.1).

2.3.3 Pleasure

Relaxing activities which are enjoyed by an individual are referred to as leisure occupations (Pierce 2003:81). Individuals engage in various pleasurable occupations and are categorized by Pierce (2003:82-86) as pleasure from being physically active and by thrill provoking activities. Individuals also experience pleasure from meaningful rituals.

2.4 OCCUPATIONAL THERAPY MODELS OF PRACTICE AND FRAMEWORKS

Occupational engagement can furthermore be illustrated by means of occupational therapy specific models of practice. One such model is the Kawa River model. The model was used in one section of the portfolio reflections of the first year occupational therapy students. The Occupational Therapy Practice Framework was used to describe the factors influencing academic success of first year occupational therapy students. The following section depicts the above mentioned model and framework used in this study.

2.4.1 KAWA RIVER MODEL

Kawa is the Japanese word for river. The Kawa River model was developed by Japanese and Canadian rehabilitation therapists. The metaphor of a river is used

to illustrate a person's life (Iwama *et al.* 2009:1125). Individuals live and engage in occupation with a specific context and factors which influence their functioning. Iwama *et al.* (2009:1125) describe the model in terms of the components of a river and the influence each component has on the individual. The first year occupational therapy students also live in specific contexts (cf. 4.3.2) which influence their academic success. Their life experiences up to this point have a definite influence on their functioning in higher education.

The water symbolizes the individual's life and the flow thereof. Water flows on the river bank, the river wall and floor, over rocks and driftwood. In the same way external factors influence individual's functioning in a specific context (Iwama *et al.* 2009:1129).

The river bed and riverside are described as the physical and social environment (cf. 4.3.2) within which the individual functions. Examples of this are family, class friends, hostel friends and friends in social circles. The physical environment is where students find themselves, whether it be in the class, hostel, clinical field or at home (Iwama *et al.* 2009:1130). It is also in this environment where the students engage in meaningful occupation (AOTA 2008:645).

The rocks in the river represent life and the challenges the individual faces. Rocks come in different shapes and sizes which represent the different challenges in the individual's life. Large rocks can cause the water to flow slower, just as challenges can have a negative influence on the functioning of an individual (Iwama *et al.* 2009:1131).

Driftwood which is found in rivers can cause the water flow to slow down; it can also speed up the flow of the water. In the Kawa model, driftwood represents the personal strong points of the individual, but also the negative factors which influence the individual's life. Iwama *et al.* (2009:1132) mentions values, character, personality, life experience, special skills and material assets as examples of driftwood (cf. 4.3.3; 4.3.5).

Up to this point the reader has been informed about the nature of occupation and the fact that it is part of our everyday lives. The following section focuses on applying the Occupational Therapy Practice Framework to the academic occupation in the context of the study.

2.4.2 OCCUPATIONAL THERAPY PRACTICE FRAMEWORK

The Occupational Therapy Practice Framework (OTPF) describes occupation and occupational engagement (AOTA 2008:625). The OTPF was designed as a therapeutic tool (AOTA 2008:625). However, it can also be utilized as a method to understand individual's, organizations' and communities' occupational profiles even in the absence of disease or disability. Consequently, occupational engagement can be observed in terms of the "context and environment" (AOTA 2008:626) specific to the individual. The OTPF consists of six interactive domains which are equally important (AOTA 2008:626). An overview of each domain is provided. The interactive relationship of the domains will become evident in chapter 4.

As mentioned earlier the OTPF is applied in the Occupational Therapy Department of the UFS. The framework replaced the Uniform Terminology for Occupational Therapy (UT III) in 1994 (Nelson 2006:511). The OTPF domains describe occupational engagement of our clients (AOTA 2008:625). All six domains describe occupational engagement or have an influence on the client's engagement in occupation (AOTA 2008:626). The domains cannot be isolated as occupational engagement cannot be linked to only one domain.

Because of the broad nature of the OTPF critique can be expected. Nelson (2006:511) voiced critique on the Framework. He argues that the logic rules of definitions and classifications of the domains were broken (Nelson 2006:511). Nelson (2006:511-517) argues that the definitions and categories of the domains of the OTPF are not specific enough. Nelson (2006:511) cautions that the

framework is not recommended as a logical basis for practice, education research and external communication.

However the OTPF is used in the Occupational Therapy program at the UFS. The framework describes the essence of occupation. In spite of the critique the OTPF stimulates critical thinking by students and therapist alike. It is also not used in isolation but combined with models in occupational therapy as well as occupational science perspectives.

In this study I have used the definitions and descriptions of each of the domains as they appear in the OTPF during the analysis. This did pose a challenge as some of the factors influencing academic success can be listed under more than one domain. For this reason the co-coder and I attached factors to domains according to our interpretation of the students' reflections and factors identified from the NGT discussions.

This will become more apparent in chapter 4 where the relationship between the different domains of the OTPF and the factors influencing academic success will be discussed in greater detail. The six domains of the OTPF are:

2.4.2.1 Areas of occupation

Each individual engages in daily activities. Because of individual preferences and interests, areas of occupation will have different meanings to different people (AOTA 2008:630). What one person views as work, such as washing dishes, another will view as a restorative occupation (Pierce 2003:106; Reid 2008:43). The areas of occupation focus on activities of daily living, instrumental activities of daily living, rest and sleep, education/school, work, leisure, play and social participation (AOTA 2008:630). These are all activities the first year occupational therapy student engages in every day and is influential to their academic success.

2.4.2.2 Client factors

Values, beliefs and spirituality; body functions and body structures are the three categories in the domain of client factors. These are “abilities, characteristics or beliefs which reside within” the individual (AOTA 2008:630). The first year students’ client factors can influence their functioning in areas of occupation and vice versa (AOTA 2008:630) (cf. 4.3.1; 4.3.3). Client factors are also influenced by other domains such as performance skills and patterns. The cultural context (AOTA 2008:645) plays a role in the development of each individual’s client factors. The cultural beliefs and customs have a direct influence on the individual’s values, beliefs and spirituality (AOTA 2008:630,645). This in turn has an influence on the first year occupational therapy students’ academic success (cf. 4.3.3).

Values are the “principles, standards or qualities” (AOTA 2008:634) which the person holds in high regard while beliefs are the thoughts and convictions the individual “holds as true” (AOTA 2008:634).

Body functions are sub-divided in the following functions:

Mental functions; Sensory functions and pain; Neuro-musculoskeletal and movement – related functions; Cardiovascular, hematological, immunological, and respiratory system function; Voice and speech function; Digestive, metabolic and endocrine system function; Genitourinary and reproductive functions and Skin and related – structure functions (AOTA 2008:634-637). Body structures refer to the “anatomical part of the body” (AOTA 2008:633) which supports all occupational engagement. Mental functions play an important part in the academic success of first year occupational therapy students. These include specific mental functions such as attention and concentration. The students’ participation in areas of occupation (education) is dependent on intact mental functions such as motivation, memory and concentration. However, taking part

in the areas of occupation (social participation) also influences the students' mental functions (cf. 4.3.1; 4.3.3).

2.4.2.3 Performance skills

Performance skills are defined in the OTPF as "the abilities clients demonstrate in the actions they perform" (AOTA 2008:639). Performance skills are in turn affected by client factors (AOTA 2008:630). The students need to have performance skills such as time management and appropriate study methods when engaging in academic occupations (AOTA 2008:639). A lack in these skills can influence academic success negatively.

2.4.2.4 Performance patterns

This domain involves habits, routines, rituals and roles which occur during activity participation (AOTA 2008:641). Every individual has different roles in different areas of activity participation and are more often than not influenced by society. A student will arrive in HE and roles expected of the student will be that of learner through engagement in academic- and other campus activities. Once the student goes home other roles will be expected of them, usually prescribed by culture. Engaging in learning activities might be replaced by social interaction, eating and drinking occupations (Pierce 2003:106).

Routines are described by the authors as actions which occur on a regular basis and "provides structure for daily life" (AOTA 2008:643). Habits of an individual can be observed as those actions which are done automatically and occur throughout the day. Study habits and study methods are examples of routines and habits of a student. These academic habits and routines influence academic success (cf. 4.3.6)

The rituals individuals engage in can be "symbolic actions with spiritual, cultural or social meaning" (AOTA 2008:643). In the university environment resident

activities become rituals which the first year students must take part in. Campus rituals can be the following: Rag, Stage door, House meetings etc. and also influence the first year occupational therapy students' academic success.

2.4.2.5 Context and Environment

Activity always takes place in a specific context and environment. The contextual factors involved in a person's activity participation include cultural, personal, temporal and virtual aspects (AOTA 2008:645). Environment refers to the physical and social environment where in the person engages in meaningful occupation. Physical environment such as the residence a student resides in and the student's roommate can influence academic success as does social support structures in the residences. The sub-categories in this domain is again interrelated.

2.4.2.6 Activity Demands

The last aspect which influences activity participation is demands of the activity on the individual. Physical tools and materials such as pens, paper, textbooks, computers and an appropriate study area are examples of this domain (AOTA 2008:638). Therefore the physical environment the student studies in will have to adhere to the activity demands such as silence and enough space to work. The interdependence of the activity demands and the physical environment can have an influence on academic success of the first year occupational therapy students.

2.5 FACTORS INFLUENCING ACADEMIC SUCCESS

The term academic success is complex. The phenomenon of academic success is approached from different perspectives. Systems such as the HEQSF regard academic success as the student who successfully obtains a qualification regardless of the institution attended (SA 2013:16) or the total years

of study (SA 2013:15). Higher Education institutions view academic success as the through put of a student who registered for a specific program offered by the University and obtains the qualification in the prescribed time (UFS 2014:17). There is also a third perspective which is of the students themselves. An important milestone a young individual reaches is obtaining a university qualification (Pritchard & Wilson 2003:18).

Success is therefore dependent on goals set by HE systems, the HE institution or the students themselves. Osters and Roberts (2007:8) distinguish between achievement goals (which indicates a drive and competition for the top position in the class), and skills development goals (which focuses on improving skills through dedication to mastering of skills and interests in the field of study).

As mentioned in chapter 1, numerous studies have identified aspects influencing academic success. However, these studies have focused on specific factors such as academic preparation, social and emotional aspects and resilience. For the purpose of this study it was necessary to look at the potential influencing aspect identified from literature.

Resilience is defined as the individual's capacity for sustainable, continuous power and competence in the face of stressful circumstances (Greene *et al.* 2003:77). For the purpose of this study resilience and the effect it has on activity participation and academic success will be discussed. This will be done from the perspective of occupational therapy. Occupational Therapy defines resilience as a characteristic of an individual who has the ability to experience stressful conditions without developing physiological or mental illness (Brown & Stoffel 2001:788). Lopez (2009:33) refers to resilience as follow: "resilience and vulnerability are distinctive personal characteristics influenced by environmental factors such as socio-cultural and institutional context". The first year occupational therapy students enter HE from an environment which shaped their client factors, performance skills and performance patterns (cf. 4.3.3; 4.3.5; 4.3.6). All of these domains will influence academic success and resilience will be a contributing factor.

There are many disciplines involved in the study of resilience, including Sociology and Psychology. When looking at resilience, literature distinguishes between internal and external factors which influence resilience. Greene and others (2003:81) find that attitude is a key aspect of internal resilience. Besides attitude and the individual's choice to stay positive and focused in stressful circumstances, Greene *et al.* (2003:82) further state that spirituality and religion are important aspects of internal resilience. The role of emotional and cognitive factors in academic success, as indicated by McGuire (2006:3) and Pritchard and Wilson (2003:18,19) also contribute to the student's internal resilience.

External factors which influence resilience include support from family, school environment, communities (Greene *et al.* 2003:83) and academic preparation (Strydom, Mentz & Kuh 2010:2).

According to Strydom *et al.* (2010:2) academic preparation, motivation and student engagement can predict academic success. A student's academic preparation refers to the study skills developed at school in preparation for HE and the student's enthusiastic participation in academics. The Higher Education Research Institute (HERI) of the United States of America (USA) reported that more than 50% of first year students spent, on average, six hours per week on homework in their final year at school (Mc Guire (2006:7). In South Africa (SA) students' lack of being adequately prepared for HE (Strydom *et al.* 2010:2) is also a reality.

Foxcroft and Stumpf (2005:11) argue that because of the difference in focus from the perspective of school educators and that of HE, the academic preparation of learners from secondary school is problematic. According to the mentioned authors, the school educators' focus is to make sure the scholar can provide evidence that basic educational outcomes have been achieved, while HE requires school education and the final Matric examination to reflect on the prospective student's potential in HE and the world of work (Foxcroft & Stumpf 2005:11).

A further reality is the language of instruction and the home language of students which differ. First year students enter HE without the necessary preparation in a second language which is needed for academic activities in HE (Van Wyk 2011:8). Students are confronted with large volumes of academic material without the necessary language skills to handle this load (Van Wyk 2011:8). Lowe and Cook (2003: 53) report that students follow the same study habits practiced in the first six months of their university career as they did at school. It can thus be deducted that students who are inadequately prepared for HE will be less successful than the student using appropriate study methods, good time management and adapt well in the classroom setting (Lowe & Cook 2003, Mc Guire 2006, Strydom *et al.* 2010).

The HE environment also requires adjustment by the students as there is less control than what they were used to in the school system (Lowe & Cook 2003:53). The new academic environment requires students to be independent in more than one aspect. There are no extra classes for subjects such as mathematics and science in order to assist a student to improve their academic marks. The first year student is now responsible for his/her learning process and must manage it in order to make use of support structures provided by HE. Support structures are there to assist students in high risk subjects such as Anatomy, not to facilitate better marks. First year students are exposed to much greater volumes of subject matter which must be dealt with. Large volumes of work are a reality and this overwhelms the first year student (Kantanis 2000:3; Nel, Troskey-de Bruin and Bitzer 2009:980).

A change in environment, in most cases, away from home and the familiar social structures requires adaptation which can lead to further stress and anxiety for the first year student. This can have a negative effect on the academic performance of the student (Lowe & Cook 2003:53). First year students who live on campus (in residence) are required to participate in all hostel activities regardless of a busy academic program. Life skills such as time management,

self-discipline and perseverance are put to the test in these situations (Lowe & Cook 2003:53).

Busato *et al.* (2000:1057) and McGuire (2006:3) have identified study methods, learning styles and intellectual abilities as factors which influence academic success. For deep learning to occur it is necessary for the student to understand the levels of Bloom's taxonomy and know what type of information is required for each level. The problem is that some students are not motivated to use these strategies (McGuire 2006:4). In the first year of university many students do not understand how Bloom's taxonomy work nor do they grasp the importance thereof.

Emotional and social factors are further indicators of academic success. Pritchard and Wilson (2003:18) refer to early studies of Books and DuBois (1995) which implies a correlation between the ability to adapt in HE and academic success (Pritchard & Wilson 2003:18-19). Depression, anxiety and resulting stress, are also negative contributors to academic success (Pritchard & Wilson 2003:19). Self-confidence and emotional control are regarded as factors of academic success worldwide (Mentz 2012:61).

According to George *et al.* (2008:711) realistic personal and academic goals are key factors of success. Students who are able to set goals for their academic activities make use of good time management. Effective time management is therefore the second most important factor in academic success according to George *et al.* (2008:711). These factors will contribute to the internal resilience of a student (Green *et al.* 2003:81)

George and others (2008:14) find passive free time activity participation to be a negative factor of academic success. These activities include socializing with friends or watching television. Yet according to Pierce (2003:107) quiet focused activities can contribute to rest and restoration of the students which in turn can add to the internal resilience of the students. Once the student is rested, he/she

is able to focus on academic occupations with the necessary motivation and energy (cf. 4.3.3).

On the other hand general health and a healthy balanced diet are considered as supporting factors influencing academic success positively (George *et al.* 2008:714).

The last mentioned factor might also contribute the external resilience of the students (Green *et al.* 2003:82,83).

2.6 SUMMARY

In this chapter an overview of the literature was provided. The chapter began with the environment the students function in; namely the higher education environment, a discussion regarding the regulatory structures, the first year student and the challenges they face. This was followed by a specific view of the occupational therapy students, the selection criteria and the first year academic program. A definition of occupation and the importance of the distinction between occupation and activity were provided. Productivity, restoration and pleasure were addressed and were followed by an overview of the Kawa River model and the Occupational Therapy Practice Profile. Lastly this chapter offered the reader an overview of possible factors which may influence academic success of the student in HE. In the next chapter the research methodology followed in this study will be discussed.

CHAPTER 3

RESEARCH APPROACH AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter featured an overview of literature relevant to this study. In this chapter the research approach and methodology will be discussed. A qualitative design was used to explore the manner in which first year Occupational Therapy students view the factors that influence their academic success (Creswell 2009:4).

The strategy of inquiry, the methods used to collect data, data analysis the trustworthiness of the study, possible errors in data collection and lastly, the ethical considerations for the study (Creswell 2009:3,4) will be discussed.

3.2 METHODOLOGY

The following section will address the paradigms of the study, research design, strategies of enquiry and the research methods.

3.2.1 Paradigm for the study

The paradigm used to position this study within the research landscape is the social constructivist paradigm (Creswell 2009:8).

The world view of the researcher, also known as the paradigm, will be presented as a point of departure for the study. Research literature use the terms paradigm and world view synonymous (Creswell 2009:6; Creswell 2012:537, Polit & Beck 2006:13). A world view gives the researcher "a general perspective on

the complexities of reality" (Polit & Beck 2006:13). The same term is described by Creswell (2009:6) as "basic set of beliefs that guide action".

The social constructivist world view assumes that every person experiences situations differently. As with this study, I wanted to explore possible factors which influence occupational therapy students' academic success. Different meanings are attached to experiences and a person's experience is influenced by various factors. It is due to this combination of factors that researchers with a social constructivist world view often investigate multiple factors influencing individuals rather than focussing on single factors (Creswell 2009:14,15).

Numerous researchers and authors (Busato, *et al.* 2000; George *et al.* 2008; Lowe & Cook 2003; McGuire 2006; Pritchard & Wilson 2003; Van Wyk 2011) report on factors influencing academic success in various academic settings and programs. All of the influencing factors of academic success found in literature were different. It is therefore clear that no single factor can be isolated as influencing academic success. The first year occupational therapy students represent different life experiences and attach different meanings to their experiences. The domains of activity participation (AOTA 2008:628) and the capabilities (Walker 2008:478) are realities in each student's life. Subsequently, these experiences contribute to the meaning they attach to different situations in higher education.

The social constructivist method of data collection occurs with the researcher directly involved with the study population (Polit & Beck 2006:14). The researcher "gains understanding by interpreting subjective perceptions" (Denzin & Lincoln 2011:102) of the study population. In other words, the researcher analyses and interprets the subjective thoughts of the study population. It was important for me to understand the perceptions of the first year occupational therapy students with regard to their view of academic success.

The method of data collection, analysis and interpretation of findings delivered rich information with regards to the research question. This is mainly because of the real life accounts which the study population provided (Polit & Beck 2006:17). By using the real life accounts of the students and describing it in terms of the OTPF, a holistic occupational profile is evident (AOTO 2008:626).

Seemingly the social constructivist world view supports qualitative research approaches. This will become apparent in the next section where the research design is addressed.

3.2.2 Research approach

A qualitative research approach was followed for the study by making use of a collective case study design (Creswell 2009:13; Fouche & Schurink 2011:322).

According to Creswell (2009:175-176) a qualitative research approach has distinctive features, namely:

The study is conducted in the area where the research question originated. This study took place in the context of the academic environment in the Occupational Therapy program at the University of the Free State.

Creswell (2009:175) states that the researcher uses documents, interviews and/or observations to collect data. This is reflected in the method of data collection of this study. Documentation data was collected from two sections of the first year occupational therapy students' portfolio reflections and the Nominal Groups Technique.

The researcher played an active role during the data collection process gathering all the data and did not make use of existing questionnaires. In this study, I read the reflections of the students and was personally involved, together with the study leader, in determining the questions and points for discussion in the

Nominal Group Technique (NGT). I was also responsible for the orientation of the first year occupational therapy students regarding the reflections which were to be written. This was done because of the modules and themes which were assigned to me and to ensure comprehensiveness of the study.

The focus is on the experience of the situation being investigated and the meaning it has for the participants (Creswell 2009:179). I thus had to be careful not to focus on my own preconceived ideas with regard to the factors influencing the students' academic success (Tufford & Newman 2010:88). For this reason, a well trained and experienced facilitator was used for the Nominal Group Technique discussions and an experienced co-coder for the analysis of the portfolios.

Finally, the fact that this study examines all the possible factors which influence academic success is thus supported by Creswell (2009:176). Creswell (2009:176) writes that a qualitative study is holistic in nature. The researcher does not only look at concrete relationships between cause and effect. Instead, I looked at a variety of factors which influence the research question.

3.2.3 Study design

A collective case study was used for the value it adds to the in depth study which was required to explore all the possible factors which influence the first year occupational therapy students' academic success (Flyvbjerg 2011: 301).

The strengths of a case study design are further emphasized by Flyvbjerg (2011:314) with regards to the "depth, detail, richness and completeness" of the data acquired from it. The case study design allowed the researcher to gain an understanding of the realities of the first year students in the occupational therapy program at the UFS (Flyvbjerg 2011:314).

A collective case study explores issues pertaining to one or more cases in a group or system (Creswell 2007:13, Yin 2003:39). This is clearly illustrated by Creswell (2012:466) where multiple cases are involved in one point of interest. The group of participants can be seen as one case. In this study, the case was the group of first year occupational therapy students. By making use of the collective case study in-depth insight into factors influencing academic success of all the participants was possible.

Yin (2003:85) also recommends that a study of the group should take place over a period of time, where the researcher uses more than one method of data collection.

3.2.4 Research population

The research population consisted of all first year occupational therapy students registered for the program at the University of the Free State in 2013. A total of 44 students were registered. The students are divided in two classes of respectively 19 English and 25 Afrikaans speaking first year students. One student out of each class was repeating her first year. A total of eight were senior students.

3.2.5 Study population

Only those first year Occupational Therapy students who registered at the University of the Free State for the first time in 2013 were included in the study population. I was only interested in the first years with no experience in HE's perspective on the influential factors of their academic success. It was a total of 35 students.

a. Inclusion criteria

First year Occupational Therapy students with no previous HE training were included in the study population.

b. Exclusion criteria

Senior students and repeaters were excluded because the possibility existed they had made necessary changes to their academic occupations.

3.2.6 Sampling

A random sample must be representative of the study population (Flyvberg 2011:307). As the academic achievements are varied throughout the class a random sample was needed to have representation of all students. A list of the English and Afrikaans students in the class of the first year students, with no previous HE experience, was provided to a biostatistician. A random sample of nine (9) first year students from the English students and nine (9) from the Afrikaans students were drawn. A total of eighteen (18) participants were randomly appointed to the study.

Table 3.1 Demographic profile of participants

Hometown Province	-	Gauteng – 5 participants Free State – 6 participants KwaZulu-Natal – 1 participant Eastern Cape – 3 participants Western Cape – 3 participants	
Maticulant in 2012		13 participants	
Gap year		5 participants	
Nature of accommodation		Campus residence	Studying from home

	15 participants	3 participants
Mother tongue	Predominantly English	Predominantly Afrikaans
	7 participants	11 participants
Language of instruction in Grd 12 -	English	Afrikaans
	8 participants	10 participants
Language of instruction in HE -	English	Afrikaans
	9 participants	9 participants

The same random sample was used for the data collection. This contributed to the trustworthiness of this study by enabling me to conduct triangulation of the data obtained (Yin 2003:89). The two sets of data from the portfolios could be tested against the data obtained from the NGT.

3.2.7 Data collection of documentation

Data was collected by means of nominal group technique discussions and documentation (Creswell 2009:178-181; Maree 2012:82; Potter, Gordon & Hammer 2004:126). Documentation data consisted of the Kawa River model reflections and the first year students' reflections on test writing. The data collection of documentation took place over a period of four months while the nominal group technique discussions took place once for the Afrikaans and English groups respectively. Having more than one method of data collection is one of the strengths of a case study research design (Nieuwenhuis 2012:76).

Documentation is defined as any type of document which can contribute to the study. A primary data collection method was used and is described by Nieuwenhuis (2010:82) as unpublished information such as the portfolio reflections written by the first year Occupational Therapy students.

The two data collection methods namely documentation and NGT discussions will be discussed separately.

3.2.7.1 Portfolio documentation: Kawa River model

As part of the first year Occupational Therapy students' General Skills module, reflections on learning experiences and personal development are done in portfolio format. Only certain parts of these reflections were used during the data collection process. The first aspect I was interested in was the Kawa River model reflections and secondly, the students' reflections on their tests. Reflections are submitted twice a year for assessment by the staff of the Department of Occupational Therapy. After the assessments were completed, I analyzed the participants' portfolios. The analysis took place during June 2013 and July 2013, and again in September 2013 and October 2013.

The Kawa River model (Iwama *et al.* 2009:1129) amongst others is used as a guideline for the reflections of all the Occupational Therapy students in their portfolios. At the beginning of the year the first year students were orientated with regards to the General Skills module and the portfolios. At this point the specific characteristics of the Kawa River model were explained to the students to use in their reflections. All the other aspects of the portfolio were also explained.

A guideline was supplied to the first year occupational therapy students to assist them in writing their reflection according to the Kawa River model. The students used the elements of the Kawa River model to reflect on the factors which influence their academic success in a positive and negative way.

The following section depicts the instructions and guidelines of the General Skills theme in the ABT114 module. The aspects given for reflection were obtained from literature sources used during this study as discussed and referenced to

individually in chapter 2. The occupational therapy students reflected in their portfolio by firstly making use of the Kawa River model elements (UFS 2013:3,4):

"By making use of the Kawa River model and the elements thereof, reflect on your first semester/second semester in the Occupational Therapy program. Below are aspects that can assist you in your reflection. Please feel free to also include any other aspects of your choice."

- *Ability to study independently*
- *Appropriate study methods*
- *Involvement in hostel and campus activities*
- *Time management*
- *Adapting to the academic pace of the university*
- *Self-discipline*
- *Perseverance*
- *Handling large work load*
- *Emotional well-being, depression, anxiety etc*
- *Self confidence*
- *Free time management and social program*
- *General health*
- *Support systems*
- *Personal and/or financial problems*
- *Study environment, hostel, student residence, other accommodation*
- *Learning styles and study methods*
- *Realistic goals: Personal and academic*

3.2.7.2 Portfolio documentation: Reflections on tests

In addition to the Kawa River model reflections, the first year OT students also reflected more specifically on their study and test writing skills. Once the students have received results of tests written, they identified and reflected on problem areas with regards to preparing for and writing of tests. An action plan was then drawn up by each student to address their specific problem areas. The

action plan was re-evaluated with the next round of test results they received (UFS 2013:10).

a. Data collection and management: documentation

The first year OT students submitted their portfolios in May 2013 and again in September 2013. Portfolios were stored on a 2 Gigabyte memory stick belonging to each student. After the assessments have been completed each student receives back her own memory stick. The secretary and the program co-ordinator divided the portfolios between members of staff to be assessed.

The memory sticks of the 18 students who were randomly selected, were taken after assessment was done by different lecturers. At that time classes for the first years had ended due to midyear examinations. Consent had already been received (cf 3.5.3).

Each participant's reflections were stored electronically in separate documents. Each document was assigned a number from one to eighteen. All eighteen documents were then stored in a file. The file indicated the content of the first semester reflection portfolios. The same method was followed with the reflections which were submitted at the end of the second semester. Analysis of the reflections was then done separately by me and the co-coder during June and July 2013 and during September and October 2013.

b. Data analysis and interpretation

A thematic analysis was used in the process of analyzing the portfolios (Creswell 2009:184). Thematic analysis is used by various authors (Boudah 2011:226; Creswell 2009: 185; Merriam 2009:176; Schurink, Fouche & de Vos 2011:404). Data was mainly analysed by using the method described by Merriam (2009:176). Methods provided by other authors were also incorporated (cf. Table 3.1).

As mentioned the OTPF domains were used as categories for analysis. The OTPF provided categories and sub-categories. Therefore the factors which influence academic success in first year occupational therapy students, as identified from the portfolios, was categorized according to the OTPF domains (AOTA 2008:625). The domains of the OTPF do not necessarily provide answers to the research question. But it was a valuable framework to place the study within the field of occupational therapy and furthermore to describe the occupations the first year occupational therapy students engage in. It was this occupation engagement or lack of engagement which influenced their academic success.

To add to the credibility of this study an independent co-coder was also involved in the analysis of the data of the portfolios. The co-coder is an occupational therapist and is knowledgeable of the process of analyzing qualitative data. The co-coder was orientated with regards to the background of the study and the research question posed in this dissertation. Merriam's method of data analysis was provided to the co-coder. The researcher provided the co-coder with the following:

- The aim and the first objective of the study,
- the categories for analysis according to the domains of the OTPF and
- the reflection portfolios of the participants.

Subsequently, the co-coder independently analyzed the reflection portfolios of the first year occupational therapy students randomly selected (Merriam 2009:178,179). During October 2013 the co-coder and I met to discuss the categories identified during analysis.

Table 3.2 Analysis process of documentation data – Portfolios (Merriam 2009: 178-186)

Prescribe method according to literature	Method followed
Focus on information which answered the research question (Merriam 2009:178). The researcher reads through the data to	By reading through the portfolios information was identified which answers the research question. This

<p>gain an overview of the content (Boudah 2011:226; Creswell 2009:185; Merriam 2009:178; Schurink, Fouche& de Vos 2011:404)</p>	<p>enabled me and co-coder to control the volume of raw data that had to be analyzed. By reading through the portfolios an overview of the data was gained.</p>
<p>Read through the data a second time to identify units of reoccurring information which answers the research question (Merriam 2009:178,179). The data is divided into smaller parts and then linked to a specific category (Merriam 2009: 178, 179,182). Categories can be identified by the researcher, the participants or as in the case of this study as identified from literature (Merriam 2009:184).</p>	<p>Factors which influence academic success in first year occupational therapy students, as identified from the portfolios, were categorized according to the OTPF domains (AOTA 2008:625).</p>
<p>The identified categories must adhere to the following criteria for it to be scientific and reliable (Merriam 2009: 185,186):</p>	
<p>The categories must answer the research question and correlate with the research question.</p>	<p>Factors identified were placed in the OTPF categories according to the interpretation of the co-coder and me. All of the factors answered the research question.</p>
<p>All the raw data must be placed in a category</p>	<p>Raw data was placed in the different domains according to the OTPF. This was done by the co-coder and me.</p>
<p>Merriam (2009:185,186) proposes that the categories must be identified in such a way that data can only be placed in one category.</p>	<p>Factors were placed in one category only. Due to the critique (OTPF) (cf 2.5) the researcher and co-coder critically discussed where needed and decided in which category to place factors.</p>
<p>When naming the category the researcher must ensure it is named in a descriptive manner. Merriam (2009: 178,179).cautions the researcher to describe each category in such a manner as to prevent uncertainty about the character and meaning of each category (2009: 178, 179).</p>	<p>The OTPF domains were used to name the categories.</p>

The practical guidelines as provided by Merriam (2009:182,187) were followed: Creating electronic files for each of the categories. The raw data were then stored in the different category files. This ensured access to the raw data after the portfolios were handed back to the students.

3.2.7.3 Nominal Group Technique discussions

Another method of data collection was the Nominal Group Technique. A concise background of the NGT is provided followed by a comprehensive description of the process followed.

According to Potter, Gordon and Hamer (2004:126) the Nominal Group Technique (NGT) was first described by Delbecq and Van de Ven in 1960. The latter mentioned researchers describe NGT as a method of "effective discussion making within a group" as method to find prioritized answers to a question. The NGT discussion is used with small groups of between four and nine members. However, Potter *et al.* (2004:126) report on Lloyd-Jones *et al.* (1999), Thomas (1983) and Twible (1992) all having success NGT discussion with more than nine members per group.

The NGT has advantages for both the researcher and the participants (Potter *et al.* 2004:126). The participants do not have to prepare for the discussion group. The NGT lasts for a maximum of two hours after which the results have been achieved and the participants feel satisfied that the task has been completed. Therefore the NGT discussions were chosen as second method of data collection.

a. Data collection and management

After notifying the participants of their inclusion in the study via email, a list of the participants was placed on the first year occupational therapy student's notice board. Two weeks before the NGT discussions a notice was placed on the notice board. This provided participants with enough time to withdraw from the study. As stated in the information letter, participants could withdraw from the study at any time.

The NGT discussions were conducted at the Clinical Skills Unit at the University of the Free State on two occasions during the second semester, for the Afrikaans

group and English group respectively. In preparation for the NGT discussions, the researcher arranged chairs in a semi-circle in front of five flip charts. On each chair were a clean sheet of writing paper, ten index cards (Dobbie, Rhodes, James, Tysinger & Freeman 2004:404) a pen, the information document and consent form which each participant completed prior to each session.

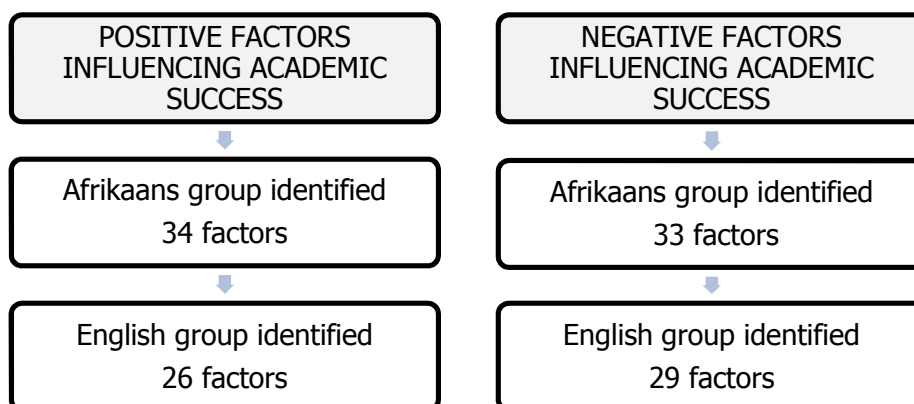
The questions for the sessions were projected, alternatively, on a screen (Dobbie *et al.* 2004:403). The questions being:

- Which factors influence your academic success positively in the first year of occupational therapy?
- Which factors influence your academic success negatively in the first year of occupational therapy?

Once all the participants were present the facilitator welcomed all present and asked them to complete the consent forms. All the consent forms were collected as no participants withdrew from the NGT discussions. The facilitator started the session by emphasising the importance of confidentiality with regards to discussions taking place in the session (Liamputtong 2011:25).

The facilitator explained the steps of the NGT discussion and referred the group's attention to the first question on the screen: *Which factors influence your academic success positively in the first year of occupational therapy?* Participants silently first wrote down their own opinions of factors which influenced their academic success positively (Dobbie *et al.* 2004:404).

Once the above mentioned step was completed, the facilitator obtained factors identified by the participants. This was done in a "Round-Robin" manner (Dobbie *et al.* 2004:404). All the factors were written down on flip charts. This coincided with the clarification of factors identified by the participants (Dobbie *et al.* 2004:405). Two lists resulted respectively from the Afrikaans and the English groups on the positive and negative aspects influencing their academic success.

Table 3.3 Factors identified per group per question

The next step was for each participant to choose five factors, from the numbered list on the flip charts, which they personally view as the most important factors influencing their academic success either positively or negatively regarding the question at hand. Each factor was written on a separate index card. These five factors were then prioritised from having the least influence to the factor having the most influence on each participant's academic success (Dobbie *et al.* 2004:405). Discrepancy is found in literature (Dobbie *et al.* 2004:404; Potter *et al.* 2004:128; Van Breda 2005:5) about the number of factors to be prioritized and varies from five (5) to ten (10) factors. I followed the method prescribed by Van Breda (2005:5) to identify the first five factors as priority. Although all the factors identified are important, I regarded the first five factors as primary factors. These can be addressed on a departmental or individual basis.

The index cards were collected by the facilitator. Starting with the factor least influential on academic success, according to each participant, followed by the factor most influential on academic success. The factors on the cards were read out in random order (Dobbie *et al.* 2004:405). The factors identified were awarded a score/numeric value. A score of one (1) represented the factor which had the least influence on a participant's academic success, where five (5) being the most important factor to influence academic success (Dobbie *et al.* 2004:405). The scores/values awarded were added up to establish the most

important factors influencing academic success of first year occupational therapy students as identified by the participants.

The same process was followed for the question: *Which factors influence your academic success negatively in the first year of occupational therapy?*

b. Data analysis and interpretation

The end product of the NGT discussions was two sets of data (Van Breda 2005:5). Multiple group NGT data analysis as prescribed by Van Breda (2005:4 – 8) was used to analyse the two sets of data as depicted in the following table. The process was adapted for this study as no quantitative analysis was done. The thematic analysis followed the content analysis.

Table 3.4 Analysis of NGT data as prescribed by Van Breda (2005:4-8)

Prescribe method according to Van Breda (2005:4-11)	Method followed
*Each group refers to the Afrikaans and English groups.	
Step 1: Capture the data on computer	The factors identified by the students as well as the scores of each statement were captured on an Excel spreadsheet. An average for each statement was calculated. This was done separately for *each group.
Step 2: Identify the Top Five	The top 5 statements according to the averages for *each group were identified.
Step 3: Content analyses of the data	Each of the statements as identified from the OTPF (AOTA 2008:625) was categorized. Although Van Breda (2005:4,5) refers to the categories as themes, in this study categories were used (Merriam 2009:178,179,182).
Step 4: Confirm the Content Analysis	The co-coder and I met once again to discuss the analysis according to the OTPF categories.
	Thematic analysis was done.
Step 5: Calculate Combined Ranks	This step was not executed.
Step 6: Comparing Demographic Groups	This step was not executed.

(Optional)	
Step 7: Reporting the NGT Data	The discussion of all findings will follow in chapter 4.

3.3 QUALITY AND RIGOR OF THE STUDY / TRUSTWORTHINESS OF THE STUDY

The trustworthiness of a qualitative study is of vital importance (Krefting 1991:217; Maree 2012:133). This implies definite procedures to ensure the trustworthiness of the collection, analysis and reporting on data.

3.3.1 Credibility

Credibility with regards to the researcher, the research method and the findings must be evident. The researcher needs to provide evidence of adequate knowledge and skill with regards to the research project embarked upon (Boudah 2011:75, c, Fouche & De Vos 2011:420).

To prove capability to embark and complete this research project I completed a research methodology module at the University of the Free State (UFS). A complete research proposal was presented to various committees for approval. Furthermore I have been involved with first year occupational therapy students since 2008. I am also the program coordinator of the Department of Occupational Therapy and have regular contact with all the students in the program. As program coordinator, the academic progress of each student is also monitored by me. Consequently, this also provided me access.

To establish credibility regarding the research method it was necessary to have a comprehensive understanding of the research topic (Schurink, Fouche & De Vos 2011:419-420). To establish truth value of a study it was necessary to make use of different methods of gathering data (Boudah 2011:77). This will be evident in the following discussion on triangulation which was used in the study.

Triangulation was the final method to ensure credibility of the research study.

Flick (2004:178) distinguishes between four methods of triangulation. Firstly, data triangulation was used. Different kinds of data were collected as indicated by the character of the case study research design. (Flick 2004:178, Nieuwenhuis 2012:113). Flick (2004:178) advises that data gathering should take place over time with different people involved as well as in different places. The data was gathered from different sections of the portfolios (documentation) and the two sets of data from two NGT. The data was collected over a period of almost one year. The same random sampled was included in the different methods of data gathering.

Investigator triangulation was also applied (Flick 2004:178) by making use of a facilitator and a co-coder. An experienced facilitator conducted the NGT discussions. I was present during the process and acted as the scribe. This ensured that I had a good understanding of the factors identified by the participants. Co-coding was done; this ensured that researcher bias was greatly limited.

Thirdly, by using different perspectives and theories with regard to the issues under investigation theory triangulation was assured (Flick 2004:178). A variety of literature from different professional disciplines with different views on factors influencing academic success was consulted. The OTPF, a specific framework in occupational therapy and an occupational therapy theoretical model (Kawa River model) were also used in an attempt to ensure theory triangulation.

Finally method triangulation (Yin 2003:89) was used. Method triangulation offers the researcher the opportunity to make use of more than one method of data gathering. This in turn allows the researcher to test the findings from the different methods comparatively. As with data triangulation, method triangulation was achieved by following a case study research design where findings were acquired from documentation and the NGT.

By making use of member checking the facilitator of the NGT discussions presented the factors influencing the students' academic achievements positively

and negatively (Creswell 2009: 191). This was done with both the Afrikaans and English groups to confirm that all participants agree on the factors identified.

3.3.2 Transferability

The study was documented in such a manner that other researchers interested in the design used in this study will be able to transfer the information to their own study (Boudah 2001:81). The study was explained by providing a comprehensive description of the steps taken during the data collection and the analysis processes.

3.3.3 Dependability

In order for the study to be presented "logical and well documented" (Schurink, Fouche & De Vos 2011:420) the same steps were followed throughout the data gathering and analysis procedures. A co-coder was also used to limit the researcher's bias. A guideline was provided to ensure that the co-coder used the same literature and steps in analysis of data.

3.3.4 Confirmability

All efforts were made to ensure that the findings in this study can be confirmed by another independent researcher (Schurink, Fouche & De Vos 2001:421). The thorough discussion of literature pertaining to academic success and factors influencing academic success and the comprehensive discussion of the findings will address conformability of this study.

3.3.5 Bracketing

Tufford and Newman (2010:88) define bracketing as: "Process whereby the researcher draws awareness to presuppositions regarding the topic." As part of the trustworthiness of the study I did not assess any of the portfolios prior to the

analysis of the portfolios of the study population. The involvement of a facilitator for the NGT and a co-coder was a further attempt to limit bias in the study. Furthermore, I reflected, on a regular basis, on my own opinions, assumptions and thoughts on factors influencing academic success. By doing so I was able to separate my assumptions from the reality of the student's experiences.

3.4 ERRORS DURING DATA COLLECTION

Possible errors occurring during the data collection process will be discussed below.

3.4.1 Understanding of the Kawa River model

All the first year occupational therapy students were orientated on the Kawa River model in the first term of 2013. This orientation session was too early in the year and the students did not understand all the concepts at the time. A second voluntary opportunity was scheduled for the class to attend a follow up orientation. Not all the students in the class made use of this opportunity which could have influenced the Kawa River model reflections as this session occurred before the random sampling was done.

3.4.2 Importance of portfolios to the students

Arguments may be raised that not all of the students in the occupational therapy program are equally committed to the portfolios. The portfolio reflection mark contributes 10% of the clinical practice module of the occupational therapy program. Various degrees of reflection and attention to the content are evident of this. This might have played a role in the information obtained from the portfolios.

3.4.3 Time of the NGT

The NGT discussions were held during October 2013. The final examination time table just became available. The students identified the examination time table as an influencing factor on their academic success even though it was still in the future. The stress due to the nature of the examination time table might have influenced their opinions.

3.5 ETHICAL CONSIDERATIONS

The researcher has responsibilities when planning and executing research studies. Administrative and ethical committee; responsibility towards the field of research and colleagues; the professional field where research is done; participants; context of the study and the institution where the research is registered.

A code of conduct and research ethics provide guidelines to ensure the researcher can comply with the above mentioned responsibilities (Strydom 2011:113). These ethical guidelines ensure that research was done in a professional manner during the planning, execution and reporting of the study (Strydom 2011:114). The principles of the Helsinki declaration were also incorporated (WMA 2013:1,2).

Strydom (2011:113-129) provides the researcher with the following guidelines which were used in this study.

3.5.1 Avoidance of harm

The emotional wellbeing of the participants was taken into consideration throughout the study (Strydom 2011:115). Kopsie Health counselling was available to participants in the event they were confronted with negative emotions during the NGT discussions.

The academic program was not disrupted (UFS 2014:16).

The participants sometimes shared personal and confidential information in their portfolios. Considering this, student information was kept confidential. Reporting on the findings of the study was done with honesty yet with the necessary sensitivity (Strydom 2011:116).

3.5.2 Voluntary participation

Participation in the study was voluntary (Fouche, Delport & De Vos 2011:144). The participants had the choice to withdraw from the study at any time without facing any penalty.

3.5.3 Informed consent

The participants were informed about the purpose of the study. A verbal agreement was entered into by the participants. This took place during the orientation lectures of the portfolios. After receiving the random sample for biostatistics each participant in turn received an email. The email notified them of their inclusion in the study. Each participant received an information letter. Participants agreed to take part in the study via email. The participants gave consent for information obtained from portfolios to be used in this study. Only once a participant agreed to the study did the analysis of the documentation commence. Each participant had the choice to withdraw voluntarily from the study (Polit & Beck 2006).

Before commencing with the NGT each participant was provided with an information document and a letter of consent which was signed prior the NGT. This served as informed consent given by the participants that information obtained from the NGT discussions to be used in this study (Polit & Beck 2006).

3.5.4 Misleading of participants

Participants were fully informed about the purpose of the study and their contribution in an information document. Participants were provided enough time to decide to take part in the study and they could withdraw from the study at any time. At no point during the study were the participants misled about the study. No information was withheld from the participants (Strydom 2011:118).

3.5.5 Privacy and Confidentiality

“Each individual has the right to privacy and it is his or her right to decide when and where beliefs and behaviour will be revealed” (Strydom 2011:119). Taking this into consideration, the study was conducted in such a manner as to ensure privacy of the participants as far as possible. However privacy could not be guaranteed during the NGT discussions. Liamputtong (2011:25) advises that a set of rules be agreed upon at the onset of each of the Nominal groups. Respect for each other’s privacy and confidentiality was stressed. These rules included the following:

- Everything discussed in the groups had to be regarded as private and confidential.
- No participant was allowed to discuss any information of the NGT with anybody outside of the group.

The facilitator assured the participants that no information from the session will be used against them. This implies that the researcher is responsible for the emotional, physical and social wellbeing of the participants of the NGT (Liamputtong 2011:26).

The information obtained from the portfolio reflections was kept confidential. The co-coder undertook to protect the privacy of the participants and keep

information of portfolios confidential. This information could not be handled anonymously as the students' names appear in their portfolios in several of the sections.

3.5.6 Compensation

The participants did not receive additional academic advantages, adjustments to academic marks or any other form of special compensation during the study (Strydom 2011:121).

3.5.7 Actions and competence of the researcher

The researcher had to provide evidence of research competence to the ethics committee of the Faculty of Health Sciences at the UFS to be granted ethical clearance to perform this study (UFS: EC29 2012).

Permission was also obtained from the Dean Academic Affairs, UFS; The Dean of the Faculty of Health Sciences, UFS; Dean of Student Affairs, UFS; Head of the School of Allied Health Professions, UFS and the Head of Department of Occupational Therapy for the study to be conducted (UFS: EC29 2012).

3.5.8 Publication of findings

Findings have to be reported (Strydom 2011:126). Findings have to be reported in an honest way even if it is not what I expected from the study. Errors must therefore be honestly reported as to contribute to other researchers' process. Participants granted permission to publish the finding of this study in accredited academic journals and to present findings at congresses.

3.6 SUMMARY

This chapter described the research methodology. Descriptions were provided regarding the chosen research paradigm and design. Data collection and the handling of the data were discussed. The analysis of both sets of data was presented. Trustworthiness of the study as well as the ethical consideration concludes the chapter.

In the following chapter the findings will be discussed in conjunction with support from literature.

CHAPTER 4

DISCUSSION OF FINDINGS

*"The water of my life is moving fast, maybe too
Fast and I am terrified that in the quest of making
a life for myself I lose those dear to me, but
even worse I lose myself."*

(First year occupational therapy student 2013)

4.1 INTRODUCTION

Chapter 3 described the methodology, trustworthiness and possible errors during data collection as well as the ethical considerations of the study. In this chapter I will describe the factors influencing first year occupational therapy students' academic success. The description will be done by making use of the domains of the OTPF (AOTA 2008:625-645)

4.2 OCCUPATIONAL THERAPY PRACTICE FRAMEWORK

Engaging in meaningful occupation leads to well-being (Reid 2008:43). However occupational engagement does not occur in fragments or only in one context. Furthermore engaging in meaningful activity implies that social contact is made which in turn poses challenges and demands. The person engaging in activity needs to have certain abilities and skills. The OTPF allows the occupational therapist to take various interrelated (AOTA 2008:625) aspects into consideration when looking at human occupation.

Factors that influence academic success were described and discussed according to the OTPF domains. The reader will therefore find factors such as resilience, social participation and support being described in more than one domain.

However, the description of the factors will be done according to the definition of the category which accommodates the factors.

Figure 4.1 firstly, depicts the first year occupational therapy students' occupational engagement in academic occupations. Secondly, the figure indicates the interrelatedness of the factors influencing academic success.

4.3 DESCRIPTION OF FACTORS INFLUENCING ACADEMIC SUCCESS

Positive and negative factors influence academic success. The mentioned factors will be described simultaneously. Influencing factors have different meanings to students where one student identified a negative factor; another mentioned the same factor as a positive influence on academic success. The factors identified by students as influencing academic success will be discussed by making use of the domains of the OTPF (AOTA 2008:625-645). Each domain will be defined as it appears in the OTPF.

Verbatim quotations of the students will be provided in the language of the students' choice. I did not correct any errors in the verbatim quotations. A translation of Afrikaans statements is provided. Statements obtained during the NGT are also used in this chapter.

Please note that due to the process of the NGT, statements are written instead of lengthy dialogues. For that reason I will indicate that the quotations were taken from the NGT.

The Personal context will be used to describe the demographics of the participants of this study (AOTA 2008:642) (cf. 4.3.2).

4.3.1 Areas of Occupation

Areas of Occupation is defined as: "Various kinds of life activities in which people, populations or organizations engage, including ADL, IADL, rest and sleep, education, work, play, leisure and social participation" (AOTA 2008:631).

In the following section the Areas of Occupation factors influencing academic success as identified by the students will be described.

4.3.1.1 Instrumental Activities of Daily Living

Instrumental Activities of Daily Living (IADL) is defined as: "Activities to support daily life within the home and community which often require more complex interactions than self-care used in ADL" (AOTA 2008:631).

Many students leave home to study at the UFS and experience IADL challenges. They are faced with much larger challenges than they had anticipated. "Adult independence" as expected from adults is a new reality for students entering HE who moved away from home (Pancer, Hunsberger, Pratt & Allistat 2000:38).

Table 4.1: IADL factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Instructional Activities of Daily Living (IADL)	*Meal preparation and cleanup *Financial management *Mobility

a. Meal preparation and cleanup

"At this stage I also started to realise just how big my new responsibilities were: I had to manage my own finances, had to cook for myself..."

"Ver van huis, versorgings aktiwiteite neem tyd.op."

"Far from home, self-care activities take up time"

(NGT statement)

The student who stays in campus accommodation or in a student house must now take care of her/himself. This is often a new role expectation on the students (cf. 4.3.6). Unfortunately, self-care activities such as preparing meals, cleaning and laundry take up valuable time. This takes up time which the students would rather spend on academics.

Pierce (2003:106) reminds us of the value of restoration from eating. Restoration can occur on various levels according to the meaning the students attach to the activity. It seems that the students do not experience a lot of restoration from eating as the process of preparing food, which is regarded as unpaid work (Pierce 2003:65) is such a burden on them. Spending time with family or friends while having a meal together are lost to the students in times when they need to work on assignments or study for assessments. During these times it is possible that students also do not prepare balanced meals with the necessary nutrients to fuel their endurance. This can become a vicious cycle as impaired endurance will influence the students' cognitive abilities negatively. Students studying from home will probably have meals prepared for them but it is doubtful whether they spend as much time with their family during meal times as before they entered the occupational therapy program.

b. Financial management

"Financial stress – managing my finances..."

"Finansies is 'n struikelblok ... dankbaar dat ek wel by die huis nog kan bly en nie so veel uitgawes het soos wat die ander OT's het wat in die koshuis bly nie."

"Finances are a stumbling block ...grateful that I am still staying at home and I do not have the same expenses as the other OTs staying in hostel."

"...food and living expenses are very expensive and are cutting my budget short..."

A proportion of students also need to manage their own finances. Students have voiced this as a stressor as well as the additional expenses of the occupational therapy program at the UFS. Students now have the additional challenge of managing their own finances over and above their academic work load (Pancer *et al.* 2000:39). Many students receive an allowance. Having to manage this with regards to living- and additional academic expenses can cause stress for the first year student.

Staying in residence and managing their own finances in addition to the physical environmental factors (cf. 4.3.2) causes stress for the students (Dusseleir, Dunn, Wang, Shelley & Whalen 2005:21). Pancer *et al.* (2000:39) confirm the influence of managing their own finances is also something which was done for them when they stayed at home. Buying groceries, filling their vehicles with petrol, buying clothes and snacks etc. must all be managed by the students themselves now. Students do not have a parent to fall back onto for financial assistance when their budget is running low.

c. Community mobility

"I am fortunate enough to have a car on campus."

The occupational therapy academic program includes visits to clinical areas. For the student without transport this is a factor influencing their academic success. On the other hand, first years identified having transport as a positive factor of their academic success.

Different clinical areas are visited by different groups of students. Thus, the students without transport have to arrange a lift to and from each visit. However, the students are forewarned about the character of their training and the importance of transport due to clinical visitations in the faculty year book (UFS 2014:14).

Literature on the influence of transport on academic success is limited. Nonetheless Lucas (2011:1321) points to the reality of the individuals from the low socio-economic population which faces public transportation challenges. However, the students in this study do not make use of public transport to reach their clinical areas. In spite of the fact that the student without her own transport does have the opportunity to reach clinical areas with friends, it still places them at a disadvantage. Students experience stress when they need to organize transport for each of their visits. Arranging transport for each of the mentioned visits can also be time consuming for the students. The lack of mobility independence has a negative influence on academic success for the students.

4.3.1.2 Education

Education is defined as: "Includes activities needed for learning and participating in the environment" (AOTA 2008:632).

Table 4.2: Educational factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Formal Educational Participation	*Work load and academic preparation *Anatomy *Assessment and feedback *Lectures *Academic program
Informal Educational Participation	*Working in groups *Academic Support

a. Work load and academic preparation

"I realised the work load was a lot more than school..."

"...die werkslading en akademiese pas van die universiteit bied 'n groot struikelblok en aapassing..."

"...the work load and academic pace of university pose a big stumbling block and adjustment..."

"...die wete dat ek soveel massas werk het wat wag om geleer te word..."
"...knowing I have masses of work waiting to be studied..."

"The world, where decisions are mostly made for us and where everything seems to go our way is definitely one of the past."

Students engage in academic occupations (ATOA 2008:632) in HE for the first time which seems to pose a number of challenges. The first challenge is the work load within the program. The sheer volume of the work which needs to be studied demotivates the students. Friedlander, Reid, Shupak and Cribbie (2007:259) identify the work load among other factors as possible negative factors which influence academic achievements. Various authors (Kantanis 2000:6; Nel, Troskey-de Bruin & Bitzer 2009:980) concur that the HE work load is much bigger than what the students were used to in school. Unfortunately

some students do not have the skills to cope with HE academic material due to inadequate preparation for HE (ACT 2005:1,3; Tinto 2012:25).

The manner in which students engage in academic occupations and specifically with the heavy work load depends on their earlier experiences with academics (Amin & Eng 2003:33). The students were taught in a teacher and learner-centered environment. This meant that all learning activities were directed by the teacher (Amin & Eng 2003:42). Once the students enter HE they are expected to function in an environment where independent learning is expected of them (Amin & Eng 2003:42). The format of lectures is different from school. At school all the relevant academic material was explained in detail and taught to the learners. Due to limited time to teach academic material it is essential for students to independently work through the material by themselves before and after lectures.

For the student to embrace the student centered learning environment their learning must become self-directed. By taking control and responsibility of the heavy academic load the students will show traits of an adult learner (Amin & Eng 2003:42). Students will present with the ability to manage their time, adjust study methods and become independent learners. A detailed discussion of these skills follows in the Performance Skills domain (cf. 4.3.5).

b. Anatomy

"Then there was anatomy that slowed down my river, it was a big obstacle in the way and I had to work really hard to move it"

"Anatomy is a gigantic rock, which is constantly breaking my speed and confidence."

"Conquering anatomy gave me a sense of accomplishment."

"In my third anatomy test I achieved 80%, which I was very happy with I could have done better in the practical as I did make stupid mistakes."

Another challenge the students face is anatomy. This is a year module and students cannot continue on to the second year of study if they do not pass anatomy. This is one of the modules in the first year which influence academic success.

Anatomy is characterised by difficult academic content and a heavy work load. This demands from the students to have study skills, time management skills (cf. 4.3.5) and amongst others perseverance (cf. 4.3.3; 4.3.5) to meet the demands of the work load. Spending enough time studying anatomy will influence academic success positively (Strydom *et al.* 2010:2). There are various factors influencing the ability of the students to cope with the work load and difficulty of anatomy. The learning approach, study methods, motivation and personality are all factors which will be discussed in the Client factors domain (cf. 4.3.3) and Performance Skills domain (cf. 4.3.5).

Anatomy is also experienced as a positive learning curve for many students. The students who are successful in anatomy experience occupational flow because they met the academic challenge with the necessary academic abilities (Pierce 2003:60,61). This in turn plays a positive role in the students' Global Mental Functions (motivation) (cf. 4.3.3).

However, some of the students have high expectations (cf. 4.3.6) with regards of their academic success, particularly in anatomy. Due to good marks obtained in school, students and maybe family members, tend to expect the same high marks in HE. These high expectations are often not met and causes the students to lose motivation to study for the next test (cf. 4.3.3).

c. Assessment and Feedback

"Anatomie - Ek het 45% behaal. Die manier waarop die vraestel gevra is het my regtig onkant gevang."

"Anatomy – I got 45%. The way the questions were asked caught me of guard"

"Ek het nie die werk reg geleer nie. Ek verstaan nie altyd hoe die vrae gevra word nie."

"I did not study correctly. I don't always understand the way questions are asked."

"Deurlopende assessering, voortdurende weergee van kennis."(NGT statement)

"Continues assessment"

"Positiewe terugvoer op toetse as goed gedoen."

(NGT statement)

"Positive feedback on tests when marks are good"

"Onseker oor verwagtinge KAB – voel nie sekuriteit in aktiwiteit" (NGT statement)

"Unsure about KAB expectations – do not feel secure in the activity"

Assessments of academic knowledge are also a challenge for the students. Students need to master all the academic material in preparation for assessments, unlike in school where a scope of the test was provided to the learners. Not receiving a scope of themes which will be assessed in tests causes stress for the students. To be able to cope with the big load of HE academic material, students need to have various skills such as their learning approach; study methods and time management skills (cf. 4.3.5).

Due to the difference between “teaching and assessment styles” from school to HE (Lowe & Cook 2003:54) the students are new to assessment of HE modules and subsequently unsure of what to expect during assessments.

Good preparation for assessment in HE demands that the students use higher order cognitive skills such as analysis, synthesis and evaluation (McGuire 2006:4). The students selected for the program all demonstrated adequate academic abilities in school. McGuire (2006:4) states that these students did well in school by “memorizing and regurgitating information”. However, students soon find that their previous study methods will not be sufficient in HE (cf. 4.3.5). McGuire (2006:4) suggests that the different levels of Bloom’s taxonomy be taught to students to develop the necessary HE learning skills. This is done in the first month the students are in the program as part of their General Skills theme in order to prepare them for assessment in HE. As soon as students understand that learning must take place on different cognitive levels (McGuire 2006:4) they might be able to predict the way in which questions can be formulated. I provide further insight into Bloom’s taxonomy and the exposure students receive in the Performance Skills domain (cf. 4.3.5).

Students also value that assessment is done formatively in preparation for the summative assessments. Subsequently academic material is broken down into smaller more digestible sections. The formative assessments enable students to manage the work load better. This indirectly forces students to start managing their academic occupation and become more independent learners (Amin & Eng 2003:42). As mentioned earlier, HE also demands independent learning skills from students which poses challenges to the students with regards to assessment (Amin & Eng 2003: 41-43). Independent learning skills are addressed in the Performance Skills domain. In this section the focus will be on the different learning approaches and the implication of superficial on deep learning which is required for HE (cf. 4.3.5).

Another educational factor negatively influencing academic success was writing two tests on one day. This is not uncommon in HE but causes much stress amongst the first years as did the format of the 2013 final examination time table. This confirms the comments in the previous paragraph pertaining to the lack of adult learning skills of the students.

Feedback on assessment activities add to the students' learning process (Amin & Eng 2003:156). However, for the students, feedback has an additional purpose. The students were accustomed to feedback at school being given in "positive language" (Kantanis 2000:5). A Positive factor influencing academic success was identified as positive feedback which students receive on tests.

The Generation Y students thrive on positive feedback and do not necessarily acknowledge the academic value of feedback (Nimon 2007:34). Hills *et al.* (2012:157) indicate the Generation Y student do not handle criticism well. This is mainly because of the way the students were raised. The generation received constant positive feedback and praise regardless of the standard of work produced (Nimon 2007:34).

In spite of the feedback the Generation Y students are used to, positive feedback do play an important role in the internal motivation and internal resilience of the students (cf. 4.3.5). However, a reality of HE is that students will not always receive positive feedback on assignments or test. Fortunately, internal motivation is not the only source of motivation the students can tap into. There are two other sources of motivation identified by the students namely, social persuasion and emotional response which are discussed in detail in the Client Factors domain (cf. 4.3.3).

Students also receive feedback on assignments and clinical reports. The students in the occupational therapy program soon realize the importance of delivering work which meets HE standards as a result of feedback from lecturers. However it does not happen without frustration on the part of the students.

The Generation Y students need specific guidelines on how assignments must be approached and executed (Sandars & Morrison 2007:86; Twenge 2009:398). At some schools learners received step by step instructions for assignments to be assessed. Assignments were drafted before submission which gave learners time to make the necessary adjustments before assessment took place. Feedback was mostly positive and was accompanied by assessment criteria (Kantanis 2000:5).

In HE students receive assignment and are expected to hand in a final product for assessment without submitting drafts (Kantanis 2000:5). Even though assignments and clinical reports are not assessed in draft format, the students deserve precise guidelines as what to include in the reports etc. Student in the program have a need for detailed instructions with regards to the expectations of their clinical practice. This is understandable as it is a new experience for them where theory knowledge need to be carried over and implemented in clinical practice. Some students do not have the ability to integrate the theory they were taught into the practical situation.

Some students are also motivated by academic achievement and tend to put a lot of pressure on themselves (cf. 4.3.3; 4.3.6) and therefore need all the guidelines and information possible to achieve their goals of academic success.

Assignments are also bigger than the students were used to in school. To complete assignments in a busy academic program student often spend weekends and holidays catching up on work and is experienced as a negative factor influencing academic success (cf. 4.3.1.4). The academic program does allow time for completion of assignments. It does happen that students do not make use of the time. Due to possible lack of time management more tasks must be domain times students are meant to rest.

d. Lecturers

"Lecturer teaching methods, style, enthusiasm."

(NGT statement)

Engaging in academic occupations means that students also have contact with different lecturers on a daily basis. Theoretical lectures are historically one of the most used approaches in HE (Amin & Eng 2003:106). However, the quality of lectures and the manner of presentation of lectures influence students' academic success.

Students reported that if a lecture seems bored and even unmotivated it demotivates the students. On the other hand, a well prepared enthusiastic lecturer is a positive factors influencing academic success of the students. Students can be drawn into the subject if the lecturer is passionate about his/her work (Harden & Laitlaw 2012:19).

It seems as if the students attach an external motivation factor to the performance of their lecturers. In other words if the lecturer does not manage to hold the students' attention for at least 50 minutes, the duration of one period, students will fail to stay motivated. It is not only motivation which plays a role in the lecture room. The student who has an independent learning approach will focus on the information presented and realize the importance. Motivation and learning approaches are discussed in the Client Factors (cf. 4.3.3) and Performance Skills domains (cf. 4.3.5).

Amin and Eng (2003:106,107) recognize advantages and challenges with regards to lecturing students. Firstly, by making use of lectures the lecturer ensures that the students are presented with all the necessary information (Amin & Eng 2003:106). What can easily happen in class is that the students taking on a "passive role" of a spectator (Amin & Eng 2003:107). The authors continue by painting a picture where the students often attach more value to the

presentation of lectures than to the academic information (Amin & Eng 2003:107).

The above mentioned factor is indicative of the Generation Y student as well as the dependent student. This generation has a short attention span and need to be entertained during lectures (Carlson 2005:5; Nimon 2007:30). Hill *et al.* (2011:157) agree with the aforesaid authors and adds that the Generation Y students "are easily bored". The challenge of lecturing is not only on the lecturer to make sure that her/his presentation skills are appealing. Students must also develop the skills to adapt to the variety of lecturers' styles and still stay motivated and focused. This is an important learning experience as the students will be in contact with different members of the multi professional team in their professional role. Not all members and colleagues will be entertaining and easy to work with.

e. Academic program

"Second year module in first year – different academic and assessment expectations. Value of Anthropology and Psychology"
(NGT statement)

"Full academic program – little time to live."
(NGT statement)

"I do not think that I have ever been so aware of every second and how much you can do in a day."

"Toe ons, ons November eksamen rooster gekry het, was ek veral baie senuweeagtig en oorweldig omdat ons al ons hoof vakke insluitend Anatomie gedurende die heel eerste week skryf wat verhoed dat ons baie ekstra voorbereidings tyd sal hê."

"Upon receiving our November examination time table I was nervous and overwhelmed because we wrote all of our major subjects including Anatomy during the first week which prevented us having extra preparation time."

The program is designed so that the second semester carries a heavier load than the first semester to allow students to adapt to HE environment. Additional second semester modules such as Psychology and Anthropology appear to have a negative influence on their academic success. Because the students have possibly not yet adopted independent learning strategies (Amin & Eng 2003:42) and mastered the higher levels of Bloom's taxonomy (McGuire 2006:4) these modules pose a challenge to them.

The occupational therapy program is very full and leaves little time for other occupational engagements. This causes the students to experience occupational imbalance (Pierce 2003:68). Students are so busy with productive occupations which they do not have a lot of time to spend on other Areas of Occupation such as Leisure or Social Participation.

The full academic program can contribute to the development of the students' life skills. Adapting to the fast and full academic pace leads to the development of time management skills (cf. 4.3.5). This is skills that the students might not have applied at school. When they were at school their program with regards to school, extra mural activities and study times were more or less manage for them.

Students identified the October/November 2013 examination time table as a major stressor and influence on academic success. Even though the examination did not take place by the time the NGT were conducted, it played a significant role in the factors identified by the students. The time table of the coming examination was a big contributor to the stress levels of the students. Students foresaw time constraints with regard to the amount of work which had to be studied in quick succession. This leads me to wonder at which stage students adapt independent learning approaches in order for deep learning to take place. Students did mention that their study methods and time management did improve during the

course of the year. However, the fact that they were concerned about the timetable might imply that in spite of the change in their skills, deep learning is still in process (Amin & Eng 2003: 29).

f. Working in groups

"Groepwerk: deur al die take saam te kon afhandel het ek baie geleer om met 'n groep oor die weg te kom en ander se sienings en idees te respekteer."

"Group work: by completing all the tasks together I learnt a lot about getting along with the group and to respect other's point of view."

"I am not a very patient person and sometimes find it difficult to work in groups."

"...it leaves you with less stress and enjoying the company of your group members, while you are working, more."

"From this group I learnt that getting things done as soon as we get them or as soon as there is a gap in our timetable is a very good thing to do as it leaves you with less stress and enjoying the company of your group members."

Group work is one of the learning activities utilized by the department of occupational therapy. Students usually work in small groups and have identified positive and negative factors influencing their academic success with regards to working in groups.

Johnson and Johnson (2000:491) also refer to the small group learning as cooperative learning where all students work together in order to facilitate their learning. Amin and Eng (2003:30) and Kuh *et al.* (2010:195) confirm the importance of group work in an academic program where students start to engage in independent learning activities. Members of the groups have to take responsibility thus ensuring that the group members gather to complete assignments by dividing the assignment in sections if applicable. Group members will each receive different tasks or responsibilities. Tasks such as

verbal presentation of the assignment and designing the power point to accompany the presentation will be divided among group members. Life skills such as verbal communication learnt during cooperative learning are important in the profession. Occupational therapists engage with members of the medical team, patients and family members on a daily basis. Thus, communication skills, among other, are a reality of the profession.

However, looking at the statements of the students, reflections on group work also have social character. This is also expected coming from the Generation Y student. Working in groups especially in the first year helps students with adapting to HE (Kantanis 2000:8) (cf. 4.3.6). The better the students get along and work together the better the group will function and group cohesion will make the group successful (Johnson & Johnson 2000:110). When the group cohesion is strong students will be committed to the group's responsibilities. They will furthermore be tolerant of each other and show each other respect (Johnson & Johnson 2000:110). The latter mentioned authors state that group cohesion will further lead to students being more open to criticism. However, as indicated in literature the Generation Y students do not except criticism well which can lead to conflict in the group (Hills *et al.* (2012:157)

As mentioned in chapter 2 this generation is also very social and being part of a group is important to them (Ninom 2007:27), which in turn meets their need of belonging according to Maslow's hierarchy of needs (Weiler 2005:47). Fulfilling the social needs of the students will contribute to their adjustment to HE and influence their academic success positively.

The negative connotation the students report on group work is not necessarily the fact that they must work in groups but rather the time implication of group work. Fortunately the program do account for this by allocating times in the time table for group assignments. However, assignments are not always finished in the designated time frames. Once the assignments are completed

the students' stress levels are less and they can enjoy the cohesion the group provides.

g. Academic support

Support is a distinct factor influencing academic success (Tinto 2012:24). It is discussed in two domains, and focuses on specific supporting factors namely academic support in this domain and social support in the Context and Environment domain (cf. 4.3.2).

"My tutor and my determination to get past helped me succeed..."

"...my tutor helped me get through anatomy."

"I am once again astounded by our lectures' caring nature. They make us feel that we're important regardless of our academic achievements. They want to know whether we are surviving even though things are tough and they ever so often add some humour to our lives. I honestly value this driftwood in my life so much."

Students have reported that support from senior students, NATP tutors and lecturers in the OT department as valuable. This support will have a positive influence on their motivation to study (cf. 4.3.3) which in turn builds internal resilience of the students (Green *et al.* 2003:82) (cf.4.3.5).

Weekly tutor sessions for anatomy and occupational therapy are attended. These sessions are presented by final year occupational therapy students. Peer tutoring is where students (usually seniors) assist other students with, among other, academic work outside of the lecture rooms (Colvin 2007:166). Tutoring contributes in developing a HE study culture, "motivation and empowering students" (Colvin 2007:165). This is where they can test their knowledge and ask questions without having to feel embarrassed. The groups are small enough

for all the members to feel that their needs are attended to. Tutor groups in the department have between five and seven students and the tutor.

Tutoring in the occupational therapy department is part of the New Academic Tutorial Program (NATP) at the UFS. Tutors and tutorial sessions have a positive influence on academic success and contribute to the students' external resilience (Green *et al.* 2003:82) (cf. 4.3.5). Tutors are in their final year in the occupational therapy program and are appointed on their academic success in the program (NMMU 2008:20).

The tutors play an important role in the success of the students. Not only do they facilitate the learning process for the students, they also become a source of support. The tutors who are knowledgeable of anatomy and well prepared for tutor sessions have a positive influence on the students. Unfortunately the participants also identified unprepared tutors as a negative influence on their academic success. Students will thus be unmotivated to attend tutor sessions as they feel that attending will take up time they could have engaged in other occupations.

Kuh *et al.* (2010:248) and Tinto (2012:25) acknowledge the benefit of support by staff and senior students hold for the students. The fact that lecturers, senior students and tutors care about the junior students leads to the latter group to take advantage of asking questions about uncertainties and concerns (Harden & Laidlaw 2012:113). The mentioned authors emphasize the importance of a supportive teaching and learning environment on the students' academic success (Harden & Laidlaw 2012:115).

All lecturers in the department are occupational therapists. We are in a caring profession and therefore it comes naturally to enquire on students' well-being. Harden and Laidlaw (2012:20) state that a passionate lecturer is interested in her students learning. The lecturers regard the students learning and growing

process in a holistic way. Enquiring about students' well-being is because the lecturers have a sincere interest in the students' academic occupations.

4.3.1.3 Social Participation

Social Participation is defined as: "Organized patterns of behavior that are characterized and expected of an individual or a given position in a social system" (AOTA 2008:633).

In this sub category of the domain the focus is on the social expectations of the students by peers, friends and the university community. Students are exposed to social expectations due to the different roles they now fulfill. The role expectations and social expectations will be drawn together in the last domain namely Performance Patterns (cf. 4.3.6).

Social participation takes place in the community, between peers, friends and family all of which can have certain expectations of the students (cf. 4.3.6). The students engage in occupations are either at home, in campus residences or in student houses off campus (AOTA 2008:633) (cf. 4.3.2). Although students find themselves in different communities, for the purpose of this study I will focus on the HE community.

Table 4.3: Social participation factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Peers and Friends	*Establishing social support *Social expectations
Community	*Hostel activities

a. Establishing social support

"My friends, the ones that study other courses, do not really understand what exactly it entails to be a first year OT student. Due to this, I have lost contact with many friends."

"Ek het goeieverhoudings met medestudente gebou en baie goeie vriendinne gemaak in die groepmeisies."

"I built good relationships with fellow students and made good friends with the group of girls."

"...I have at the same time been blessed with OT friends, who are very special to me."

Students move out of the known school environment and often suffer the loss of school friends who are studying elsewhere or in other programs, which is sometimes less challenging than the occupational therapy program. In addition, new friends have social expectations which the students in the occupational therapy program are not always able to meet. This factor was identified as a negative factor influencing academic success.

Consequently, it is an important task for the students to establish a new social support system (Nel *et al.* 2009:980). This is a daunting yet necessary task the Generation Y student must complete. Social contact and social support are high on this generation's priority list (Nimon 2007:28; Sandars & Morrison 2007:86). For the adolescent it is very important to establish friendships. "Without friends, students have fewer resources at their disposal to assist them in the process of transition to university" (Kantanis 2000:4). However, due to the heavy workload students are not always in the position to engage in social activities as often as they would like to. The students spend many hours together in classes, working on assignments and studying for tests. Subsequently, they form close friendships which last long after university.

New forged friendships on campus and in residences play a positive role in academic success of the student (Kantanis 2000:3; Nel *et al.* 2009:983; Tinto 2012:27). The support from fellow students who understand their situation is of importance to the students. Social support is important to the students and will be discussed in the Context and Environment domain (cf. 4.3.2).

b. Social expectations

"Friends can also be an obstacle as they often want to do things which are hard when I have so much work."

Unfortunately, not all new friends understand the pressure of the occupational therapy program. The dilemma the students face is that new friendships have been formed but due to the heavy work load they are not able to socialize as much as what they would like to. As mentioned by Kantanis (2000:4) students need to engage in social occupations. It is furthermore important for the Generation Y students to be in constant contact with friends (Nimon 2007:27). Yet the students have to take responsibility for their academic occupations and weigh this up against the social demands of friends. The reality is that the academic program is primarily the reason for the student being at university and thus they will have to make sacrifices.

c. Hostel activities

"I am very involved in my hostels activities and this causes problems with my time management and endurance."

"...koshuis aktiwiteite en die wete dat ek soveel massas werk het wat wag om geleer te word..."

"...hostel activities and knowing I have masses of work to study"

"Die koshuis aktiwiteite het my ook baie besig gehou en die seniors wou nie verstaan dat ek moes leer nie, want hulle voel almal skryf toetse, nie net ek nie."

"Hostel activities kept me very busy and the seniors do not want to understand that I must study, because they feel everybody write tests not just me."

"It was stagedoor, we practised late at night which led to me being half asleep in my classes."

"...stagedoor rotations also occurred the day before we wrote our first anatomy semester test and only finished that morning at 1:30."

"Residence activities give me a break from my studies, nice way to meet people..."

"Sêr did contribute to the big waves and a few rock by making my schedule a bit busier but every time I go to sêr it relaxes me completely and gives me new energy to take on the next day's challenges."

"It appears that the physical environment does not always understand what sacrifices are made by an OT student."

The students' academic success is also influenced by demands from the community (AOTA 2008:633). The community which was identified as influential in academic success is the hostel community. Hostel activities are in some cases tiresome and have a negative impact on the students' concentration and endurance (cf. 4.3.3).

Engaging in some residence activities is compulsory and can be time consuming for the first years and include activities such as, at times, lengthy hostel meetings. For the student with a heavy work load these meetings add to already existing stress. On the other hand the students might not have made the transition to learner centered students thus, not planning and taking responsibility for their learning (Amin & Eng 2003:32,33,42; Dent & Harden

2003:135; Harden & Laidlaw 2005:79) (cf 4.3.5). Students receive timetables and residence program in advance and can use the information to assist in planning ahead for busy times.

Additional residence activities which students engage in are the annual Rag, "Sêr" and Stage door (cf 4.3.6). Students can audition for these activities voluntarily. Once they are successful they are compelled to attend all practice sessions. Again this was identified as either positive or negative factors of academic success.

Stage door practice and performances took place in the afternoons and evenings during the first semester. Unfortunately students are not aware of the time and energy demands of these residence activities prior to embarking on it. Stage door demanded time which the students would have used to study or complete assignments. Subsequently students do not spend enough time preparing for classes and assessment. Apart from the time management challenges the students face, these residence activities take their toll on the students' emotional well-being and endurance (cf. 4.3.3).

Nevertheless, hostel activities were also identified as positively influencing academic success. Reid (2008:43) documents that through engagement in meaningful activity the student's state of well-being will be "nurtured". Taking part in extra mural residence activities and experiencing a sense of presence in the occupation will improve the student's well-being (Reid 2008:43) and internal resilience. Experiencing a sense of being present while engaging in an activity is when the individual becomes aware of his/her engagement in the occupation and the subsequent flow which is experienced because of the meaningful engagement (Reid 2008:45). As a result of the positive emotions which students experience their motivation to study will also be stronger (Brown 2011:332) (cf.4.3.3). Soon the students will find that they do have the capacity to meet the challenges and they will experience flow (Pierce 2008:61). This factor is a contributor to the students' internal resilience (Green et al. 2003:82).

At this stage it is clear which social participation can be viewed from various perspectives. In this domain I focused on the social participation and the expectations the physical and social environment (cf. 4.3.2) have on students. The value of social support will be discussed in the social environment sub category of the Context and Environment domain (cf. 4.3.2). There is also a third domain where social participation will be addressed which is the role fulfillment expectation of the student during engaging occupations of HE (cf. 4.3.6)

4.3.1.4 Sleep and Rest

Rest and sleep are defined as: "Includes activities related to obtaining restorative rest and sleep that supports healthy active engagement in other areas of occupation" (AOTA 2008:632).

Table 4.4: Rest and sleep factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Rest	*Little time for restoration
Sleep	*Sleep deprivation

a. Little time for restoration

"No time outside program, self, social, occupational deprivation."(NGT statement)

"Werk naweke en vakansie dae om agterstande in te haal."

"Work weekends and holidays to catch up on the back log."

"Ons het baie lang dae waarin ons gedurig klas het met min af tye. Daarom moet ek al my take en leerwerk in die aande en veral op naweke voltooi, wat lei tot 'n groot behoefte aan rekreasie aktiwiteite."

"We have very long days of constant classes and little time off. Therefore I must do all my assignments and studying in the evenings and especially over weekends, which leads to a big need for recreation activities."

In order for the students to keep up with the work load they often spend weekends, public holidays and holidays engaging in academic occupations (AOTA 2008:632). Unfortunately, this brings about that the students cannot find restoration from sleep, self-care activities, quiet focused activities or participation in leisure (Pierce 2003:81,98-107). The lack of restoration influences the students' motivation negatively (cf. 4.3.3). Kantanis (2000:5) argues that "a balance needs to be struck between the competing demands of university study, social life and paid employment". This statement will be agreed upon by the Generation Y first year students. Twenge (2009:402) report this generation "expect plenty of leisure time". To have a balanced lifestyle as the Occupational Therapy profession stands for is often lacking.

Pierce (2003:98) argues the need for restoration in order for the student to be able to accommodate the challenges of their academic program. "Without adequate restoration, productivity and pleasure also remain low" (Pierce 2003:98).

b. Sleep deprivation

"Because of the high work load I do not look after myself,so I have a lack of sleep."

"Lack of sleep and exhaustion."

(NGT Statement)

"Not being able to life a balanced lifestyle with enough sleep."

Durmer and Dinges (2005:119) categorize sleep deprivation in three types namely

- Long-term total sleep deprivation with more than 45 hours without sleep
- Short-term total sleep deprivation with less than 45 hours without sleep, and lastly
- Partial sleep deprivation with less than 7 hours of sleep in 24 hours.

The last category is where the students often find themselves. Sleep deprivation ultimately influences cognitive and emotional functioning in academic activities (Durmer & Dinges 2005:119,120). The authors comment that sleep deprivation actually has a bigger influence on the students' emotional well-being than on their cognitive abilities (Durmer & Dinges 2005:120).

Emotional well-being influences students' motivation and energy to engage in academic occupation and can therefore have a negative influence on their academic success (cf. 4.3.3). As the students' schedule is filled with various residence and academic activities it is sometimes necessary to do multitasking, problem solving and time management. In addition, Durmer and Dinges (2005:120) mention a variety of executive functions the students need to maintain which can be affected by sleep deprivation. Functions such as "insight, communication and temporal memory skills" are functions students utilize and which might be affected by sleep deprivation.

4.3.1.5 Leisure

Leisure is defined as: "A nonobligatory activity that is intrinsically motivated and engaged in during discretionary time, that is, time not committed to obligatory occupations such as work, self-care or sleep" (AOTA 2008:632).

Table 4.5: Leisure factors influencing academic success

FACTOTRS INDITIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Leisure Participation	*Leisure participation

a. Leisure participation

*"...ek maak tyd om by die gym uit te kom en hanteer
stres so..."*

"...I make time to go to gym and handle stress in that manner..."

*"Series on the laptop and friends in residence are greatly beneficial when
distraction is needed (during free time)."*

"...away for the ocean and no more surfing..."

Students engage in leisure occupations and are categorized by Pierce (2003:82-86) as pleasure from being physically active and by thrill provoking activities. The previous section indicated that due to the full academic program students do not have a lot of time for rest and restoration. However, it does seem that some students do make time for leisure participation. Taking part in leisure activities was identified as a positive factor influencing academic success.

Unfortunately students who relocated to Bloemfontein do suffer a loss with regards to leisure participation such as surfing or life-saving. Engaging in leisure occupation, as any other occupation, has specific meaning to the student. Students express their identity through leisure participation and therefore it is a personal experience for them (Pierce 2003:198,199). It is therefore necessary for students who relocate to Bloemfontein to adjust not only to the physical and social environments, but they also have to find significant leisure occupations. Engaging in meaningful leisure occupations will also have an energizing effect on the students' motivation hence, influencing academic success positively.

4.3.2 Context and Environment

Context and Environment are defined as: "a variety of interrelated conditions within and surrounding the client which influence performance" (AOTA 2008:645).

4.3.2.1 Temporal Context

Temporal Context is defined as: "The experience of time as shaped by engagement in occupations. Includes stages of life, time of day, duration, rhythm of activity or history" (AOTA 2008:645)

Table 4.6: Temporal contextual factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Temporal Context	*Long duration of classes

a. Long duration of classes

"Lang duur van klasse."

(NGT Statement)

"Long duration of classes."

The perceived long duration of classes was identified as a temporal contextual factor influencing students' academic success. Again, this is a recurring theme where the new comer to HE are not prepared nor use to the pace of HE. The lack of endurance also influences the student's ability to concentrate for long periods at a time (cf. 4.3.3) which stems from residence and or academic engagements.

Even though the life stage the students are in was not identified as a direct influence on academic success it is a factor which plays a role in their lives in HE. Therefore it will also be addressed in this section. The majority of first year students enter HE directly after school. Kantanis (2000:7) argues the students are adolescents who are on the brink of early adult hood. The change in life stage and the new challenges faced in HE is a factor to consider when looking at factors influential to academic success.

The new phase the students are entering namely young adulthood correlates with the academic changes the students face. As adolescents in school the manner of learning was different from self-directed learning which is expected from the young adult in HE (Amin & Eng 2003:42). As mentioned throughout this chapter, the students are at a juncture in their lives where they have to take responsibility for their own care, finances as well as academic achievements. Students have to identify resources in their community which can assist them in these tasks in order to take responsibility and plan their learning engagements.

4.3.2.2 Personal Context

Personal Context is defined as: "Includes age, gender, socioeconomic status and education status. Can also include organizational levels and population levels" (AOTA 2008:645).

Table 4.7: Personal contextual factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Personal context	*First year occupational therapy students

a. First year occupational therapy students

The participants of the study were all female first year occupational therapy students. Their ages ranged from 18 years to 19 years. Out of the group 30 were first year students straight from grade 12 and 5 were in their first year of study after taking a gap year. The students stayed in different types of accommodation namely: campus residences, student houses and study out of their parents' homes. With regards to race representation one participant was a colored girl while the other 17 participants were white girls.

4.3.2.3 Cultural context

Cultural context is defined as: "Customs, beliefs, activity participation, behavior standards and expectations accepted by the society of which the client is a member" (AOTA 2008:645).

Table 4.8: Cultural contextual factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Cultural Context	*Language Barrier *Cultural differences

a. Language barrier

"Language barrier. I am from an English home and so battle a lot with the Afrikaans."

"The driftwood that blocks the flow of my river, but can be moved would be the language barrier and pressure that I feel."

It is every student's constitutional right to receive their education in the language of their choice (Mouton *et al.* 2012:1213). The UFS recognizes this and offer HE training in Afrikaans and English to all students. Upon registration student indicate their preference of language of instruction and are placed in the appropriate class. Yet, once students enter some clinical areas they will be expected to communicate with members of the multidisciplinary team, verbally and in writing, only in English.

In addition, as mentioned earlier all student in the program have been selected on the grounds that they met the selection criteria as language proficiency is a criterion of selection. In other words students provided the department with proof of their efficiency in Afrikaans and English as these are the languages they were examined on in the NBT and National certificates. Yet they experience language as a barrier in the program. This might be as a result of the manner and attitude with which students engaged in language tuition at school.

The above mentioned brings to mind the level of academic preparation students receive in school. Students are not challenged enough to engage in critical thinking in their second language on school level (Mouton *et al.* 2012:1217). Once the students have to work in diverse groups with regards to language it becomes a problem. Now the student has to engage with students who speak either Afrikaans or English and who contributes information to the group in that language.

Admittedly, some of the students in the program attended school where Afrikaans was a third language subject. These students then did not submit Afrikaans marks for selection. It is therefore understandable that such students will face a challenge with regards to Afrikaans being spoken in the department and on campus.

b. Cultural differences

"Different culture More conservative..."

"...die opset daar was net nie vir hierdie boere-meisie nie."

"...the setup there were not for this boere-meisie."

Apart from finding the language differences a challenge, cultural differences are factors influencing academic success. Difficulty in adjusting to the cultural context influences academic success negatively. Cultural activities hold personal meaning and have significant symbolic meaning for the students (Pierce 2003:202). Due to the personal character it is experienced differently by others. However, for the occupational therapy students it is important to develop cultural sensitivity and cultural competence to be able to engage with the wide variety of patients/clients seen in the profession (Pierce 2003:208). The occupational therapy program at the UFS realizes the above mentioned importance. Therefore students are exposed and culturally sensitized to various cultures. This is done by means of introducing the students, from their first year, to all possible clients they might meet in the Free State area. Students engage in community services learning and clinical practice in a wide variety of areas which include clients from different socio-economic statuses, cultures, ages and diagnosis.

Dusselier (2005:22) offers encouragement for the student who is faced with cultural adjustment challenges will eventually make an easy transition and deal better with future stressors.

4.3.2.4 Social Environment

Social Environment is defined as: "Is constructed by presence, relationships and expectations of persons, organizations, populations" (AOTA 2008:645).

The factor of importance in this sub category is the social support systems identified by students as influencing academic success. Hence, I will focus on the support factors in the following section. Students are confronted with numerous social expectations and demands (cf. 4.3.1). But fortunately the social systems they are part of also contribute to the students' resilience in the form of support.

Table 4.9: Social environmental factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Social Environment	*Peer and family support

a. Peer and family support

"My ma is altyd daar vir my en my vriendin ondersteun my deur al my omstandighede."

"My mother is always there for me and my friend supports me through in all my circumstances."

"I have the privilege to stay with my parents and they play a huge part in my support system, helping with food, laundry and just being there when I need them, I count them as a huge blessing in my life."

"My family does not understand my hardship"

"My family support me and does wonders for my spirit. Going home gives me perspective."

"Leaving my family behind also upset me a lot and it took me a while to get used to the fact that I had to be on my own now, but they would always be there for me"

"Die ondersteuning van die OT groep. Ek voel baie bevoorreg om deel te wees van so 'n "AMAZING" groep mense!"

"The support of the OT group. I feel privileged to be part of such an AMAZING group of people."

"The 4th years, have kept me afloat during the year during tests, good times and bad times."

"Ons is saam in die bootjie van anatomie en die ander jaar groepe help ons met als waarmee hul kan."

"We are in the same boat of anatomy and the other year groups help us where they can."

Various authors (Friedlander *et al.* 2007:259, 269; Lowe & Cook 2003:66; Nel *et al.* 2009:982) are in agreement on the value of support and the improvement of the students' affect and internal resilience. Friedlander *et al.* (2007:270), Green *et al.* (2003: 82) and Lopez (2009:35) also agree on the value of social support and the subsequent strengthening of the first year student's external resilience. Consequently, it can lead to improved adjustment of first year students and a sense of belonging (Friedlander *et al.* 2007:269; Kantanis 2000:3; Nel *et al.* 2009:983; Tinto2012:27) (cf. 4.3.6).

The Social and Physical Environments are interrelated as social support or the lack thereof happens in the physical environments. Even though students identified staying at home as a positive influence on their academic success it also has the opposite influence.

Support from family has been identified as either a positive or negative aspect influencing academic success of the students. Friends and family who do not

understand the pressures of the program might expect students to take part in social and or family activities. Students will then feel pressured from the academic and from the social side. A lack in social support can negatively influence the students' academic success as identified by the students. However, support from family members, particularly in the first semester can influence student's successful transition and adaption to HE (Elkins, Braxton & James 2000:262; Lowe & Cook 2003:66).

4.3.2.5 Physical Environment

Physical environment is defined as: "Natural and built nonhuman environment and the objects in them" (AOTA 2008:645).

In this subcategory the challenges of the physical environment on academic success will be discussed. The focus will not be on the social demands as in the previous domain with for example the hostel environment.

Table 4.10: Physical environmental factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Physical Environment	*Hostel / Accommodation *Roommate and Noisy environment

a. Hostel / Accommodation

"Bly by die huis, ondersteuning, versorging - kos en klere." (NGT statement)

"Stay at home, support, care – food and laundry."

"Ek het onveilig en bang gevoel."

"I felt scared and unsafe."

"I see my room as a 'chill zone' and so I struggle to get motivated in this space."

"I no longer study in my residence room. I don't use the ladies gazelle both as many people walk through and distractions are present."

"Wanneer die omstandighede by die huis ondraaglik is met tye troos ek my daaraan dat aan die ander kant van my rivier is die grond vrugbaar met blomme wat daar groei."

"When circumstances at home get unbearable I comfort myself with the fact that on the other side of my river the land is fertile with flowers growing there."

Many students move out of the safe home environment to stay and study in campus residences or student houses. The transitional challenges and consequential stress of moving away from home can impact negatively on the first year student's academic success (Friedlander *et al.* 2007:259). This additional stress impacts on the students' internal resilience (Green *et al.* 2003:81).

Another factor which influences internal resilience and academic success are feelings insecurity and emotional distress in their accommodation. Feeling safe and sheltered are the basic needs of the students (Freitas & Leonard 2011:9). Being afraid and distressed will influence academic success negatively. Students spend emotional energy on these unpleasant feelings and might subsequently have less energy to concentrate on their studies. These unpleasant emotions can have a negative influence on motivation as well.

The students staying in residence do so in a cramped area. Herein they must study, prepare snacks, relax and sleep. Students find it difficult to make the shift from relaxing to studying in the same environment.

As mentioned, the residence room is where the students prepare snacks sleep, do self-care and study. The demands with regard to space are discussed in the Activity Demands domain ((cf. 4.3.4).

b. Roommate and Noisy environment

"My roommate demotivates me to study."

"My hostel roommate motivates me to study."

"Res is a noisy place which is a very negative experience for me."

The physical residence environment seems to be an influential factor of academic success in more than one way and are the cause of stress for many students (Dusselier 2005;22). Stressors identified from literature and from the students are the incompatibility of roommates and the noisy environment which is not conducive to studying (Dusselier 2005:22). The residence is all students' home away from home. It is thus understandable that students want to relaxed, play music and visit with their friends in the residence rooms. Not all students might be equally accommodating towards fellow students' study needs. This can cause stress for students who need to study or work on assignments.

It seems as if the challenges faced by roommates which are noisy and do not respect each other are universal. Dusselier (2005:22,23) reports the same challenges at a university residence in the United States of America with regards to roommates and noisy physical environments.

Junior students staying in residence share a room with one other student. This can lead to stress due to incompatibility of roommates, or have just the opposite outcome. Roommates who study in the same demanding program will be beneficial to each other and study together, while roommates with different study directions with different workloads might run into disagreement. Students not registered in equally demanding programs might go about their actions in the residence room and disturb the student need to study.

4.3.3 Client Factors

Client Factors are defined as “specific abilities, characteristics or beliefs that reside within the client and may affect performance in areas of occupation” (AOTA 2008:630).

4.3.3.1 Body Functions

Body functions are described as “the physiological and psychological functions of the body systems” (AOTA 2008:635).

a. Specific Mental Functions

Specific mental functions enable students to concentrate and be attentive in class. It includes the higher cognitive/ executive functions expected of a student in HE. This sub category of the domain also accommodates emotions experienced by an individual (AOTA 2008:635).

The effect of specific mental functions and the manner in which the students engage with the specific mental factors present will be described in the Performance Skills domain (cf. 4.3.5).

Table 4.11: Specific mental functions factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Specific Mental Functions	*Emotions experienced (Emotional Well-being) *Psychological Endurance *Attention Deficit Disorder (ADD) and concentration

i) Emotional well-being

*"Five causes of stress:
 lack of time
 inability to manage my time properly
 fear of failing
 ineffective prioritizing
 workload..."*

"In the beginning of this year my river overflowed as I felt many different emotions."

"...feeling scared and overwhelmed in beginning of the year."

"...I was also very home sick at this stage ..."

"The comfort zones I had are a lot less now..."

"...being taken from my comfort zone of home and school and realising the new responsibilities that I had to take up."

"...added work load in second semester causes stress..."

"As the first semester is drawing to an end I can truly say I'm starting to get use to student life and my waters are calm and tranquil."

Engaging in occupation is an ever changing phenomenon which poses challenges and adjustment to the individual. In the same manner the academic occupation of the students are influenced by among others, adjustment- (cf. 4.3.6), academic-, and social challenges which the students face and must react upon

(cf. 4.3.1). Students experience a variety of negative emotions which influences their academic success.

As a result of the challenges and expectations, student may feel over whelmed and anxious. Friedlander *et al.* (2007:259,260) remind us that students moved out of their familiar comfort zones of school and some from family members and friends to start their HE journey. The subsequent "academic, social and emotional adjustment" must not be overlooked (Friedlander *et al.* 2007:260) (cf.4.3.6). In the first semester the students have to adapt to the HE environment, social and physical environments. As a result, many student experience unpleasant emotions such as anxiety. These emotions have a negative influence on the students' academic success and internal resilience (Green*et al.* 2003:82) (cf. 4.3.5).

Students are preoccupied with their anxiety and missing family and friends. Thus, might not be able to focus during classes and concentrate when it comes to studying. Then, once their classes for the day are done some students return to their respective residences where a new array of expectations with regards to social engagement (cf. 4.3.1; 4.3.6) awaits them.

The increase in academic classes and modules in the second semester added stress for the first year students. The academic weight of the students first semester is lighter than the second. Indirectly this offers the students an opportunity to adjust to the academic environment. However, the sudden academic increase, during the second semester, in their perceived already heavy work load does cause distress with the students. First semester modules which are presented are Occupational Therapy, Clinical Occupational Therapy (community service learning), Anatomy and Technology. During the second semester two Psychology- and one Anthropology modules are added.

Students now need to readjust their performance skills (cf. 4.3.5) such as time management, decision making, problem solving skills and possibly their study

methods again in response to the new challenge of the additional modules. Internal resilience factors influencing students emotional well-being will also be addressed in the Performance Skills domain (cf. 4.3.5).

ii) Psychological endurance

"...lack of sleep influences my concentration..."

Students need to be able to concentrate, memorize information etc. Furthermore they must be able to maintain higher order thinking skills throughout the day. Because of the demanding nature of education and social participation (cf. 4.3.1; 4.3.6) these specific mental functions (AOTA 2008: 635) might be affected negatively.

Sleep deprivation due to residence activities and heavy work load leads to reduced concentration which in turn affect memory and focus to study or concentrate in class (Durmer & Dinges 2005:120; Trockel *et al.* 2000:125). Students with sleep deprivation where found to have impaired concentration, memory and cognitive endurance (Durmer & Dinges 2005:120). The named authors further found that students made more errors in tasks with "slower response time" (Durmer & Dinges 2005:120). Please note that in addition to the above mentioned factors, a description of the effect of sleep deprivation is also in the first domain namely Areas of Occupation (cf. 4.3.1).

iii) Attention Deficit Disorder and concentration

'I have ADD and find it very difficult to keep my concentration in class and while studying.'

As mentioned numerous times, the students have a full academic program which require of students to regulate their attention and focus during classes and while

studying. Although ADD was identified by only one student it does highlight the challenges faced by students suffering from ADD and similar conditions.

Students need to utilize all their cognitive abilities while engaging in academic occupations. However, distractions are all around them and can influence their concentration and focus on the task at hand. (Brown & Stoffel 2011:242). For the student suffering from ADD it will be even more of a challenge to keep her attention on the task. She will have to screen and filter sensory information from her surroundings which is not required to perform the task she is busy with (Brown & Stoffel 2011:242,243).

Internal as well as external factors can cause a student's attention to wander (Brown & Stoffel 2011:242,243). Various factors already discussed in this chapter can contribute to the internal or external factors which can draw the student suffering from ADD attention from her studies or focus in class. When a lecturer does not succeed in holding the students attention, work covered in class will probably be missed. The physical environment with all the distractions around her might constantly distract her attention and she will have to refocus her attention time and time again.

b. Global Mental Functions

Global mental functions refer to the executive functions of an individual (Brown & Stoffel 2001:780). Motivation, energy and drive, temperament and personality are, among others, part of the domain (AOTA 2008:635).

Table 4.12: Global mental functions factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Global Mental Functions	*Motivation *Personality traits

i) Motivation

"Met hierdie passie gaan niks my onder kry nie, want ek kyk na die einddoel ..."

"With this passion nothing will get me down, because I am looking at the end goal..."

"The summer holiday is my motivation, seeing family and friends this holiday also keeps me motivated."

"a different approach and motivation to do well helped me to exceed in this test"

"...I was proud of this mark..."

"...my motivation which is now diminishing as I have become less motivated because I worked hard for a few of my tests and did not receive the marks I deserved."

"Ek het deur 'n tydjie gegaan na my derde anatomie toets waar ek rerig ongemotiveerd was om te leer. My rede daarvoor was dat ek so hard geleer het vir die anatomie toets, maar toe ek my punte kry is ek skaars deur."

"I went through a period after my third anatomy test where I was really unmotivated to study. My reason being I study hard for the anatomy test but when I received my marks I barely passed."

"Anatomy has brought my confidence down"

"...tutors and old test papers have kept me afloat during the year during tests..."

"...dat ek my droom kan uitleef en dat ek 'n toekoms vir myself kan bou."

"...that I can live my dream and a future for myself."

Motivation is described as internal or external factors which influence individuals to act in certain ways (Brown 2011:331). Andrew (2002:1) provides the following description of motivation: "Motivation can be conceptualised as the students' energy and drive to learn, work effectively..."

Motivation can be intrinsically localized in the students but external factors may also have a motivational influence in which case it is referred to as extrinsic motivation (Brown 2011:332,333). Factors such as going home after a long semester will be an external motivator for the students to complete tasks or study for assessments.

Additionally self efficacy plays a role in the students' academic occupational engagement which in turn influences their success in the named occupation. Brown (2011:332) describes four sources of self-efficacy which she in turn adopted from Bandura namely mastery, modeling, social persuasion and lastly emotional states.

Mastery is a source of internal motivation and occurs when a student experience success with subsequent self believe in her ability.(Brown 2011:332). Although when a student studies hard for a test, and draws on her internal motivation, but does not achieve as expected, her motivation and belief in her own abilities will be affected negatively. The student's intrinsic motivation may be limited and external sources might be needed to improve motivation. Therefore social persuasion and support might be what the student needs to regain motivation for her studies.

Social persuasion and support have been discussed (cf. 4.3.2) and identified by the students as a positive influence of their academic success. Even though it is extrinsic motivators (Brown 2011:333) students identified the encouragement of family, friends, tutors and lecturers to improve their motivation. This will in turn affect their internal motivation and belief in themselves. Unfortunately the social and physical environment also contributes to demotivation (cf. 4.3.2) as mentioned in the context and environment domain.

Motivation is also observed with the student who enjoys her studies and is passionate to become an occupational therapist. Sandars and Morrison (2007:86) add the following insight: " ... motivation to learn comes from being actively involved in learning"

However, to realize their dreams they have to engage in a demanding academic program. Consequently, the big work load leads to a negative mindset which in turn affects the students' motivation negatively.

Finally, Brown (2011:332) refers to the above mentioned factor in terms of self-efficacy and the emotional response it triggers in the students. When students experience positive or negative emotions with regard to any of the academic- (cf. 4.3.1) context and environmental- (cf. 4.3.2) or performance pattern factors (cf. 4.3.6) that emotional response will color their motivation in accordance. The emotional effect of the work load and the unpreparedness of the students have been discussed. Then again it is of such importance to motivation that it warrants another look at the impact on the students (cf. 4.3.1). Students experience a variety of negative emotions such as anxiety, worry and frustration due to the work load and the fact that some feel they are unprepared to handle. Other causes of negative emotions are also with regard to missing family and friends and the pressure of residence activities they are confronted with on a regular basis. This flows over in to feeling overwhelmed and disheartened with the daily challenges they face. This emotional response subsequently influences their motivation.

ii) Personality traits

"Ek het gesien dat dit nie help om moed op te gee nie..."

"I saw that it does not help to give up..."

...determination, hardworking and responsible..."

"...ek het selfdissepline en deursettingsvermoë..."

"...I have self-discipline and perseverance..."

"...and I found that hard work paid off..."

"I am hard working, friendly and easy to talk to..."

Global mental functions (AOTA 2008: 635) such as personality also have an influence on the students' academic success. I mentioned in the Social Environment sub category of Context and Environment that the students' social environment contributes to the development of their norms, values and beliefs. Personality develops from exposure to norms, values and beliefs the students had as youngsters combined with their temperament (Rothbart 2007:207).

Literature is in agreement that personality influences academic success (Busato *et al.* 2000:1057; Davey, Eaker & Walters 2003:348; Pritchard & Wilson 2003:18). Personality traits such as being agreeable, extroverted, open to new experiences and conscientiousness function as internal resilience factors which influence academic success positively (Davey *et al.* 2003:348).

The latter authors add the following personality traits specifically identified with adolescence which adds to their resilience: perseverance, optimism, locus of control and hardiness. The students who show perseverance in their studies might be engaging in effective deep learning (Amin & Eng 2003:33) (cf. 4.3.5), as the student who will keep studying with determination and perseverance. By

showing these characteristics students also tend to take responsibility for their learning as they are serious about their studies.

Students who are easy going and extroverted might make new friends easier. As was found in the social environmental domain (cf. 4.3.2) the support of friends add to the students' external resilience (Green *et al.* 2003:78) and contribute positively to academic success.

The conscientious students will show persistence at academic occupations with a consequential positive influence on their academic success. The students will, in spite of being tired, finish assignments or study for assessments because of their persistent personality. Once the hard work is rewarded with good marks the students' motivation and personality trait are strengthened.

4.3.3.2 Spirituality

Spirituality is defined as: "a search for the meaning of one's life and a desire for connection to one's self, to others and to a transcending power or purpose" (Pierce 2003:109).

Table 4.13: Spirituality factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AN DNGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Spirituality	*Religion

a. Religion

"...my verhouding met die Here. Hy weet waarmee ek struikel en Hy dra my wanneer ek nie meer self kan loop nie."

"...my relationship with the lord..."

"I know that everything I do is a platform to glorify God so that motivates me."

"As dit nie vir God was nie sou ek nie elke oggend kon opstaan om my droom te leef nie, want Hy is my anker en die Een wat my OT droom in my hart gesit het."

"If it was not for God I would not be able to get every morning to live my dream, because He is my Anker and the One who put the OT dream in my heart."

"I am also fortunate enough to have a spiritual environment... This environment is the one I truly regret neglecting. The neglect is as a result of the amount of hay on my fork."

Green *et al.* (2003:82) and Pierce (2003:129) are in agreement that spirituality is a source of internal resilience which provides support to the students in challenging times.

Students face challenges such as academic work load and difficult subjects (cf. 4.3.1), the hostel environment (cf. 4.3.2) motivation (cf 4.3.3) and adapting to HE (cf. 4.3.6). God provides students with inner strength to cope with the challenges in HE was identified as a positive influence on their academic success. They did not elaborate on the occupations they engage in but Pierce (2008:109) writes religious traditions such as gathering with other Christians reading and learning about their faith can be a positive influence. Furthermore taking part in spiritual activities can contribute to the restoration (Pierce 2003:129). The restorative effect of spiritual occupational engagement can have a positive influence on their academics.

However some students do identified their religious occupations decreased. A decrease in spiritual and religious activities is a reality for students entering HE for the first time (Bryant, Choi & Yasuno 2003:726). Subsequently the situation arises where because of the work load, other voluntary activities and adaption to HE students engage less in their religious occupations. As a result they do not experience the restoration they need to keep up with the demands of the

academic program. This can have a negative influence on their academic success.

4.3.3.3 Body Structures

A definition of Body Structures was adopted by the authors of the OTPF form the World Health Organization (2001) as the following: "Body Structures are anatomical parts of the body, such as organs, limbs and their components which support body function" (AOTA 2008:637).

Table 4.14: Body structures factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Body structures	*General health *Diabetes Mellitus

a. General health and Diabetes Mellitus

"Luckily my general health has not been a problem..."

"I have a lot of self-discipline in my work and being diagnosed with diabetes at a young age I think self-discipline and endurance is part of who I am... but I learned that I need to make time to exercise and just do something different than studying the whole time and that is when self-discipline and endurance becomes an obstacle but I am taking it one day at a time. "

General health of students does influence academic success positively (George *et al.* 2008:714). Healthy students will have the ability to cope with the challenges of HE. These students will be able to attend classes because of their health. Students who suffer from ill-health might not be able to attend classes as

regularly as they wish to and consequently, miss important lectures, learning activities or assessments.

The student suffering from Diabetes Mellitus might face some of the above mentioned challenges. Diabetes Mellitus is an auto-immune disease which is characterized by an increase of glucose in the blood. Blood glucose need to be strictly regulated as it plays an important role in producing energy to the central nervous system (Pearson & McCrommon 2014:800).

The importance of Diabetes Mellitus for this study is the impact it has on students suffering from the disease. Self-discipline with regards to following a balanced diet and getting regular exercise is of importance for the student to manage her blood glucose levels. The student reported that having to cope with the disease since an early age caused her to be disciplined. This can be a positive influence on her academic success and discipline in academic occupations as well. On the other hand, the full academic program and the emotional responses the students experience in the first year can affect her motivation to take care of herself. The medical and endurance effects should not be ignored. The pace of the program is not going to slow down. In fact once the students start their clinical rotations this student should be extra disciplined to ensure that she exercises at least two and a half hours per week and maintain a healthy diet (Pearson & McCrommon 2014:821).

4.3.4 Activity Demands

Activity demands are defined as: "The aspects of an activity, which include the objects and their properties, space, social demands, sequencing or timing..." (AOTA 2008:638). The definition continues with the inclusion of required body functions and body structures needed in activity. These factors were already discussed in the previous domain therefore I will not include it again in this section.

4.3.4.1 Space Demands

Space demands refer to “physical environment requirements of the activity (e.g. size, arrangement, surface, lighting, temperature, noise, humidity, ventilation)” (AOTA 2008:638).

Table 4.15: Space demands factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Space Demands	*Study area *Campus facilities

a. Study area

"Koshuis is nie akademies vriendelike omgewing."

(NGT statement)

"Hostel is not an academic friendly environment."

"Noisy residences – Hostels and Uniloft."

(NGT statement)

"I moved to another corridor which is very friendly and quiet compared to the other corridor."

Engaging in academic occupations such as studying, preparing for class or assignments demand a physical environment which is big enough, noise-free and conducive to studying. As mentioned students who stay in campus residences do so in a relatively small room which is shared with a roommate. Students report that the room is central to self-care, academic rest and sleep occupations. But the room they stay in is not isolated from other rooms in the hallway. Thus noise from adjoining rooms and hallway can affect students who need to study.

This physical environment can cause students' to experience negative emotions which in turn demotivates them to study. Unfortunately the result might be bad marks for test or an assignment. The circle may repeat itself if the students do not make an attempt to change their study environment or motivation.

b. Campus facilities

"...I now study in the medical faculty library as well as the 24/7 section of the main campus library."

"Biblioteek, studie fasiliteite en bronne."

(NGT statement)

"Library, study facilities and sources."

"...great facilities, computer labs, printers, classrooms, libraries and Occupational Therapy department."

The UFS offers high quality facilities to its undergraduate and post graduate students. This was evident in the reflections of the students. The support structures such as the libraries influence the students' academic success positively (Lowe & Cook 2003:71). Because the residences are not conducive to studying these facilities have also been a supporting factor to many students. These facilities also have the potential to contribute to the students' transition to becoming an independent learner. Student will be motivated to use library as it is well stocked with literature for students to use.

4.3.5 Performance Skills

Performance Skills are defined as: "The abilities clients demonstrate in the actions they perform" (AOTA 2008:639). While engaging in areas of occupation such as education the students will need performance skills such as coping and time management skills (Brown & Stoffel 2011:275).

4.3.5.1 Cognitive Skills

Cognitive skills are described as “the skills” a student has to organize activities within a certain time span, do multi-tasking of necessary work, have appropriate situational judgment and lastly implies time management skills (AOTA 2008:639.640).

Table 4.16: Cognitive skills factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Cognitive Skills	*Learning approaches and study methods *Adjusting Study methods *Time management

a. Learning approaches and study methods

"...ek sal ernstig moet werk aan 'n nuwe studiemetode nou dat die volume van die werk eksponensieel toeneem."

"...I will seriously have to start working on a new study method now that the volume of work is increasing exponentially."

"I decided that for the next test I'm going to have to learn harder and try to relax more."

"I achieved 68% for this test. I was very proud of myself as I had worked hard."

"I worked really hard for this test and I am happy with this mark and the study method I used."

"Revising the works before the test has helped to attain more knowledge and therefore my marks have increased by almost 10%."

"I have consulted with my tutor and the first year OT mother on different study methods and what they think I should work on. I am going to continue to study in advance and learn details."

"I have critical thinking skills, I can look at work in perspective..."

The adjustment students need to make with regard to their learning approaches from teacher centered to learner centered in order to accommodate the work load of the program has been discussed (Amin & Eng 2003:32,33) (cf.4.3.1). This change also facilitates life-long learning which is needed once they enter the profession. The knowledge students acquire in the program are only the core of the profession. As soon as the students qualify as occupational therapists they have to ensure that they keep up with development in the profession and attend refresher courses on a regular basis. For the life-long learner this will be easy to do. However, for now, student are expected to be independent as they engage in learning occupations, and some students identify a need for change in their learning approach.

There is consensus in literature that students in HE need to adopt a learner-centered learning/independent learning approach (Amin & Eng 2003:32,33,42; Dent & Harden 2003:135; Harden & Laidlaw 2005:79). The independent learner presents with specific characteristics.

Firstly, the learner is able to take control of his/her learning (Amin & Eng 2003:31; Dent & Harden 2003:135). Students must realize that a change is needed in their study methods in order to cope with the academic demands in the program. They must decide "when, where, what and how" to study (Dent & Harden 2003:135). In order for the student to take control of her studies she must be able to develop her own learning plan (Dent & Harden 2003:135) and be able to reflect on her learning process (Amin & Eng 2003:31). Students

completed the reflection on their test writing skills in the portfolio and were able to identify problem areas and how to adjust it.

In addition, for the students to be motivated about their studies they need to stick to their action plans. This brings me to the second characteristic of an independent learner. Independent learners are intrinsically motivated to study (Amin & Eng 2003:31).

When a student experiences success as a result of deep learning, it will cause positive emotions such as satisfaction which will lead to improved motivation (Amin & Eng 2003:33; Brown 2011:332). A spiral effect can thus be seen when the students' internal motivation and resilience are strong and leads to academic success with subsequent positive emotions. This positive spiral will repeat itself.

The third characteristic of an independent learner is to take responsibility for her own learning (Dent & Harden 2003:135). Students realize that their learning will be facilitated by lecturers, but they are responsible to make sure that they engage with the academic content which was presented to them.

The independent learner will engage in a deep learning approach which will enable them to understand and see the bigger picture of the work. Furthermore when a deep learning approach is followed the student's critical thinking skills are developed. Lastly, the students who engage in deep learning tap in on their internal resilience for sustained focus (Amin & Eng 2003:32,33).

Critical thinking is an important skill which all occupational therapists need to develop. In the process of assessing and managing possible interventions for our clients we need to critically appraise their occupations, roles and tasks, challenges and expectations. Without having critical thinking skills to incorporate a vast knowledge base of pathology and occupation the student will only evaluate and plan interventions in a superficial manner.

b. Adjusting study methods

*"In high school I used to summarize all my work,
but I soon found out that it only takes my time..."*

*"Vind meer uit oor die onderwerp, as wat in die handleiding staan."
"Find out more about the subject than what appears in the guide."*

*"My studievaardighede het verbeter en ek kan nou al baie meer hoeveelhede
werk op een slag hanteer"*

*"My study skills have improved and I am now able to handle bigger volume of work at a
time."*

*"Dit het gewerk. Ek het beter gedoen in die volgende toets."
"It worked, I did better in the next test."*

"I have also found that studying with friends helps me a lot"

*"I felt that because I never learnt with my friends I did worse than I could have.
I know that for my exam I'm going to have to learn with them."*

"Having a study buddy really helps."

*"More driftwood present in my life is the awesome people that I am studying
with. It is really nice to know that I am not facing everything alone and that
there are people who are going through the same situation as I am."*

We have seen that to be able to develop into a competent therapist the students need to adjust their learning approach into that of an independent learner. Therefore the students need to take control and change the study methods they used in school and adapt these to the challenging program.

Knowing how to adapt their study methods is difficult for the students. Literature points us to Bloom's taxonomy to assist students in managing their study methods. "Bloom's taxonomy provides a measurement tool for thinking" (Forehand 2012:6). The author mentions that lecturers can use the taxonomy to assess students' knowledge. I agree with her, and furthermore value the taxonomy for its properties to guide students when studying. During the early 1990 Bloom's scholars undertook a revision of the existing taxonomy. They proposed changing the level descriptors from nouns to verbs as well as the focus on the processes to be followed (Forehand 2012:3).

Table 4.17: Old and new levels of Bloom's Taxonomy

Old Taxonomy (St Edward's University 2004)	New Taxonomy (Forehand 2012:4)
Knowledge	Remembering
Comprehension	Understanding
Application	Applying
Analysis	Analysing
Synthesis	Evaluating
Evaluation	Creating

The old version of the taxonomy focuses on the "kind of knowledge to be learnt" (Forehand 2012:4). While the new version focuses on the process used in learning academic material (Forehand 2012:4). An understanding of the different cognitive levels of learning is imperative for the students. Knowing what to expect from a question and how to prepare academic material implies knowledge and an understanding of Bloom's taxonomy of learning (McGuire 2006:4). The UFS occupational therapy department introduces students to the different levels during the first year. It seems that initially the taxonomy is an abstract construct and the students do not immediately find it helpful. The integration of the levels in their study methods happens gradually as they are exposed to questions asked in a different manner than at school (cf. 4.3.1).

Using Bloom's taxonomy is one way of altering study methods to fit the challenges in HE and the way students approach their learning. However,

students identified finding specific methods and strategies of studying as paramount for success.

One such strategy is to study with friends. Students refer to this strategy as studying with study buddies. Kuh *et al.* (2010:248) report that students who study together share their academic knowledge with one another. During these study sessions students are able to share their learnt knowledge with the group. By doing this the students realizes where there is a gap in their knowledge base. Working together on possible questions will influence their learning positively. In addition to the intellectual and pure academic advantages of studying in a group, is the mutual support of members in the group. The value of social support was discussed in the Context and Environment domain (cf. 4.3.2). Students will confide in a class mates who are experiencing the same difficulties. They sometimes just need to voice their frustrations (Kantanis 2000:3). Establishing a social support system becomes a reality and a factor of importance with regard to academic success.

c. Time management

"Yes, my marks of my second test in first semester increased dramatically because of better time management..."

"Tydsbestuur help my om die werklading en al my pligte te organiseer en uittevoer. As dit nie vir my tydsbestuur was nie sou ek nie al die balle waarmee ek moet "juggle" in die lug kon hou nie."

"Time management helps me to organize the work load and my responsibilities. If it was not for time management I would not be able to keep balls I am juggling in the air."

"Ek het ook nie vroeg genoeg begin leer nie..."

"I did not start studying early enough..."

Effective time management skills have a definite influence on academic success (George *et al.* 2008:711; Kantanis 2000:3). Upon entering HE students

underestimate the work load and the amount of time needed for engaging in academic occupations. This is why they follow the same methods as they did in school (Lowe & Cook 2003:53). Consequently time management is a problem as the students only start studying a few days before tests (McGuire 2006:7). Procrastination is also a factor which influences the time management of students. The skill of effective time management and personality seems to go hand in hand. The disciplined students with internal motivation will be able to strike a balance between academics and socializing. However, the achievement driven student might manage her time but only with regards to her academic occupations with an imbalance and little time for restorative occupations.

4.3.5.2 Emotional Regulation Skills

Emotional Regulation Skills is observed as the "actions or behavior a student uses to identify, manage and express feelings while engaging in activities or interacting with others."(AOTA 2008:640). In addition, the authors furthermore point the appropriate expression of emotions as an emotional regulation skill (AOTA 2008:639).

Emotional regulating skills identified by the students, according to the OTPF, are persistence, recovery from hurt or disappointment and using relaxation strategies when stressed (AOTA 2008:640).

Table 4.18: Emotional regulation skills factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Emotional Regulation	*Resilience factors

a. Resilience Factors

"I know that I have to work for what I want as I am not naturally smart and I find it difficult to learn easily."

"...I became disappointed when looking at others and seeing how exceptionally well they did..."

"Some goals for my academics are to give my best... to laugh more and to enjoy the journey."

"I am coping and emotionally I tend to have my moments when the going gets tough, but like I said, I am coping."

"...I can run this race set before me. I know that I am going to finish it as best I can, with my eyes constantly fixed upon the end, with the Person who holds everything in His mighty hand."

"...I realize that I can be proud for overcoming certain things..."

"I learned that I need to make time to exercise and just do something different than studying the whole time."

When we think of resilience, coping is sometimes seen as a synonym hereof. However, Davey *et al.* (2003:351) make the following distinction: "Resilience refers to an adaptive outcome in response to a crisis or some other form of stress..." where coping is conceptualized as: "...psychological and/or behavioral response which diminishes the physical, emotional and psychological effects of stressful life events."

In other words a student has external and/or internal resilience factors which influence his/her response with regards to a stressful situation. Consequently, because of resilience he/she is able to cope with stressful events.

Students identified various strategies they implemented through the year to help them cope with the demands of HE and which influenced their academic success. Some of these strategies were internally situated such as persistence, their ability to recover and realizing the need to relax. Lopez (2011:33) confirm the mentioned strategies and refer to it as "protective factors" the students implement in order to overcome stressful situations.

In addition, resilience is life's "buffers to stress and contributes to coping" (Green *et al.* (2003:75). Resilience can be internally or externally localized. Internal resilience is factors such as personality (cf. 4.3.3) and attitude. The student who shows persistence will keep on working hard in the program despite personal challenges. It is also the student which recognizes that the current challenges are only temporary and has the bigger picture in mind. Green and others (2003:81) mention that the student who are "cheerful and have a sense of humor" tend to have more internal resilience.

The above mentioned factors are not the only resilience factors influencing academic success. Throughout this chapter there is mention of additional external and internal factors of resilience. These factors were identified by the students and were placed in the appropriate categories according to the definition of the domain, categories or sub-domains a provided by the OTPF.

4.3.6 Performance Patterns

Performance Patterns include habits, routines, roles and rituals "used in the process of engaging in occupations or activities." (AOTA 2008:641).

The following habits, routines and ritual students engage in have already been described: Study habits and skills (cf. 4.3.5), dietary habits (cf. 4.3.1) and exercise (cf. 4.3.3) as well as the influence these factors have on academic success.

Students assume the role and subsequently face a variety of demands because of the student role. They voluntarily participate in residence activities such as sêr and stage door which some residences regard as an annual traditional ritual. The positive and negative impact of residence activities have also been addressed (cf. 4.3.1). Taking part in the mentioned activities contribute to the students sense of belonging which is important for their adjustment to HE (Barefoot 2000:15; Zhao & Kuh 2004:124). The influence of performance patterns especially with regards to habits, routines and rituals will therefore not be discussed further in this domain again.

This domain will mainly have a consolidating function as many of the occupational engagement factors come together here. Adapting to HE was found to be a factor which can be linked to many of the factors already described for example social and academic adjustment and support. I will refer back to previous domains to illustrate the connection to adjustment in HE and academic success but will focus on the role expectations on the students and how it influences their engagement in their academic occupation.

4.3.6.1 Roles

Roles are defined as: "A set of behaviors expected by society, shaped by culture and may be further conceptualized and defined by the client" (AOTA 2008:643).

Table 4.19: Role expectations factors influencing academic success

FACTORS IDENTIFIED FROM PORTFOLIOS AND NGT	
OTPF Domains, Categories and sub categories (AOTA 2008:625-645)	Factors identified by the participants from Portfolios and NGT
Role Expectations	Adjusting roles in transition from school to HE

a. Adjusting roles in transition from school to HE

"...adapting to the pace and the volume of work was a challenge at the beginning but now it begins to feel normal."

"Ek het regtig gesukkel met die aanpassing en was regtig oorweldig met die druk van die uitdagings en ook die druk wat ek op myself geplaas het, omdat ek nog altyd gewoon was aan presteer."

"I really struggled with adjustment and was really overwhelmed with the pressure of challenges and pressure I put on myself because I have always been an achiever."

"I got 75% for this class test. I made a few silly errors that counted against me, next time I need to concentrate more."

"Om uit die huis uit te wees en by die koshuis aan te pas...."

"To be away from home and adjusting to the hostel..."

"I struggle to concentrate and be self-disciplined, this is especially due to the over whelming volume of work presented before us, and by bad adaption to the academic pace of university."

"The residence that I am in is also a driftwood. It provides me with the sense of belonging and it makes me feel as if I contribute to something great."

"The hostel which I am part of has a lot of events and 'first year responsibilities', which at the moment I cannot always get to."

"As the first semester is drawing to an end I can truly say I'm starting to get use to student life."

The final factor influencing academic success is the different role expectations of the students. Students enter into a new academic and social environment as well as cultural context. There will consequently be different role expectations placed on the students (AOTA 2008:645). Thus, they have to adjust their responses to the environment and the expectations it poses. Pancer *et al.* (2000:39) identify five areas of adjustment for the student entering HE for the first time namely:

- Adjusting to the role demands placed on a young adult and independence,
- adjusting to the academic environment which is different from the school environment they were used to,
- less contact with family and friends with subsequent loss of known support structures,
- students perform self-care tasks such as cooking, laundry and financial management on their own now, and lastly
- cope with a bigger work load than what they were used to in school and take on the role of independent student.

The transition to HE is not a process which happens gradually (Lowe & Cook 2003:53). Many students leave the protected environment of secondary school and proceed directly on to HE. There is no transition period which prepares and equips them with the necessary skill needed for adjusting in HE. Many students also move away from home to study at the UFS. Suddenly they must take on different roles, that of young adults and students which have to take care of their emotional, physical and academic needs. The adaption can cause anxiety and stress for the students (Lowe & Cook 2003:53) (cf. 4.3.3).

The role expectation of being a student is engaging in successful academic activity. This role is influenced by a multitude of factors, some of which have already been discussed (cf. 4.3.1). A factor which has not been discussed is the pressure from students themselves and/or family members to achieve high academic marks in program. It is a known fact that students entering any program in health sciences are selected. For the students to be selected they must provide evidence of, among others, their academic ability and achievements. Once the students reach HE many tend to expect their academic achievements to remain on the same level as in school regardless of the increase in workload and complexity of the occupational therapy program. However, Kuh *et al.* (2010:111) reiterate the value of challenge as without it the students seldom exceed their own expectations of their abilities. On the other hand the constant pressure to do well academically can have a negative influence on the students' emotional well-being and in turn affect their academic success negatively.

Adjustment to HE occurs when student is able to successfully integrate various role expectations of the domains of occupational engagement (Lowe and Cook 2003:53). For the student who is able to adapt to the academic pace and the hostel environment translates into a positive factor influencing academic success as well as a strong internal resilience factor (Green *et al.* 2003:78). An affirmation from Friedlander *et al.* (2007:269) is that as students adjust to the new environment and challenges, there is a marked improvement in their mental well-being. Subsequently the students will be able to fulfill all the new role expectations in HE.

Stage door and Sêr are hostel rituals which strengthen the students' identity as a member of the residence they reside in. (Barefoot 2000:15; Zhao & Kuh 2004:124) Taking part in these activities is tiresome and consequently has a negative influence on academic success. However, because the student is a member of the hostel, by their own choice, they take part in all the activities associated with sêr and stage door.

Being part of a family also implies different roles the student has for example being a daughter or a sister to the family. Students who study far from home are unable to take part in family activities and get home sick. Fortunately support from family members are a positive factors influencing academic success and an external component of the students' resilience (Nel *et al.* 2009:982) (cf 4.3.5).

The last role expectation the students must negotiate is that of a member of a social environment. This environment puts expectations on the student. In spite of the heavy load of the academic program the Generation Y student needs to be surrounded by friends (Nimon 2007:28; Sandars & Morrison 2007:86). Even though this is a challenge for the students it is part of the process of growing up. They need to be adjustable in order to function in the program. They will have contact with different lecturers, therapists and patients which warrant adjustment.

4.4 SUMMARY

Factors influencing academic success as identified by the students were described in this chapter. Factors were placed in each of the six domains, with some carrying more weight than others. The chapter attempted to sketch a holistic picture of the students' occupational engagement in academia. Some students enter HE without the necessary academic preparation. Other students find the transition and subsequent adjustment to HE a challenge. The value of academic and social support came out strongly in many of the students' reflections. The next chapter will summarize the dissertation; provide limitations of the study and recommendations.

CHAPTER 5

LIMITATIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter described the academic engagement of students and factors influencing students' academic success in HE. This chapter will provide the limitations, conclusions and recommendations of the study.

5.2 LIMITATIONS OF THE STUDY

The limitations of the study will be addressed with regards to sampling, the OTPF, collection of documentation data, gender and ethnic representation.

5.2.1 Sampling

The first limitation of the study was the sampling. A criterion sampling is advised for a study of this nature. By making use of criterion sampling it is possible to decide on the characteristics of participants. In a study where academic success is as the criteria, academic achievements would thus be used. In this study the academic marks ranging from low through to high would have been used in the sampling process. Thus, the sample would be representative of students with varied academic achievements. During the planning of the study it was decided to use Anatomy marks as indicative of academic achievement. However, when sampling had to be done the average first semester marks of Anatomy was not available. Consequently, randomized sampling was used.

Once the sampling was done and the first round of data collection took place I was able to do a comparison between the participants and their academic achievement in Anatomy for the first semester. There was an even representation of academic achievement throughout the sample. Achievements

varied from 90%, 78%, 65%, 54% to 38% averages for Anatomy at the end of the first semester.

5.2.2 Occupational Therapy Practice Framework

The critique on the OTPF mentioned in chapter 2 is not unfounded as the definitions and criteria of the domains often allowed for a factor to be placed in more than one domain. A co-coder was used in the analysis process in an attempt to address this limitation and to place factors in more appropriate domains. The use of the OTPF does add a valuable holistic perspective on students and more depth in their engagement in their occupation as students.

5.2.3 Data Collection: Documentation

The documentation used in the study was submitted by the students for assessment by lecturers of the department. Since the students' portfolios are marked by lecturers they probably will not mention all social and academic encounters which might have had an influence on their academic success. Students' might not want the lecturers to know of all the activities they partake in which might influence their academic success.

Reflection, as a learning activity, is a new skill which students need to master. In order to find academic benefit from reflection students need to take the exercise serious. As this is probably the first time students encounter reflection as a learning activity they might not have realized the importance thereof.

5.2.4 Gender and ethnic representation

The participants in the study were all female. This poses a limitation on the identification of factors, as different factors might be perceived differently by males. All except one participant are from the white ethnic group while the one student was from the colored ethnic group. Thus, limited factors with regards to

cultural implications were identified. During selection each year the Department of Occupational Therapy strive to select a diverse group. However, not all the applicants meet the Faculty of Health Sciences' selection criteria.

5.3 CONCLUSIONS

The aim of the study was to investigate possible factors influencing academic success of first year occupational therapy students. The study was executed in the Department of Occupational Therapy at the University of the Free State. By implementing the social constructivist paradigm I was able to investigate multiple factors influencing academic success of the students. This was achieved by making use of the OTPF. The named framework provided a holistic view of the students' occupational engagement.

Two objectives were identified to reach the aim of the study namely:

The first objective was to explore the view point of students regarding their own academic success. After analyzing data from the NGT and documentation, it was evident that each student experiences their engagement in HE occupations differently. Students identified positive as well as negative factors as influential to their academic success as seen in chapter 4. Factors identified by students were not only of academic nature but also social, cultural, physical, emotional and cognitive.

The second objective of the study was to describe the factors influencing academic success. Students identified factors on account of their real life situations in HE. These real life situations were described in chapter 4 according to the domains of the OTPF. The following section provides the factors identified by students in *italic* print.

5.3.1 Areas of occupation

Factors identified in the domain of Areas of Occupation were IADL, formal and in formal education participation, social participation, rest and sleep and lastly leisure participation.

5.3.1.1 Instrumental Activities of Daily Living

Self-care, meal preparation, laundry, mobility and financial management were factors identified by the students. Instrumental Activities of Daily Living tasks such as meal preparation and laundry are a reality for many students living in residence or student houses. As a result IADL take up time the students can spend on academic activities.

Students visit clinical field areas off campus on a regular basis. The UFS do not supply transport to these areas for students who do not have their own transport. Thus, arranging transport to clinical areas is time consuming and a source of anxiety for the students.

Moving away from home and managing their own finances are challenge students are confronted with. Therefore students need to budget their allowance amid social and academic expenses.

5.3.1.2 Formal and Informal Educational Participation

The following factors were identified with regards to formal educational participation: *Work load and academic preparation, anatomy, assessment and feedback, lecturers, academic program*. Informal educational participation factors identified were the following: *working in groups* and *academic support*.

Engaging in academic occupations poses new challenges to students. Students are overwhelmed with the pace, character of lectures and the work load in the

program. Consequently, students are not adequately prepared at school to face the HE challenges. Thereupon, tutors and lecturers provide much needed emotional and academic support to the students who are overwhelmed and anxious.

5.3.1.3 Social participation

Students identified *social expectations* from peers and the community as influencing academic success. Peers do not understand the pressure students are under with regards to academic load and subsequent time constraints. Social expectations are placed on students; they are not always in a position to meet the expectations. Consequently, they lose contact with friends and need to establish new friendships in a group of students who are in equally demanding programs.

Students staying in campus residences are expected to take part in *hostel activities* which are also time consuming. These activities have a negative influence on their academic success as it takes up valuable academic time.

The new comer to HE also need to *establish a social support* structure as they are new to the social environment. For the Generation Y student being part of a social structure is very important. However, this much needed social structure poses social demands which the students are not always able to meet.

5.3.1.4 Sleep and Rest

Little time for restoration and *sleep deprivation* were identified as negative factors influencing academic success. The academic program and residence activities leave students with little time for restoration. The work load of the program leads to sleep deprivation hence, influences the students' cognitive function and emotional well-being.

5.3.1.5 Leisure

Making time to *take part in leisure* occupations is a positive contributor to academic success. However, some students who relocated to Bloemfontein find themselves lacking known leisure activities which have a negative influence on their academic success.

5.3.2 Context and Environment

Factors influencing academic success were identified in the temporal -and cultural contexts and social and physical environments.

5.3.2.1 Temporal contexts

Students found the *long duration of classes* as influencing their academic success negatively. This factor thus point to students being ill prepared for HE and the challenges they will face. Students lack the psychological endurance which HE occupations require. As a result students found it difficult to cope with the busy schedule of the program with numerous classes scheduled per day.

5.3.2.2 Cultural context

Cultural differences were identified as an influential factor to academic success. Students entering the program come from various provinces throughout South-Africa. For this reason adjusting to the cultural context in Bloemfontein poses challenges. Yet being faced with adapting to the new culture or accommodating different cultures contributes to the development of the students. In the occupational profession the students will be exposed to clients and patients from different cultures.

5.3.2.3 Social environment

Social support or on the other hand lack thereof was identified as prominent factors influencing academic success. In order for students to experience academic success, social support for peers, friends and family were found to be of importance.

5.3.2.4 Physical environment

The physical environments the students find themselves in are *campus residences* or other forms of *accommodation* such as their parents' home or student houses. These environments have positive or negative influences on their academic success. Students studying from home identified it as a positive influence. The home environment is more often than not more conducive to studying.

On the other hand, students staying in campus residence noted that this environment is not always contributing to academic success. The *noise* in residences as well as *Roommates* has a negative influence on the students and also influences their motivation negatively. Given these points the campus residence environment is not always conducive to studying.

5.3.3 Client Factors

Body functions, body structures, and spirituality were described in this domain. Body functions were described in terms of specific and global mental functions.

5.3.3.1 Specific mental functions

Emotional well-being, psychological endurance, Attention Deficit Disorder (ADD) and concentration were factors identified by students. Due to the pressure of the HE environment students experience negative emotions which has a

negative influence on their academic success. As mentioned the full academic program leads to sleep deprivation, which in turn influences the students' psychological endurance negatively. A lack of concentration has a subsequent negative influence on academia. Students suffering from ADD will present with concentration problems which can negatively influence their academic success.

5.3.3.2 Global mental functions

Students identified their *motivation* being influenced by various internal and external factors. Motivation is a factor influencing academic success. Personality was the second global mental function factor identified. *Personality traits* such as persistence, conscientiousness, optimism and determination were all found to have a positive influence on students' academic success. This being said, a student presenting with the mentioned personality traits will be able to manage demands set by the program with regards to heavy work load and difficult subject material.

5.3.3.3 Body structures

Students identified their *general health* as a positive factor of academic success. A healthy student can focus all their energy on academic occupations without the influence of debilitating effects of illness or disease. However, a student suffering from a condition such as *Diabetes Mellitus* has indicated this to have a positive and negative influence on academic success. Suffering from Diabetes Mellitus for a long time has resulted in the students being self-disciplined in many areas of her life. This self-discipline is also observed in academic occupational engagement. Nevertheless, the impact of the full academic program influences the student's endurance and impacts negatively on academic success.

5.3.3.4 Spirituality

Numerous students have mentioned their *religion* and believe in God as a positive influence on their academic success. Accordingly, the student with a religious lifestyle will be able to cope better in the HE environment.

5.3.4 Activity Demands

A suitable *study space* when engaging in academic occupations was identified. Unfortunately the physical environments do not always meet this demand thus, negatively influencing academic success. Fortunately the UFS offers *facilities* such as libraries and the anatomy museum which students make use of and contribute to academic success. However, the Faculty of Health Sciences' facilities such as the library and anatomy museum are not available after-hours and over weekends. Due to the structure of the academic program students often work after-hours in times when the library and in the anatomy museum are not accessible. As can be seen student support in the form of study facilities are of importance with regards to academic success.

5.3.5 Performance Skills

In the domain of performance skills students identified cognitive- and emotional regulation skills as influencing their academic success.

5.3.5.1 Cognitive Skills

The majority of students reach HE without the necessary skills to engage in academic occupations. The *learning approach and study methods* student followed in school is prevalent in the beginning of the academic year. Students need to adjust their learning approach and study methods to meet the demands of the program. In addition, students who possess *time management* skills cope better with the heavy work load and complex academic subjects such as

Anatomy. The mentioned cognitive skills will need to be developed in students who do not possess the needed cognitive skills to cope in HE.

5.3.5.2 Emotional Regulation Skills

Internal and external resilience factors were found in all of the domains of the OTPF as positive influences on academic success. Factors such as academic -, social - and family support are important external resilience factors. Motivation, personality traits, attitude and emotional well-being of the students contribute to their internal resilience and academic success.

5.3.6 Performance Patterns

Students entering HE straight from school face transitional challenges. The adolescents are moving into young adulthood and need to adapt to the social environment of HE. In addition, students have to adjust to changing role expectations both academically and socially thus, *adjusting roles in transition* from school to HE were found to influence academic success.

5.4 RECOMMENDATION

Recommendations are done on departmental level, institutional level and with regards to future research.

5.4.1 Recommendations: Department of Occupational Therapy

Assisting students in their transition and adjusting can be done by means of the first semester's time table. Time tables are drawn up afresh each year allowing for changes. By allowing more time for students to adjust to the program might be beneficial for the first year in the HE environment.

Lecturers will be educated on the challenges the first years face. By ensuring that lecturers provide students with all the information they might need to cope with the program, the students' anxiety levels might decrease. Until students feel comfortable in the HE environment instructions and guidelines for activities in the program need to be repeated often.

Each year group in the occupational therapy program at the UFS receives a module guide with all the information pertaining to the modules taken discussed in the guide. Orientating students to the module guide and assisting them in the use thereof might facilitate an independent learning approach. Here it will be important to focus on the different levels of Bloom's taxonomy and how its application will differ from school. We all agree that the university is where deep learning must take place and student should start to take responsibility for their own learning, yet the department seldom facilitates this important process.

Exposing the first year occupational therapy students to second years in the same program will promote their adjustment by receiving advice and tips from a group who went through the same challenges. The occupational therapy student body do have meet and greet functions where seniors meet the first year students. First year students are also paired up with a fourth year "mother" who are a valuable support for the students. This action of the student body can be put to good use by working together with the department and program coordinator.

Providing much needed departmental support might facilitate a smoother transition into the program. Members of faculty and the department as well as the first year guardian lecturer in the department need to be reminded of the factors influence the students' engagement in HE. The first year guardian needs to be able to assist first years with academic as well as administrative problems. This would range from questions with regards to registration, finding lecture venues to understanding the academic timetable.

As mentioned the UFS has numerous support structures in place such as the NATP. The NATP trained tutors in the department can be utilized in facilitating peer assisted learning. The tutors are all students who still recognize and remember the challenges students face. Therefore they are able to assist students with coping strategies. The tutors will also be informed of possible factors influencing academic success of the students during their training session.

A general skills module is presented in the first semester of the first year. Unfortunately not all students take it seriously as the content is not formally assessed. However, the skills students acquire by means of the general skills module assist them in assessments and assignments in HE. It is recommended that the seriousness of the named module be stressed by presenters. Furthermore it is advisable that these skills are made applicable in terms of the challenges the students face.

In order for members of the department to contribute to the effective teaching and learning of students, the findings of this study must be presented during a professional development session.

The challenge of lecturing the students is not only on the lecturer to make sure that her/his presentation skills are appealing. Students must also develop the skills to adapt to the variety of lecturers' styles and still stay motivated and focused. The students will be made aware of different teaching styles of different themes in the department of occupational therapy. This is an important learning experience as the students will be in contact with different members of the multi professional team in their professional role. Not all members and colleagues will be entertaining and easy to work with.

5.4.2 Recommendations: Institutional level

It is advised that the UFS consider accommodating students registered in equally challenging programs in hostels together. This recommendation might be met

with resistance due to various reasons. The main focus however, should be on students' academic success and how the institution can assist in achieving it.

Collaborative research with universities training occupational therapy students which focus on academic success is recommended. Firstly, it can contribute to the existing knowledge regarding factors influencing academic success. Secondly, a comparative study can be done between training institutions with regards to above mentioned factors. Thirdly, such collaborative studies might include a more diverse study population with regards to gender and ethnic background. Additional factors might be identified by the above mentioned students.

The division academic support at the Faculty of Health Sciences should be utilized more by referring students for additional academic support when needed.

The findings of this study and a wealth of already published studies indicated a lack of academic preparation of learners on school level. The Department of Education should put strategies in place in order for independent learning and academic preparation to be facilitated at school.

Establishing a development program at UFS focusing on prospective students of the Faculty of Health Sciences will be of value. Learners attending the program during the July holiday of their Grade 12 year will facilitate the development of independent learning. By being on campus will also introduce them to the HE environment without the pressure and challenges the first year students experience.

Access to the anatomy museum and library after-hours allowing students to go and work there after classes in the afternoons between 16h00 and 18h00 are recommended.

It is recommended that all efforts are made in recruiting a more diverse student population in the Department Occupational Therapy at the UFS.

5.4.3 Recommendation: Future research

Further research into the application of the OTPF as a theoretical basis for research is recommended. One cannot isolate the domains as it will not provide the researcher with a complete occupational profile. However, refining the definitions of the categories and sub categories will contribute to the effectiveness of the framework. The more specific the definitions or descriptions are the better the understanding of occupational engagement will be.

A study focusing on student learning with regards to independent learning and the effect thereof is a recommendation. Embarking on such a study may shed light on processes the department can implement to improve independent and deep learning.

In taking an active position with regards to the recommendation on residences for students in challenging programs, a pilot project can be launched evaluating the effect of such a residence on students' overall well-being, socialization and academic success.

5.5 TO CONCLUDE

The aim of the study was achieved. I succeeded in identifying and describing possible factors influencing academic success of the first year occupational therapy students at the UFS. The findings correlate with factors identified from literature. This study furthermore succeeded in describing a comprehensive array of possible factors influencing academic success in one document.

Using the OTPF and the Kawa River model were new and unique approaches to the study of academic success in Occupational Therapy. By using the framework and the model a contribution was made to the discourse on the theoretical foundation of Occupational Therapy.

Finally this study contributed to my professional growth. As coordinator of the occupational therapy program I now have a better understanding of the influencing factors on students' academic success. Consequently, I will be able to recommend adjustments to the program in order to contribute to the standard of teaching and learning at the Department of Occupational Therapy at the University of the Free State.

List of References

ACT. 2005. Crisis at the core. Preparing all students for college and work. p 1-3

Amin, Z. & Eng, K.H. 2003. Basics in medical education. World Scientific Publishing. Singapore.P 33-195

Andrew. M. 2002. Motivation and Academic Resilience. Australian Journal of Education.p 1-6

AOTA.(American Occupational Therapy Association). 2008. Occupational therapy practice framework: domain and process 2nd ed. American Journal of Occupational Therapy 62. p 625 – 645.

Barefoot, B. O. 2000. The first-year experience are we making it any better? About Campus.January-February. p. 15

Boudah, D. J. 2011. Conducting educational research. Sage. California. p. 75 – 296

Brown, C. 2011. Motivation (*In Occupational therapy in mental health a vision for participation*).F.A. Davis Company Philadelphia. p. 315 - 788

Brown, C. & Stoffel, V.C. 2011. Occupational therapy in mental health a vision for participation .F.A. Davis Company Philidelphia. p. 315 - 788

Bryant, A.N. Choi, J.Y. & Yasuno, M. 2003. Understanding the religious and spiritual dimensions of students' lives in the first year of college. Journal of College Student Development. Vol. 44. No. 6. p 723-745

Busato, V.V. Prins, F.J. Elshout, J.J. & Hamanker, C. 2000. Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*. Volume 26. Issue 6. December 2000. p. 1057 – 1068

Carlson, S. 2005. The net generation goes to college. *The Chronicle of Higher Education*. p 1-5

Colvin, J.W. 2007. Peer tutoring and social dynamics in higher education. *Mentoring & Tutoring*. Vol 15. No 2. p 156-187

Creswell, J.W. 2007. *Qualitative inquiry & research design. Choosing among five approaches*. Second Edition. Sage. California. p. 13 – 191

Cresswell, J.W. 2009. *Research design qualitative, quantitative and mixed method approaches*. Third Edition. Sage. California. p. 4 – 189

Creswell, J.W. 2012. *Educational research planning, conducting and evaluating qualitative research*. Fourth edition. Pearson. Boston. p 466,537

Davey, M. Eaker, D.G. & Walters, L.H. 2003: Resilience processes in adolescents: personality profiles, self-worth, and coping. *Journal of Adolescent Research*. Vol 18 No. 4.p 347-362

Dent, J.A. & Harden, R.M. 2005. *A practical guide for medical teachers*. Second Edition. Elsevier. London. P 135

Denzin, K.N. & Lincoln, S.Y. 2011. *The SAGE handbook of qualitative research*. Sage. Los Angeles. p 102

Dobbie, A. Rhodes, M. James, W. Tysinger, D. & Freeman, J. 2004. Using a modified nominal group technique as a curriculum evaluation tool. *Family Medicine*. p 402 – 406

Durmer, J.S. & Dinges, D.F. 2005. Neurocognitive consequences of sleep deprivation. *sleep in neurology practice*. *Seminars in Neurology*. Vol 25 Nr 1. p 117-129

Dussler, L. Dunn, B. Wang Y. Shelley, M. C. & Whalen, D.F. 2005. Personal, health, academic and environmental predictors of stress for residence hall students. *Journal of American College Health*. p 15-24

Elkins, S.A. Braxton, J.M. & James, G.W. 2000. Tinto's separation stages and its influence on first-semester college students persistence. *Research in Higher Education*. Vol 41. No 2. p 251-268

Examination results. 2011. Department of occupational therapy

Flick, U. 2004. Triangulation in qualitative research (*In* Flick, U. Von Kardorff & Steinke, I. 2004. *A Companion to qualitative research*. Sage. London. p 178 -183)

Flyvbjerg, B. 2011. Case Study. (*In* Denzin, N.K. Lincoln, Y.S. 2011. *The sage handbook of qualitative research*. Fourth Edition. Sage. California. p.307)

Forehand, M. 2012. Bloom's taxonomy. *Emerging perspectives on learning*. *Teaching and Technology*. p 3-6

Fouche, C.B. & Schurink, W. 2011. Qualitative research designs. (*In* de Vos, A.S. Strydom, H. Fouche, C.B. & Delpont, C.S.L. 2011 *Research at grass roots for the social and human service professions*. Fourth Edition. Van Schaik. Pretoria. p.322

Foxcroft, C. & Stumpf, R. 2005. What is Matric for? Matric: What is to be done. Seminar Papers & Presentations. Umalusi. p 10-32.

Freitas, F. A. & Leonard, L. 2011. Maslow's hierarchy of needs and student academic success. Teaching and Learning in Nursing. Vol 6. Issue 1.p 9-13

Friedlander, L.J. Reid, G.J. Shupak, N. & Cribbie, R. 2007. Social support, self-esteem and stress as predictors of adjustment to university among first-year undergraduates. Journal of College Student Development. p 259-270

George, D. Dixon, S. Stansal, E. Gelb, L. S. & Pheri, T. 2008. Time diary and questionnaire assessment of factors associated with academic and personal success among university undergraduates. Journal of American College Health. May/June 2008. Vol 56.No. 6. P. 711 – 714

Greene, R.R. Galambos, C. & Lee, Y. 2003. Resilience theory: Theory and professional conceptualizations. Journal of Human Behavior in the Social Environment. Vol. 8(4). 2003. p 75 – 91

Harden, R.M. & Laidlaw, J.M. 2012. Essential skills for a medical teacher. An introduction to teaching and learning in medicine. Churchill Livingstone. London. p 19 – 115

Hills, C. Ryan, S. Smith, D.R. & Warren-Forward, H. 2012. The impact of "Generation Y" occupational therapy students on practice education. Australian Occupational Therapy Journal. Vol 59.p 156-163

HPSCA.(Health Professions Council of South Africa). 2008. Professional boards for occupational therapy, medical orthotics/prosthetics and art therapy. Minimum standards for the training of occupational therapy students

Isaacs, S.B.A. 2000. The national qualifications framework and the standard setting. Pretoria. p 3,4

Iwama, M. K. Thomson, N. A. & Macdonald, R. M. 2009. The Kawa model: The power of culturally responsive occupational therapy. *Disability and Rehabilitation*. 2009. 31(14): p. 1125 – 1135

Johnson, D. W. Johnson, F.P. 2000. *Joining together group therapy and group skills*. Seventh Edition. Allen and Bacon. Boston. p 110,491

Kantanis, T. 2000. The role of social transition in students' adjustment to first-year to the first year of university. *Journal of Institutional Research*. p 1-8

Krefting, L. 1991. Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*. March 1991. Volume 45. Number 3. p. 217

Kuh, G.D. Kinzie, J. Schuh, J.H. Whitt, E.J. & Associates. 2010. *Student success in college. Creating Conditions that Matter*. Jossey-Bass. San Francisco. p 111,248

Le Grange, L. 2007. (Re)thinking outcomes-based education: From arborescent to rhizomatic conception of outcomes (based-education). *Perspectives in Education*. Vol 25(4).p 79-85

Liamputong, P., 2011. *Focus group methodology – principles and practice*. Sage. London. p. 25,26

Lopez, A. 2009. Posttraumatic stress disorder and occupational performance: Building resilience and fostering occupational adaptation. *Work*. IOS Press. p 33-36

Lowe, H. & Cook, A. 2003. Mind the Gap: are students prepared for higher education?. *Journal of Further and Higher Education*. Vol. 27. No 1 2003 p. 53

Lucas, K. 2011. Making the connection between transport disadvantages and the social exclusion of low income populations in the Tswane region of South Africa. *Journal of Transport Geography*. Vol. 19. p. 1320-1334

Maree, K. 2012. *First steps in research. Revised tenth impression*. Van Schaik Pretoria. p. 133

Martin, A. 2002. Motivation and academic resilience: development a model for student engagement. *Australian Journal of Education*. Vol. 46 Issue. 1. p 1,2

McGuire, S.Y. 2006. The impact of supplemental instruction on teaching students how to learn. *New Directions for Teaching and Learning*. Wiley Inter Science. no 106. Summer 2006. p. 3 – 4

Mentz, M. 2012. Measuring and using pre-university levels of student engagement at a South African university. p.16 - 61

Merriam, S.B. 2009. *Qualitative research a guide to design and implementation*. Jossey-Bass. San Francisco. p.176 – 186

Mouton, N. Louw, G.P. & Strydom, G.L. 2012. A historical analysis of the post apartheid dispensation education In South Africa (1994-2011). *International Business & Economic Research Journal*. Vol 11 Nr 11.p 1211-1221

Mouton, N. Louw, G.P. & Strydom, G.L. 2013. Present-day dilemmas and challenges of the South African tertiary system. *International Business & Economic Research Journal*. Vol 12 Nr 3.p 285-300

Nel, C. Tronskie-de Bruin, C. & Bitzer, E. 2009. Students' transition from school to university: Possibilities for a pre-university intervention. SAJHE 23(5),p 974-983

Nelson, D.L. 2006. Critiquing the logic of the domain section of the Occupational Therapy Practice Framework: Domains and process. The American Journal of Occupational Therapy. Sep/Oct 2006. Volume 60. Number 5. p 511-523

Nieuwenhuis, J. 2012. Analysing qualitative data. (In Maree, K. 2012. First steps in Research. Revised Tenth Impression. Van Schaik Pretoria. p. 99 – 115)

Nimon, S. 2007. Generation Y and higher education: The Other Y2K. Journal of Institutional Research .Vol 13(1),p 24-41

NMMU (Nelson Mandela Metropolitan University). Supplemental instruction leader manual. 2008. Port Elizabeth

NQF.(South African National Qualifications Framework). 2010. Understanding the National Qualifications Framework. www.jobs.co.za. Date accessed 02/09/2010

Osters, S. & Roberts, D. 2007. Academic success – How do students define it. SACSA/NASPA Rgion III/ TACUSPA Joint Student Affairs Conference. 4 November 2007. p 8

Pancer, S.M. Hunsberger, B. Pratt, M.W. & Alistat, S. 2000. Cognitive complexity of expectations and adjustment to university in the first year. Journal of Adolescent Research. Vol 15. No 1. p. 38-57

Patterson,B. 2007. A-Z of Genration Y. Sunday Herald Sun. Retrieved 1 February 2014. <http://www.heraldsun.com.au>

Pearson, E.R. & McCrimmon, R.J. 2014. Diabetes Mellitus. (*In Davidson's Principles & Practice of Medicine*). 22nd Edition. Churchill Livingstone. Edinburgh

Pierce, D. 2003. *Occupation by design: Building therapeutic power*. F.A. Davis Company. Philadelphia. p 4-107

Polit, D. & Beck, C.T. 2006. *Essential of nursing research methods, appraisal, and utilization*. Sixth edition. Lippincott Williams & Wilkins. p 13

Potter, M. Gordon S. & Hamer, P. The nominal group technique: A useful consensus methodology in physiotherapy research. *New Zealand Journal of Physiotherapy*. November 2004. Volume 32. p. 126 – 130

Pritchard, M. E. & Wilson, G. S. 2003. Using emotional and social factors to predict student success. *Journal of College Student Development*. January/February 2003 Vol 44 no 1. p. 18 – 28

Reid,D. 2008. Exploring the relationship between occupational presence, occupational engagement and people's well-being. *Journal of Occupational Science* Vol 15(1) April 2008. p 43-46

Rothbart, M.K. 2007. Temperament, development and personality. *Current Directions in Psychology Science*. p 207

Sandars, J. & Morrison, C. 2007. What is the net generation? The challenges for future medical education. *Medical Teacher*. Vol. 29. p 85,86

SA. (South Africa). 2013. The higher education qualifications sub-framework. *Government Gazette* No. 36751. p5-39

SAHP.(School of Allied Health Professions). *Yearbook 2014*. University of the Free State. Faculty of Health Sciences. p 14

SANQF.(South African National Qualifications Framework). 2010. Understanding the national qualifications framework. www.jobs.co.za. Date accessed 02/09/2010

Schurink, W. Fouche, C.B. & de Vos A.S. 2011. Qualitative data analysis and interpretation. (*In de Vos, A.S. Strydom, H. Fouche, C.B. & Delport, C.S.L. 2011 Research at grass roots for the social and human service professions. Fourth Edition. Van Schaik. Pretoria. p. 404 - 421*)

Strydom, H. 2011. Ethical aspects of research in the social sciences and human service professions. (*In de Vos, A.S. Strydom, H. Fouche, C.B. & Delport, C.S.L. 2011 Research at grass roots for the social and human service professions. Fourth Edition. Van Schaik. Pretoria. p. 113 - 129*)

Strydom, J.F. Mentz, M. & Kuh, G.D. 2010. Enhancing success in higher education by measuring student engagement in South Africa. To be published in *Acta Academica* in 2010. p. 2

Tinto, V. 2012. *Completing college rethinking institutional action*. The University of Chicago Press. Chicago. p 24-27

Trockel, M.T. Barnes, M.D. Egget, D.L. 2000. Health-Related Variables and academic performance among first-year college students: Implications for sleep and other behaviors. *Journal of American College Health*. Vol 29.p 125-131

Tufford, T. & Newman, P. 2010. Bracketing in qualitative reserch. *Qualitative Social Work*.Vol. 11(1).p 80 - 96

Twenge, J.M. 2009. Generational changes and their impact in the classroom: teaching Generation Me. *Medical Education*. Vol 43.p 398-405

UFS EC 29. (University of the Free State). 2012. Ethics Committee of the Faculty of Health Sciences. General Guidelines.

UFS.(University of the Free State). 2013. Department Occupational Therapy. General Skills Portfolios.

UFS. (University of the Free State).Yearbook 2014. Faculty of Health Sciences. School of Allied Health Professions. p 10, 14

Van Breda, A.D. 2005. The social work practitioner-researcher. Volume 17.Issue 1.p 1-14

Van Wyk, A. 2011. Trying to find the right word. Supplement to Mail & Guardian. 26 September 2011. p. 8

Van Schalkwyk, S. Leibowitz, B. & Van der Merwe, A. 2009. Perspectives on the First-Year Experience. (*In Focus on first-year success: Perspectives emerging from South Africa and beyond.* Sun Media. Stellenbosch. p 3

Walker, M. 2008. A human capabilities framework for evaluating student learning. Teaching in Higher Education. Vol 13. No 4. p 477 - 487

Weiler, A. 2005. Information-seeking behavior in generation y students: Motivation, critical thinking and learning theory. The Journal of Academic Librarianship. Vol 31 Issue 1.p 46-53

Wilcock, A.A. 1999. Reflection on Doing, being and becoming. Australian Occupational Therapy Journal nr 46.p 1 – 11.

WMA.(World Medical Association). 19 October 2013. World medical association declaration of Helsinki. Ethical Principles for Medical Research Involving Human Subjects. p 1,2

Yin, R.K. 2003. Case study research design and methods. Third Edition. Sage Publications. p. 39 – 85

Zhao, CM. & Kuh, G. 2004. Adding value: Learning communities and student engagement. Research in Higher Education. Vol 45. No 2. p 124

APPENDIX A

LETTERS:

PERMISSION FOR CONDUCTING RESEARCH

NOTICE OF RESEARCH



Department Occupational Therapy

6 May 2013

Prof Hay
Vice Rector: Academics
University of the Free State
Bloemfontein

Prof van Zyl
Dean: Faculty of Health Sciences
University of the Free State
Bloemfontein

Dr van Vuuren
Head: School of Allied Health Professions
University of the Free State
Bloemfontein

Mrs van Jaarsveld
Head: Department Occupational Therapy
University of the Free State
Bloemfontein

**PERMISSION FOR CONDUCTING RESEARCH: FACTORS
INFLUENCING ACADEMIC SUCCESS OF FIRST YEAR
OCCUPATIONAL THERAPY STUDENTS AT THE UNIVERSITY OF
THE FREE STATE**

Hereby I request permission to do post graduate research within the School of Allied Health Professions in order to complete my Master's degree.

The aim of the study is to investigate the factors which influence academic success of first year Occupational Therapy students at the University of the Free State.

Nominal Group Techniques will be held with the sample population. This will not interfere with their academic program. Dates and times have been set for the groups at times where the students do not have scheduled classes. The researcher will also analyze portfolio reflections written by the first year Occupational Therapy students. In these portfolios the students reflect on learning and development during the first year. The participants will give informed consent before taking part in the study.

This protocol will be submitted to the Ethics Committee of the Faculty of Health Sciences for approval.

This study will be of value to the already existing student support structures at the University of the Free State. Adjustment problems and other emotional and social factors influencing academic success can then be addressed more purposefully. The study will also provide a holistic view of the first year student in the Department of Occupational Therapy.

I trust that this request will be favorably considered.

Yours Faithfully

A. Swanepoel
Post Graduate Student (M OccTher)

Date

Prof Hay
Vice Rector: Academic

Date

Prof van Zyl
Dean: Faculty of Health Sciences

Date

Dr van Vuuren
Head: School of Allied Health Professions

Date

Date
Head: Department of Occupational Therapy



Department Occupational Therapy

6 May 2013

Mr. R. Buys
Dean: Student Services
University of the Free State
Bloemfontein

Dear Mr. Buys

**NOTICE OF RESEARCH: FACTORS INFLUENCING ACADEMIC
SUCCESS OF FIRST YEAR OCCUPATIONAL THERAPY STUDENTS
AT THE UNIVERSITY OF THE FREE STATE**

I hereby wish to inform you of post graduate research request within the School of Allied Health Professions in order to complete my Master's degree.

The aim of the study is to investigate the factors which influence academic success of first year Occupational Therapy students at the University of the Free State.

Nominal Group Techniques will be held with the sample population. This will not interfere with their academic program. Dates and times have been set for the groups at times where the students do not have scheduled classes. The researcher will also analyze portfolio reflections written by the first year Occupational Therapy students. In these portfolios the students reflect on learning and development during the first

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This study will be of value to the already existing student support structures at the University of the Free. Adjustment problems and other emotional and social factors influencing academic success can then be addressed more purposefully. The study will also provide a holistic view of the first year student in the Department of Occupational Therapy.

I trust that you will find this in order.

Yours Faithfully

A. Swanepoel
Post Graduate Student (M OccTher)

Date

Mr R. Buys
Dean: Student Services

Date

APPENDIX B
INFORMATION DOCUMENT:
AFRIKAANS AND ENGLISH

INFORMED CONCENT LETTER:
AFRIKAANS AND ENGLISH

INFORMATION DOCUMENT FOR PARTICIPANTS
--

**FACTORS INFLUENCING ACADEMIC SUCCESS OF FIRST YEAR
OCCUPATIONAL THERAPY STUDENTS AT THE UNIVERSITY OF
THE FREE STATE**

Dear Participant

I am a post graduate Master's in Occupational Therapy student at the University of the Free State. I am exploring the factors which influence the academic achievements of first year occupational therapy students.

You are invited to take part in the study and by doing so you will contribute to new insight about the challenges which students face and the support students need.

Your participation in the study is voluntary. You can withdraw from the study at any time without being penalized for doing so. Participants will receive no additional benefits, academic mark adjustments or special privileges.

The researcher undertakes to keep participant information confidential. The results of the study will be utilized for academic purposes. By signing the consent form the researcher accept that the participants give consent that information acquired from Nominal Group Technique and portfolio reflections may be included in the study. The information may also be used in research presentations and Academic Journal publications.

There are no costs involved for participants taking part in the study. Interviews will be held at the department of occupational therapy at a time which will suit both parties.

You are welcome to contact me at 051 401 3078 in case you have any questions with regards to the information in this document or the study

If you have any complaints you can bring it under the attention of the Ethics Committee of the Faculty of Health Sciences: Mrs Henriette Strauss at 051 405 2812.

INLIGTINGSDOKUMENT AAN DEELNEMERS
--

**FAKTORE WAT AKADEMIESE SUKSES BEINVLOED BY
EERSTEJAAR ARBEIDSTERAPIE STUDENTE AAN DIE UNIVERSITEIT
VAN DIE VRYSTAAT**

Beste Deelnemer

Ek is 'n nagraadse Meesters student in die departement van Arbeidsterapie. Ek wil verstaan watter faktore eersterjaar Arbeidsterapie studente se akademiese prestasies beïnvloed.

U word genooi om deel te neem aan die studie en so 'n bydrae te lewer tot beter gegrip van studente se uitdagings en watter ondersteuning benodig word deur studente.

U deelname aan hierdie studie is vrywillig en u kan enige tyd van die studie ontrek sonder dat u daarvoor in enige situasie gepeenaliseer sal word. Geen addisionele voordele, punte aanpassings of spesiale vergrunnings sal gemaak word vir deelnemers tot die studie nie.

Die navorser onderneem om elke deelnemer se inligting konfidensieel te hanteer. Die resultate van die studie sal gebruik word vir akademiese doeleindes. Indien u die toestemmings brief onderteken aanvaar die navorser dat u toestemming verleen dat inligting wat verkry word vanuit Nominale Groep Tegniek en u portefeulje refleksies in die studie ingesluit mag word. Die inligting mag ook gebruik word in joernaal publikasies en navorsings voordragte.

Daar is geen kostes verbonde aan u deelname aan die studie nie. Nominale Groep Tegnieke sal by die Arbeidsterapie departement geskied op 11 Oktober 2013 om 8h00 tot 10h00.

U is welkom om my enige tyd te kontak by tel. 051 401 3078 indien u vrae het in verband met die studie of die inligting in hierdie dokument vervat.

Indien u enige klagtes het kan u dit onder die aandag van die Etiek komitee van die Fakulteit van Gesondheidswetenskappe bring: Mev. Henriette Strauss by tel. 051 405 2812.

CONCENT TO PARTICIPATE IN RESEARCH

**FACTORS INFLUENCING ACADEMIC SUCCESS: PERCEPTION OF
FIRST YEAR OCCUPATIONAL THERAPY STUDENTS AT THE
UNIVERSITY OF THE FREE STATE**

I _____ hereby confirm that I am
willing to take part in the above mentioned study.

The researcher explained the study verbally and I also received a written
information document. I am familiar with the content of the document.

Signature of participant

Date

Signature of researcher

Date

TOESTEMMING TOT DEELNAME AAN DIE STUDIE
--

**FAKTORE WAT AKADEMIESE SUKSES BEINVLOED BY
EERSTEJAAR ARBEIDSTERAPIE STUDENTE AAN DIE UNIVERSITEIT
VAN DIE VRYSTAAT**

Hiermee bevestig ek _____ dat ek bereid is om aan die bogenoemde studie deel te neem.

Die navorser het die die studie verbaal aan my verduidelik en ek het ook skriftelike inligtingstuk ontvang. Ek is bekend met die inhoud van die inligtingstuk.

Handtekening van deelnemer

Datum

Handtekening van navorser

Datum

Integration of factors influencing academic success of first-year occupational therapy students – OTPF domains

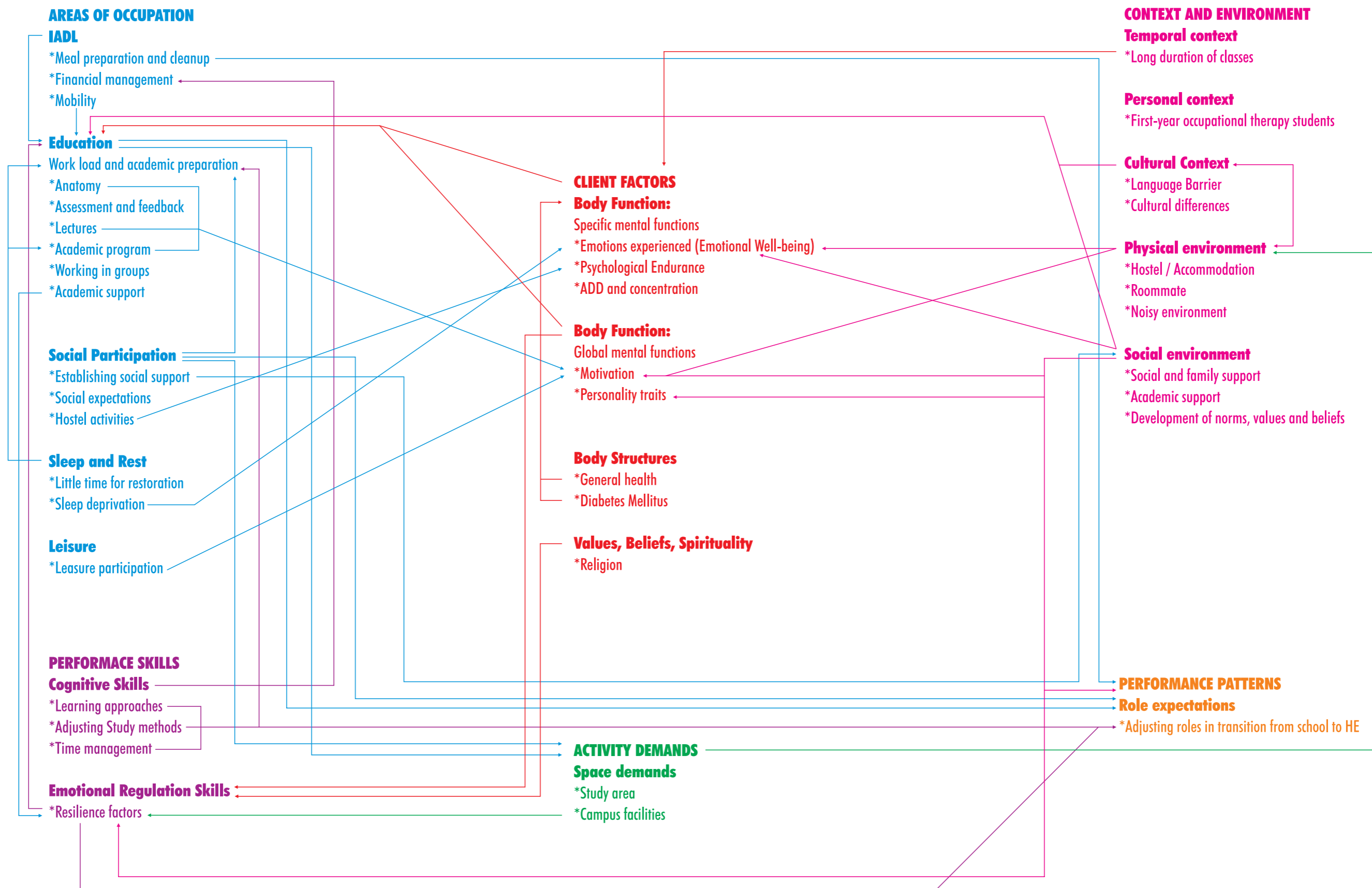


Figure 4.1 Integration of factors influencing academic success of first-year occupational therapy students – OTPF domains (Compiled by student: A. Swanepoel)