



**DURBAN UNIVERSITY OF TECHNOLOGY**  
**INYUVESI YASETHEKWINI YEZOBUCHWEPHESHE**

**THE MANAGEMENT OF THE FIRST-YEAR STUDENT EXPERIENCE  
PROGRAMMES AT THE SELECTED HIGHER EDUCATION INSTITUTION: A  
CASE OF BUSINESS AND INFORMATION MANAGEMENT UNDERGRADUATES**

by

**Musa Grace Mbonambi**

Submitted in fulfilment of the requirements of the Master of Business and Information

Management Science

in the

Department of Information and Corporate Management

Faculty of Accounting and Informatics

Durban University of Technology

Durban, South Africa

2024

**THE MANAGEMENT OF THE FIRST-YEAR STUDENT EXPERIENCE  
PROGRAMMES AT THE SELECTED HIGHER EDUCATION INSTITUTION: A  
CASE OF BUSINESS AND INFORMATION MANAGEMENT UNDERGRADUATES**

by

**Musa Grace Mbonambi**

**Student Number: 21615605**

Submitted in fulfilment of the requirements of the Master of Business and Information

Management Science

in the

Department of Information and Corporate Management

Faculty of Accounting and Informatics

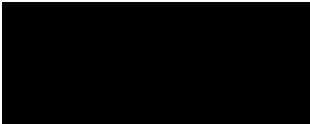
Durban University of Technology

Durban, South Africa

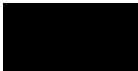
2024

Student:  \_\_\_\_\_

Date: 2024-08-20

Supervisor   
Dr. M. Ngibe

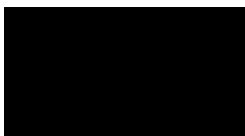
Date: 2024-08-20

Co-Supervisor:  \_\_\_\_\_  
Ms. M. Msomi

Date: 2024-08-20

## DECLARATION

I, Musa Grace Mbonambi, declare that this dissertation is a representation of my own work both in conception and execution.



---

Musa Grace Mbonambi

## **ABSTRACT**

The transition from high school to university is recognised in research and theoretical literature as a distinct period of transition. To successfully transition from high school to university, students must adjust while being supported by the people and systems around them. Numerous studies show that the transition from high school to university is disconcerting and stressful, especially for first-generation students and students from poor backgrounds who experience additional challenges as a result of disadvantaged schooling. This results in declining completion and throughput rates.

The aim of this study is to examine the management and effectiveness of DUT's first-year student programmes that were designed to manage the transition of students from high school to university. A pragmatist philosophy was adopted together with a mixed methods approach, which was deemed appropriate to support the primary aim of the study. The study's population consisted of Business and Information Management students, Centre for Learning and Teaching (CELТ) administrators, and Tutor Mentor Advisors (TMAs). To identify and select the appropriate sample size, both probability and non-probability sampling techniques were adopted. Probability sampling was used to sample 175 first-year students, while non-probability sampling was used to sample three CELТ administrators coordinating the FYSE programme and five TMAs. A self-administered questionnaire, focus groups, and individual interviews served as the data collection mechanisms. The Statistical Package for the Social Sciences (SPSS) version 26.0 was used to analyse quantitative data, while thematic analysis was used to analyse qualitative information.

The empirical findings revealed that the students who participated in this study found the transition to higher education difficult, and that it inevitably posed serious challenges to their academic progression and achievements. The majority of the students who participated in this study were confident that DUT's first-year student orientation programme assisted them to adapt to university life. However, some students indicated that the orientation programme was not beneficial or was relatively unknown to them. The study also found that there was no clear collaboration between CELТ and the academic departments within the university. This finding was quite alarming since the academic departments dealt directly with first-year students. The

study identified a number of support programmes offered by DUT to ensure that first-year students transition successfully to university. However, the strategic management of these programmes is a great concern, as many first-year students still face difficulties adjusting to university life. The study also found that the TMAs used different approaches to provide assistance to first-year students. The study recommends that first-year student orientation be conducted not only at the beginning of the year, but also at the beginning of the second semester. The study also recommends that CELT and academic departments collaborate to develop structures that resonate with particular departments, rather than offering workshops that are too generic and do not address departmental curricula. In addition, the study recommends that CELT establish an applicable teaching philosophy for tutoring students.

## **DEDICATION**

This project is dedicated to my parents:  
Mrs. Zandile Mbonambi and Mr. Joseph Mbonambi

## ACKNOWLEDGEMENTS

***“And he said unto me, my grace is sufficient for thee: for my strength is made perfect in weakness. Most gladly, therefore, will I rather glory in my infirmities, that the power of Christ may rest upon me” 2 Corinthians 12:9***

First and foremost, I give all praise and glory to Jesus, my Lord, and Saviour, who has never failed me along this journey. I wanted to give up several times, but God's grace in my life kept me going.

My deepest gratitude also goes to my supervisor (Dr. M. Ngibe) and co-supervisor (Ms. M. Msomi), who have always been there for me, providing prompt responses, encouragement, expert advice, and unconditional love and support. They provided me with the best support throughout this emotional path, and I genuinely believe that if it had not been for them, I would not have made it. I am grateful for their help, and I will never forget how essential they were in making this research project a success. May the good Lord continue to bless them and keep their cups overflowing. Dear Dr., Ngibe and Ms. Msomi, your vital contributions towards this research study will be honoured eternally.

I would also like to convey my gratitude to the Durban University of Technology (Hlomis Skills Academy) for the financial assistance.

I would also like to extend my gratitude to my mentors, Dr. David Mohale, Dr. Maditsane Nkonoane, Mr. Masiza Ngculu, Dr. Thobeka Shoji-Nxumalo, Mrs Unathi Ngculu, and Ms Lungile Ngcobo, for their emotional and physical support. The journey was long and exhausting, but your presence kept me going. I am very privileged to have you in my life, and I appreciate and thank you for your words of encouragement and for always being accessible for whatever research-related needs I had. Thank you so much for always rooting up for me and for always reminding me that I am destined for greatness, you are the best support system one could ever ask for. You hold an integral place in my heart.

I would also like to extend my gratitude to my Twin Sister, Ms. Nothando Mbonambi, thank you so much my sister for being my cheerleader, for motivating every day to persevere up to the finishing line. Mostly, I am truly appreciative for always showing up for me always when I run out of funds, you are my answered prayer and may the good Lord continue blessing you mommy bear.

I'd like to thank my sisters, Ms. Nomfundo Mbonambi, Ms. Senzelwe Mbonambi, and Ms. Minenhle Mbonambi, for always rooting for me and praying for my success, and for always being patient with me when I didn't visit home as often because I was trying to push my research project. Thank you so much to my amazing babies, Ms. Alwande Mbonambi, Ms. Azania Mbonambi, and Ms. Simkhonze Mbonambi, as well as my handsome boy Mr. Leebongwe Mbonambi, for always cheering me up when I am down, you are the best my bunnies, and I hope that my journey inspires you to keep pushing despite everything.

I'd like to appreciate Ms Thokozile Mazibuko for the love and support, thank you so much for coming through for me every day, every hour and every minute and not complaining even for a bit, thank you for cross-nights with me even on those demanding days when I needed to push my deadlines. I wish nothing but the best for you and I can't wait to also see you in the finishing line when your Doctoral degree is finally conferred. I love you MA- Afrozana.

I would like to express my gratitude to my current employer, Prof. Katleho Moloi, thank you so much my Prof for making the working conditions bearable, thank you for always motivating me to push hard and for being the best HOD one could ever ask for. You are the best and I truly appreciate the good working environment you have created for us. You are family and I will never forget you.

I would like to thank Ms. Zinhle Madela from the Human Resources department for the everlasting love and support, thank you so much for giving me a chance to put food in the table whilst growing my skills, thank you so much for being a part of my family, you are a true epitome of what it means to love someone without any boundaries, I truly love you sis and all your investments in me will definitely pay off. Ngiyabulela kakhulu Nkosazane for everything.



I would like to also give thanks to my research buddies, Ms. Simlindile Cele, Mrs. Sharon Mbalo, Mr. Sibusiso Nxamalala, Ms. Luyanda Bingwa, Mr. Wiseman Qwabe, Mr. Simphiwe Mahlaba, Mr. Makhosesizwe Nzama and Mr. Bongumusa Ngcobo, thank you so much for holding my hand throughout this whole journey, thank you so much for always checking up on me and always willing to go an extra mile so I can finish this research project.

I would also like to express my gratitude to my data analyst and editor for their contributions to making my study a success.

I would also like to thank my research participants for availing themselves for the study and for providing the accurate and necessary information that I needed to conclude this study. I strongly believe that without them, the study was going to be null and void.

This research is dedicated to my parents: Dear Mom and Dad, thank you so much for the sacrifices you have made for us as your children, from hustling for food in the streets so that we can eat at night. We have made it, and your hard work has paid off. Thank you for your continued support, and may the Lord provide you with many more years, I love you so much.

Finally, my friends and family thank you for love and support; you play a huge role in my life, and I wish nothing but the best for you.

## **LIST OF ABBREVIATIONS**

BIM	Business and Information Management
CELT	Centre for Learning and Teaching
DHET	Department of Higher Education and Training
DUT	Durban University of Technology
EI	Emotional intelligence
FYE	First-year experience
FYEP	First-year experience programmes
FYS	First-year seminar
FYSE	First-year student experience
HE	Higher education
ICM	Information and Corporate Management
IR	Interpersonal relationship
KMO	Kaiser-Meyer-Olkin
LO	Life Orientation
REP	Residence Educational Programme
SPSS	Statistical Package for the Social Sciences
TFL	Technology for Learning
TMA	Tutor Mentor Advisor

## TABLE OF CONTENTS

DECLARATION .....	i
ABSTRACT.....	ii
DEDICATION.....	iv
ACKNOWLEDGEMENTS .....	v
LIST OF ABBREVIATIONS.....	viii
TABLE OF CONTENTS .....	ix
LIST OF FIGURES .....	xvii
LIST OF TABLES.....	xix
CHAPTER ONE .....	1
INTRODUCTION AND OVERVIEW .....	1
1.1 Introduction.....	1
1.2 Background of the study .....	1
1.3 Background to the research problem .....	4
1.4 Problem statement.....	5
1.5 Aim of the study .....	6
1.6 Objectives of the study.....	7
1.7 Critical questions.....	7
1.8 Significance of the study .....	7
1.9 Theoretical framework .....	8
1.10 Literature review .....	9
1.10.1 Challenges faced by students moving from high school to Durban University of Technology .....	9
1.10.2 Elements that contribute to high school learners' smooth transition from high school to tertiary education .....	9
1.10.3 University programmes designed to assist students in leaving high school and entering tertiary... 10	
1.10.3.1 First-year student experience programme .....	10
1.10.3.2 First-year institutional orientation.....	10
1.11 Clarification of concepts.....	11
1.11.1 Successful transition.....	11
1.11.2 High school.....	12
1.11.3 Higher education .....	12
1.12 Research design.....	12
1.12.1 Research approach .....	12
1.12.2 Population and target population .....	13
1.12.3 Sampling technique and sample size .....	13
1.12.4 Data collection process and instrument.....	14
1.12.5 Data analysis and pretesting of the instrument.....	14
1.12.6 Validity and reliability .....	14
1.12.7 Ethical considerations.....	14

1.12.8 Limitations and delimitations of the study .....	15
1.12.8.1 Limitations .....	15
1.12.8.2 Delimitations .....	15
1.13 Structure of the dissertation .....	15
1.14 Conclusion .....	16
<b>CHAPTER TWO</b> .....	17
<b>LITERATURE REVIEW</b> .....	17
2.1 Introduction .....	17
2.2 Theoretical framework .....	17
2.3 Contextual overview of student transition from high school to higher education .....	19
2.4 Challenges faced by first-year students in the transition from high school to university .....	21
2.5 Factors affecting the transition from high school to university .....	22
2.5.1 Academic factors .....	23
2.5.1.1 High school and higher education curriculum .....	23
2.5.1.2 Poor selection of study fields .....	24
2.5.1.3 Teacher training .....	26
2.5.2 Financial factors .....	27
2.5.3 Culture shock .....	28
2.5.4 Emotional intelligence .....	29
2.5.5 Interpersonal relationships .....	29
2.5.6 Computer literacy .....	30
2.6 Common issues faced by first-year students .....	31
2.6.1 Fitting into the new environment .....	33
2.6.2 Making new friends .....	33
2.6.3 University workload .....	34
2.7 Management of first-year student programmes .....	34
2.7.1 International first-year experience programmes .....	35
2.7.2 Local first-year experience programmes .....	36
2.8 Educational programmes offered by Durban University of Technology to support first-year student transition .....	37
2.8.1 First-year student experience programme .....	37
2.8.2 First-year student orientation .....	38
2.9 First-year students' transition at Durban University of Technology .....	39
2.10 Psychological impacts of transitioning from high school to university .....	40
2.10.1 Depression .....	40
2.10.2 Psychological distress .....	41
2.10.3 Anxiety .....	42
2.11 Summary .....	42
<b>CHAPTER THREE</b> .....	43
<b>RESEARCH METHODOLOGY</b> .....	43
3.1 Introduction .....	43

3.2	Research design .....	43
3.3	Research philosophy .....	45
3.3.1	Positivism .....	45
3.3.2	Interpretivism .....	46
3.3.3	Pragmatism .....	46
3.3.4	Philosophical approach of this study.....	47
3.4	Research strategy .....	47
3.4.1	Case studies.....	48
3.4.2	Surveys.....	48
3.4.3	Interviews .....	48
3.5	Target population .....	49
3.6	Sampling process .....	49
3.6.1	Inclusion criteria.....	50
3.6.2	Exclusion criteria .....	51
3.7	Quantitative research approach .....	51
3.8	Qualitative research approach .....	51
3.8.1	Rigour in qualitative research .....	52
3.8.1.1	Credibility.....	52
3.8.1.2	Dependability.....	53
3.8.1.3	Confirmability.....	53
3.8.1.4	Authenticity.....	53
3.9	Mixed methods .....	53
3.10	Triangulation .....	54
3.11	Measuring instruments.....	55
3.11.1	Data collection instrument .....	55
3.11.2	Focus group interviews.....	55
3.11.3	Individual interviews.....	56
3.11.4	Questionnaire .....	57
3.11.5	Structure of the questionnaire.....	57
3.11.5.1	Section A: Demographics .....	58
3.11.5.2	Section B: Programmes that are adopted to aid the smooth transition.....	58
3.11.5.3	Section C: Interventions to support the transition of first-year students.....	58
3.12	Recruitment procedure.....	58
3.12.1	First-year students.....	58
3.12.2	Tutor Mentor Advisors .....	59
3.12.3	CELT administrators.....	60
3.13	Pilot study .....	60
3.14	Delimitations .....	61
3.15	Data collection and analysis.....	61
3.15.1	Regression tests.....	62
3.15.2	Comparison tests.....	62
3.15.3	Correlation tests .....	62
3.16	Validity and reliability of the questionnaire .....	63

3.17	Ethical considerations .....	63
3.17.1	Data management and storage .....	64
3.18	Conclusion .....	65
<b>CHAPTER FOUR .....</b>		<b>66</b>
<b>FINDINGS, INTERPRETATION AND DISCUSSION OF THE RESULTS .....</b>		<b>66</b>
4.1	Introduction .....	66
4.2	Sample .....	67
4.3	Research instrument.....	67
4.4	Reliability statistics.....	67
4.5	Factor analysis.....	68
4.6	Section A: Demographic data.....	70
4.6.1	Age .....	70
4.6.2	Education level .....	72
4.6.3	Type of school attended .....	72
4.7	Section B1: Programmes offered by DUT to support the transition of high school learners from high school to university. ....	74
4.7.1	Career guidance is offered by the university to assist with the transition from high school to university .....	74
4.7.2	The university facilitates academic programmes to support first-year students who are struggling academically.....	75
4.7.3	The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands.....	76
4.7.4	First-year student orientation is beneficial in helping students adapt to university life .....	77
4.7.5	The university facilitates social programmes to support first-year students in adapting to university social life .....	78
4.7.6	First-year student experience programmes facilitated by CELT assist students to cope academically.....	79
4.7.7	The programmes offered by CELT contribute to the empowerment and development of first-year students.....	80
4.7.8	The CELT programmes are necessary for promoting a smooth transition for first-year students... ..	82
4.7.9	Section analysis.....	83
4.8	Section B2: Impact and effectiveness of the first-year introductory programmes.....	86
4.8.1	The introductory programmes facilitated by the university helped with the transition from high school to higher education.....	86
4.8.2	The introductory programmes introduced by the university are useful in supporting students in adapting to university life. ....	87
4.8.3	The introductory programmes offered by the university assist in familiarising students with the university's facilities and support structures.....	88
4.8.4	The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment.....	89
4.8.5	Interactive participation amongst students is encouraged during the introductory programmes.....	90
4.8.6	Having attended the introductory programmes, I feel confident to be part of the university .....	91
4.8.7	Attending the introductory programme improved my holistic view of the university .....	92
4.8.8	Section analysis.....	94

4.9	Section B3: The effectiveness of the orientation programme in the Department of Information and Corporate Management.....	96
4.9.1	Proper guidance is provided regarding the alignment of qualifications to industry .....	96
4.9.2	The departmental orientation offered to first-year students effectively addresses the objectives of the programme for which they are registered .....	97
4.9.3	Tutors provide valuable assistance in ensuring that first-year students adapt to university life .....	99
4.9.4	First-year tutoring programmes contribute to the successful transition of first-year students from high school to university .....	100
4.9.5	The department is effective in providing the necessary support to first-year students while they transition from high school to university.....	101
4.9.6	Section analysis.....	102
4.10	Section B4: Challenges faced by first-year students when they transition. ....	105
4.10.1	Lack of financial support influences the transition from high school to higher education .....	105
4.10.2	Insufficient knowledge about my career choice influenced the transition from high school to higher education .....	106
4.10.3	Insufficient knowledge about the selected university influenced the transition from high school to higher education .....	107
4.10.4	The academic learning environment had an impact on the transition from high school to higher education .....	108
4.10.5	Environmental changes, such as location and cultural shock, influenced the transition from high school to higher education.....	109
4.10.6	Social interactions with peers influenced a smooth transition from high school to higher education .....	111
4.10.7	Section analysis.....	112
4.11	Section C: Interventions to support the transition of first-year students .....	114
4.11.1	Parental guidance.....	114
4.11.2	Career guidance .....	115
4.11.3	Open days .....	116
4.11.4	Advice from Life Orientation teachers.....	117
4.11.5	Section analysis.....	119
4.12	Summary .....	121
	CHAPTER FIVE.....	122
	QUALITATIVE ANALYSIS .....	122
5.1	Introduction.....	122
5.2	Sample .....	122
5.3	Research instrument.....	122
5.4	Individual interview sessions .....	123
5.4.1	Theme 1: First-year support programmes .....	123
5.4.1.1	Sub-theme 1.1: First-year student experience.....	124
5.4.1.2	Sub-theme 1.2: Technology for Learning programme .....	125
5.4.1.3	Sub-theme 1.3: Institutional orientation .....	125
5.4.1.4	Sub-theme 1.4: Residence Educational Programme.....	127
5.4.1.5	Sub-theme 1.5: Open Day programme.....	128
5.4.2	Theme 2: Technology .....	129
5.4.3	Theme 3: Challenges of online learning .....	131
5.4.4	Theme 4: Empowerment and development of students.....	132

5.4.5	Theme 5: Factors affecting psychological and socio-social background in students .....	133
5.4.5.1	Sub-theme 5.1: Psychosocial support .....	134
5.4.5.2	Sub-theme 5.2: Student-related issues .....	134
5.4.6	Theme 6: Student success .....	138
5.4.6.1	Sub-theme 6.1: Induction of first year students .....	139
5.4.6.2	Sub-theme 6.2: Bridging the gap between high school and university. ....	140
5.4.7	Theme 7: Effectiveness of support programmes .....	141
5.4.8	Summary .....	142
5.5	Focus group discussions.....	143
5.5.1	Theme 1: Familiarisation with technology .....	144
5.5.1.1	Sub-theme 1.1: Lack of technology usage by students .....	144
5.5.1.2	Sub-theme 1.2: Advantages of technology to students .....	145
5.5.1.3	Sub-theme 1.3: The role of tutors in supporting first-year students .....	146
5.5.1.4	Sub-theme 1.4: Challenges of tutoring .....	147
5.5.1.5	Sub-theme 1.5: The new normal (COVID-19).....	148
5.5.2	Theme 2: Transition to university learning.....	149
5.5.2.1	Sub-theme 2.1: Initiatives used by tutors to assist students .....	150
5.5.2.2	Sub-theme 2.2: Language barriers .....	151
5.5.2.3	Sub-theme 2.3: The role of tutoring in academic support .....	152
5.5.3	Theme 3: Evaluation of first-year support programmes .....	154
5.5.3.1	Sub-theme 3.1: The gap between students and lecturers .....	154
5.5.3.2	Sub-theme 3.2: Training of tutors .....	155
5.5.3.3	Sub-theme 3.3: Challenges faced by TMAs when tutoring .....	156
5.5.3.4	Sub-theme 3.4: Effectiveness of the tutoring programme.....	158
5.5.4	Theme 4: Introduction of new support programmes .....	159
5.5.4.1	Sub-theme 4.1: Improving DUT's introductory programmes.....	161
5.6	Triangulation Perspective on the findings of the study .....	162
5.7	Summary .....	163
CHAPTER SIX.....		164
RECOMMENDATIONS AND CONCLUSIONS.....		164
6.1	Introduction.....	164
6.2	Overview of research objectives .....	164
6.3	Key findings from the literature review .....	165
6.4	Key findings from students.....	166
6.4.1	Type of school attended .....	166
6.4.2	Career guidance is offered by the university to assist with the transition from high school to university .....	167
6.4.3	The university facilitates academic programmes to support first-year students who are struggling academically.....	167
6.4.4	The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands.....	168
6.4.5	First-year student orientation is beneficial in helping students adapt to university life .....	168
6.4.6	First-year experience programmes facilitated by CELT assist students to cope academically .....	168
6.4.7	The programmes offered by CELT contribute to the empowerment and development of first-year students.....	169
6.4.8	The CELT programmes are necessary for promoting a smooth transition for first-year students .....	169
6.4.9	The introductory programmes facilitated by the university helped with the transition from high school to higher education.....	170
6.4.10	The introductory programmes introduced by the university are useful in supporting students in adapting to university life .....	170



6.4.11	The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment.....	171
6.4.12	Attending the introductory programme improved my holistic view of the university .....	171
6.4.13	Proper guidance is provided regarding the alignment of qualifications to industry .....	171
6.4.14	The departmental orientation offered to first-year students effectively addresses the objectives of the programme they are registered for .....	172
6.4.15	Tutors provide valuable assistance in ensuring that first-year students adapt to university life ....	172
6.4.16	First-year tutoring programmes contribute to the successful transition of first-year students from high school to university .....	172
6.4.17	The department is effective in providing the necessary support to first-year students while they transition from high school to university .....	173
6.4.18	Lack of financial support influences the transition from high school to higher education .....	173
6.4.19	Insufficient knowledge about my career choice influences the transition from high school to higher education .....	174
6.4.20	The academic learning environment had an impact on the transition from high school to higher education .....	174
6.4.21	Environmental changes such as location and cultural shock influenced the transition from high school to higher education.....	174
6.4.22	Career guidance .....	175
6.4.23	Parental guidance.....	175
6.4.24	Open days .....	175
6.5	Key findings from CELT .....	176
6.6	Key findings from TMAs .....	178
6.7	Achievement of the research objectives.....	180
6.7.1	Research objective 1: To identify challenges that are faced by students when they transition from high school to DUT .....	180
6.7.2	Research objective 2: To determine which educational programmes are offered by DUT to support first-year students in their transition from high school to higher education .....	181
6.7.3	Research objective 3: To determine the impact and effectiveness of the first-year introductory programmes offered by DUT .....	181
6.7.4	Research objective 4: To evaluate the administration of the first-year seminar programme at DUT .....	182
6.8	Recommendations based on the study's findings .....	183
6.8.1	Recommendations based on key findings from students.....	183
6.8.2	Recommendations based on key findings from CELT .....	185
6.8.3	Recommendations based on key findings from TMAs.....	186
6.9	Limitations of the study .....	187
6.10	Future research .....	187
6.11	Conclusions .....	188
	REFERENCES .....	189
	APPENDIX A: LETTER OF INFORMATION AND CONSENT FORM .....	234
	APPENDIX B: QUESTIONNAIRE .....	238
	APPENDIX C: STRUCTURED INTERVIEW SCHEDULE .....	245
	APPENDIX D: FOCUS GROUP INTERVIEW SCHEDULE .....	250
	APPENDIX E: ETHICAL CLEARANCE .....	254

APPENDIX F: GATEKEEPER’S LETTER .....	255
APPENDIX G: RELIABILITY TEST .....	256
APPENDIX H: CHI-SQUARE TEST .....	263
APPENDIX I: CROSSTABS – BIOGRAPHICAL.....	264
APPENDIX J: FACTOR ANALYSIS .....	268

## LIST OF FIGURES

Figure 2.1: Theoretical framework (Cheng, 2015) .....	18
Figure 2.2: Common issues faced by students (UKEssays, 2018) .....	32
Figure 4.1: Education level.....	72
Figure 4.2: Type of school attended.....	73
Figure 4.3: Career guidance is offered by the university to assist with the transition from high school to university .....	74
Figure 4.4: The university facilitates academic programmes to support first-year students who are struggling academically .....	75
Figure 4.5: The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands .....	76
Figure 4.6: First-year student orientation is beneficial in helping students adapt to university life.....	77
Figure 4.7: The university facilitates social programmes to support first-year students in adapting to university social life.....	79
Figure 4.8: First-year student experience programmes facilitated by CELT assist students to cope academically .....	80
Figure 4.9: The programmes offered by CELT contribute to the empowerment and development of first-year students .....	81
Figure 4.10: The CELT programmes are necessary for promoting a smooth transition for first-year students .....	82
Figure 4.11: Section analysis B1 .....	83
Figure 4.12: The introductory programmes facilitated by the university helped with the transition from high school to higher education .....	86
Figure 4.13: The introductory programmes introduced by the university are useful in supporting students in adapting to university life .....	87
Figure 4.14: The introductory programmes offered by the university assist in familiarising students with the university's facilities and support structures.....	88
Figure 4.15: The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment.....	90
Figure 4.16: Interactive participation amongst students is encouraged during the introductory programmes.....	91
Figure 4.17: Having attended the introductory programmes, I feel confident to be part of the university.....	92
Figure 4.18: Attending the introductory programmes improved my holistic view of the university.....	93
Figure 4.19: Scoring patterns for Section B2.....	94
Figure 4.20: Proper guidance is provided regarding the alignment of qualifications to industry .....	97
Figure 4.21: The departmental orientation offered to first-year students effectively addresses the objectives of the programme for which they are registered.....	98
Figure 4.22: Tutors provide valuable assistance in ensuring that first-year students adapt to university life .....	99
Figure 4.23: First-year tutoring programmes contribute to the successful transition of first-year students from high school to university.....	100
Figure 4.24: The department is effective in providing necessary support to first-year students while they transition from high school to university .....	101
Figure 4.25: Scoring patterns for Section B3.....	103
Figure 4.26: Lack of financial support influences the transition from high school to higher education .....	105
Figure 4.27: Insufficient knowledge about my career choice influenced the transition from high school to higher education.....	106

Figure 4.28: Insufficient knowledge about the selected university influenced the transition from high school to higher education.....	108
Figure 4.29: The academic learning environment had an impact on the transition from high school to higher education .....	109
Figure 4.30: Environmental changes, such as location and cultural shock, influenced the transition from high school to higher education .....	110
Figure 4.31: Social interactions with peers influenced a smooth transition from high school to higher education .....	111
Figure 4.32: Scoring patterns for Section B4.....	112
Figure 4.33: Parental guidance .....	115
Figure 4.34: Career guidance.....	116
Figure 4.35: Open days.....	117
Figure 4.36: Advice from Life Orientation teachers.....	118
Figure 4.37: Scoring patterns for Section C.....	119

## LIST OF TABLES

Table 4.1: Research questionnaire sections.....	67
Table 4.2: Reliability score .....	68
Table 4.3: KMO and Bartlett's Test .....	69
Table 4.4: Overall gender distribution by age .....	71
Table 5.1: Themes and sub-themes emerging from semi-structured individual interview sessions with CELT administrators .....	123
Table 5.2: Themes and sub-themes emerging from focus group interviews with TMAs.....	143

# **CHAPTER ONE**

## **INTRODUCTION AND OVERVIEW**

### **1.1 Introduction**

The shift from high school to university is generally seen as challenging, especially for first-year students. There are number of initiatives that universities can implement to assist students to ease into the change and to have a successful transition. First-year support programmes are an appropriate means to ensure that students have a successful transition and that they are provided with adequate support when going through the transition phase.

This chapter provides contextual information outlining the background and significance of this study. The research problem and critically constructed aims and objective to address the problem identified are addressed in this chapter. Furthermore, the chapter also focuses its attention on the theoretical framework and the research methodology that is adopted, and the limitations and delimitations of the study. It clarifies concepts used in this study and reflects the synopsis of the chapters presented in this dissertation.

### **1.2 Background of the study**

On a global scale, the rising number of university dropouts remains an important policy issue in the higher education (HE) sector (Mtshweni, 2022). In line with this, Dyomfana (2022) indicates that a staggering number of university dropouts is overwhelmingly high in South Africa, with 50% to 60% of the first-year students dropping out. Even though the dropout rates numbers are high in South Africa, however, countries such as the United States also faces challenges of this kind, as it was reported that 40% of the undergraduate dropout within their first year, while 30% dropout within the commencement of the second year of study (Bustamane, 2019). A study conducted by Orellana, Segovia, and Rodriguez Canovas (2020) found that dropout rates in HE is a significant concern in national and international contexts. This is because almost 40% of all first-year students in tertiary education in South Africa do not finish their

degrees (Marwala and Mpedi 2022). This was also found in a study conducted by Van Broekhuizen, Van de Berg and Hofmeyr (2017), who found that students who were admitted to university often find it extremely difficult to complete their degrees on record time, and a considerable number of these students eventually proceed to fail to finish their degrees (Van Broekhuizen et al., 2017). This signifies that there is a persistent issue in HE, precisely regarding first-year transition. The DHET Report (2013) revealed that plausible explanations for the low accomplishment rate include insufficient student support, a lack of infrastructure amenities, and not conducive accommodation for students. These issues are also supported by Mngomezulu, Dhunpath and Munro (2017) and McKenzie (2019), who state that the lack of adequate financial and support for both studies and social adjustments to higher education constitutes an additional important factor which exacerbates the low level of student performance. These transitions have been described as stressful for first-year students since they must adapt to a different and demanding environment (Ntuli and Haffajee, 2016; Shoji and Haffajee, 2017). Therefore, it is important that all the necessary support is provided, as poor transition measures contribute to substantial rates of dropout among first-year students. A study conducted by Soundy (2016) discovered that first-year students struggle to adapt to a new learning environment and new teaching and learning methodologies, which eventually causes them to experience shock and anxiety.

Studies reveal that moving from high school to university is challenging, which means that there's an obligation to deliberate on these obstacles from the students' perspectives (Mittelmeier, Rogaten, Long, Dalu, Gunter, and Prinsloo, 2019; Van Breda, 2017; Benner, Boyle, and Bakhiari, 2017). According to Shawky (2024) transitioning from high school to university is a transforming period that impacts students' intellectual, social, and personal development. It represents an important stepping stone, developing their personalities, aspirations, and capacities for future success in both academic and real-life situations.

During first-year students transition period, students are normally confronted with many changes in the expectations imposed on them, as well as in the structure of their new environment (Shoji and Haffajee, 2017). While the literature acknowledges that a student's transition to HE has a major impact on subsequent achievement and

performance in school, there is presently no broad agreement on how to assist students most effectively during this process (Hughes and Smail, 2015). According to Chetty and Kepkey (2023) student support services in higher education institutions have been identified as essential strategies for assisting students at risk. Due to an assortment of influences, they are more likely to drop out of their respective programmes and the higher education system in particular.

First-year experience programs (FYEPs) are intended towards assisting undergraduates to efficiently make the change from high school to tertiary while additionally fostering student success (Comevo, 2015). These programmes often start with a mandatory orientation that is offered by relevant supporting departments in the institution. The goal of orienting is to ensure that students are both academically and socially adjusted to the unfamiliar setting. Recent study has identified these types of programs as significant elements in improving educational achievement, persistence, evaluation, and accomplishment.

The first-year student experience (FYSE) has an enormous effect on students' academic success as well as engagement in higher education (Workman, 2015). Research highlights that a smooth change from high school to tertiary education enhances academic performance and perseverance (Harvey, Drew, and Smith, 2006; Rooij, Jansen, and van de Grift, 2018). The literature has highlighted that initial term of university as a crucial period for students' achievement in the future, continuation, and determination at the university (Merhi Paniagua and Descals, 2018; Baik Naylor, Arkoudis, and Dabrowski, 2019). Moreover, HE institutions are facing major challenges in successfully creating support platforms for first-year students that are designed to improve their experiences at university and, more importantly, to influence their academic performance (Sikhwari, Ravhuhali, Lavhelani and Pataka, 2019). The transition to tertiary education is educationally challenging for first-year students, and they are most likely to experience emotional, financial, and social problems during this period of study (UKEssays, 2018).

The choice of appropriate degree programs that match students' expectations and abilities can be a major factor in their successful transition to university (Soundy, 2016). When students discover that their chosen disciplines are different from what



they expected, they become disappointed and discouraged. Soundy (2016) cites a study conducted by James (2000), which found that choosing appropriate degree programs that match students' expectations and abilities was a major factor in their successful transition to university. Therefore, students need appropriate and timely information about the structure and content of the degree programs they intend to pursue. Unsuitable career and course choices result in later changes or poor academic performance before students settle on a suitable career path. Unsuitable course and career choices are also attributable to a lack of proper leadership in coordinating the registration process and ensuring that students have access to the correct information.

### **1.3 Background to the research problem**

According to Ntuli and Haffajee (2016) the underpinning issue hampering high school learners from performing academically well in tertiary institution is the transition period. Briggs (2012) argues that inefficient management of FYEPs by universities may cause challenges and severe difficulties for first-year students in adapting to campus life. These difficulties may include environmental changes such as location and cultural shock, financial issues, social changes, and changes within the perimeters of teaching and learning environment. A study conducted by Larkin, Rowan, Garrick and Beavis (2016) found that first-year students faced challenges with the learning environment, such as being unable to communicate freely in large lecture venues.

Transition is more complex for students from rural areas. According to Soundy (2016), students from disadvantaged communities are generally not familiar with technology usage, or are familiar to only a very limited extent, due to the high level of educational inequalities in the country. Lack of access to information curtails these students' knowledge of, and access to, courses offered at universities. A study conducted by Ntuli and Haffajee (2016) found that the majority of students who register at Durban University of Technology (DUT) are in the lower living standards measure categories and are from disadvantaged backgrounds. This suggests that while transition is difficult for students in general, it is more difficult for students from rural areas since these students also face challenges with access to universities.

## **1.4 Problem statement**

According to Gamede and Ajani (2020) First-year students face difficulty adjusting to a new academic environment and social life, which may differ from their previous high school experiences. A study by Hassel and Ridout (2018) found that 32.9% of undergraduate students did not complete their degree programmes. Studies by Wilson-Strydom (2015), and Garraway and Jaffer (2016) have identified many factors contributing to high undergraduate dropout rates. These factors include under preparedness of the university, a lack of proper resources to accommodate students, and a lack of skills such as time management, study strategies and academic literacy. A study conducted by Jooste (2023) highlighted that the substantial number of university dropouts in South Africa is a major issue with far-reaching consequences for both individuals and society as a whole. Financial constraints, a lack of academic preparation, social pressures, and insufficient digital literacy skills are some of the reasons why students fail to complete their higher degree.

While numerous factors contributing to high dropout rates have been identified, there is a lack of research into the transition of learners from high school to university. Makondo (2018) notes that there is a lack of requisite knowledge to understand how learners from high school successfully adjust to a new and dynamic tertiary environment. To better understand the challenges that students face during their transition from high school into college, such a lack of awareness and understanding calls for further investigation. This research study argues that universities are expected to play a major role in ensuring that students complete their qualifications in the expected time frame. Therefore, closer investigation is needed into the types and levels of support that are provided to first-year students, together with urgent interventions to help them transition successfully without any detrimental issues. If these interventions are not implemented, universities will continue to experience high drop-out rates and students will not complete their qualifications on time, which will have adverse consequences on the subsidies received by universities from the DHET, amongst other things. It is therefore expected that the study will help students make an improvement in their transition from secondary school into higher education by establishing various initiatives aimed at facilitating adjustment to college life.

A study conducted by Avci (2024) highlighted that the first-year of university is not always a positive experience, although many students come to university with optimism and expectations of a positive university experience, many first-year students experience difficulty in the second year and many even consider dropping out of the university. According to Carter, Locks and Winkie-Wagner (2013) as cited in (Alharthi, 2020) higher education institutions face crucial difficulties regarding new students' commitment to their academics. To significantly reduce the withdrawal rate during the first year of university, higher education providers implement transition programs that aid freshmen with their adjustment phase. According to Rahat and Ilhan (2016) the university transition period is a unique experience for every student: while some first-year feel overwhelmed and have to deal with numerous adjustment problems that lead to retention, others are good at handling these transitional challenges and adapting smoothly.

Although previous studies have identified that the vast majority of first-year students will not have been in a university setting before and many of them would be moving from familiar environments (home) to unfamiliar ones (university) and they are therefore likely significant changes in their social and academic lives in a relatively short space of time, little is known about the type of support initiatives that the universities are offering to provide the adequate support so that the transition from high school to university is smooth. The present study seeks to bridge this gap by exploring the management of the first-year support initiatives at the selected higher education institution in order to identify the areas of improvement so that the support initiatives that are provided by the universities cater for the needs of students.

### **1.5 Aim of the study**

The aim of this study is to examine the management and effectiveness of first-year student programmes offered by DUT that are designed to manage the transition from high school to university.

## **1.6 Objectives of the study**

In order to achieve the above-mentioned aim, the study addresses the following objectives:

- to identify challenges that are faced by students when they transition from high school to DUT.
- to determine which educational programmes are offered by DUT to support first-year students in their transition from high school to university.
- to determine the impact and effectiveness of the first-year introductory programmes offered by DUT; and
- to evaluate the administration of the first-year seminar (FYS) programme at DUT.

## **1.7 Critical questions**

- What are the challenges that first-year students face when they transition from high school to DUT?
- What are the educational programmes offered by DUT to help first-years?
- How effective are the first-year introductory programmes offered by DUT?
- How effective is the administration of the FYS programme at DUT?

## **1.8 Significance of the study**

First-year students face many challenges, since relocating from a familiar environment to a new environment can result in social problems, economic problems, and emotional problems. This study is vitally paramount as it seeks to minimize the unpleasant moments that freshmen may have as they move from high school to HE. The aim of this study is to examine the management and effectiveness of first-year student programmes offered by DUT that are designed to manage the transition from high school to HE. It is envisaged that this study will have a very significant favourable influence on student social stability, academic performance, retention, and throughput rates. The study will also assist the institution by allowing it to improve undergraduate throughput rates and allow students to graduate on schedule. The study will also allow

the university to assess the level of assistance provided to first-year students during their adjustment to higher education.

## **1.9 Theoretical framework**

For first-year students, adjusting from secondary school to educational institutions can be challenging. Anxiety, inconvenience, and fear are typical impacts to change (Shozi and Haffajee, 2017; Rooij, Jansen, and van de Grift, 2018). According to Kift (2015), the transfer to university is crucial in creating an atmosphere of identity. Many freshmen look forward to higher education because it introduces them to new people, fresh ideas, and abilities. However, according to Yam (2010), the shift to university culture is generally complicated and challenging, creating obstacles for all parties involved. Therefore, theoretical constructs become significant in understanding and solving issues of this nature.

A theoretical framework is an essential component of any research project, regardless of whether it is explicitly stated or maintains implicit. According to Sreekumar (2023) A theoretical framework is the structure that supports and defines a theory. This study adopts the U-curve theory of adjustment. This theory asserts that when first-year students enter the university environment they undergo different phases. Some first-year students go through a honeymoon phase during the first three to four months, in which they are excited to be in the university environment, and they are happy to have been accepted and enrolled at the university. While some first-year students enjoy the honeymoon phase, others experience culture shock, which means that they are shocked that they have moved away from a familiar environment at home to an unfamiliar one at university.

In line with the above, scholars have indicated that the first part of the honeymoon period is regarded to be quite brief. The vast majority of new undergraduates envisage a life filled with opportunities for personal, social, and intellectual advancement (Pancer, Hunsberger, Pratt, and Alisat, 2000). Following the honeymoon period, students experience culture shock, which occurs when they transition from a familiar setting at home to an unfamiliar one at university. Denovan and Macaskill (2013) and Gu, Schweisfurth and Day (2010) claim that this culture shock is categorized by

feelings of disappointment and sadness. This is followed by an adjustment period in which students learn how to function well in their new surroundings. They become more motivated, form bonds with other college students, and establish new learning patterns.

## **1.10 Literature review**

### **1.10.1 Challenges faced by students moving from high school to Durban University of Technology**

Peters (2015) notes that first-year students encounter issues such as poor decision-making, unsuitable choice of acquaintances, low self-esteem, uncertainty about job choice, difficulties with aspects of the academic program, homesickness, and a lack of pre-university preparation. Similarly, Tom (2015) identifies challenges faced by first-year students including "homesickness, financial problems, different methods of instructions, increased workload, difficulty fitting in with the other students and the new social environment". In a focus group session that was held by the DUT Siyaphumela Student Success Task Team, frequently mentioned challenges faced by students included access to Wi-Fi and stable connectivity, which impacts on both students and staff; other challenges included water and electricity, noise levels in residences, insufficient study spaces, and security risks. To address these issues, universities should accommodate students in conducive areas, and establish student friendly areas with Wi-Fi in all university buildings and residences (Zulu, 2022). As noted by Memela, Ndlovu, Vooght and Peters (2018), change is not easy for anyone in any environment; this includes the transfer from high school to DUT.

### **1.10.2 Elements that contribute to high school learners' smooth transition from high school to tertiary education**

Significant elements influencing the move between high school to HE have been discovered through research projects. In a study conducted by Cofield (2019), these qualities are referred to as "characteristics," which are particular traits of a student considering higher education. Family history, socioeconomic status, prior HE experiences, abilities, and talents all have an impact on the student's intentions while

entering higher education. Therefore, it is necessary to assess the intellectual and societal merits of potential students. The role played by HEIs in integrating and developing new students is an important component of the Tinto model. According to Lombard (2018:86), the factors contributing to a successful or unsuccessful transfer into university are different, and these can include academic or non-academic factors.

### 1.10.3 University programmes designed to assist students in leaving high school and entering tertiary.

DUT implemented the FYSE programme to support first-year students acclimatise to HE. This programme is aimed at supporting first year students through the transition process.

#### 1.10.3.1 First-year student experience programme

In order to help first-year students acquire the knowledge and skills necessary to successfully transition from high school to university, the DUT FYSE program was established (Peters, 2016). The FYSE initiative, is driven by the DUT Centre for Learning and Teaching (CELT), since its establishment in 2014. The goal of this institutional student development program is to create long-lasting communities of university students who live and learn there. According to CELT (2016), the FYSE program was designed with the goal of incorporating the knowledge and skills of DUT staff and departments with the objective to assist students with the aforementioned issues, as well as establish a stable foundation and support structure for the students' personal and academic growth and advancement.

#### 1.10.3.2 First-year institutional orientation

DUT's first-year orientation program prioritizes the needs of students that are relatively new to the institution's population. The majority of students joined university immediately following high school. The orientation program is a team effort aimed at assisting students in adjusting to the unfamiliar surroundings and becoming emotionally and academically prepared for their new journey (Ngcobo, 2020).

According to Zuma (2021), the orientation initiative is designed to introduce and acclimate first-year students to DUT's distinctive amenities, infrastructure, and components of life at university. It is an initiative of "Sikusekele" (We Got You) under the curatorship of the Dean of Students, Dr Maditsane Nkonoane, that aims to build synergy across every division within the DUT ecosystem in order to provide students with efficient and energized support. The orientation program is a collaborative effort of various departments, including Student Governance and Development, CELT, Student Housing and Residence Life, and many more that deal directly with students. Zuma (2022) emphasizes that DUT works for an effective and efficient holistic student life cycle to ensure that its graduates are not only equipped with business skills and knowledge but are also well-rounded citizens. Therefore, the engagement of many departments, such as academic aid, health and counselling, operational support, sports, or student structures ensures an enjoyable experience for first year students at DUT (Zuma 2022).

### **1.11 Clarification of concepts**

The following concepts, along with the initiatives provided by institutions to support a successful transition from high school to higher education, have been identified in order to facilitate an understanding of these elements.

#### **1.11.1 Successful transition**

Ensuring that all students are "on the way to university and career" as well as having adequate skills in English language, mathematics, reading, writing, communication, teamwork, conceptualization and dealing with issues is an important part of moving from high school into higher education. The necessary requirements for entrance to university courses have been fulfilled by students who achieved grades 12 at school with university passes or college credits and enrolled in a degree or diploma program (Lombard 2018).

For the purposes of this study, an effective transition from high school to higher education is defined as a situation in which students possess the necessary non-



academic skills and academic knowledge to pursue successful careers in higher education (Parker, Hogan, Eastabrook, Oke, and Wood, 2006).

#### 1.11.2 High school

Merriam Webster (2023) defines the term high school as an institution of learning, especially in the United States of America, that normally comprises grades 9 to 12 or 10 to 12. In line with Your Dictionary (2018), a high school is an academic institution that gives coursework that is more sophisticated than elementary or middle school but less advanced than university.

#### 1.11.3 Higher education

According to the DHET (2013), post-secondary institutions and technical universities are known as HE. In South Africa, HE refers to a university level of education. As HE institutions, some sources refer to universities, while others refer to colleges.

For these purposes, the term Higher Education shall be regarded as all post-secondary training, learning and research at HEIs such as universities where they are designated by national authorities as higher education institutions. Tertiary education institutions provide courses designed for awarding certificates, degrees, and postgraduate qualifications to successful students.

### **1.12 Research design**

#### 1.12.1 Research approach

A research design is a method for solving research questions through the use of empirical data (Bhandari, 2020). A research design's job is to guarantee that the evidence gained allows the researcher to address the study challenge as clearly as possible (Sacred Heart University, 2023). A research design's purpose is to ensure that the gathered evidence is properly address the studies intentions clearly and more practically. This study considered a mixed research strategy, with both quantitative and qualitative methodologies equally interacting. Closed questionnaire, interviews

and focus groups were considered as they supported the research method applied in this study.

#### 1.12.2 Population and target population

The target population of this study comprised 317 BIM full-time registered students in the Department of Information and Corporate Management (ICM) at DUT. The BIM first-year students were chosen in the study because the researcher at some point was a first-year student under the department of BIM and had some challenges with the transitioning from high school to university, therefore the researcher wanted to get the first-hand experience of the other students in the same department so it can be identified if they had the same experience as hers.

Five Tutor Mentor Advisors (TMAs) who played an important role in supporting first-year students to transition successfully were also included in the target population. The TMAs were chosen to participate in the study solely for the reason that they are appointed to provide tutoring sessions to first-year students, and their inclusion was necessary in the study so they can share input on the support programmes that are offered by the institution and they are one of the important stakeholders that provide the support so that the first-year students can transition successfully from high school to university.

The study also involved the CELT administrators who coordinated the FYSE programme. CELT had a total of five administrators. The study chose to use CELT administrators because the majority of first-year workshops are coordinated by CELT therefore, the inclusion of CELT administrators was key to this study.

#### 1.12.3 Sampling technique and sample size

Simple random sampling was used for accurate representation of the larger population of first-year students. The study adopted a purposive sampling technique to select Three CELT administrators who coordinated the FYSE programme at DUT in the Student Development Unit. A non-probability sampling technique was adopted to select Five TMAs. However, only four TMAs were available to participate in a focus

group interview. The sample for this study also comprised of One Hundred and Seventy-Five first-year students registered for BIM in the 2020 academic year at DUT.

#### 1.12.4 Data collection process and instrument

In this study, quantitative data was obtained by means of a closed-ended questionnaire. The qualitative data instruments included semi-structured focus group interviews with five TMAs and individual interviews with three CELT administrators coordinating the FYSE programme.

#### 1.12.5 Data analysis and pretesting of the instrument

Quantitative data was analysed using the Statistical Package for the Social Sciences (SPSS), version 26.0. Thematic analysis was adopted to examine the different perspectives of the research participants.

#### 1.12.6 Validity and reliability

The survey was piloted among 10% of first-year students. These students did not participate in the main study. Using a random sample, 10% of the first-year students were selected to participate in the pilot study. The purpose of the pilot study was to test the instrument, verify whether it was reliable, and determine whether the questions were easy to understand for participants. According to Connelly (2008) extant literature suggests that a pilot study sample should be 10% of the sample projected for the larger parent study.

#### 1.12.7 Ethical considerations

In conducting this study, the principles of ethics were considered and applied, especially, confidentiality, anonymity, and acquiring informed consent from participants. In this study, all the respondents and participants were informed of the study's purpose through a letter of information attached in the appendices.

Furthermore, the present study precisely and fully acknowledges any form of research data obtained through various sources, publications, or authors.

#### 1.12.8 Limitations and delimitations of the study

##### 1.12.8.1 Limitations

Study limitations are inefficiencies in the research methodology that can affect the study's outcomes and conclusions (Ross and Bibler Zaider, 2019).

It was planned for the dissemination of questionnaires and the conduction of interviews to be done face-to-face. However, due to COVID-19, the data was collected online. Collection of data online was a limitation because some participants had connectivity challenges and some participants were not familiar with online platforms. Some participants did not finish the survey, resulting in spoiled questionnaires. There were also challenges with obtaining a sufficient number of participants and with obtaining participants' responses to emails and poster invitations.

##### 1.12.8.2 Delimitations

Delimitations are qualities which limit the extension and characterize the limits of a review (Kuada, 2012). The delimitations are in the specialist's control. Variables of delimitation incorporate the selection of targets, the exploration questions, the populace, and the hypothetical structure embraced in the review. This study was restricted to BIM understudies selected at the Ritson grounds at DUT.

### 1.13 Structure of the dissertation

This study consists of Six chapters as outlined below:

Chapter One provides a brief introduction to this research. The research question is presented with the support of recent and old relevant literature. Describe the main purpose and specific objectives of the study, explain the significance and scope of the

study, and explain the theoretical framework. The chapter concludes with a breakdown of the content of each of the five chapters.

Chapter Two provides a comprehensive review of the literature related to the study and further expands and elucidates key concepts. A review of the existing literature on transitions from high school to university institutions transitions is provided, and a theoretical overview of the literature is given.

Chapter Three describes the methodology used in the study, including both qualitative and quantitative methods. This chapter also describes the research design, the research philosophy, the sampling process, and the inclusion and exclusion criteria.

Chapter Four provides a detailed analysis of the data by means of an interpretation of the results of the survey and qualitative interview sessions held with the participants. For quantitative data, a statistical and tabular depiction is presented to discuss the findings, while thematic approach was utilized for the qualitative data.

Chapter Five provide a detailed analysis of the data collected through the focus groups and interviews. Thematic analysis was utilized to draw understanding on the data collected. The discussion emanated and the findings were further supported by relevant literature.

Chapter Six contains recommendations and conclusions in accordance with the empirical findings of the study and how the objectives of the study were addressed. This chapter also provides future research that can be conducted emanating from this research study.

## **1.14 Conclusion**

This chapter has provided a brief overview introduction of this study and has explained its context. The rationale for the study has been discussed, the research aims and objectives have been defined, and the methodology to achieve the desired outcomes has been outlined. The next chapter is a literature review that presents and discusses primary and secondary literature sources related to this study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The previous chapter gave a brief introduction to this study. The background, research problems, aims and objectives, significance of the study, the scope of the study, the theoretical framework, and the content of the chapters were also outlined. This chapter will discuss literature that relates to this study. The primary goal of this study's literature review is to evaluate the characteristics that influence a learner's successful transition to HE and how these aspects might be addressed proactively at the high school level to aid a learner's transition. The review of literature also looks into the effectiveness of assistance programs that are available to help first-year students adjust to higher education institutions.

#### **2.2 Theoretical framework**

A theoretical framework is a collection of interconnected concepts, definitions, and propositions that explain or forecast events or their relationships (Salomao, 2023). It is a structure or framework of ideas used to guide the research process, and it aids in the organization and definition of the essential concepts being examined.

The U-curve theory of adjustment was utilized in this study to provide an effective heuristic to analyze the various phases of first-year student adaptation to university life. It offered an extensive understanding of the time frames that the university may use to measure the effective period in which they can offer assistance programs aimed solely at easing the transition from high school to higher education. The U-curve theory of adjustment was used in this study to help explain the stages that first-year students at DUT go through when they transition from high school to HE.

The honeymoon period, the crisis period, the adjustment period, and the mastery period are the four stages in the U-curve theory of adjustment. Some first-year students go through a honeymoon phase during the first three to four months, in

which they are excited to be in the university environment, and they are happy to have been accepted and enrolled at the university. While some first-year students enjoy the honeymoon phase, others experience culture shock, which means that they are shocked that they have moved away from a familiar environment at home to an unfamiliar one at university.

The first part of the honeymoon period is expected to be quite brief. The majority of incoming university students envisage a life filled with opportunities for personal, social, and intellectual advancement (Pancer, Hunsberger, Pratt, and Alisat, 2000). Following the honeymoon period, there is a time of culture shock, in which students are shocked that they have moved from a familiar environment at home to an unfamiliar one at university. Culture shock is characterized by feelings of disillusionment and dejection (Denovan and Macaskill, 2013; Gu, Schweisfurth, and Day, 2010). This is followed by an adjustment period in which kids learn to function efficiently in their new surroundings. They become more motivated, build a sense of community with other students, and establish new learning patterns.

A useful framework for preparing students for the initial shocks they may encounter during their first year of university life is shown in Figure 2.1 below (Cheng, 2015). These shocks may be academic, social, or emotional.

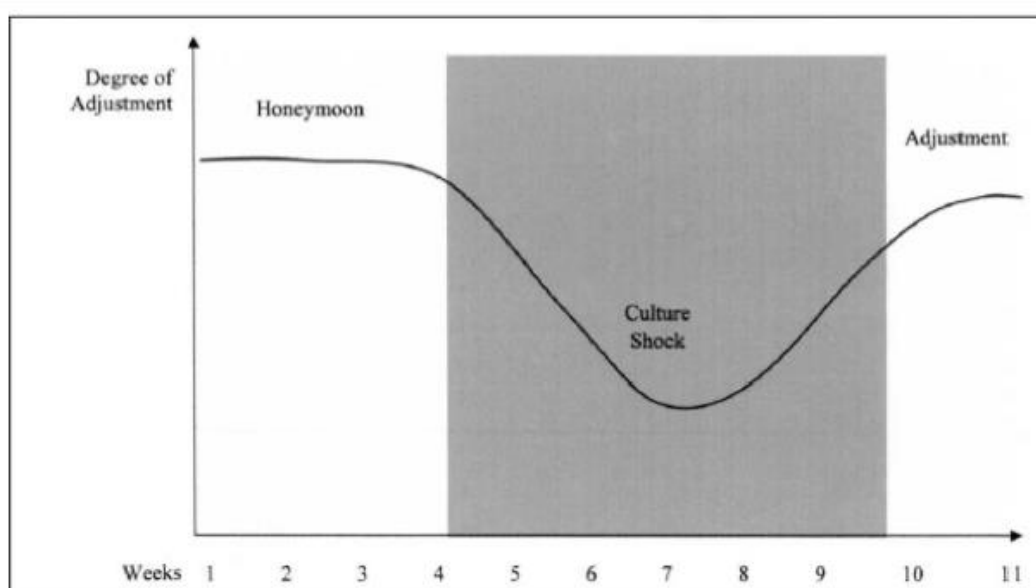


Figure 2.1: Theoretical framework (Cheng, 2015)

## **2.3 Contextual overview of student transition from high school to higher education**

In the United States, the term 'school' refers to any place where individuals learn (StudyUSA, 2021). According to Schall, Wallace, and Chhuon (2016), schools are learning settings that primarily give learners with significant academic and social skills by instilling behaviour and comprehension at a young age to provide them with greater possibilities. Roser (2022) argues that schools are not just places where one can learn facts, but also places where one can learn how to live. Therefore, schooling is regarded as a fundamental phase of learning before HE. After school, learners need to further their career paths by enrolling in HE.

According to the DHET (2008), HE refers to all learning programs that lead to a qualification which complies with the Higher Education Qualifications Framework standards. Tertiary education includes universities, colleges, technical training institutes, and vocational schools, both private and public. The World Declaration on Higher Education (1998) describes HE as the "all forms of undergraduate studies, training, or research training provided by universities or other schools of higher learning that have been approved by authorized state agencies as institutes of HE."

The first year of HE sets an emotional precedent for the rest of a student's HE career (Lee, 2019). The first year of university serves as a foundation for future learning. It is a test of perseverance over a chasm that often comprises a geographical shift, new people, new living arrangements, and new educational needs. Students encounter many difficulties during the first year of university (Brooker, Brooker and Lawrence, 2017). To address the difficulties faced by students, educators need to identify the difficulties that need to be addressed and how to support students in overcoming these issues (Bexley, Daroesman, Arkoudlis and James, 2013). According to Rutland, Dobbs, and Tötemeyer (2016), the first year of university is critical to the development of student attitudes and approaches to studying, as well as to persistent decisions, such as whether students continue with and complete their degrees. Nelson, Kift, Humphrey and Harper (2006) state that since people entering university as first-year students have diverse backgrounds, a significant number of students, particularly those referred to as "first-generation students", are either unfamiliar with or



misinformed about what to expect from university education. According to Fernandez (2022), a first-generation university student is the first person in his or her immediate family to attend college; neither of his or her parents has a university degree. First-generation students may have unrealistic expectations, which can lead to difficulties in transitioning to university life (Brien, 2016). In this study, the term 'transition' refers to a time of major adjustment, development, and change that entails extensive student life adaptation.

Transitioning from high school to university is a "very difficult event" that necessitates readjusting to a new academic and social environment (Terenzini and Reason, 2014). The rising number of students in higher education has resulted in a more diverse student body, making it more difficult to identify the characteristics that influence students' decisions to stay or drop out (Casanova, Cervero, Nunez, Almeida, and Bernado, 2018). As a result, a high number of first-year students fail to complete their studies. Nkosi (2015) states that half of the 18% of matriculants who enrol at university drop out.

Many students' elation at getting admitted into a South African university is short-lived, since the hurdles they face are frequently overwhelming; as a result, many students drop out during their first year of study (Moodley and Singh, 2015). Some students drop out of university owing to financial issues, insufficient secondary school preparation, conflicts with work and family duties, rising failure rates, or other factors. The importance of intervention programs for first-year students cannot be overstated. One of the major causes of South Africa's high number of university dropouts is students' lack of university readiness when they transition from high school to university.

One of the most difficult difficulties in higher education, according to Kruger (2019), is ensuring that students complete their university courses and graduate on time. This difficulty arises during the first year of study, when there is frequently a mismatch between what students expect and what they actually encounter. Because it is a time when academic skills and social foundations are built, the first-year experience is a significant transitional marker for students' success (Thou and Edda, 2017).

Furthermore, the first-year experience is important because it influences dropout, which costs both the student and the university.

According to Lodge (2020), the majority of transition research focuses on the transition from elementary to secondary school. However, it is important to consider transition in all year groups. Transition places immense social, linguistic, emotional, scholastic, and practical demands on children. Transition will certainly be more challenging for some individuals than for others, but this can be alleviated. Moreover, the significance of a positive transition to college has been repeatedly emphasised in research conducted around the world. For undergraduate students to succeed academically, they must make a smooth transition to HE (Parker, Hughes, March, Admed, Cannon, Taylor-Steeds, Jones and Page, 2017; Strayhorn, 2012). According to Lombard (2018), students transferring to HE must be prepared to face new challenges and take steps to integrate into HE academic demands, create new connection networks, achieve independence, and accept responsibility for their personal lives and career choices.

## **2.4 Challenges faced by first-year students in the transition from high school to university**

First-year students face several academic and non-academic challenges as they move from high school to HE. While the first year of university might be exciting, it can also be the most difficult in terms of personal adjustment (Parker et al., 2017). In light of the above, Hilsdon (2013) states that students in HE is faced with various challenges that affect retention and throughput rates. Jonh (2013) asserts that the high dropout rates among first-year students at several colleges are due to a lack of assistance. Mudzielwana and Maphosa (2013) emphasise a student's academic performance is greatly influenced by a lack of assistance.

For learners in South Africa, transitioning from high school to university is a process that is filled with stressful expectations (Ajani and Gamede, 2020). Learners are often hopeful and aspirational when they commence HE. For many students, the first year of university offers a fresh start as it is their first time away from home, and they are free to make their own decisions (Millet, 2015). Students develop new experiences, information, and understandings of themselves during their first year of HE. Many first-

year students look forward to university because it introduces them to new people, new ideas, and new abilities. However, Yam (2010) argues that the shift to university culture is generally complicated and challenging and creates obstacles for all parties involved. Hassel and Ridout (2018) concur that the transition from high school to university can be stressful for many students.

The transition occurs during a critical developmental stage in which young people's brains are experiencing rapid growth and increased sensitivity to stress (Williams, Coare, Marvell, Pollard, Houghton and Anderson, 2015). There are a number of unique stressors associated with leaving a family home and moving into shared accommodation.

Students who enrol HE immediately from high school, as well as mature-aged and international students, experience significant anxiety as well as stress as they acclimate to university life (Malau-Aduli, Adu, Alele, Jones, Drovandi, Mylea, Sfera, Ross, and Jennings, 2021). Earnest and Dwyer (2010) note that first-year students frequently experience anticipatory anxiety throughout the transfer period. This type of stress includes anxieties and the fear of the unknown. In addition to this, some of the common difficulties faced by first-year students are homesickness, depression, psychological disturbance, absent-mindedness, a sense of isolation, a drop in academic grades, and increased interpersonal conflict (Boute, Pancer, Pratt, Adams, Birnie-Lefcovitch, Polivy and Wintre 2007). An issue of concern is the disconnect between students' prior expectations and the realities of university life, which, if not addressed, can result in severe distress, poor academic performance, and increasing dropout rates (Hassel and Ridout, 2018).

## **2.5 Factors affecting the transition from high school to university**

A variety of factors, both academic and non-academic, affect whether a student decides to attend university or not (Lombard, 2018). This study will consider the following factors identified by Lombard (2018), and others, to identify the challenges facing first-year students transitioning from high school to university.

### 2.5.1 Academic factors

The majority of first-year students in South African universities are confronted with a series of challenges when transitioning from high school to university. The university environment is generally different from the environment in their high schools (Gamede, 2020). For first-year students, transitioning from classroom teaching methods to university-based lecturing methods can be extremely difficult (Mudhovozi, 2012; Aderi, Jdaitawi and Ishak, 2013). Coping with course requirements, large classes, and dealing with lecturers who use different teaching styles are some of the academic adjustment issues that first-year university students face. A study conducted by Tanga and Maphosa (2018) revealed that first-year students face a variety of academic challenges during their transition phase from high school to HE. Writing issues, referencing, plagiarism, English as a barrier, and inability to use computers are some examples of potential challenges faced by students which disproportionately impact their overall academic performance (Thompson, Pawson & Evans, 2021). It is important to establish the academic factors that affect first-year students when they transition from high school to HE. In the context of this study, academic factors are those that relate to a student's academic performance.

#### 2.5.1.1 High school and higher education curriculum

An effective high school curriculum provides teachers, students, administrators, and community stakeholders with a measurable plan and structure for delivering quality education (Glenn, 2018). Curriculum, according to Stauffer (2020), refers to a collection of lessons, assessments, and other academic content that is taught in a school, programme, or class by a teacher. Curriculum is defined by the International Bureau of Education as a definition of what, why, how, and how well students should study in a systematic and planned manner (UNESCO, 2011). Curriculum goals (knowledge and attitudes), content, sequence, instructional resources (materials and locations), and assessment (methods used to assess student learning as a result of these experiences) are all part of the curriculum notion. Williams (2019) describes the high school curriculum as a map for outlining where learners need to go and how to get there. Curriculum is essentially a series of activities and learning outcome goals related to each subject.

According to Duncan, Quinn, Nelson, Smith, Creagh and Clarke (2009), all students should be able to access and participate in the curriculum, which should be sensitive to student diversity due to social, cultural, and academic transitions. Diversity is frequently a factor that exacerbates transition issues. The first-year curriculum should include students' backgrounds, needs, experiences, and study patterns, with few, if any, assumptions about prior abilities and knowledge. Curriculum design refers to the deliberate, methodical, and purposeful organising of curriculum (instructional blocks) in a class or course. It is a method for teachers to organise lessons. When teachers create a curriculum, they determine what will be done, who will do it and how long it will take (Shweitzer, 2019). According to Khan and Law (2015), it is critical to develop an adequate curriculum in order to provide information and skills. Furthermore, there is an increasing demand for HE institutions to respond to the changing environment in a constructive and learner-centred manner through high-quality curricula.

Curriculum is essential for providing high-quality educational programs and services; yet there are discrepancies between how curriculum is generated in practice and how it is supposed to be developed in theory (Barnett and Coate, 2005). The fact that there are significant discrepancies between the curriculum published by educational institutions and the curriculum actually taught by instructors in their classes further complicates the situation. Curriculum is seen as a cornerstone of HE's well-being and effectiveness.

The curriculum plays a crucial role in the transition of first-year students from high school to university. If the curriculum is well designed, students stand a better chance of successfully transitioning. All curricula have the same goal: to help students learn. Careful planning of student outcomes benefits teachers and administrators as well as students. It can also help schools connect with parents and the community.

#### 2.5.1.2 Poor selection of study fields

An unsuitable career choice misdirects all individual efforts and resources. According to Manspal (2018), one of the most important academic and personal decisions that Grade 11 students face is choosing the right career path. This decision is challenging for learners, many of whom are influenced by their parents, guardians, teachers,

friends, peers, and others, because there are so many elements to consider, particularly in Grades 11 and 12. Making a career choice is a pivotal moment in any student's life (Kazi & Akhlaq, 2017). Before making a decision, students must examine a number of aspects.

The Department of Basic Education (2021) states that the subject choice at the end of Grade 9 could determine the field of study that learners can follow once they complete high school. If learners do not select the correct combination of subjects, they could find themselves unable to enter HE. The selection of study fields can be a very stressful process for students and their parents (Williams, 2019). The choice of subjects for the Further Instruction and Preparing stage (Grades 10-12) incredibly affects a student's future vocation, as well as on a student's potential choices for tertiary training.

(Life Orientation acts as a guide to prepare students for life and its possibilities, as well as to equip them for meaningful and effective living in a constantly growing and transforming society (Fundi Connect, 2018). LO might be valuable as a subject in teaching high school students with knowledge on many careers and courses of study. Pedro, 2017). A study by Kennedy and Tuckman (2013) found that high school counsellors are a valuable resource for students, as they help students choose study and career paths and provide reliable sources of information on various fields of study.

When students graduate from university, they must choose a career path that will allow them to succeed in life (Mzikhulu, 2022). According to Peterkin (2016), students are prone to making poor job decisions as a result of peer pressure, following their parents' desires, and market trends. Parents are a major motivator for students' job choices and can have a positive or bad impact on them. Lack of desire plays a big part in improper career choices; kids should be driven to choose careers that match their skills rather than careers that their parents choose for them.

The subjects selected by a learner can enable or limit career options (Raleigh, 2016). Therefore, a learner should take subjects that will maximise career possibilities but are also in line with the learner's interests, personality, and aptitude. Bradshaw (2019) asserts that learning about subject choice is important for students of all backgrounds,

but particularly for those from disadvantaged backgrounds. A career choice made without a thorough analysis of the benefits and drawbacks will have an impact on one's daily routine and, in some cases, one's life. Hence, choosing an appropriate career is critical in order to prosper and to achieve ambitions. When a student graduates, it is possible that he or she will struggle to make a sensible career choice and will be unsure about what to do next. According to Karmick Institute (2017), the majority of students deal with this situation by deferring to their family and peers.

#### 2.5.1.3 Teacher training

According to Sattar and Awan (2019), teachers are known as “national builders” in society as their main objective is to provide training to the next generation in accordance with the needs of the nation. Omar (2014) emphasizes the importance of teacher education in improving educational quality. Teachers have a vital role in implementing educational reforms that are consistent with the goals of the national educational philosophy. Training helps teachers to manage their classes better and improves their subject teaching skills (Panda, 2022).

It is self-evident that good teachers are effective at instructing students (Kampen, 2019). Conversely, unqualified teachers can cause unprecedented disruption in the academic performance of students, persistent and critical low self-esteem, and decreased motivation for self-development (Ezeh, 2020). In-service teacher training enables teachers to be more systematic and rational in their teaching styles (Kazmi, Perve and Mumtaz, 2011). Sattar and Awan (2019) recommend that teachers participate in ongoing in-service training to stay current not only in their field of specialisation, but also in areas such as educational trends, social challenges, and cultural issues. A well-trained and skilled teacher has a greater ability to instruct students and to successfully execute diverse teaching approaches (Saira, Zafar and Hafeez, 2021). When teachers use diverse teaching methods and strategies based on the abilities they acquire, students are more attentive and achieve better academic outcomes (Wuryaningsih, Susilastuti, Darwin and Pierewan, 2019). Therefore, training is an excellent way for teachers to improve their teaching abilities. Qualified teachers have additional abilities and approaches that can assist students to attain higher academic results.

### 2.5.2 Financial factors

HE is a critical component in addressing South Africa's wide range of social and economic problems. Access to university is one of the prevailing factors that hinder first-time entry students from furthering their studies, since there is limited capacity in each university's enrolment plan. Amongst other issues, sources of funding for university fees and accommodation remain a common challenge for potential students, as they need to secure funding before accessing university (Walker and Mkwanaenzi, 2015). Taking into account the total number of students matriculating as well as those who have taken a gap year after matriculation, a large number of students require funding while there are limited funds available. Since there are insufficient funds available for all these students, the government is continually investigating innovative strategies to overcome this challenge.

Transitioning to a challenging and diverse multi-cultural education institution can be difficult for students from disadvantaged backgrounds. These students experience serious financial issues as a result of their underprivileged upbringing, which has a negative impact on their academic achievement (Mofoka, 2016). The need to obtain funds for their education is one of the first obstacles that prospective first-year university students face. In South Africa, the demand for funding for students seeking HE significantly outnumbers supply (McKay, Naidoo and Simpson, 2018). Therefore, financial resources are a critical consideration for students moving from high school to university. A study conducted by Lombard (2018) found that the application fee that is paid to the Central Application Office when prospective students apply for HE studies is a barrier for many students from underprivileged communities.

Higher learning is seen as a critical engine which plays a huge role in redefining and repositioning the country, and Africa at large. The aspirations are to share economic growth and social progress, however, challenges in higher education do prevail (Shange, 2018). HE tuition costs are a transitional issue (Robie, 2017). Accommodation, transportation, books, supplies, and personal expenses make about 50 to 80% of a student's financial needs. Students from low-income families may be positioned to make challenging financial decisions.



Over the years, it has become evident that the financial implications of studying at a university have become more challenging, and the majority of students rely heavily on government funding, which cannot cater for all students. With this constant rise in the demand for university funding and insufficient supply, students are prone to experience difficulties in accessing and pursuing HE.

### 2.5.3 Culture shock

Students may experience an overwhelming and uncertain transition time when entering a new setting, whether it is a new country, a new neighbourhood, or a new school (Fok-Trella, 2020). As they enter and engage in a new environment, understanding the feelings and emotional implications that may develop will help them strengthen their capacity to respond thoughtfully to their own needs. Adjusting to university life is a predicament for most first-year students and their parents (Nelson, 2014). Students know that life at university is going to be different, and they are excited, and perhaps a bit anxious, about starting their new adventure.

Culture shock can occur when people move to another city or country, such as when retiring abroad. Culture shock can also occur when people go on vacation, travel in retirement or for business, or study abroad for school (Segal, 2022). Culture shock has a wide range of effects on the body and mind. Some individuals may feel homesick and lonely, while others may be frustrated with how things work in their new environment. These feelings may impact a student's self-esteem and result in psychosomatic symptoms such as headaches, insomnia, or eating disorders, all of which can have a negative impact on a student's life and learning at university (Ackerman, 2021).

The majority of school leavers notice significant shifts in teaching and learning pedagogies between high school and higher education. Wangeri, Kimani, and Mutweleli (2012) state that most new students are uncertain about their future lives in a higher education institution. Such emotions may have an impact on their physical well-being and sense of social security. Higher academic standards, course and subject difficulty, and rigorous workloads are all major sources of anxiety for new students (McGhie, 2017; McCoy, Smyth, Watson and Darmody, 2014).

#### 2.5.4 Emotional intelligence

Emotional intelligence (EQ) is defined by Darby (2023) as the ability to comprehend, use, and manage one's own emotions in constructive ways in order to reduce stress, communicate effectively, empathize with others, overcome problems, and diffuse conflict. EI is a type of intelligence that enables a person to be skilled at not just recognising emotions but also anticipating their repercussions (Mendoza and Hontiveros, 2017). As a result, a person with EI could justify and employ suitable approaches to resolve difficult emotional dilemmas.

First-year students often suffer from a shock of transition as their environment evolves from high school to college (Mergal, Thomas, Park, and Lalog, 2019). Furthermore, they believe that their success at university is exclusively dependent on their intellect, and they rarely consider EI as a component in their academic performance. Students with higher levels of EI are better able to regulate their emotions and empathise with others (New Delhi, 2019). This can aid in the development of increased self-motivation and more effective communication skills, both of which are necessary for students to become more self-assured learners. Conversely, students who lack EI may become disengaged from the university, which negatively impacts their academic performance.

#### 2.5.5 Interpersonal relationships

In essence, education is an interactive activity in which teacher-student interactions create a learning route that leads to increased knowledge. Since learning is not solely cognitive, the importance of interpersonal interactions should not be overlooked. One of the most important aspects of good teaching is the interaction between the teacher and the students (Li, 2021). Interpersonal relationships (IRs) are dependent on a person's ability to manage mutually beneficial interactions with others in a social or professional setting. Mangal and Mangal (2015) stress the importance of being able to interact well with others in order to form mutually rewarding IRs. Strong IRs help to relieve stress, provide emotional support in everyday life, provide companionship in cooperative activities, and establish the framework for social and emotional development (Martin, 2014).

Teachers have an important role in helping students form IRs from the first day of pre-school to the last day of high school. There are many opportunities to teach students how to engage with those around them, including settling quarrels and promoting cooperation. DeVito (2014) asserts that IRs are highly important to people, and that the capacity to build meaningful relationships is primarily dependent on interpersonal communication abilities. Students must develop interpersonal skills in order to improve their learning, their ability to express themselves to others, their personality development, and their academic performance (Khan, 2017). Students with strong interpersonal skills are considered more likely to have a successful career and personal life. Maintaining strong IRs necessitates sensitivity to other people as well as a willingness to form partnerships that benefit all parties involved (Mangal and Mangal, 2015).

This study focuses on the cultivation of interpersonal relationships among DUT first-year students pursuing a diploma in BIM in the Faculty of Accounting and Informatics.

#### 2.5.6 Computer literacy

A computer literate is someone who knows how to utilize a computer and other associated technology. This word is typically used to define the most fundamental knowledge and abilities required to operate software products such as an operating system, a software program, or an automated Web design tool (Rouse, 2016). Computer literacy includes the use of e-learning programs, which are learning models that leverage the Internet to provide digitized resources and instructional materials. (Lombard, 2018). Digital technology is having a growing impact on higher education and has fundamentally changed the way we teach and learn. The emergence of Covid-19 forces higher education to migrate from traditional to digital learning, leading to significant changes in the education system and the way students are educated globally (Shaikh and Nikooherafmaher, 2022).

One of the most reliable determinants of success is perceived efficiency in computer use, including e-learning programs. These programs provide advanced e-learning systems that have a favourable association with student satisfaction (Khasawneh and Yaseen, 2017). The education sector is witnessing a huge transition in this digital era

as both students and universities all over the world are moving away from one-dimensional, chalk-and-board learning methods. Instead, they have begun to use a range of online technologies to help facilitate, simplify, and contextualise the entire learning process, such as incorporating e-learning into HE (Hurix, 2020).

Remote teaching and learning became the new norm during the COVID-19 outbreak world-wide (Sargrad, 2020). As a result, educational institutions are prioritising the provision of technology and Internet access to students. Students who do not have access to technological equipment and high-speed Internet and are unfamiliar with online learning are highly vulnerable to expanding inequities (Fitzpatrick, Berends, Ferrare and Waddington, 2020).

In addition to offering students with the expertise they need to enhance their computer usage; computer literacy programs can improve students' utilization of online learning programs. In the context of DUT, Technology for Learning (TFL) constitutes an example of an e-learning program. The TFL program is intended to advise, train, and support students in becoming familiar with both online and offline technologies that will enhance their learning experience at DUT.

## **2.6 Common issues faced by first-year students**

Transitioning from high school to university is a stressful process for students in South Africa. Students are generally hopeful and ambitious about attending university (Ajani and Gamede, 2020), but some students experience difficulties in the first year of university. To address these challenges, educators and academics must establish which issues need to be addressed and how to help students to overcome them (Brooker et al., 2017). A study by Bexley, Daroesman and James (2013) identified finances, workload, and family issues as specific obstacles that students face. The most typical challenges that first-year students face during transitioning are shown in Figure 2.2 and explained in greater detail below.

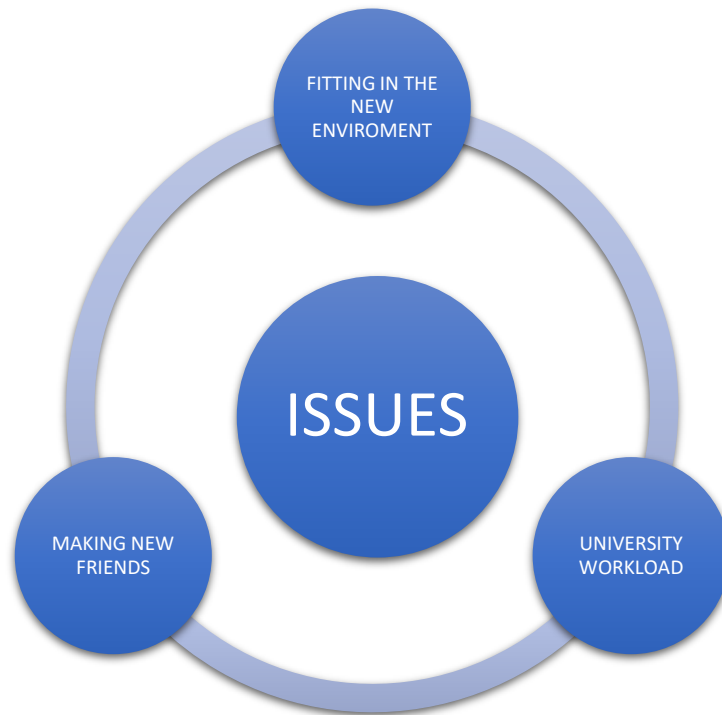


Figure 2.2: Common issues faced by students (UKEssays, 2018)

### 2.6.1 Fitting into the new environment

Many students face the challenge of adjusting to a new college environment at some point during their academic pursuits. Students face a range of new situations as they begin their time in their new academic environment, some of which are easy to handle and others that are stressful (Mercado and Espano, 2021). According to Rzaeva (2021), When the new academic year begins, most students feel as if they are stuck in a traffic jam full of obstacles, novelties, and unpredictability, and they are emotionally overwhelmed by all of these stressors. First-year students deal with a number of changes when transitioning, which include the challenges of campus locations, transportation to residences, timetabling and grouping of students.

University timetabling is a detailed educational schedule for courses that includes class times and locations (Larabi-Marie-Sainte, Jan, Al-Matouq and Alabduhadi, 2021). It has been observed that some students have a full schedule that includes four or more consecutive lectures in a day, which can be stressful and lead to fatigue and class skipping. Conversely, other students may have two or three lectures per day separated by a long break, which may also result in class skipping. These circumstances are challenging for first-year students, as they are used to a different system of attending classes in high school. This has a significant impact on their transitional progress.

### 2.6.2 Making new friends

According to Makara, Fishman, Karabenick and Teasley (2015), relationships are essential for a successful first year of HE; some students thrive, while others struggle to adjust socially. Students' social development is a valuable outcome in and of itself, but it is also linked to academic adjustment, satisfaction with HE, and HE retention. Friendships provide a wide range of psychosocial benefits and engagement opportunities for first-year students navigating the unfamiliar territory of university (Morton, Mergler and Boman, 2013; Wrench, Garrett and King, 2014). A study by DeAngelo (2014) found that students who engaged in discussions about course content outside of class were more likely to progress to their second year. Friendships

have significant benefits for positive psychosocial student experiences in addition to peer support as a solely institutional initiative.

### 2.6.3 University workload

Bitzer (2007) defines academic workload as the full spectrum of work commitments of an academic staff member in an academic unit at an institution of HE. Academic workload is regarded as one of the primary stressors for university students, as it has been shown to account for increased stress levels in university students (Murff, 2005). First-year students can find themselves overwhelmed by an unexpected workload when they enter university (Watts, 2018). The quantity of work can be intimidating, as students may be given more homework than they are used to or more intricate projects and tasks.

The transition from high school to university is inherently stressful for students (Yikealo, Tareke and Karvinen, 2018). It may cause them psychological, academic, and social distress. Open colleges (2018) asserts that students who are overworked experience higher levels of stress. A study by Koch (2018) found academic workload to be one of the most significant stressors for college students as it was linked to higher stress levels in these students. Sandoval (2021) asserts that excessive workload can have a negative impact on a student's mental health.

## 2.7 Management of first-year student programmes

First-year experience (FYE) is a term that refers to a variety of academic and non-academic interventions that take place during the first year of HE (Herkulaas, Combrink and Oosthuizen, 2020). The goal of FYE is to aid first-year students in their academic and social transition to a HE institution (Evans and Morrison, 2011). According to Schreiber, Luescher and Moja (2018), the emerging perception that FYE is critical to academic performance in HE has prompted an emphasis on FYE in student affairs and HE. Although most FYE programmes at different colleges and universities have similar goals, institutions usually tailor their programmes to fit their institutional missions and the needs of their student bodies (Yan and Sendall, 2016). Freer (2016) argues that while the achievements of the FYE movement are

remarkable and notable, individuals working in HE continue to face hurdles. Students evaluate FYE classes positively in general, yet, according to Jamelske (2009), the findings of the literature are contradictory, as there are considerable disparities between public and private institutions, large and small colleges, and institutions that focus on teaching and those that focus on research.

### 2.7.1 International first-year experience programmes

Many undergraduate students find their first year of college to be the most challenging as they may feel alienated or overburdened, leading to an increase in dropout rates (Yan and Sendall, 2016). As a result, many institutions have introduced FYE programmes in recent years to help first-year undergraduate students acclimatise to college life and to prepare them to be more successful (Yan and Sendall, 2016).

Many students struggle with contradictory emotions, unknown expectations, and social disorientation, which can be especially challenging for students from disadvantaged backgrounds (Briggs, Clark and Hall, 2012). A study by Larmar and Ingamells (2010) identified a number of critical determinants of success that can help students succeed in their first year of university. The goal of offering a first-year orientation experience programme is to assist in the delivery of these critical predictors in order to ensure that each student's first year of college is successful (Evensen, 2017). According to Gentling (2016), offering a FYE programme can help meet the particular needs of international students while also increasing the levels of support and advice that international students value when choosing an HE institution to attend in the United States.

According to Fennel (2020), international students face a range of problems upon their arrival in the United States, including pressures stemming from an acculturating individual's personal, demographic, or social background, as well as the host culture. In addition, the migration to a host country, as well as a variety of practical and emotional problems, can make international students' transition difficult (Hellstén, 2007; Leask, 2015). Anxiety about finances, health, social relationships, and even racial discrimination may arise as a result of relocating (Perry, Lausch, Weatherford, Goeken and Almendares, 2017). International students, in particular, frequently



navigate their lives and studies using English as a second language (Kettle, 2017; Montgomery, 2010). The Global First Year programme assists overseas students in adjusting to university life in the United States (Florida International University, 2017).

In the United States, the College of Charleston, Temple University and Worcester State University offer a wide range of FYE programmes which are designed to help first-year students with their transition from high school to university. These universities provide FYE programmes to assist students with starting their academic experience, as well as first-year student orientation programmes that are designed to assist students to become familiar with the university (Sheehan, 2021; Worcester State University, 2020).

### 2.7.2 Local first-year experience programmes

The transition from high school to university has always been difficult; therefore, most universities are committed to assisting first-year students in navigating this transition by developing academic and student life support programmes (Wits University, 2022). Many researchers have investigated the high attrition and dropout rates of first-year university students (Arco-Tirado, Fernández-Martín and Fernández-Balboa, 2011; Badat, 2010; Council on Higher Education, 2013). Many reasons have been given for these high dropout rates, including under preparedness for university, a lack of skills such as time management, study strategies, and academic literacy, and an inability to adjust to the university environment (Wilson-Strydom, 2015; Jaffer and Garraway, 2016)

FYE programmes help students make the transition from high school to university by giving them a strong sense of belonging while also empowering and equipping them with the skills they need to navigate and succeed at university. In South Africa, the University of KwaZulu-Natal and the University of Johannesburg provide FYE initiatives to help support first-year students with their transition. These initiatives, which include orientation workshops and free academic and social support for students, aim to improve the overall quality of their experience.

According to Omar (2014), FYE programmes strive to provide a solid foundation for incoming students in their first year of study to prevent them from failing when their studies become more challenging in later years. Maymon, Hall and Harley (2019) asserts that providing support to students throughout their first year is critical. However, in order to succeed, first-year students must take an active role in their own development and take advantage of the resources available to them. Many students are hesitant to seek assistance because they perceive it as a sign of weakness, but this study asserts that it is an integral part of the first-year experience.

## **2.8 Educational programmes offered by Durban University of Technology to support first-year student transition**

DUT has implemented first-year student support programmes that are designed to help first-year students adapt to HE (Zuma, 2022). These programmes are formulated to assist first-year students to transition more successfully. While DUT has implemented these support programmes, it remains unclear whether they are effective in ensuring that first-year students transition successfully from high school to university, and how effectively students participate in these programmes.

### **2.8.1 First-year student experience programme**

The CELT-supported first-year student program has been in effect since 2014, and it is an institutional student development program aiming at fostering long-term student communities of living and learning at DUT (Peters, 2016). As noted by Nzama (2015), all DUT departments must collaborate to improve first-year students' transition to university life through orientation and to reduce dropout rates during the first year of study. DUT's first-year orientation program is a collaborative effort aimed at assisting students in adjusting to their new surroundings and emotionally and academically preparing for their new experience (Ngcobo, 2020). According to CELT (2016), the FYSE program was established with the goal of bringing together the expertise of staff and departments from across DUT to assist students with the issues mentioned above, as well as to provide a stable foundation and support structure for students' academic and personal development and progress. Makondo (2018) notes that the writing requirements at university level differ from those at high school level; the FYSE

programme includes seminars and training in digital literacies to assist first-year students.

DUT's faculties and departments provide assistance programs to help first-year students effectively transfer to university. For example, at the ML Sultan Campus, the DUT Human Resources Management department organizes an annual Human Resource Management orientation for first-year students. This orientation program seeks to educate first-year students with information about the campus resources that are available to them, as well as the role DUT plays in enhancing their academic studies (Xaba, 2020).

DUT's FYSE program was created to provide first-year students with the information and abilities needed to successfully adapt and transition from high school to postsecondary institutions (Peters, 2016). The FYSE programme is also designed to facilitate students' lives both on and off campus by providing services such as student counselling and health, writing centre facilities, and DUT online system access (Shabalala, 2018).

### 2.8.2 First-year student orientation

The first-year orientation program is intended to introduce freshmen students to campus resources that will help them achieve their academics and personal goals, establish a space that minimizes anxiety while promoting a positive attitude, and stimulating excitement for learning at DUT (Zuma, 2021; Ngcobo, 2020). This program gives all academic departments the opportunity to outline their academic requirements and student expectations. It is a "Sikusekele" (We Got You) program that aims to foster collaboration across various departments within the DUT ecosystem in order to give students seamless and energetic support. The goals of the orientation programme at DUT are to enhance knowledge of the resources available to help students thrive at the university, and to strengthen staff-student engagement (Ngcobo, 2020).

The orientation programme is generally implemented through contact sessions. However, the COVID-19 pandemic resulted in a move to online learning (Khumalo, 2021). This has enabled the reinvention of methods of conducting orientation week

and approaches towards students support and growth, while maintaining the actual essence of student transition and integration as defined in Tinto and Chickering's theories (Khumalo, 2021). The Vice Chancellor of DUT, Professor Mthembu, released a statement about the institutional orientation week offered to the 2023 cohort in the Iminingo. The orientation week emphasised instilling the living values and principles of the university, as well as sharing the fundamental approach of remodelling the institutional culture with the new cohort of students.

## **2.9 First-year students' transition at Durban University of Technology**

Students from low-income families face difficulties moving from their homes into a rigorous and diverse multi-cultural education institution environment. These students face significant financial difficulties as a result of their disadvantaged background, which has a severe impact on their academic performance (Shange, 2018). In addition, first-year students drop out because they lack the requisite knowledge and abilities to successfully adjust and make the transition from high school to university (Makondo, 2018). DUT is mandated to review version 2.0 of its strategic plan with a particular focus on the strategic area of creating sustainable student living and learning communities. One of the most common reasons why students drop out is that they are unable to adjust to university life (Makondo, 2018; Nzama, 2015).

According to Moreku (2022), DUT provides a hospitable atmosphere for students to engage in teaching, learning, research, and student life. DUT strives for excellence and innovation in knowledge enhancement and academic activities in a safe living environment, while also ensuring that its graduates are well-rounded citizens with entrepreneurial skills and knowledge, as well as well-rounded citizens. Makondo (2014) states that students in HE faces numerous challenges that may jeopardise their ability to complete their studies on time. CELT's student development programs are designed to assist DUT students across faculties and campuses in reaching their academic potential. Peters (2015) notes that being a first-year university student is a significant shift from high school, and the FYSE student development project tries to assist students in making this move smoothly.

## **2.10 Psychological impacts of transitioning from high school to university**

According to Cleary, Walter, and Jackson (2011), students who make the move from high school to university are usually excited about the new chapter in their lives. They are, however, subjected to situations and expectations that put them at risk for psychological problems or exacerbate pre-existing conditions. Further to that, many students find the adjustment to university emotionally and psychologically demanding. Students going through the transition phase may encounter psychological anguish, anxiety, sadness, sleep disturbances, low self-esteem, and isolation (Hughes, 2016). Dias and Sa (2014) note that the transition from secondary to tertiary education encompasses many changes in a student's life, including the development of new financial, social, and family responsibilities. Some of the psychological impacts that are faced by students when they transition from high school to university are discussed below.

### **2.10.1 Depression**

Goldman (2019) defines depression as a psychological disease characterized by a continuous sense of melancholy and a decrease in interest. Globally, depression is one of the leading causes of illness and disability among students (World Health Organisation, 2023). University life is both exciting and challenging for first-year students; they go through a number of transition phases, including adjustments to living arrangements, friendship networks, and educational settings as they adjust to more responsibility and autonomy in their personal and academic lives (Mapfumo and Nkoma, 2013). Although some students make the move to university successfully, others suffer from long-term mental maladjustment and despair. A study by Brandy, Penckofer, Solari-Twedell and Velsoe-Friedrich (2015) found that the majority of first-year students suffering from negative emotions such as depression tend to perform poorly academically and have a poor quality of life.

Students with depression are at risk of poor academic performance and aversion to anything related to their education (Anon, 2021). This can include a lack of classroom engagement, poor relationships with peers and teachers, and a lack of interest in pursuing passions and planning for the future. A lack of sleep, poor eating habits, and

insufficient exercise are all elements of depression in college students. Academic stress, financial concerns, pressure to find employment, and failed relationships cause some students to drop out (Kerr, 2017).

#### 2.10.2 Psychological distress

Students go through adjustments before arriving at university, transitioning between years, and leaving or returning to work or postgraduate study. Throughout, students have to figure out who they are as individuals as well as how they integrate to university life (Tett, Cree, and Christie, 2017). Psychological discomfort is a collection of unpleasant mental and physical sensations that most people experience as a result of irregular mood swings (Pengpid and Peltzer, 2020). Students in tertiary education settings face a variety of ongoing normative stressors, which can be defined as normal day-to-day aggravations such as persistent academic expectations (Pascoe, Hetrick, and Parker, 2020).

Numerous pressures, such as academic demands, workload, tension to perform well, pressure from educators and parents, financial burdens, and future concerns, can lead to the growth of psychological issues in students and negatively impact their academic performance (Alfiyan, Purnama, Youlanda, Kaloeti, and Sakti, 2021). According to Evans, Borriello and Field (2018), student transition is one of the most stressful moments in a student's life, and it can have a severe impact on a student's psychological well-being and academic progress.

The distinctive transfer phase that first-year university students go through has an enormous effect on their emotional health (Brandy et al., 2015; Shudifat and Al-Husban, 2015). Increased academic obligations are one of the most common stressors in the student population and have been linked to depression symptoms (Shudifat and Al-Husban, 2015). Many studies have shown that psychological problems caused by multiple stressors lead to poor academic performance in first-year students (Alfiyan et al., 2021),

### 2.10.3 Anxiety

Mental health is a major predictor of life quality and satisfaction (Pedrelli, Nyer, Yeung, Zulauf and Wilens, 2015). Moreover, poor mental health is a complex and widespread psychological issue among undergraduate university students. The transition period from high school to university involves much stress and anxiety. Anxiety is a common feeling in most individuals as it is the brain's way of responding to stress and warning an individual about impending danger (Mele, 2020). LeBlanc and Marques (2019) assert that anxiety is very common in university students. A poor transition period is linked to contemporary psychological disorders and can set in motion a series of occurrences that affect future attainment and integration (Rice, Frederickson, and Seymour, 2011). Depression and anxiety, for example, can make the transition from high school to university more stressful (Olson, 2014).

## 2.11 Summary

The majority of university students find the transition from high school to university difficult. This chapter has presented a thorough examination of the issues that may inhibit first-year students' successful transition from high school to HE. It has also discussed FYSE programmes, which are offered by many universities to aid first-year students with their transition. The theoretical framework used in this study to explain the various transition stages that students experience has been discussed. This chapter has also identified several academic and non-academic challenges that arise during the transitioning stage and has focused on a few factors that may hinder first-year students' transition. In this study, the challenges highlighted include but not limited to financial challenges of first-year students which are critical component in addressing South Africa's range of social and economic problems.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The previous chapter focused on the relevant literature to establish the context of the investigation. Relevant empirical literature was evaluated with the goal of analysing the elements that impact the successful transition to HE and how these features can be proactively addressed at the high school level to facilitate learners' transitions.

The review of literature also investigated the effectiveness of assistance programmes available to help first-year students adjust to HE institutions.

The current chapter considers and explains the research approach that was employed in this study. The target population and sample methods are addressed. The research techniques and design used in this study involves the collection of data by means of disseminating online questionnaires and conducting individual interviews and focus group interviews to address the primary objectives of this research study. The procedure of data analysis and the measurement of the reliability and validity of the data will be scrutinized.

#### **3.2 Research design**

A research design is a comprehensive framework for linking research problems to an appropriate empirical investigation (Sekaran and Bougie, 2016). It provides a framework or design for the planned study by describing the techniques required to gather the information required to address the project's research topic (Creswell, 2014). Therefore, it can be seen as a road map for a research study that sets the scene for the study and specifies how data will be collected, analysed, and interpreted (Creswell and Clark 2011). In order to answer the research question, the study first identified the research problem, the literature was reviewed, the concepts were clearly defined, the population was identified, the method of data collection was formulated, and data was analysed. According to Brink, Walt and Rensburg (2016) a research design refers to the set of logical steps that a researcher must take in order to answer



scientific questions. It determines the right methodology to utilize and leads research processes and concerns such as information sources, participant sampling, elements, units of analysis, data collecting and analysis, and findings interpretation (Taherdoost, 2016). The essential approach for research is a study design, which includes the instruments and processes needed to collect data and analyses as well as specifying who or what will be covered by an investigation (Punch and Oancea 2014). It provides precise direction for procedures in a research endeavour. This strategy can involve qualitative, quantitative, or mixed techniques (Krishnaswamy, Sivakumar and Mathirajanm, 2006; Creswell, 2013). Thus, a research design is a structure for employing empirical data to solve a research topic (McCombes, 2021).

The process of choosing a research design for this study included determining between a qualitative, quantitative, or mixed method design.

This study used mixed methods to identify and deeply understand the barriers faced by first-year students and the effectiveness of DUT's support programmes in helping them successfully transition from high school to college. The study used quantitative and qualitative data in order to understand the barriers faced by first-year students.

A mixed method design requires the collection of both quantitative and qualitative data. In this study, qualitative as well as quantitative methods were employed to strategically help the researcher to collect both quantitative and qualitative data from the participants so that the study's objectives are addressed and subsequently achieved. In order to strategically assist the researcher in collecting quantitative and qualitative data from participants so that the study objectives are taken into consideration and attained, a mixed method approach was then deemed appropriate for this investigation.

Data was acquired from first-year students pursuing a National Diploma in BIM at DUT's Faculty of Accounting and Informatics. Data was also received from CELT employees. To answer the research problems and collect the necessary data, a set of questionnaires was distributed, and interviews were conducted with CELT staff members and TMAs. In the study, quantitative data was acquired from BIM first-year students and qualitative data was acquired from CELT employees and DUT TMAs.

### **3.3 Research philosophy**

Before considering the design of a research project, the philosophical paradigms of the research should be considered to establish the expectations of the study; this helps to clarify the reasons for selecting a particular research design (Lsuro, 2020). A research philosophy is a framework that guides how research should be conducted based on ideas about reality and the nature of knowledge (Collis and Hussey 2014). A research philosophy is defined by Saunders, Lewis, and Thornhill (2015) as a set of beliefs and assumptions regarding the generation of knowledge. In order to achieve high standards of quality research, it is necessary to ensure that a thoroughly detailed study design has been taken into account so as to support the Research Philosophy adequately (Saunders et al., 2015). Two primary research philosophies are generally followed, which form the roots of the qualitative and quantitative research strategies (Thompson, 2015; Brannen, 2017). Qualitative research is based on the phenomenological viewpoint that the universe is made up of numerous realities that are subject to the interpretations of the observers who live within it (Creswell and Poth, 2017). Positivists, then again, accept that there is only one reality, which can be precisely estimated and seen with quantitative accuracy and consistency (McNabb, 2015). The examination reasoning ought to mirror the scientist's perspective as well as how information development will be achieved. Positivists advocate quantitative logical techniques, though interpretivists incline toward subjective humanistic ones.

#### **3.3.1 Positivism**

Positivism depends on a characteristic researcher's philosophical point of view and requires working with a discernible reality inside society to foster speculations. It alludes to the meaning of considering unadulterated information and realities without being influenced by human translation predisposition (Saunders et al., 2012). Positivists see society as forming the individual and trust that 'social real factors' effect individual activity (Thompson, 2015). Positivism is a philosophy of knowledge, or epistemology, that embraces that only knowledge received through direct scrutiny is true and trustworthy. This notion is based on a true and empirical assessment of the information possessed by the researcher. Knowledge is frequently gained via observation; therefore, it can be transmitted in a tangible form (Intgrty, 2016).

Positivists contend that information would be able and should be created impartially, without being impacted by the analysts' or alternately members' qualities (Park, Konge and Artino, 2020). At the point when information is appropriately shaped, it is truth - that is, it is sure, exact, and agreeable with the real world. The post-positivist perspective is regularly based on realities that are upheld by proof and sane reasons (Creswell, 2014). Empirical observation of the elements, hypothesis creation based on existing theories, and quantitative analysis are all part of the post-positivist research philosophy (Saunders, Lewis and Thornhill, and Wilson, 2009). Therefore, in a post-positivist philosophical worldview, researchers should objectively collect and interpret data with minimal interaction with the research participants (Creswell, 2014).

### 3.3.2 Interpretivism

According to Steph (2020), interpretivism is a philosophical doctrine that holds that individuals socially construct knowledge and reality. It is talking about theories about how the human mind learns about the world. The term interpretivism alludes to epistemologies or hypotheses about how we can acquire information about the world that depend on deciphering or understanding the implications that individuals append to their way of behaving (O'Reilly, 2012). The interpretivist paradigm is a subjective way of understanding the world through human experience (Pandey and Patnaik, 2014). This approach seeks to understand and interpret what is in the mind of the subject and to interpret only what the subject is thinking. An effort is made to understand the context through the views of the subjects or participants rather than the views of the researcher (Denzin and Lincoln, 2018). From an ontological perspective, interpretivists are keen on the relativist or emotional real factors that exist in any examination issue (McKenna, Richardson and Manroop, 2011).

### 3.3.3 Pragmatism

Pragmatic research approach involves using methods that appear best suited to the research problem (Hashim, 2019). It is frequently associated with mixed method or multiple method research.

The pragmatic research approach to research asserts that no single point of view can provide the whole picture, and hence employs various means to obtain multiple realities (Bajpai, 2011). According to pragmatism, truth is not influenced by predetermined structures or theories, which means that it does not adhere to any specific system, reality, or philosophy (Mackenzie and Knipe, 2006; Saunders et al., 2009). Practical research investigations utilize a range of research techniques, such as both quantitative and qualitative methods, as well as action research. In adherence to a practical research philosophy, both quantitative and qualitative methods were utilized in this study. Bryman and Bell (2015) explain that researchers who adopt a pragmatic stance have the liberty to employ any procedures, techniques, and methods that are consistent with either qualitative, quantitative, or both approaches.

#### 3.3.4 Philosophical approach of this study

The philosophy embraced in this study is pragmatism due to the utilization of a mixed method approach. The researcher used this philosophy to develop a comprehensive understanding of the reasons behind the challenges faced by first-year students during their transition from high school to university. Moreover, this approach helped them assess the success of the support programs provided by DUT to facilitate this transition. Kumar (2014) states that scientific research entails the following steps: formulating the research problem, conceptualising its design, determining the measurement instrument, selecting the sample, collecting the data, and analysing the data. These steps are incorporated into this research study.

### 3.4 Research strategy

A research strategy entails a step-by-step action plan with which the examiner's cognitive processes are led. This ensures that research is carried out in a methodical and timely manner for researchers (Walia and Chetty, 2020). It is a step-by-step action plan that guides the researcher's cognitive process and allows the researcher to complete the study methodically and on schedule (Walia and Chetty, 2020). A research strategy serves as a road map for researchers as they design, carry out, and evaluate their research. Part of defining a research plan is choosing whether to

conduct primary research or rely on existing literature (Rodrigo, 2017). Research strategies include case studies, surveys, and interviews (Rodrigo, 2017).

#### 3.4.1 Case studies

A case study refers to an in-depth examination of an individual, a collective, or a specific entity with the objective of drawing more general conclusions applicable to multiple entities (Heale and Twycross, 2018). According to Baskaranda (2014) and Yazan (2015), the case study method is frequently utilized in qualitative research. In adherence to a practical research philosophy, both quantitative and qualitative methods were utilized in this study.

#### 3.4.2 Surveys

According to Check and Schutt (2012), survey research refers to the process of gathering information by posing specific questions to a group of individuals and analyzing their responses. Various research methods can be employed to recruit participants, gather data, and utilize diverse instruments in this type of study. Survey research designs are quantitative research techniques in which researchers administer a survey to either a sample or the entire population in order to depict the population's attitudes, opinions, behaviours, or characteristics (Tanny, 2018). Surveys are important in research because they are the most reliable methods to obtain real feedback (Estevez, 2014).

#### 3.4.3 Interviews

Survey research, according to Check and Schutt (2012), is the process of obtaining data from a group of people by asking them specific questions and then examining their answers. In order to recruit participants, collect data, and use a variety of instruments in this kind of study, different research methods can be used. Researchers can use survey research designs, which are quantitative research techniques, to show the attitudes, opinions, behaviors, or characteristics of the population by asking a survey of a sample or the entire population (Tanny, 2018). Structured interviews are based on a series of pre-determined questions that provide limited room for flexibility.

Unstructured interviews begin with a few broad questions or discussion topics, which the interviewer uses to guide the conversation (Fauvelle, 2020).

This study makes use of questionnaire, individual interviews, and focus group interviews.

### **3.5 Target population**

A population is the whole pool from which a statistical sample is selected (Kenton, 2019). The phrase "target population" refers to a group or set of elements about which the researcher wishes to learn more (Glen, 2019). The target population of this study comprised 317 full-time students registered for BIM in the Department of ICM at DUT. The student data was received from the Head of Department of ICM in 2020. BIM students were identified and selected for this study because they were considered to be well-informed about the subject being investigated, and had the appropriate information needed to answer the aims and objectives of the study. The researcher was previously an undergraduate student in the Department of ICM and experienced challenges transitioning from high school to HE.

Five TMAs who play an important role in supporting first-year students to transition successfully were included in the target population. The study also involved the CELT administrators who coordinated the FYSE programme. CELT has five administrators. These administrators were selected and considered because they had first-hand information about the various foundations that were needed in order for students to transition smoothly. Since the majority of first-year workshops were facilitated and coordinated by CELT, the inclusion of the CELT administrators was key to this study.

### **3.6 Sampling process**

Sampling is the process of selecting units, such as people or organisations, from a population of interest, so that by studying the sample the researcher may fairly generalise the results back to the population from which they were selected (Nkomo, 2019). Sampling methods are categorised into two types: probability and non-probability sampling. Probability sampling is a sampling technique in which a sample

from a larger population is chosen using some form of random selection (Data Science, 2019). In non-probability sampling, not all members have an equal chance of participating in the study (Saunders et al., 2012). Non-probability sampling can be effective when trying to generate ideas and obtain feedback, but the results cannot be generalised to the entire population with a high level of confidence (Nkomo, 2019). In this study, a purposive sampling technique was adopted in selecting the research participants to allow the researcher to focus on the target population that could provide the information that was relevant to the study.

Three CELT administrators who coordinated the FYSE programme at DUT were identified using the purposive sampling technique. CELT had five administrators; however, three administrators were identified who were solely responsible for coordinating the FYSE programme and therefore possessed the information required for this study.

The sample size for the students enrolled in the BIM program was determined and chosen using a technique called simple random sampling. According to Etikan and Bala (2017), random sampling is a method of sampling where each item from a population has an equal likelihood of being included in the sample. In methods based on probability sampling, every individual has an equal chance of being chosen or their chances are known, which allows for mathematical adjustments to be made (Sharma, 2017). This study used simple random sampling for accurate representation of the larger population of first-year students. The simplest and acceptable approach for deciding a sample size for a specific population was described by Sekaran and Bougie (2016), whose book developed the scientific guidelines with a table that facilitates the decision of the sample size. Based on Sekaran and Bougie's (2016) sampling size table, this study sampled 175 first-year students.

### 3.6.1 Inclusion criteria

All first-year students who were registered in the year 2021 for the BIM programme in the Faculty of Accounting and Informatics were considered in this study.

### 3.6.2 Exclusion criteria

All first-year students who were not registered for the BIM programme in the Faculty of Accounting and Informatics were not considered in this study.

## 3.7 Quantitative research approach

A quantitative research method quantifies and analyses factors to produce outcomes (Apuke, 2017). It entails the use and analysis of numerical data through the application of certain statistical procedures to answer questions such as who, how much, what, where, when, how many, and how. Quantitative research investigates links between variables that are numerically measured and analyzed using a variety of statistical approaches. It is mostly related with survey tactics, which often use questionnaires to collect the necessary data (Saunders et al., 2012). Data collected from participants in the form of a questionnaire with closed-ended questions was analyzed and reported using a quantitative method. The effectiveness of the programs implemented for first-year students during their transition was assessed using this approach. Surveys were given to first-year students at DUT who were studying BIM in order to collect quantitative data.

## 3.8 Qualitative research approach

Brink et al. (2016) define a qualitative research approach as a diverse set of research designs and methodologies employed to investigate social actions that are not yet comprehended. According to Maree (2016), a qualitative approach entails venturing into the actual environment where people reside, collecting their narratives, and crafting a compelling and artistic portrayal of their encounters. Qualitative research entails in depth investigation by using face to face techniques to collect data from participants (McMillan and Schumacher, 2010). Qualitative research consists of collecting and analysing non-numerical data, such as video or audio, to understand concepts, opinions, or experiences (Bhandari, 2020). It can be used to gather in-depth insights into a problem or to generate new ideas for research. This study uses a qualitative approach in the form of interviews.



The interviews were conducted with five CELT student development unit administrators who coordinated the FYSE programme. Focus group interviews were conducted with five TMAs. Structured interview questions allowed participants the freedom to provide detailed information that they felt would contribute to the study.

Qualitative approaches usually make use of non-probability sampling strategies, which are also known as purposive sampling strategies (Etikan, Musa and Alkassim, 2016).

### 3.8.1 Rigour in qualitative research

Research rigour is the extent to which appropriate inferences can be made about a study (Polit and Beck, 2012). Trustworthiness is the most critical inference in qualitative research regarding research rigour. The reliability and validity of research are defined as research rigor (Davies and Dodd, 2002). Tactics employed by the researcher are essential to ensuring the reliability of the data collected and the subsequent theory generated. Lincoln and Guba (1985, as cited in Buthelezi, 2019) suggest four criteria for developing the trustworthiness of a qualitative study: credibility, dependability, confirmability, and transferability. Authenticity is a further criterion (Lincoln and Guba, 1985, as cited in Buthelezi, 2019). Although this study uses mixed methods, combining qualitative and quantitative research, it adheres to four criteria that relate to qualitative research. These four criteria are discussed below.

#### 3.8.1.1 Credibility

Credibility refers to the truthfulness and reliability of the data and its associated interpretations (Polit and Beck, 2012:99). In order to ensure the credibility of this study, an audio recorder was used to collect data with the permission of the prospective participants, the data was transcribed, and the researcher verified that the transcribed notes were true reflections of the participants' experiences.

#### 3.8.1.2 Dependability

Dependability refers to the stability and solidity of data over time (Polit and Beck, 2012). In this study, dependability was ensured by maintaining consistency in asking the same questions of all participants. An audit trail was preserved by retaining data of individual interviews and focus group interviews for future reference.

#### 3.8.1.3 Confirmability

Confirmability is related to the independence of data, meaning that there should be correspondence and coherence between two or more independent people concerning the accuracy of the data (Polit and Beck, 2012). After the interviews, all participants in this study were given an opportunity to review the notes of the recorded sessions to confirm whether the transcribed notes were true reflections of what had been shared in the interview sessions.

#### 3.8.1.4 Authenticity

In this study, trust was developed with the interviewees, which encouraged them to respond freely. The researcher also expressed gratitude for the participation of the interviewees.

### 3.9 Mixed methods

The usage of mixed methods in research involves integrating both qualitative and quantitative elements in order to investigate your research inquiry. Mixed methods research combines both quantitative and qualitative approaches, allowing for a more holistic understanding that surpasses what can be achieved through either method separately (George, 2021). Creswell (2013) states that mixed methods research entails the collection of both quantitative and qualitative data, the combination of these two types of data, and the utilization of a unique design. According to Maree (2016), researchers gather both numerical and textual data together when employing mixed methods, since solely using either qualitative or quantitative methods might not yield a comprehensive comprehension of the research issue. In this research, the utilization

of unrestricted interview questions provided a chance for the TMAs and CELT administrators to share information that may not have been included in the structured surveys given to first-year students. This approach also allowed them to voice any additional information that could contribute to this study. A comprehensive understanding of the research problem was obtainable by speaking directly to CELT administrators, whose overview of the effectiveness of support programmes would provide a wider view not necessarily obtainable from the first-year students.

### **3.10 Triangulation**

Triangulation is “the most well-known and popular of the four mixed methods designs” (Maree, 2016). In this design, “the researcher uses both quantitative and qualitative methods in order to best understand the phenomenon of interest” (Maree, 2016).

Saunders et al. (2012) describe triangulation as follows:

“...the use of different data collection techniques within one study in order to ensure that the data are telling you what you think they are telling you. For example, qualitative data collected using semi-structured group interviews may be a valuable way of triangulating quantitative data collected by other means such as a questionnaire.”

According to Sekaran and Bougie (2016), “triangulation requires that research is addressed from multiple perspectives” and that the researcher “can be more confident in a result if the use of different methods or sources leads to the same results”. Triangulation aids in obtaining “richer, fuller data” and helps to “confirm the results of the research” (Wilson, 2014). When quantitative and qualitative data are collected concurrently, the time frame for data collection is shorter as both sets of data are “gathered at one time at the research site” (Creswell, 2009). This study triangulated data collected from the interviews with three purposively recruited DUT CELT administrators, a questionnaire that was sent via email to first-year students and focus group interviews with TMAs.

### **3.11 Measuring instruments**

#### **3.11.1 Data collection instrument**

Regardless of the field of study, the core element of any research design is the gathering of data (Parveen and Showkat, 2017). Diesel Plus (2019) states that it assists in enhancing effectiveness and minimizing ambiguity. The researcher was able to evaluate the impact of the university's support programs for helping first-year students transition by collecting data in this study. The researcher also gained assistance in making well-informed choices about implementing new support programs by the university, aimed at facilitating a smooth transition from high school to university life for first-year students.

#### **3.11.2 Focus group interviews**

Focus group interviews are a research approach that involves interviewing a small group of people about a topic of interest to the researcher (McMahon, 2020). A focus group interview results in a wealth of data that can be applied in many different ways. According to Denscombe (2014), a “focus group consists of a small group of people, usually between six and nine in number, who are brought together by a trained moderator (the researcher) to explore attitudes and perceptions, feelings and ideas about a topic.” A semi-structured interview, according to Doyle (2020), is a meeting in which the interviewer does not precisely adhere to a formalised list of questions. Instead of a standard question-and-answer approach, they will offer more open-ended questions, allowing for a debate with the interviewee. A focus group interview allows a homogeneous group to reflect on topics posed by the interviewer. In this study, focus group interviews were held with TMAs who played a role in ensuring that first-year students were able to adapt to campus life. The focus group interviews were conducted via Microsoft Teams due to COVID-19.

The TMAs participated in a focus group interview. Through personal email correspondence, the researcher introduced themselves to the TMAs and set up a convenient time and date for the interviews. Microsoft Teams was used for the interview. Participants had to sign an informed consent form when they arrived at the

meeting. This form provided an overview of the study, its advantages, and the degree of confidentiality. The subjects were informed of their rights to take part in the study prior to the interview starting. It was voluntary for the TMAs to participate in the study, and they were free to leave at any moment. Permission to record the interview on audio was also sought by the researcher. Participants were assured of their privacy and informed that all information would be kept private and would only be disclosed in an anonymous manner.

### 3.11.3 Individual interviews

In-depth interviews are a sort of qualitative research in which a highly competent interviewer conducts a personal interview with a single respondent. The main aim of conducting thorough interviews is to gain insight into the deeper motivations, beliefs, attitudes, and emotions that individuals hold regarding a specific subject (Attia, 2021). According to Boyce and Neale (2006), in-depth interviewing refers to a qualitative research method which involves carrying out detailed one-on-one interviews with a limited number of participants. The purpose of these interviews is to explore the viewpoints of the individuals regarding a specific concept, program, or problem. For the purpose of this study, semi-structured individual interviews were conducted with three CELT administrators who coordinated the FYSE programme to obtain their input on how effective the support programmes were in assisting first-year students to adapt to the university. Due to the COVID-19 pandemic, emails were sent to these administrators requesting their formal consent to participate in the study. Upon receiving full consent, arrangements were made to conduct the interviews via Microsoft Teams. The interviews conducted with the CELT administrators assisted the researcher in understanding the effectiveness of the support programmes offered by the university to help first-year students transition from high school to university. The individual interviews also provided an opportunity to obtain the point of view of CELT staff members as to whether the support programmes offered by CELT serve their purpose, or whether there was a need for measures to be introduced to help ease the struggle of transition from high school to university. The interviews with the CELT administrators were conducted via Microsoft Teams on 4 September, 21 October, and 25 October 2021.

All of the CELT staff members coordinating the FYSE programme that were chosen for the semi-structured individual interview were contacted personally via email. A suitable interview date and time was negotiated with each participant. Each participant was requested to sign a consent form. This form outlined the study, its benefits, and the extent of confidentiality. Before the commencement of each interview, each administrator was notified of his or her right to voluntarily participate and that the administrator had the right to withdraw from the study at any time. The researcher also requested permission to audio tape each interview session. The confidentiality of the participants was assured, and the participants were assured that all information would be secured and would only be made public with anonymity.

#### 3.11.4 Questionnaire

A questionnaire is a type of research instrument that consists of a sequence of open-ended or closed-ended questions (Ndukwu, 2020). It is a data collection strategy that consists of a series of questions meant to create data adequate for meeting the goals of a research study (Wilson, 2010). In this study, a closed-ended questionnaire was used as a means of collecting data in addition to the interviews discussed above. The questionnaire was distributed to first-year students registered for the National Diploma in BIM. Data was collected from first-year students in order to obtain their views on the management and effectiveness of FYEPs offered by DUT and the Department of ICM. The questionnaire disseminated to first-year students comprised three sections and is shown in Appendix A. The period of interaction with first-year students was from 1 August 2021 to 30 August 2021.

#### 3.11.5 Structure of the questionnaire

The questionnaire that was used in this study to collect data from first-year students was divided into three sections.

#### 3.11.5.1 Section A: Demographics

Section A of the questionnaire dealt with the demographics of the participants. Demographics were included in the questionnaire in order to obtain an understanding of the participants.

#### 3.11.5.2 Section B: Programmes that are adopted to aid the smooth transition

DUT caters for its first-year students by offering university support programmes that assist with transition from high school to university. Section B of the questionnaire investigated the support programmes adopted by the university to assist first-year students with transition.

#### 3.11.5.3 Section C: Interventions to support the transition of first-year students

Section C of the questionnaire investigated the interventions that were offered to first-year students before they enrolled at the university.

The data obtained from TMAs, CELT administrators and first-year students aided in conducting this research study.

### **3.12 Recruitment procedure**

#### 3.12.1 First-year students

The first-year students were contacted via their DUT4life email accounts provided by DUT. All potential participants were contacted and requested to participate in the study. Students were notified that participation in the study was purely voluntary. Details of the research project were discussed with the prospective participants via email. Those who were willing to participate in the study responded, and copies of the closed-ended questionnaire were sent to them. A letter of information and an informed consent form were discussed with the participants and copies were sent to them via email. All participants were required to sign the informed consent form prior to participating in the study. Participants that were undecided about their willingness to take part in the study were given time to think about it and to inform the researcher,

either by email or telephonically, of their decision to participate in the study or not. The information letters and consent forms were sent to all prospective participants, and the researcher offered to meet with them face-to-face or via Microsoft Teams to provide more clarity regarding the study and to address any concerns they might have. None of the prospective participants requested clarity or raised any concerns prior to participating in the study.

### 3.12.2 Tutor Mentor Advisors

The TMAs were reached out to using their staff email accounts that were given by DUT. We reached out to all possible candidates and asked them to take part in the research. The TMAs were informed that taking part in the study was entirely optional. The TMAs were emailed to discuss the specifics of the research project. Respondents who expressed their willingness to take part in the research were contacted and provided with information pertaining to the date, time, and agenda for the focus group discussions. Participants were presented with a letter of information and an informed consent form, and then received digital copies through email. Before taking part in the study, it was mandatory for all participants to sign the informed consent document.

Participants that were undecided about their willingness to take part in the study were given time to think about it and to inform the researcher, either by email or telephonically, of their decision to participate in the study or not. The information letters and consent forms were sent to all prospective participants, and the researcher offered to meet with them face-to-face or via Microsoft Teams to provide more clarity regarding the study and to address any concerns they might have. None of the prospective participants requested clarity or raised any concerns prior to participating in the study. All individuals who had expressed their interest in participating in the research were sent an email to schedule a date and time for the second set of focus group interviews. The purpose of the email was to ensure their availability to meet through Microsoft Teams. A follow-up email was sent to all participants who had not replied yet, asking them to let the researcher know their final decision about participating in the study.



### 3.12.3 CELT administrators

The CELT administrators were contacted via their staff email accounts provided by DUT and requested to participate in the study. The CELT administrators were notified that participation in the study was purely voluntary. Details of the research project were discussed with the CELT administrators via email. Those who were willing to participate in the study responded, and were sent communication regarding the date, time, and schedule for individual interviews. The participants were provided with a letter containing information and a form for giving consent, which were thoroughly discussed, and copies of these documents were sent to them through email. Before taking part in the study, it was necessary for all participants to sign the form that informed them about the study and its implications. Participants who were unsure about their inclination to participate in the study were provided with a period to consider it and convey their decision to the researcher, either via email or telephone, in order to confirm their participation or decline it. All potential participants received the information letters and consent forms. The researcher proposed both in-person meetings and virtual meetings using Microsoft Teams to further explain the study details and resolve any concerns or questions they may have had. None of the prospective participants requested clarity or raised any concerns prior to participating in the study. For the second round of individual interviews, all participants who had indicated their willingness to take part in the study were contacted via email to arrange a date and time and confirm their availability to meet on Microsoft Teams. All participants who had not responded regarding their participation in the study were sent a follow up e-mail requesting them to inform the researcher of their final decision.

### 3.13 Pilot study

Pretesting is pivotal in any research study, as it helps the researcher to conduct small-scale research to test the reliability, validity and methods to be applied in disseminating the research instrument (Crossman, 2019). It assists researchers to refine a questionnaire by clarifying ambiguous words that are difficult to understand. A pilot study was conducted to test the reliability and validity of the questionnaire in this study. The pilot study involved 10% of the population which did not form part of the main study. The pilot study made use of the questionnaire that was used in the main study

in order to test for any ambiguity or errors. After the pilot study was conducted, all recommendations that were made by the respondents were carefully scrutinised and considered for the improvement of the instrument prior to disseminating it to the target population for data collection.

The pilot study collected data from 10% of the target population. Out of 317 students registered for BIM, 32 were selected to participate in the pilot study. The students were sent emails requesting them to participate in the study. Out of 50 online questionnaires distributed, 43 responses were received. The pilot study was a success, and no ambiguity or errors in the questionnaire were identified. Furthermore, students did not report any issues. Therefore, the questions were deemed appropriate and reliable to answer the objectives of the study.

### **3.14 Delimitations**

Delimitations are qualities that limit the scope of a study and establish its borders (Kuada, 2012). The researcher has control over the limits. Delimitation factors include the selection of objectives, research questions, population, and the theoretical framework used in the study. This study was limited to BIM students enrolled at the Ritson campus at DUT.

### **3.15 Data collection and analysis**

Thematic analysis is a qualitative method of data analysis that involves reading over a set of data, such as transcripts from focus groups or in-depth interviews, and searching for meaning patterns within the data (Delve, 2020). Examining the data gathered after participants have replied is part of the data analysis process (Zikmund and Babin, 2010). Researchers who use different research methodologies can interact with each other by using theme analysis, which Nowell, Norris, White, and Moules (2017) characterize as a translator for those who speak the languages of qualitative and quantitative analysis. The researcher collects primary data directly from individuals through interviews, focus groups, mail, or computerised surveys to answer a study topic (Velentgas, Dreyer, Nourjah, Smith, and Torchia, 2013). The quantitative data instrument in this study was a closed-ended questionnaire. The qualitative data

instruments in this study were semi-structured focus group interviews with five TMA's and individual interviews with three CELT administrators who coordinated the FYSE Programme. Thematic analysis was adopted in this study to examine the different perspectives of the research participants.

For the analysis of quantitative data, SPSS version 26.0 was used. This software is used by various researchers for complex statistical data analysis (Aichemer, 2021). There are different types of statistical tests; the three tests listed below were conducted to enlighten, improve, and support the arguments and perspectives of the phenomenon being investigated (Bevans, 2021).

#### 3.15.1 Regression tests

Regression analysis is utilized to carry out examinations on cause-and-effect associations. Their quest revolves around examining the extent to which a distinct variable is influenced by one or multiple continuous variables.

#### 3.15.2 Comparison tests

Comparison tests aim to identify differences in the mean values between the different groups. One can utilize them to examine the correlation between a categorical variable and the average value of another attribute. T-tests are used to compare the means of two groups like the typical height of males and females. ANOVA and MANOVA examinations are employed to assess the means of multiple groups, such as the mean heights of children, adolescents, and grown-ups.

#### 3.15.3 Correlation tests

Correlation tests examine the connection between two variables without assuming any cause-and-effect connections. These can be utilized to examine if there is autocorrelation between two variables that the researcher intends to utilize, such as in a multiple regression test.

### **3.16 Validity and reliability of the questionnaire**

In a quantitative study, the concept of validity is determined by how well a notion is accurately assessed or evaluated. In a quantitative study, the second indicator of quality is the dependability of the instrument (Heale and Twycross 2015). According to Conway and Powell (2010), a reliable tool for collecting data is one that is free of errors and produces accurate information. To assess the questionnaire's dependability in this research, it was tested on a group comprising 10% of first-year students. The main study did not involve these students. A random selection was made of ten percent of the incoming students to participate in the pilot project. The process of testing the instrument to establish its reliability and validity of the included questions. The pilot study also assisted in identifying minor grammatical errors before the instrument was administered to the prospective participants. To further strengthen the reliability of the instrument, Cronbach's alpha coefficient was performed using SPSS version 26.0. Consistency is measured using Cronbach's alpha; a reliability coefficient of 0.7 or higher is generally seen as consistent and acceptable, whereas a value below 0.7 indicates a lack of internal consistency (Sekaran & Bougie, 2016).

The pilot study confirmed the accuracy and dependability of the questionnaire and other tools used for data collection. The researcher ensured that there was no possibility of uncertainty in any of the questions. Confidentiality was maintained when conducting the interviews and distributing the questionnaires.

Data for this research study were collected using individual interviews, focus groups, and questionnaires. The selection of these instruments was made with the intention of eliciting a more profound response from the participants.

### **3.17 Ethical considerations**

Norms of ethical deliberation promote research goals such as truth, knowledge, and avoidance of error (Resnik and David, 2015). Hammersley and Tryannou (2012) define ethics as the field of study concerned with what is good and right in the eyes of a community, and how people should regulate it. Research ethics are moral principles

that guide researchers in conducting and reporting research without deception or intent to intentionally or unintentionally harm research participants or society at large.

In line with the above, confidentiality, anonymity and informed consent were taken into consideration for this research study. Ethical clearance from the Faculty Research Office was obtained (see Appendix F). A gatekeeper's letter (see Appendix D) was obtained from the Research and Postgraduate Support Office. The permission of the staff and students who participated in the study was obtained. All participants were kept anonymous. The researcher assured the respondents that the information provided would be kept strictly anonymous and confidential. A letter of information and a consent form (see Appendix C) were made available to the participants to explain the purpose of the research and the role of the participants in the study before proceeding with the interviews. A letter of information and a consent form (see Appendix D) were also given to students during the dissemination of the questionnaire. The invitation introduced the title of the research study and explained how and why participants should participate in the research study. Contact details for the researcher, supervisor, and co-supervisor were provided to enable participants to clarify any questions regarding any aspect of the study. Each participant in this research study was informed that their participation was voluntary and that they had the right not to participate or withdraw from the study at any time. This applies to both interviews and focus group discussions.

#### 3.17.1 Data management and storage

Anonymity was maintained throughout the whole dissertation. Data that was collected was stored in a manner that ensured the confidentiality of participants. The participants' personal details were not recorded during the focus group and individual interviews. Permission to record the interviews was obtained from the participants. Records of each participant's name and details were kept only by the researcher and supervisor. The collected data was kept in a safe, secured and fully protected for the duration of the study, stored in a locked office of research study personnel in the Department of ICM at DUT, and will be destroyed after five years. Only the researcher, supervisor, and co-supervisor have permission to access the stored data. The

confidentiality of participants was maintained for the duration of the study and the researcher ensured that no information identifying the participants was revealed.

### **3.18 Conclusion**

This section provided an explanation of the research approach used in this study, which encompassed the research design. To achieve a comprehensive and more insightful method of gathering data, a combination of different approaches was utilized. The group under consideration included DUT's first-year students who were studying BIM, TMAs, and CELT administrators. The quantitative aspect of the study employed purposive sampling, while the qualitative aspect employed simple random sampling. To establish the trustworthiness and effectiveness of the questionnaire, a preliminary study was carried out by a group of researchers. The research study was conducted in compliance with the established ethical restrictions by considering ethical factors. The upcoming section will address the examination of the data and its corresponding explanation.

## **CHAPTER FOUR**

### **FINDINGS, INTERPRETATION AND DISCUSSION OF THE RESULTS**

#### **4.1 Introduction**

The previous chapter discussed the research design, philosophical approach of the study, research strategy, target population, sampling process, research approach, triangulation, recruitment procedure, data collection method, and measuring instruments. In order to strengthen the reliability and validity scores of the instruments, a pilot study was conducted. The chapter further deliberated on ethical considerations and the ethical processes that were followed and applied in carrying out the study.

This chapter presents the results and discusses the findings obtained from the questionnaires. The quantitative data addresses the following objectives of this study:

- to identify challenges that are faced by students when they transition from high school to DUT; and
- to determine the impact and effectiveness of the first-year introductory programmes offered by DUT.

As stated in the previous chapter, the primary method utilized to collect data was a questionnaire. The questionnaire was disseminated to 250 students of which the collected data was analysed using SPSS latest version (V26.0). Graphical charts, crosstabs and similar diagrams are used in this chapter to illustrate statistics obtained by analysis of qualitative data. Correlation and chi square test values, which are interpreted on the basis of p value, are used for inference techniques. Statistical significance is required as part of the existing approach to reporting results. A test statistic is used to generate the pValue. Significant results are depicted by  $p < 0.05$ .

## 4.2 Sample

As indicated in the previous chapter, the target population for the study was 317 full-time students registered for BIM in the Department of ICM at DUT. The confirmed sample size was 175 first-year students. To secure a higher response rate, 250 questionnaires were distributed, of which 187 were returned, giving a 100% response rate. This means that the response rate for the study was favourable, allowing conclusive generalisations to be made. According to Cleave (2020), a survey response rate of 50% or higher is typically regarded as excellent in most circumstances. This indicates that the response rate for this study was relatively high.

## 4.3 Research instrument

The research instrument consisted of 34 items that included measurements at nominal or usual levels. The questionnaire was divided into three sections covering different themes, as shown in Table 4.1 below.

Table 4.1: Research questionnaire sections

A	Biographical data
B	Programmes that are adopted to aid the smooth transition
C	Interventions to support the transition of first-year students

## 4.4 Reliability statistics

The legitimacy and dependability of accuracy are the two most huge elements. To determine reliability, multiple measurements on the same subject are used. For a recently produced construct, an unwavering quality coefficient of 0.6 or above is respected OK. Table 4.2 shows the Cronbach's alpha score for each question on the questionnaire.



Table 4.2: Reliability score

	<b>Segments of the instrument</b>	<b>No. of items tested</b>	<b>Cronbach's alpha</b>
B5	Educational programmes offered by the institution to support the transition of high school learners to the university	8	0.745
B6	The impact and effectiveness of the first-year introductory programmes	7	0.802
B7	The effectiveness of the Department of Information and Corporate Management orientation programme	5	0.779
B8	Challenges faced by first-year students when they transition	6	0.774
C9	Interventions to support the transition of first-year students	4	0.712
Overall		30	0.847

The reliability scores for all sections exceed the recommended Cronbach's alpha value of 0.7. This indicates a high degree of acceptable, consistent scoring for these sections of the research. This further demonstrates that the instrument was a reliable tool to collect the data needed for addressing the objectives of this investigation.

#### 4.5 Factor analysis

Factor analysis was performed to evaluate the items loaded in the same defined constructs. Factor analysis is a powerful data reduction approach that enables researchers to study topics that are difficult to quantify directly (Aichemer, 2018). It is a statistical method that helps researchers to study the underlying dimensions that explain the connections between a large number of variables or items by simplifying a large number of difficult variables or items (Tavakol and Wetzal, 2020). When a researcher wants to represent a large number of questions with a small number of hypothetical components, factor analysis is frequently used in survey research (Salkind, 2010). To investigate the underlying dimensions that explain the connection between the themes, factor analysis was then used to simplify the collection of items through statistical processes in this study.

To assist in validating the factors influencing effectiveness of the support offered by the university to assist first-year students when transitioning from high school to university, exploratory factor analysis making use of principal component analysis extraction method and Varimax rotation on the 8 items related to support programmes that are adopted to aid the smooth transition, the 7 items related to impact and effectiveness of the first-year introductory programme, the 5 items related to the effectiveness of the ICM orientation programme, the 5 items related to challenges faced by first-year students when they transition, and the 4 items related to the interventions to support the transition of first-year students, was conducted.

For the exploratory factor analysis condition, the Kaiser-Meyer value must be more than 0.5, and the Bartlett's Test of Sphericity must be statistically significant (Shrestha, 2021). The Kaiser-Meyer-Olkin (KMO) Sampling Measure Adequacy is a measure of how much of a variable's variance can be explained by underlying factors. High scores (close to 1.0) frequently suggest that a component examination of the information might be huge. On the off chance that the worth is under 0.50, the element examination results will in all likelihood be futile. The hypothesis that the correlation matrix is an identity matrix, indicating that the variables are unrelated and unsuitable for structure detection, is examined by Bartlett's test of sphericity. Little importance level qualities (under 0.05) propose that a component investigation might be gainful with the information (IBM n.d.).

Only items on the Likert scale are the subject of factor analysis. Finer components are formed from some components.

Table 4.3 below shows the results of a KMO and Bartlett's test reflecting the sampling adequacy and significance levels.

Table 4.3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.718
Bartlett's Test of Sphericity	Approx. Chi-Square	2147.219
	df	435
	Sig.	< 0.001

The results of the KMO and Bartlett's test reflect that the conditions for factor analysis are satisfied. For factor analysis, the KMO value should be greater than 0.500 and the Bartlett's Test of Sphericity sig. value should be less than 0.05.

#### **4.6 Section A: Demographic data**

The following section contains the respondent's biographical data. Biographical information was gathered to assist the researcher in gaining a better understanding of the participants in the study. It provided insight into their lives and experiences and aided the researcher in determining the basic characteristics of the participants. Biographical data was also used to differentiate between participants. Biographical data collected in this study included age, gender, level of study and type of school attended.

##### **4.6.1 Age**

Demography is the study of populations, whereas demographics are characteristics of (and statistics about) populations. Age, gender, ethnicity, region, education, work status, marital status, and family income/composition are all common demographics used in questionnaires (Jovancic, 2021). Determining the age group of the participants assists in understanding the level of preparedness and maturity of the participants when enrolling at the university for the first time.

The overall gender distribution by age is shown in Table 4.4 below.

Table 4.4: Overall gender distribution by age

Age group (years)		Gender		Total
		Male	Female	
< 18	Count	4	4	8
	% within Age group	50.0%	50.0%	100.0%
	% within Gender	5.0%	3.7%	4.3%
	% of Total	2.1%	2.1%	4.3%
18 - 20	Count	38	64	102
	% within Age group	37.3%	62.7%	100.0%
	% within Gender	47.5%	59.3%	54.3%
	% of Total	20.2%	34.0%	54.3%
21 - 30	Count	38	40	78
	% within Age group	48.7%	51.3%	100.0%
	% within Gender	47.5%	37.0%	41.5%
	% of Total	20.2%	21.3%	41.5%
Total	Count	80	108	188
	% within Age group	42.6%	57.4%	100.0%
	% within Gender	100.0%	100.0%	100.0%
	% of Total	42.6%	57.4%	100.0%

The gender distribution by age shows that 50% of responders aged 18 and under were female. 3.7% of females (only) were aged 18 and under. Females between the ages of 18 and below made up 2.1% of the total sample. Within the age category of 18 to 20, 62.7% were female. Only among females, 59.3% of respondents were between the ages of 18 and 20. 34.0% of the sample's females were between the ages of 18 and 20. Half of those under the age of 18 were men. Only 5.0% of the male population was under the age of 18. Males matured 18 and under comprised 2.1% of the all-out example. 47.7% of men between the ages of 21 and 30 were male. 47.5% of males (only) were between the ages of 21 and 30 years old. Males between 21 to 30 years old made up 20.2% of the overall sample. 37.3% of those aged 18 to 20 years in age were male. 47.5% of males (18-20 years of age) were between the ages of 18 and 20. A total of 20.2% of the sample were men between the ages of 18 and 20. Accordingly, the age dispersions are not comparable given that there are more respondents beneath the age of 20 ( $p = 0.001$ ). In general, there are approximately 2:3 males to females (42.6%: 57.4%) ( $p = 0.041$ ).

#### 4.6.2 Education level

The education levels of participants were of interest to determine whether students entering the university were first-time entrants or whether they were previously enrolled at institutions such as TVET colleges or other colleges. The education levels of the respondents are shown in Figure 4.1 below.

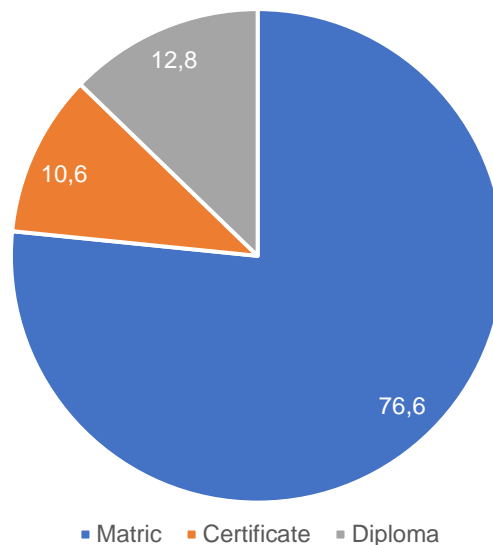


Figure 4.1: Education level

All of the respondents had completed schooling, with approximately a quarter having a post-school qualification (23.4%) ( $p < 0.001$ ). The majority of the respondents had a matric certificate (76.6%), while the minority had certificates (10.6%) or diplomas (12.8%). This suggests that the majority of the participants entered the university directly from high school, meaning that most of the students entering the university had no prior experience or exposure to campus university life. These findings demonstrate that more support from several structures within the university is needed to help students settle in.

#### 4.6.3 Type of school attended

The type of schooling the participants attended, whether in rural, semi-urban or urban areas, was of interest in accounting for the students' transition from high school to

university. Figure 4.2 below shows the types of schools attended by respondents before enrolling at the university.

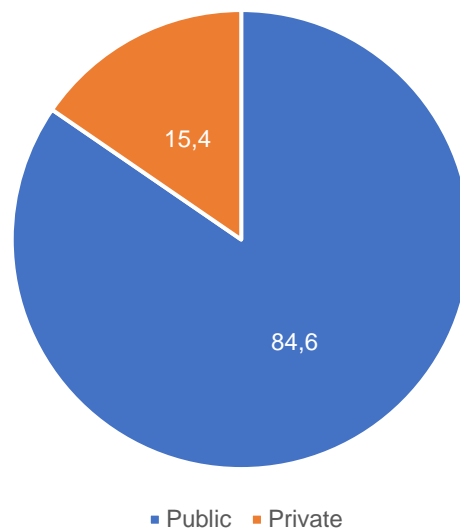


Figure 4.2: Type of school attended

The majority of participants (84.6%) had attended public schools ( $p < 0.001$ ), while 15.4% of respondents indicated that they attended private schools. This suggests that the majority of the participants enrolled at the university with little knowledge about the university culture and its processes, and this may contribute to their finding it difficult to adjust to university life if proper mentoring, support, and guidance is not provided by the university. Furthermore, students who may be significantly affected by transitioning are those from public schools where infrastructure and resources limit their exposure to technology, quality education, general information, and other basic requirements for survival in a university environment. According to Cele (2018), first-generation rural students face additional obstacles as a result of their disadvantaged upbringing, making the transition from high school to university particularly challenging and stressful for them.

The findings for Section B1 of the questionnaire are discussed in the next section.

#### 4.7 Section B1: Programmes offered by DUT to support the transition of high school learners from high school to university.

This section of the questionnaire investigated the types of support that are offered by the university with the aim of supporting first-year students as they transition from high school to university. In this section, eight statements were tested.

##### 4.7.1 Career guidance is offered by the university to assist with the transition from high school to university

Career guidance provides students with support in choosing careers that align with their goals and passions. Participants were asked whether career guidance was provided at the university. Figure 4.3 depicts the distribution of responds.

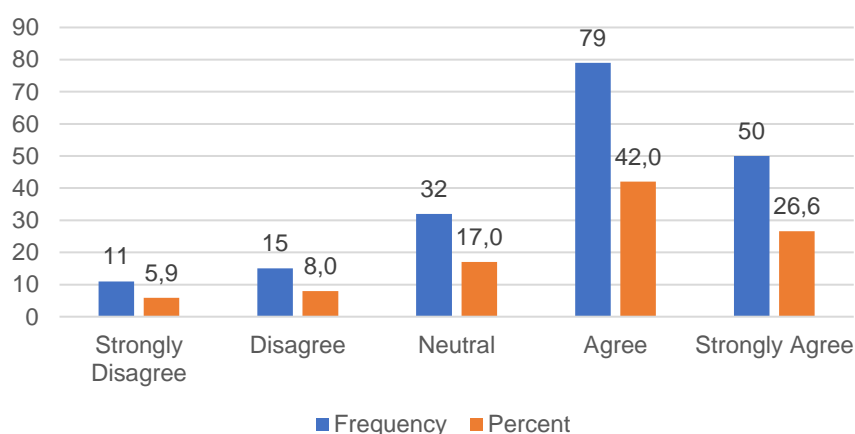


Figure 4.3: Career guidance is offered by the university to assist with the transition from high school to university

The majority of the respondents agreed (42%) or strongly agreed (26.6%) that career guidance is offered by the university to assist with the transition. 17% of respondents were neutral regarding this statement, while only 8% disagreed and 5.9% strongly disagreed with the statement. These findings indicate that most of the students (68.6%) were confident that the career guidance offered assisted them with transitioning from high school to university. In support of these findings, Mafilika (2021) indicates that universities should prioritize career guidance to assist students to

understand their strengths and weakness and match these with their skills and interests so that they can make the most suitable career choice.

#### 4.7.2 The university facilitates academic programmes to support first-year students who are struggling academically

This item aimed to measure the understanding and knowledge of academic programmes the university offers in support of first-year students. Participants were asked to express their level of agreement or disagreement with the university's provision of such programs. The results are shown in Figure 4.4 below.

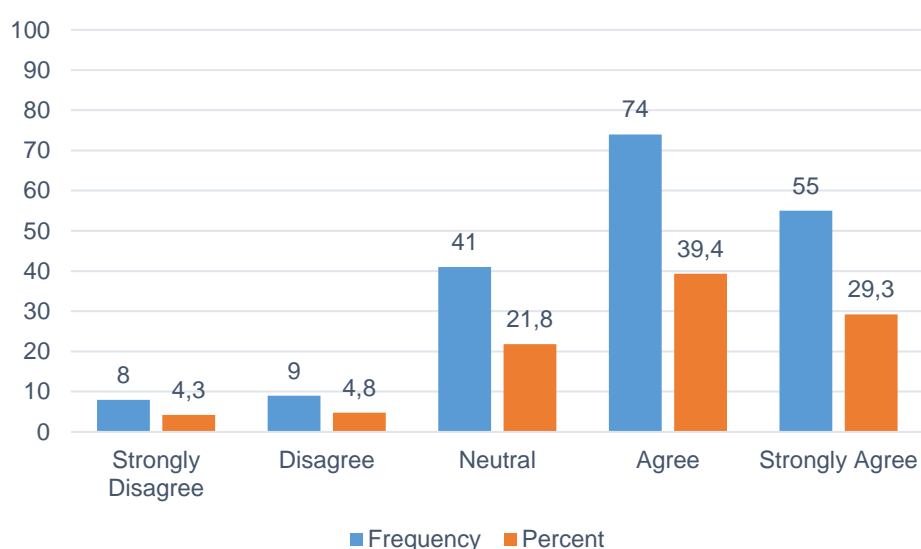


Figure 4.4: The university facilitates academic programmes to support first-year students who are struggling academically

The majority of respondents agreed (39.4%) or strongly agreed (29.3%) that the university facilitates academic programmes to support first-year students who are struggling academically. 21.8% of respondents were neutral regarding this statement, while only 4.8% disagreed and 4% strongly disagreed with the statement. These findings indicate that most of the students (68.7%) were confident that the academic programmes that are offered by the university support first-year students who are struggling academically. They also suggest that even though the university facilitates academic programmes, some students feel that these programmes do not provide support to those who are struggling academically. These findings resonate with a



study conducted by Edward (2016), which found that improved academic support for students may reduce university dropout rates.

#### 4.7.3 The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands

This item aimed to measure whether the programmes introduced by the university provide students with the support they require when dealing with their academic demands. Participants were asked whether the university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands. The distribution of responses is shown in Figure 4.5 below.

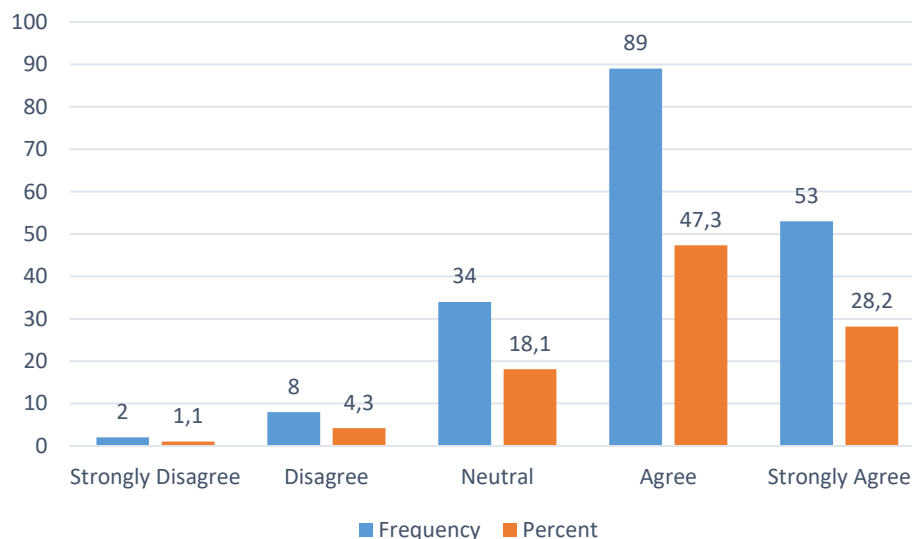


Figure 4.5: The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands

The majority of the respondents agreed (47.3%) or strongly agreed (28.2%) that the university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands. 18.1% of respondents were neutral regarding this statement, while only 4.3% disagreed and 1.1% disagreed and strongly disagreed with the statement. These findings indicate that most of the students (75.5%) were confident that the programmes introduced and offered by the university are necessary for assisting and supporting first-year students with their academic demands. This resonates with the findings of a study conducted by Oduran and

Bechuke (2018), which demonstrated that the majority of first-year university students face numerous issues with their courses due to a knowledge gap in their transfer from high school to university. Hence, some universities have become aware of this problem and have initiated first-year support programmes. This implies that DUT is aware of the gap in providing support to first-year students and has initiated interventions to assist with the transition while providing academic support.

#### 4.7.4 First-year student orientation is beneficial in helping students adapt to university life

This item aimed to measure whether first-year student orientation offered by the university to assist students with adapting to university life enables students to understand the transition better and provides knowledge of the university's processes as well as academic advice. Participants were asked whether first-year student orientation was beneficial in helping them to adapt to university life. The results are shown Figure 4.6 below.

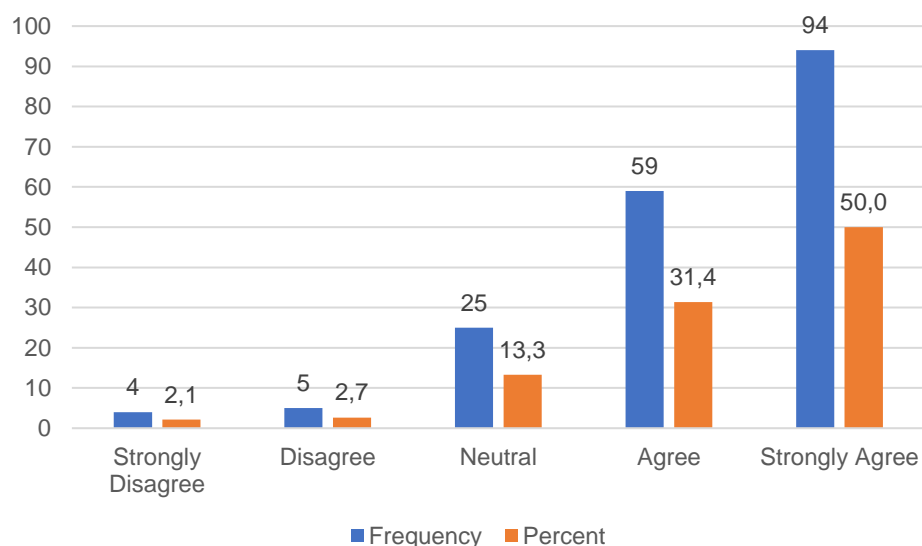


Figure 4.6: First-year student orientation is beneficial in helping students adapt to university life

The majority of respondents strongly agreed (50%) or agreed (31.4%) that first-year student orientation is beneficial in helping students adapt to university life. 13.3% of the respondents were regarding this statement, while only 2.7% disagreed and 2.1%

strongly disagreed with the statement. These findings indicate that most of the students (81.4%) were confident that first-year student orientation was beneficial in helping them adapt to university life. These findings are supported by Evensen (2017), who indicates that first-year orientation programmes offer students a unique opportunity to adjust to their new environment. Before the start of the academic year, orientation allows freshmen to meet their peers, better understand the transition to higher education, explore the campus, feel comfortable interacting with faculty, staff, and administration, and learn more about themselves and others at large or small group setting. These results clearly demonstrate that first-year orientation is a key component in ensuring that students integrate into the university without feeling abandoned.

#### 4.7.5 The university facilitates social programmes to support first-year students in adapting to university social life

This item aimed to measure whether the social programmes facilitated by the university to support first-year students in adapting to university social life provide students with a sense of belonging and assist in easing the transition. Participants were asked whether the university facilitates social programmes to support first-year students in adapting to university life. The distribution of responses is shown in Figure 4.7 below.

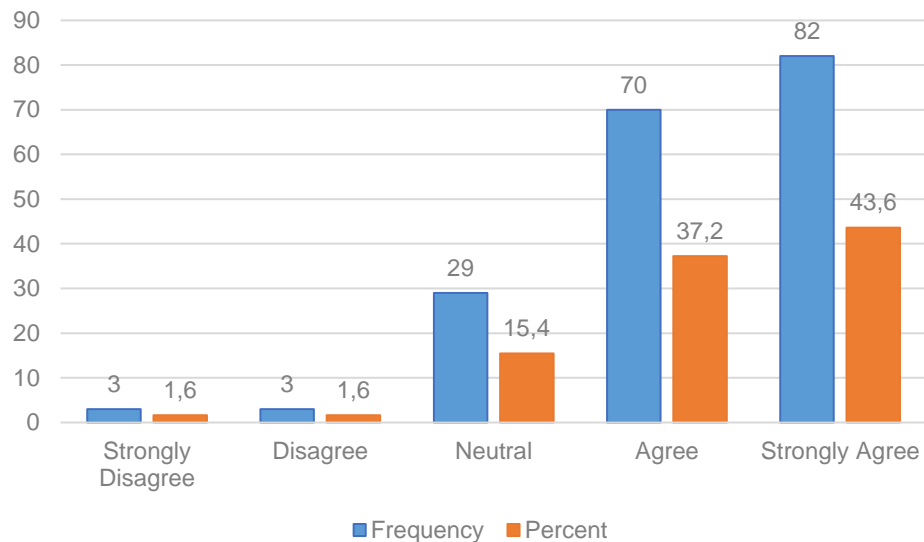


Figure 4.7: The university facilitates social programmes to support first-year students in adapting to university social life

The majority of the respondents strongly agreed (43.6%) or agreed (37.2%) that the university facilitates social programmes to support first-year students in adapting to university life. 15.4% of respondents were neutral regarding this statement, while only 1.6% disagreed and 1.6% strongly disagreed with the statement. These findings indicate that most of the students (80.8%) were confident that the university facilitates social programmes to support first-year students in adapting to university life. These findings are supported by Dlamini, Tom, Nel and Zogli (2020), who indicate that universities need to play a substantial part in ensuring that undergraduates adjust to both the social and academic dimensions of university life, as both of these dimensions entail some level of stress and emotional challenge which could increase the risk of students dropping out.

#### 4.7.6 First-year student experience programmes facilitated by CELT assist students to cope academically.

This item aimed to measure whether the FYSE programmes facilitated by CELT to assist students to cope academically provide holistic support to students and enable them to adapt to university life. Participants were asked whether the FYSE programmes facilitated by CELT assist students to cope academically. The distribution of responses is shown in Figure 4.8 below.

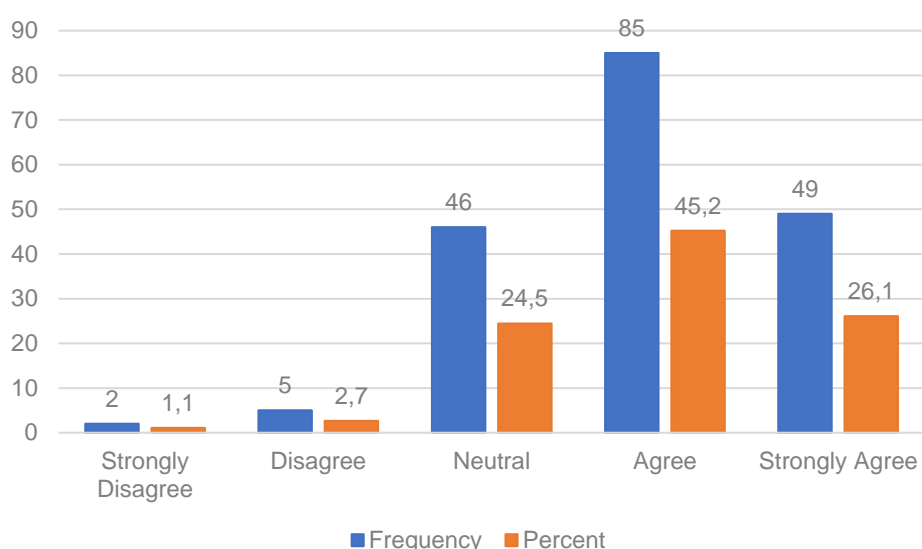


Figure 4.8: First-year student experience programmes facilitated by CELT assist students to cope academically

The majority of respondents agreed (45.2%) or strongly agreed (26.1%) that the FYSE programmes facilitated by CELT assist students to cope academically. 24.5% of respondents were neutral regarding this statement, while only 2.7% disagreed and 1.1% strongly disagreed with the statement. These findings indicate that most of the students (71.3%) were confident that the FYSE programmes facilitated by CELT assisted students to cope academically. These findings also indicate that although the university facilitates support programmes to assist students to cope academically, some students (24.5%) were unsure whether these programmes actually enable first-year students to cope academically. This resonates with a study conducted by McGie (2012), which asserts that Investing in HE support services assumes that most first-year students are not fully equipped for higher education. This suggests that FYEPs contribute to the academic success of students and positively influence their transition.

#### 4.7.7 The programmes offered by CELT contribute to the empowerment and development of first-year students

This item aimed to measure whether the programmes that are offered by CELT contribute to the empowerment and development of first-year students. The progress from secondary school to HE might be simpler for first-year understudies assuming

that the college helps with the strengthening and improvement of understudies. Participants were questioned about the extent to which CELT's programs aid in the empowerment and growth of first-year students. The results are shown in Figure 4.9 below.

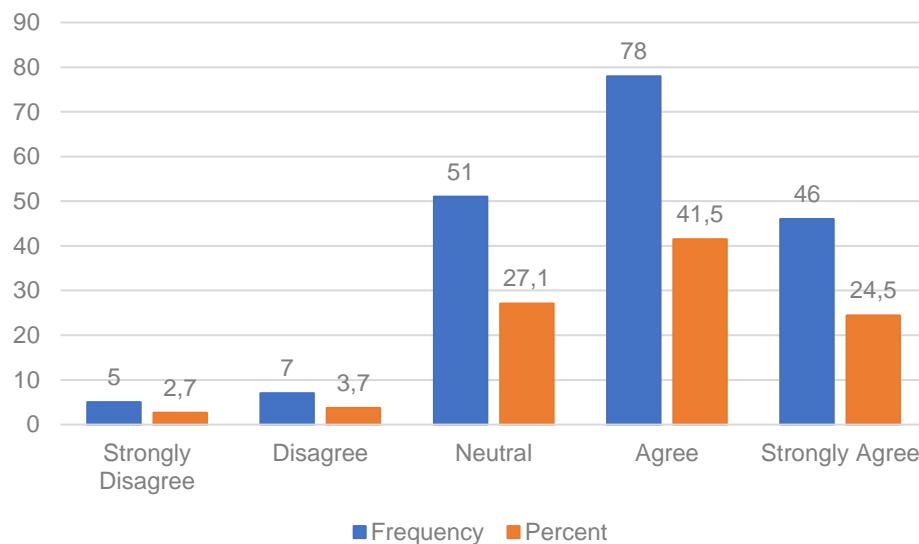


Figure 4.9: The programmes offered by CELT contribute to the empowerment and development of first-year students

The majority of respondents agreed (41.5%) or strongly agreed (24.5%) that the programmes that are offered by CELT contribute to the empowerment and development of first-year students. 27.1% of respondents were neutral regarding this statement, while only 3.7% disagreed and 2.7% strongly disagreed with the statement. These findings indicate that most of the students (66%) were confident that the programmes that are offered by CELT contribute to the empowerment and development of first-year students. These findings also indicate that while CELT provides initiatives to help ease the transition, some participants were unsure as to whether these support programmes contribute to the development and empowerment of first-year students. This is indeed a concern, considering that initiatives to empower and develop students are of importance to the university as they enable students to be independent and manage their academic progression effectively. These findings are supported by Adams (2019), who indicates that Student engagement has been found as an important predictor of academic performance. With the ongoing push to enhance student achievement and graduation rates in South African universities,

#### 4.7.8 The CELT programmes are necessary for promoting a smooth transition for first-year students.

This item aimed to measure whether the CELT programmes are necessary for promoting a smooth transition for first-year students. Participants were asked whether the CELT programmes are necessary for promoting a smooth transition for first-year students. The distribution of responses is shown in Figure 4.10 below.

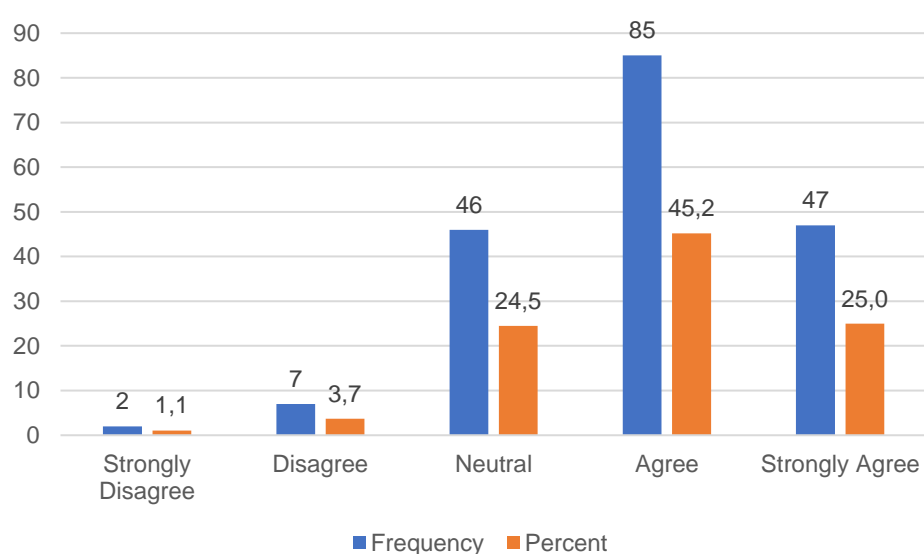


Figure 4.10: The CELT programmes are necessary for promoting a smooth transition for first-year students

The majority of the respondents agreed (45%) or strongly agreed (25%) that the CELT programmes are necessary for promoting a smooth transition for first-year students. 24.5% of respondents were neutral regarding this statement, while only 3.7% disagreed and 1% strongly disagreed with the statement. These findings indicate that most of the students (70%) were confident that the programmes offered by CELT are necessary for promoting a smooth transition for first-year students. These findings also indicate that while CELT offers support programmes to promote a smooth transition, not all students feel that these support programmes assist with the transition from high school to HE. These findings are supported by Amri (2014), who indicates that it is important for universities to simplify and smooth the process of transition of students from high school to HE to ensure their academic success. Parker and Thomas (2021) also emphasise that transition is not a one-time event but rather an ongoing process

that occurs over time, and that it is important to provide support to students to ensure a smooth transition.

In order to enhance the interpretation of the findings in Section B1, a section analysis is presented below.

#### 4.7.9 Section analysis

The scoring patterns for Section B1 are summarised in Figure 4.11 below.

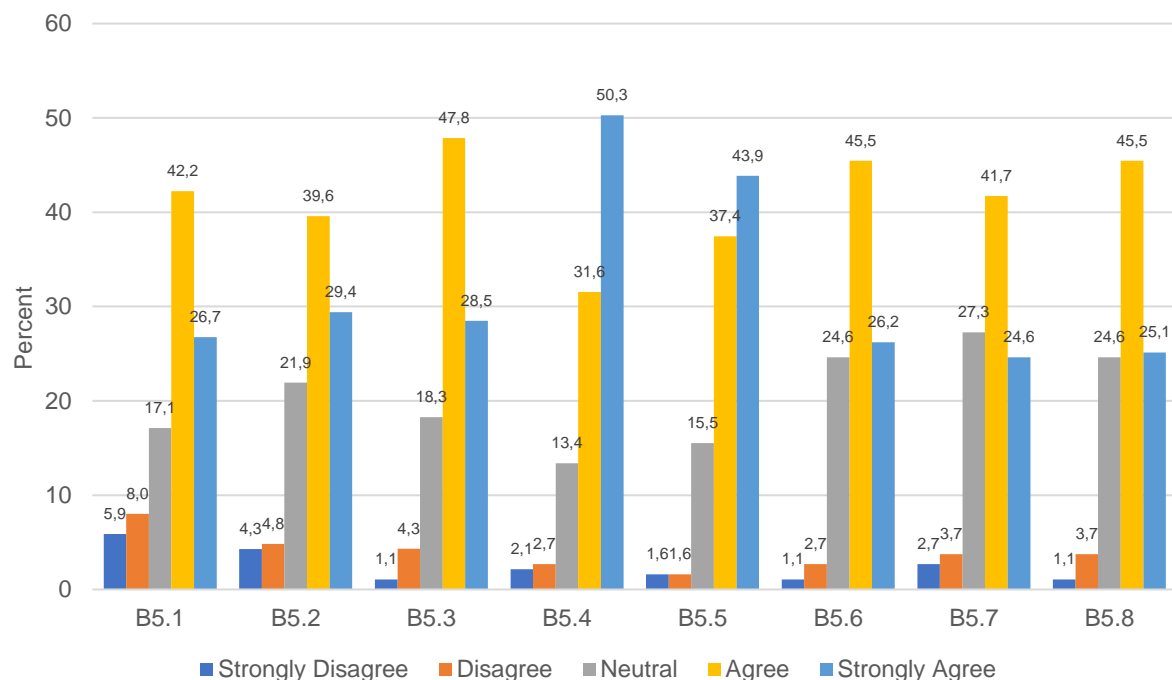


Figure 4.11: Section analysis B1

Across all the statements that were tested, the following patterns are observed and appear to be consistent:

- There is significant agreement on all statements. There is less agreement with some statements than there is with others. For all assertions, understanding is higher than conflict.
- There are no assertions on which there is a lot of disagreement.
- A few assertions have elevated degrees of impartial scores.



A chi square decency of-fit test was performed to see whether the scoring designs per sentence were essentially unique per elective. The null hypothesis states that the same number of respondents chose each option (one at a time) for each statement. The alternative suggests that there is a significant disparity between the levels of support and opposition.

The sig. values (p-values) that are highlighted are less than 0.05 (the level of significance). This suggests that there was no comparability between the distributions. In this instance, the responses that respondents gave (agree, neutral, disagree) varied significantly.

Factor analysis indicates that the three statements below constitute a sub-theme. (Assistance initiatives):

- Career guidance is offered by the university to assist with the transition from high school to university.
- The university facilitates academic programmes to support first-year students who are struggling academically.
- The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands.

With regard to this sub-theme, there is significant and consistent agreement. Participants identify that the university has attempted to assist students in respect of career guidance and demands related to the requirements of the academic programme.

Factor analysis demonstrates that the following two statements comprise a sub-theme (Orientation and adaptations):

- First-year student orientation is beneficial in helping students adapt to university life.
- The university facilitates social programmes to support first-year students in adapting to university social life.

This sub-theme has high and similar degrees of agreement. Respondents identify that the university has attempted to assist by providing social and orientation programmes to ensure a pleasant transition from high school to HE.

Factor analysis shows that the following five statements form a sub-theme (Support initiatives):

- First-year student orientation is beneficial in helping students adapt to university life.
- The university facilitates social programmes to support first-year students in adapting to university social life.
- First-year student experience programmes facilitated by CELT assist students to cope academically.
- The programmes that are offered by CELT contribute to the empowerment and development of first-year students.
- The CELT programmes are necessary for promoting a smooth transition for first-year students.

There is a wide consensus on this sub-theme. Participants identified that the university offers support initiatives to help students navigate their move from high school to higher education.

An analysis of the scoring patterns reveals that 50.3% of students were confident that the first-year student orientation is helping undergraduates adapt to university life. Furthermore, 43% of students agreed that the university provides social programmes to support first year students. This suggests that the university is playing its role in ensuring that first-year students transition successfully.

The following section discusses the findings for Section B2.

## 4.8 Section B2: Impact and effectiveness of the first-year introductory programmes

This section of the questionnaire focused on the impact and effectiveness of the first-year introductory programmes in order to determine how influential they are with the shift of students from high school to higher education. In this section, seven statements were tested.

### 4.8.1 The introductory programmes facilitated by the university helped with the transition from high school to higher education

This item aimed to measure how successfully the introductory programmes facilitated by the university help with the transition from high school to HE. Participants were asked whether the introductory programmes facilitated by the university helped with their transition from high school to HE. The distribution of responses is shown in Figure 4.12 below.

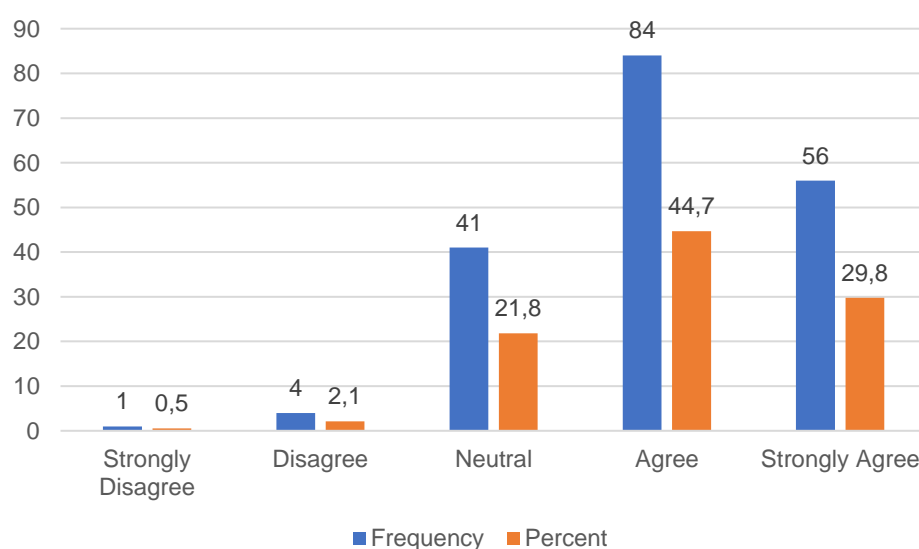


Figure 4.12: The introductory programmes facilitated by the university helped with the transition from high school to higher education

The majority of the respondents agreed (44.7%) or strongly agreed (29.8%) that the introductory programmes facilitated by the university helped with the transition from high school to HE. 21.8% were neutral regarding this statement, while only 2.1% disagreed and 0,5% strongly disagreed with the statement. These results specify that

most (74,5%) of the respondents were confident that the introductory programmes offered by CELT are necessary for promoting a smooth transition for first-year students. This suggests that the first-year introductory programmes provided comprehensive knowledge and the basic skills required for a smooth transition to HE, and that the content of these programmes provided relevant assistance to students. These results are firmed up by Ulriksen et al. (2017), who assert that in order to understand student dropout and the strategies that universities can implement to reduce dropout rates, each institution must make an explicit effort to identify the gap in first-year support programs and apply it to address the challenges students face that complicate student transition.

#### 4.8.2 The introductory programmes introduced by the university are useful in supporting students in adapting to university life.

This item aimed to measure how useful the introductory programmes introduced by the university are in supporting students in adapting to university life. Participants were asked whether the introductory programmes introduced by the university are useful in supporting students in adapting to university life. Figure 4.13 illustrates the response distribution.

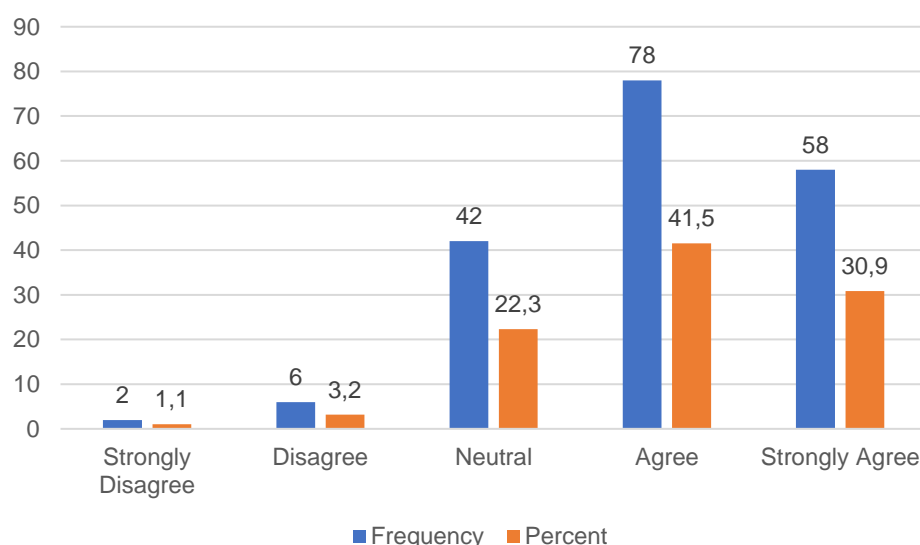


Figure 4.13: The introductory programmes introduced by the university are useful in supporting students in adapting to university life

The majority of the respondents agreed (41.5%) or strongly agreed (30.9%) that the introductory programmes introduced by the university were useful in supporting students in adapting to university life. 22.3% were neutral regarding this statement, while only 3.2% disagreed and 1.1% strongly disagreed with the statement. These findings indicate that most of the students (72.4%) were confident that the introductory programmes introduced by the university were useful in supporting students in adapting to university life. These findings are supported by Alharti (2020), who asserts that to maximise the benefits of their time at university, students need to be engaged in activities outside their academic and educational spheres, and HE institutions should provide first-year transition programmes to help students adapt to university life. The findings suggest that the introductory programmes at DUT provide effective support for first-year students in adjusting to university life with ease.

#### 4.8.3 The introductory programmes offered by the university assist in familiarising students with the university's facilities and support structures

This item aimed to measure the extent to which the introductory programmes offered by the university assist in familiarizing students with the university's facilities and support structures. Participants were asked whether the introductory programmes offered by the university assisted in familiarizing them with the university's facilities and support structures. The distribution of responses is shown in Figure 4.14 below.

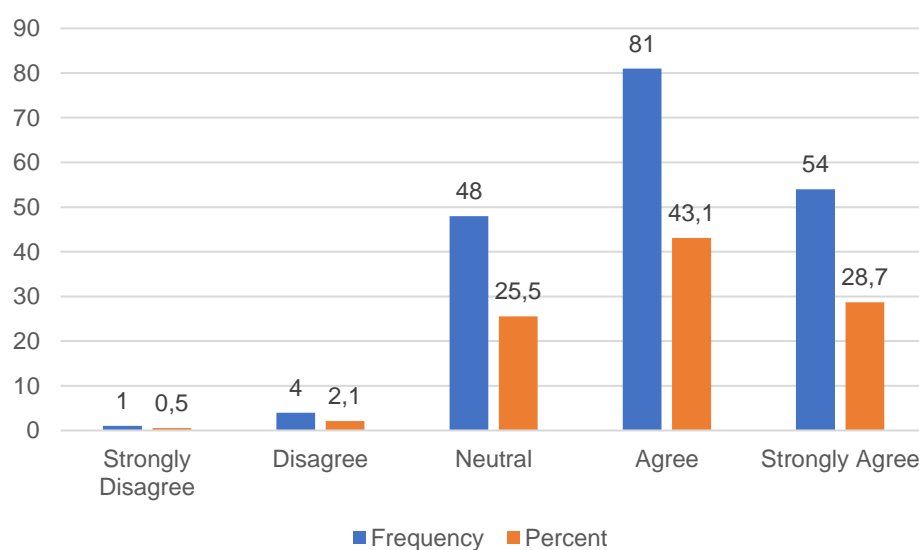


Figure 4.14: The introductory programmes offered by the university assist in familiarising students with the university's facilities and support structures

The majority of the respondents agreed (43.1%) or strongly agreed (28.7%) that the introductory programmes offered by the university assisted in familiarising them with the university's facilities and support structures. 25.5% were neutral regarding this statement, while only 2.1% disagreed and 0.5% strongly disagreed with the statement. These findings indicate that most of the students (71.8%) were confident that the introductory programmes offered by the university assisted in familiarising students with the university's facilities and support structures. These findings also indicate that some students felt that these programmes did not pay much attention to university facilities. These findings are supported by Zuma (2022), who asserts that familiarizing students with university facilities promotes an effective student life cycle, ensuring that students are not only instilled with entrepreneurial skills and knowledge, but also are well-rounded citizens.

#### 4.8.4 The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment.

This item aimed to measure the extent to which the introductory programmes are effective in mapping students' roles and responsibilities within the academic environment. Participants were asked whether the introductory programmes were effective in mapping students' roles and responsibilities within the academic environment. The distribution of responses is shown in Figure 4.15 below.

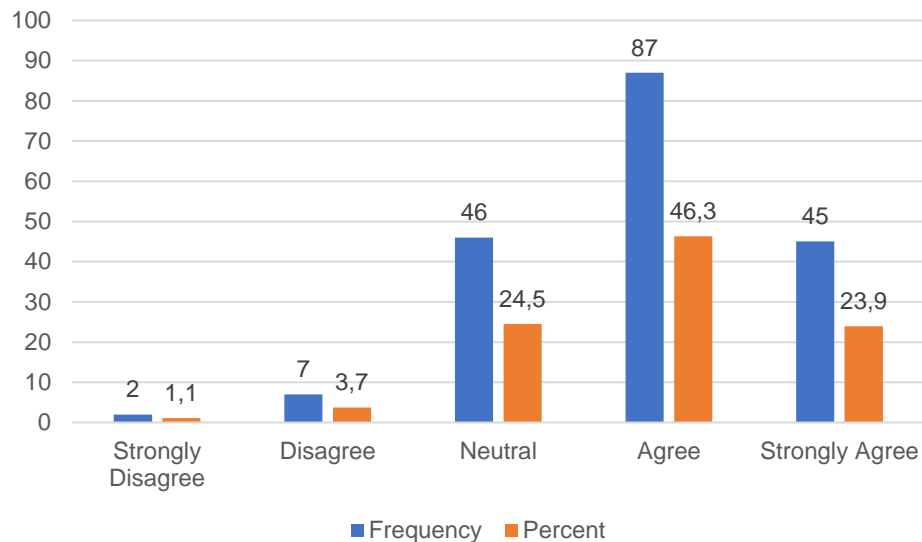


Figure 4.15: The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment

The majority of the respondents agreed (46.3%) or strongly agreed (23.9%) that the introductory programmes were effective in mapping students' roles and responsibilities within the academic environment. 24.5% were neutral regarding this statement, while only 3.7% disagreed and 1.1% strongly disagreed with the statement. These findings indicate that most of the students (70.2%) were confident that the introductory programmes were effective in mapping students' roles and responsibilities within the academic environment. The findings also indicate that while the majority of participants agreed that the introductory programmes were effective in mapping students' roles and responsibilities, some felt that these programmes did not address their roles and responsibilities within the academic environment. This may have a negative impact on these students, who have been used to explicit instruction in a high school environment.

#### 4.8.5 Interactive participation amongst students is encouraged during the introductory programmes

This item aimed to measure the extent to which interactive participation amongst students is encouraged during the introductory programmes to provide students with improved academic performance, increased engagement, and enhanced social skills. Participants were asked whether interactive participation amongst students is

encouraged during the introductory programmes. The distribution of responses is shown in Figure 4.16 below.

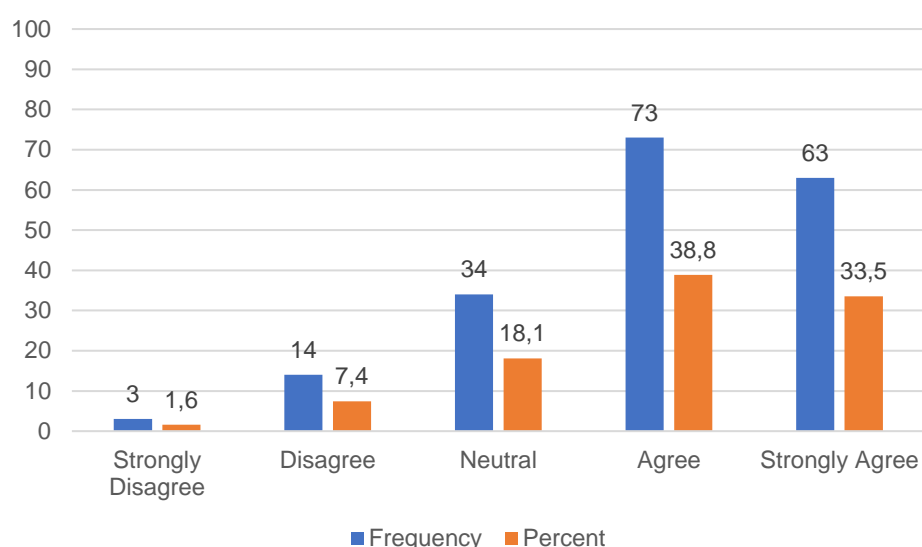


Figure 4.16: Interactive participation amongst students is encouraged during the introductory programmes

The majority of the respondents agreed (38.8%) or strongly agreed (33.5%) that interactive participation is encouraged amongst students during the introductory programmes. 18.1% were neutral regarding this statement, while only 7.4% disagreed and 1.6% strongly disagreed with the statement. These findings indicate that most of the students (72.3%) were confident that interactive participation amongst students is encouraged during the introductory programmes. These findings resonate with those of Meer, Scott and Pratt (2018), who indicated that students' interactive participation during the first year of study is important as students' non-engagement is one of the risk factors that affect their academic success. This indicates that interactive participation is vital for academic performance and ensuring that first-year students effectively transition from high school to university.

#### 4.8.6 Having attended the introductory programmes, I feel confident to be part of the university

This item aimed to measure the extent to which attending the introductory programmes increases students' confidence about being part of the university. Participants were



asked whether they feel confident about being part of the university after having attended the introductory programmes. The distribution of responses is shown in Figure 4.17 below.

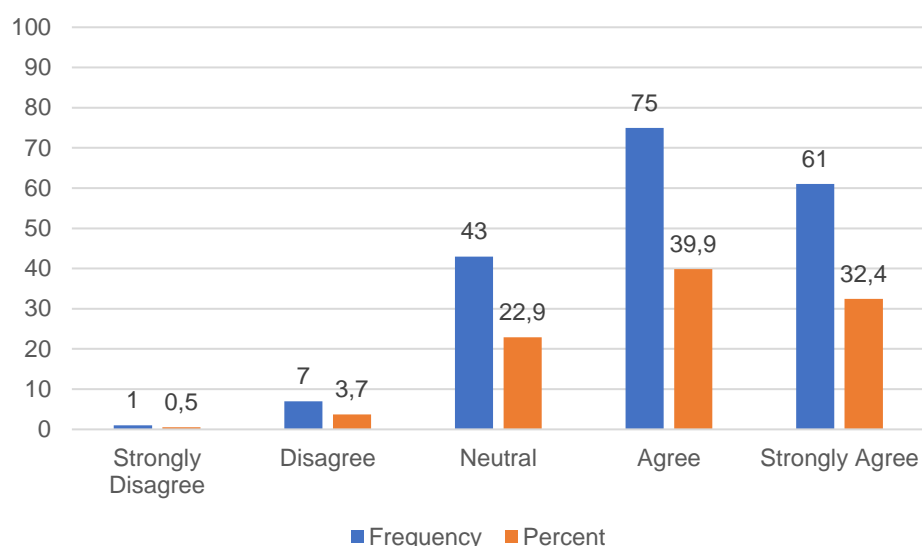


Figure 4.17: Having attended the introductory programmes, I feel confident to be part of the university

The majority of the respondents agreed (39.9%) or strongly agreed (32.4%) that having attended the introductory programmes, they feel confident to be part of the university. 22.9% were neutral regarding this statement, while only 3.7% disagreed and 0.5% strongly disagreed with the statement. These findings indicate that most of the students (72.3%) believed that the introductory programmes made them feel confident about being part of the university. This suggests that when students attend introductory programmes, they feel a sense of belonging and develop an interest in wanting to be part of the university. This may have a significant influence on students, especially with regard to settling into the university culture.

#### 4.8.7 Attending the introductory programme improved my holistic view of the university

This item aimed to measure the extent to which attending the introductory programmes improves students' holistic view of the university. Participants were asked whether

attending the introductory programmes improved their holistic view of the university. The distribution of responses is shown in Figure 4.18 below.

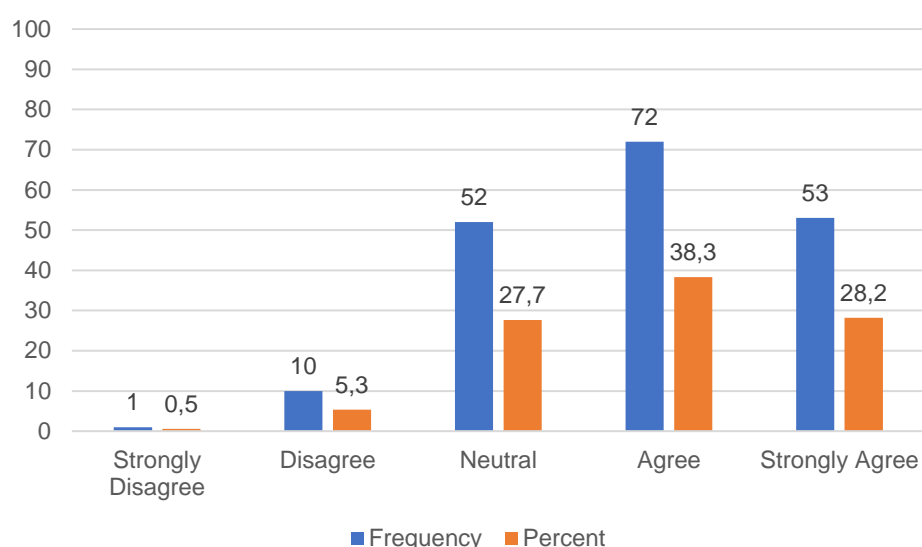


Figure 4.18: Attending the introductory programmes improved my holistic view of the university

The majority of the respondents agreed (38.3%) or strongly agreed (28.2%) that attending the introductory programmes improved their holistic view of the university. 27.7% were neutral regarding this statement, while only 5.3% disagreed and 0.5% strongly disagreed with the statement. These findings indicate that most of the students (66.5%) were confident that attending the introductory programme improved their holistic view of the university. However, a recognisable number of students (27.7%) were uncertain about the impact of the introductory programmes, specifically with regard to improving their holistic view of the university. This is a serious concern, as these programmes are designed to strengthen students' awareness of the university. It must be noted, though, that a number of factors could have contributed to this, as not all students enter DUT directly from high school. As indicated above, approximately a quarter (23.4%) of the respondents had a post-school qualification. This indicates that these participants had already been exposed to tertiary education at some point after matriculating, and the introductory programmes offered by the university might not be of significance to them.

In order to enhance the interpretation of the findings in Section B2, a section analysis is presented below.

#### 4.8.8 Section analysis

The scoring patterns for Section B2 are summarised in Figure 4.19 below.

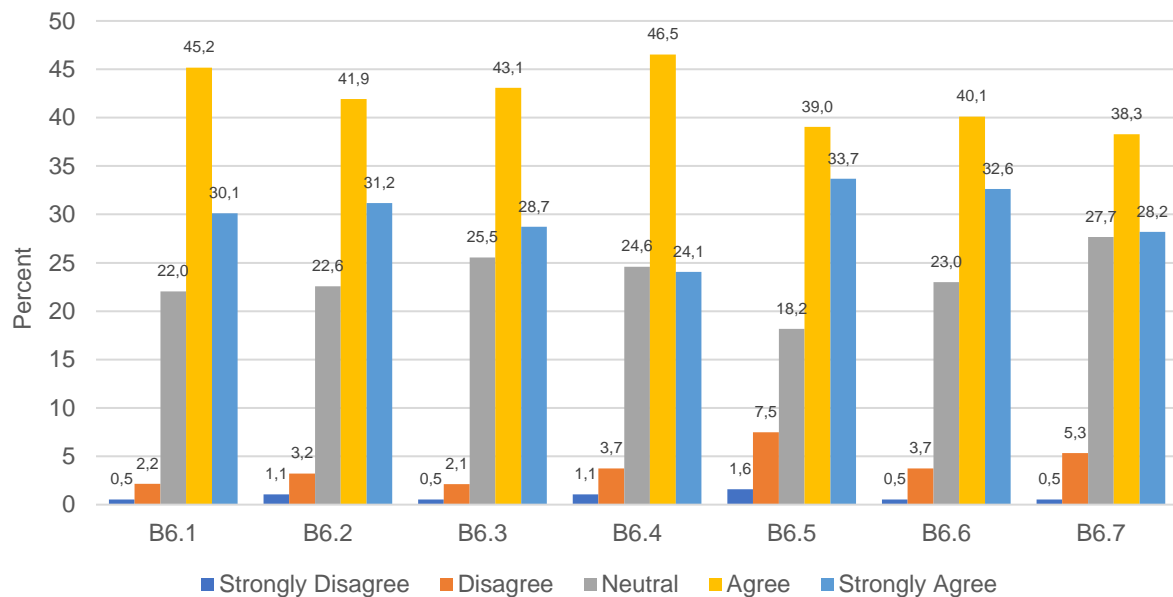


Figure 4.19: Scoring patterns for Section B2

Across all the statements that were tested, the following patterns are observed and appear to be consistent:

- There is significant agreement on all statements.
- There is less agreement with some statements than there is with others. For all assertions, understanding is higher than conflict.
- There are no assertions on which there is a lot of disagreement.
- A few assertions have elevated degrees of impartial scores.

A chi square decency of-fit test was performed to see whether the scoring designs per sentence were essentially unique per elective. The null hypothesis states that the same number of respondents chose each option (one at a time) for each statement. The alternative suggests that there is a significant disparity between the levels of

support and opposition. The sig. highlighted values (p-values) are less than 0.05, which is the level of significance. This suggests that there was no comparability between the distributions. In this instance, the responses that respondents gave (agree, neutral, disagree) varied significantly.

Factor investigation shows that the accompanying seven assertions structure a sub-topic (First-year early on programs):

- The introductory programmes facilitated by the university helped with the transition from high school to higher education.
- The introductory programmes introduced by the university are useful in supporting students in adapting to university life.
- The introductory programmes offered by the university assist in familiarizing students with the university's facilities and support structures.
- The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment.
- Interactive participation amongst students is encouraged during the introductory programmes.
- Having attended the introductory programmes, I feel confident to be part of the university.
- Attending the introductory programme improved my holistic view of the university.

There is significant and consistent agreement on this sub-theme. Participants identify that the university has attempted to facilitate introductory programmes related to the FYSE so that students will feel that they are part of the university and so that they transition successfully from high school to university. Respondents also identify that attending these introductory programmes offered by the university assist them in understanding the university environment and contribute to their positive adaption to university life.

An analysis of the scoring patterns reveals that 40% of students agreed that attending the first-year student introductory programmes assists students to feel confident about being part of the university. Furthermore, 43.1% of students agreed that these introductory programmes offered by the university assisted in familiarizing them with the university's facilities and support structures. This implies that the university is addressing the needs of all students, that the institution understands the importance of the transition from high school to university, and that the university is doing its bit to ensure that students receive enough support.

The following section discusses the findings for Section B3.

#### **4.9 Section B3: The effectiveness of the orientation programme in the Department of Information and Corporate Management**

This section of the questionnaire focused on the effectiveness of the orientation programme in the Department of ICM. In this section, five statements were tested.

##### **4.9.1 Proper guidance is provided regarding the alignment of qualifications to industry**

This item aimed to measure the extent to which proper guidance is provided regarding the alignment of qualifications to industry. Participants were asked whether proper guidance was provided regarding the alignment of qualifications to industry. The distribution of responses is shown in Figure 4.20 below.

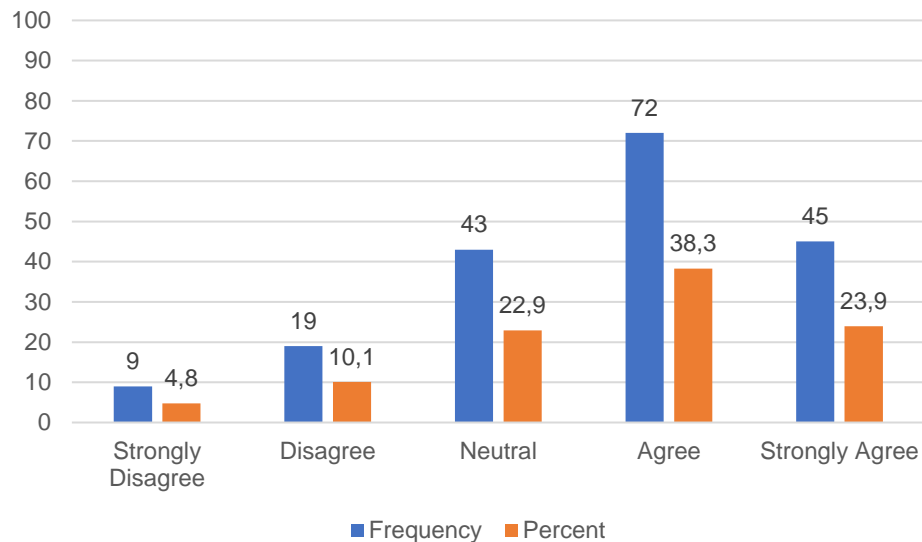


Figure 4.20: Proper guidance is provided regarding the alignment of qualifications to industry

The majority of the respondents agreed (38.3%) or strongly agreed (23.9%) that proper guidance is provided regarding the alignment of qualifications to industry. 22.9% were neutral regarding this statement, while only 10.1% disagreed and 4.8% strongly disagreed with the statement. These findings indicate that most of the students (62.2%) were confident that proper guidance had been provided to them regarding qualifications' alignment to industry. These findings are supported by Roy (2020), who claims that effective advice in educational institutions is crucial to meeting students' objectives since picking a vocation is unquestionably one of the most important decisions one can make in life. If students do not receive proper guidance, they might not understand the alignment of their qualification to industry, which may result in students becoming disinterested and dropping out. Therefore, proper career guidance from academic departments is crucial to the completion rate and success of students.

#### 4.9.2 The departmental orientation offered to first-year students effectively addresses the objectives of the programme for which they are registered

This item aimed to measure the extent to which the departmental orientation offered to first-year students effectively address the objectives of the programme for which they are registered. Participants were asked whether the departmental orientation

offered to first-year students effectively address the objectives of the programme for which they are registered. The distribution of responses is shown in Figure 4.21 below.

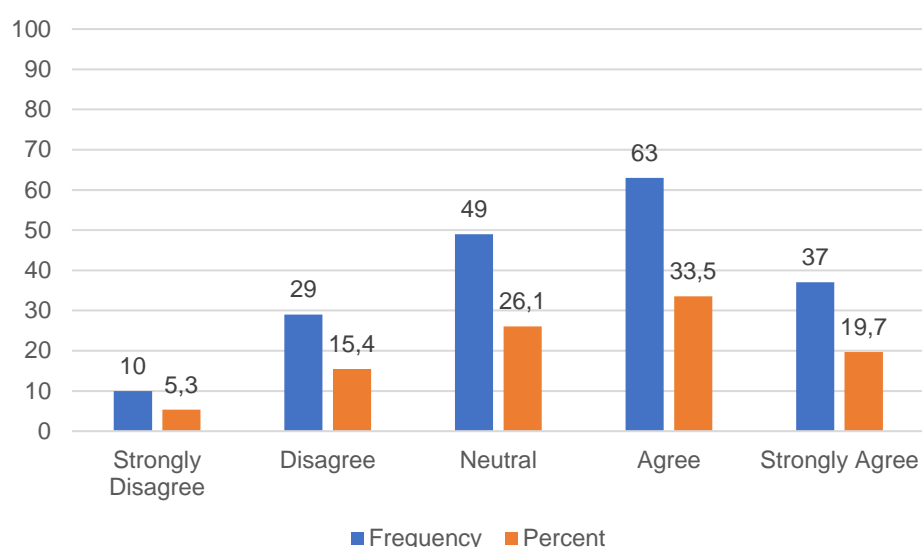


Figure 4.21: The departmental orientation offered to first-year students effectively addresses the objectives of the programme for which they are registered

The majority of the respondents agreed (33.5%) or strongly agreed (19.7%) that the departmental orientation presented to first-year students effectively addresses the objectives of the programme for which they are registered. 26.1% were neutral regarding this statement, while only 15.4% disagreed and 5.3% strongly disagreed with the statement. These findings indicate that most of the students (59.9%) were confident that the departmental orientation offered to first-year students effectively addresses the objectives of the programme for which they are registered. These findings are supported by Matt (2022), who suggests student orientation is a period during which students learn about the school's regulations and procedures, interact with advisors, and become acquainted with the campus. It enables students to connect with other students and faculty members, learn about campus resources, and receive assistance as they embark on their college experience. While the majority of students agreed that the departmental orientation effectively addresses the objectives of the programme for which they are registered, a considerable number of students were neutral regarding this statement or disagreed or strongly disagreed with it. These findings suggest that while the department has initiatives in place to ease the transition, some students are not convinced that these initiatives are effective in

providing the necessary information about the objectives of the programme. This suggests that students expect comprehensive information about the objectives of their programme and how it matches industry expectations.

#### 4.9.3 Tutors provide valuable assistance in ensuring that first-year students adapt to university life

This item aimed to measure the extent to which tutors provide valuable assistance in ensuring that first-year students adapt to university life. Participants were asked whether the tutors provide valuable assistance in ensuring that first-year students adapt to university life. The distribution of responses is shown in Figure 4.22 below.

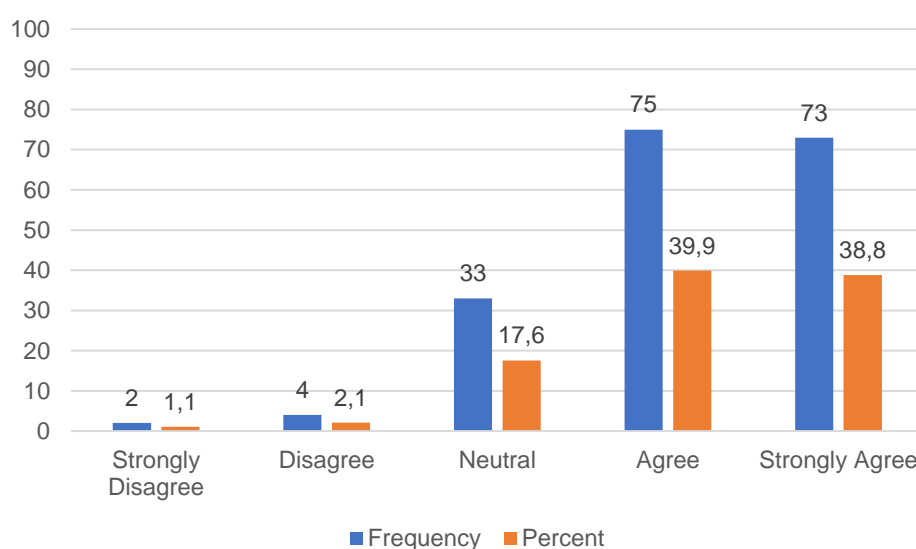


Figure 4.22: Tutors provide valuable assistance in ensuring that first-year students adapt to university life

The majority of the respondents agreed (39.9%) or strongly agreed (38.8%) that tutors provide valuable assistance in ensuring that first-year students adapt to university life. 17.6% were neutral regarding this statement, while only 2.1% disagreed and 1,1% strongly disagreed with the statement. These findings indicate that most of the students (78.8%) were confident that tutors provide valuable assistance in ensuring that first-year students adapt to university life. These findings are supported by Ruiz and Fandos (2014), who state that tutoring is an important part of the university teaching-learning process, with the goal of increasing student success rates and



enabling students to achieve their professional goals and adapt to university life. Tutoring is considered a fundamental strategy for any model of student learning, guidance, individualization, and monitoring. Jiménez (2010) claims that university lecturers regard tutoring as a professional skill and employ it as a teaching strategy. This indicates that tutoring is an effective strategy used by the university to confirm that students are given sufficient support when dealing with the transition and adapting to university life.

#### 4.9.4 First-year tutoring programmes contribute to the successful transition of first-year students from high school to university

This item intended to determine the extent to which first-year tutoring initiatives assist in making a successful move of first-year students from high school to university. Tutors are beneficial as they assist students to succeed academically and provide the skills required for students to achieve academic success. Participants were asked whether first-year tutoring programs aid in the successful transfer of first-year students from high school to university. The distribution of responses is illustrated in Figure 4.23 below.

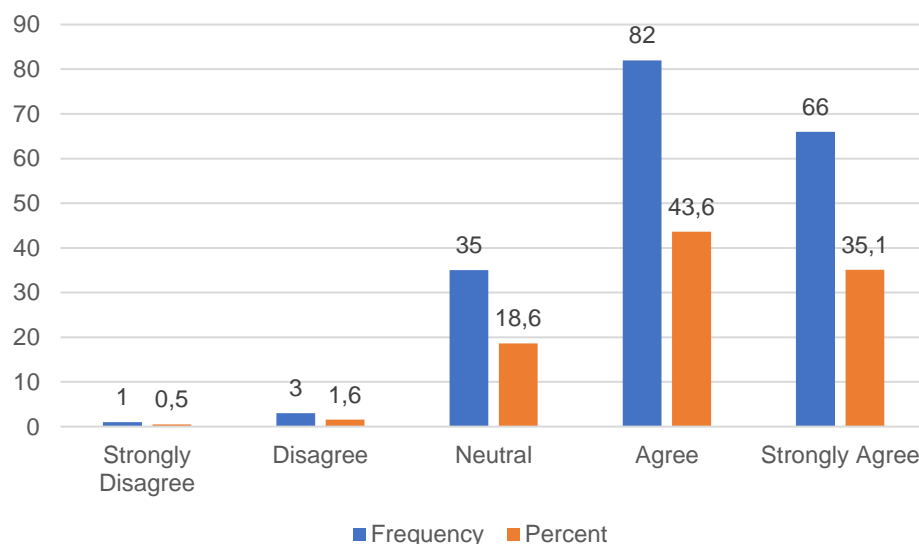


Figure 4.23: First-year tutoring programmes contribute to the successful transition of first-year students from high school to university

The majority of the respondents agreed (43.6%) or strongly agreed (35.1%) that first-year tutoring programmes contribute to the successful transition of first-year students

from high school to university. 18.6% were neutral regarding this statement, while only 1.6% disagreed and 0.5% strongly disagreed with the statement. These findings indicate that most of the students (78.7%) were confident that first-year tutoring programmes contribute to the successful transition of first year students from high school to university. These findings resonate with those of Yam (2010), who claims that the initial few weeks of a first-year student's university experience are essential to their learning experience and that tutors must use successful tutoring tactics to engage them. This is advantageous to students' studies and also assists them in swiftly adapting to the university learning environment and establishing themselves within the teaching and learning environment.

#### 4.9.5 The department is effective in providing the necessary support to first-year students while they transition from high school to university.

This item aimed to measure the extent to which the department is effective in providing the necessary support to first-year students while they transition from high school to university. Participants were asked whether the department is effective in providing the necessary support to first-year students while they transition from high school to university. The distribution of responses is shown in Figure 4.24 below.

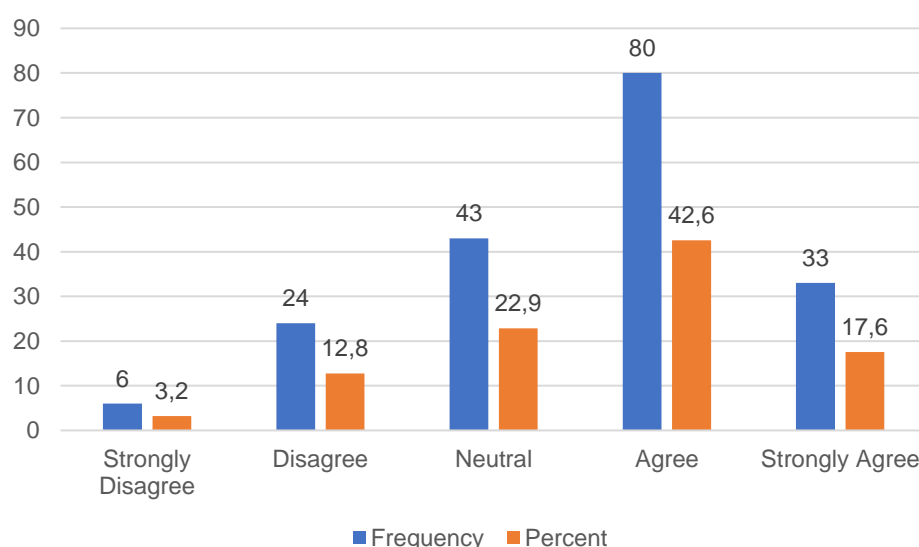


Figure 4.24: The department is effective in providing necessary support to first-year students while they transition from high school to university

The majority of the respondents agreed (42.6%) or strongly agreed (17.6%) that the department is effective in providing the necessary support to first-year students while they transition from high school to university. 22.9% were neutral regarding this statement, while only 12.8% disagreed and 3.2% strongly disagreed with the statement. These findings indicate that most of the students (60.2%) were confident that the department effectively provides the necessary support to first year students while they transition from high school to university. The findings also indicate that some students were not fully convinced about the level of assistance provided to them by the department during their transition. These findings resonate with those of Van Rooij, Jansen and Grift (2018), who assert that the level of academic adjustment to this new environment, as measured by the type of assistance provided, is an effective indicator of how successfully a student has moved to university. This implies that students who receive the requisite support have a better probability of successfully transitioning from high school to HE and doing satisfactorily or excelling.

In order to enhance the interpretation of the findings in section B3, a section analysis is presented below.

#### 4.9.6 Section analysis

The scoring patterns for Section B3 are summarised in Figure 4.25 below.

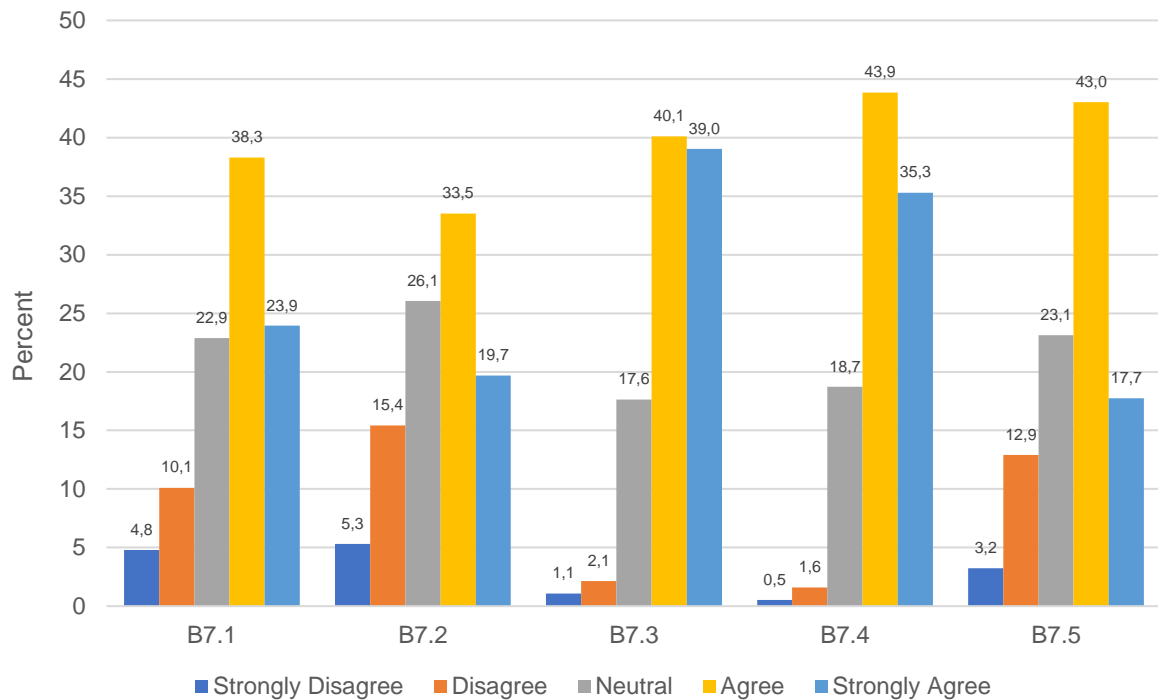


Figure 4.25: Scoring patterns for Section B3

The following patterns are observed and appear to be consistent throughout the statements tested:

- All statements show significantly high levels of agreement. Some statements show lower levels of agreement than others. For all statements, agreement is higher than disagreement.
- There are no statements with high levels of disagreement.
- Some statements have high levels of neutral scores.

Chi-square goodness-of-fit tests were conducted to determine whether the pattern of ratings for each sentence was significantly different for each option. The null hypothesis states that the same number of respondents made a different choice for each statement (one at a time). There are large differences in the degree of agreement and disagreement with alternatives. The highlighted sig. value (p-value) is less than 05 (significance level). This indicates that the distributions are not comparable. In this example, there were significant differences in respondents' ratings (agree, neutral, and disagree).

Factor analysis indicates that the following two statements represent a sub-theme. (Programme knowledge):

- Proper guidance is provided regarding the alignment of qualifications to industry.
- The departmental orientation offered to first-year students effectively address the objectives of the programme for which they are registered.

There are high and similar levels of agreement relation to this sub-theme. Respondents identify that the university, in collaboration with the academic departments, has attempted to provide students with the necessary knowledge about the programmes for which they are registered and to effectively address the objectives of these programmes.

Factor analysis shows that the following two statements form a sub-theme (Tutoring initiatives):

- Tutors provide valuable assistance in ensuring that first-year students adapt to university life.
- First-year tutoring programmes contribute to the successful transition of first-year students from high school to university.
- The department is effective in providing the necessary support to first-year students while they transition from high school to university.

There are high levels of agreement in relation to this sub-theme. Respondents identify that the university provides tutoring programmes to students in order for them to receive the necessary support to excel academically. An analysis of the scoring patterns reveals that 43.9% of students agree that the university provides tutorial assistance to support students' academic lives and to ensure a successful transition from high school to university. Furthermore, 43% of students state that the department is effective in providing the necessary support to students while they transition from high school to university.

The following section discusses the findings for Section B4.

#### 4.10 Section B4: Challenges faced by first-year students when they transition.

This section of the questionnaire focused on the challenges faced by first-year students when they transition. In this section, six statements were tested.

##### 4.10.1 Lack of financial support influences the transition from high school to higher education

This item aimed to measure the extent to which lack of financial support influences the transition from high school to HE. Financial support plays a crucial role in the transition of students as it is a necessity; students with no financial support have limited chances of transitioning successfully and are at risk of dropping out. Participants were asked whether lack of financial support influenced their transition from high school to HE. The distribution of responses is shown in Figure 4.26 below.

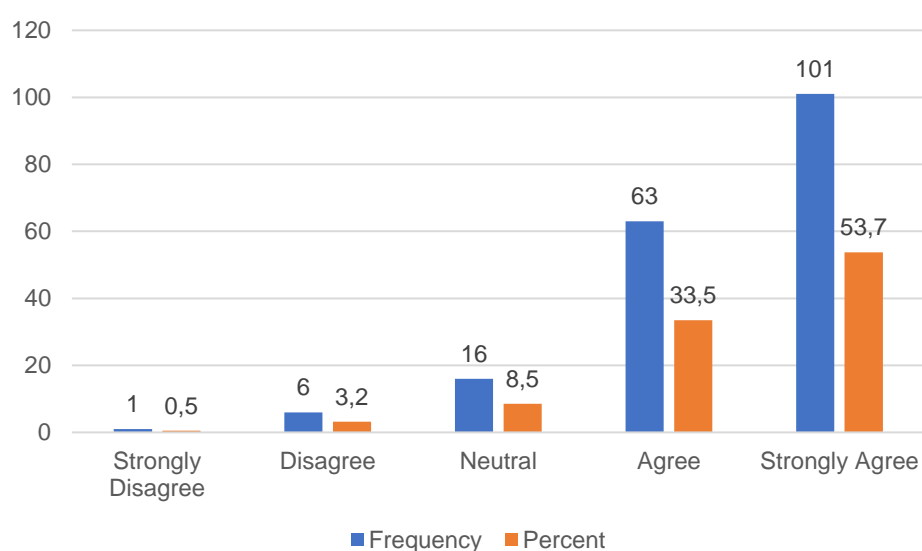


Figure 4.26: Lack of financial support influences the transition from high school to higher education

The majority of the respondents strongly agreed (53.7%) or agreed (33.5%) that lack of financial support influences the transition from high school to HE. 8.5% were neutral

regarding this statement, while only 3.2% disagreed and 0.5% strongly disagreed with the statement. These findings indicate that most of the students (87.5%) believed that lack of financial support influences transition from high school to HE. These findings resonate with those of Walker and Mkwana (2015), who note that South Africa is faced with the challenge of young students from disadvantaged areas and low-income families; these students desperately need to convert their aspirations into reality and see HE as a way out of poverty. Moore, Nguyen, Rivas, Bany-Mohammed, Majeika and Martinez (2021) affirm that numerous studies have found that students who are in financial distress are more likely to drop out than students in better financial status. This suggests that lack of financial support for first-year students contributes to their being unable to transition successfully to HE.

#### 4.10.2 Insufficient knowledge about my career choice influenced the transition from high school to higher education

This item aimed to measure the extent to which insufficient knowledge about career choice influences the transition from high school to HE. Knowledge of their chosen careers enables students to make appropriate course choices and to have the opportunity to settle in well at the university. Participants were asked whether insufficient knowledge about career choice influenced their transition from high school to HE. The distribution of responses is shown in Figure 4.27 below.

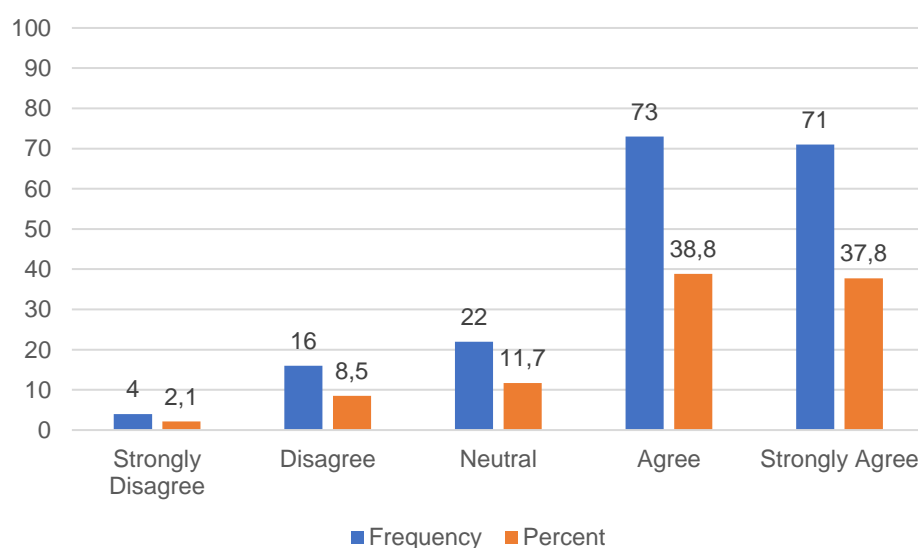


Figure 4.27: Insufficient knowledge about my career choice influenced the transition from high school to higher education

The majority of the respondents agreed (38.8%) or strongly agreed (37.8%) that Inadequate understanding about professional options influenced their transition from high school to HE. 11.7% were neutral regarding this statement, while only 8.5% disagreed and 2.1% strongly disagreed with the statement. These findings indicate that most of the students (76.6%) believed that insufficient knowledge about career choice influenced their transition from high school to HE. These findings are supported by Nyamwange (2016), who states that many students are provided with a list of career choices before being admitted to their first year of tertiary study. However, given that most students lack enough information about alternative vocations, the decisions they make are based on their view of the ideal job and the topics they study in secondary school... Due to the shortage of capacity at universities, first-year students end up registering for whichever qualifications have capacity available to accommodate them. This suggests that many students are enrolled in courses that are not in demand in industry, and that students are enrolling in courses for the sake of getting places at university.

#### 4.10.3 Insufficient knowledge about the selected university influenced the transition from high school to higher education

This item aimed to measure the extent to which Insufficient knowledge about the selected university influences the transition from high school to HE. Students' knowledge about their chosen university prepares them for what to expect when they enroll and eases the transition from high school to HE. Participants were asked whether insufficient knowledge about the selected university influenced their transition from high school to HE. The distribution of responses is shown in Figure 4.28 below.



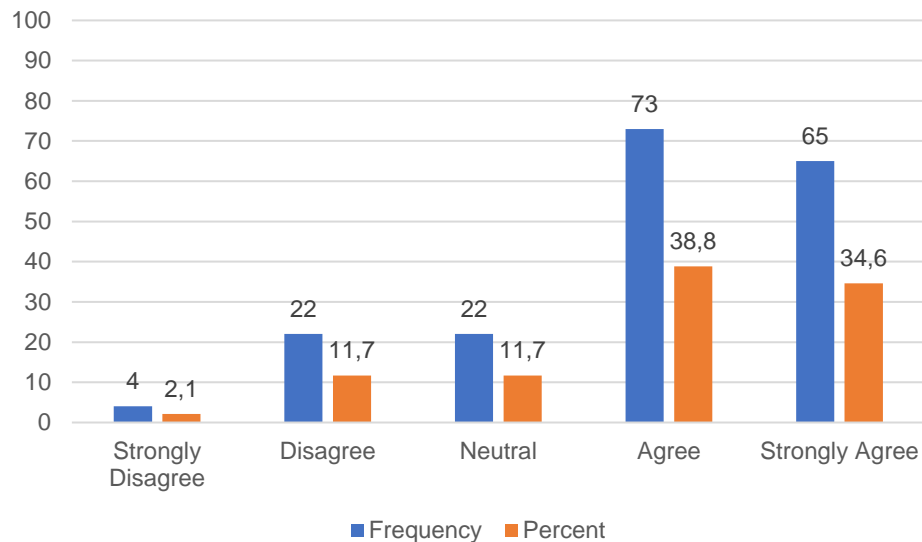


Figure 4.28: Insufficient knowledge about the selected university influenced the transition from high school to higher education

The majority of the respondents agreed (38.8%) or strongly agreed (34.6%) that insufficient knowledge about the selected university influenced their transition from high school to HE. 11.7% were neutral regarding this statement, while only 11.7% disagreed and 2.1% strongly disagreed with the statement. These findings indicate that most of the students (73.4%) believed that insufficient knowledge about the selected university influenced their transition from high school to HE. This suggests that most students register for HE without proper knowledge of the programmes that are available at the institution, and that some students register for the sake of getting places at university and because they do not want to stay at home. After registration, these students find that they are studying courses that are not to their interest, and some have difficulties transitioning and end up dropping out.

#### 4.10.4 The academic learning environment had an impact on the transition from high school to higher education

This item aimed to measure the extent to which the academic learning environment had an impact on the transition from high school to HE. The physical location of the academic learning environment, the culture in which students learn, and how students interact with each other all have an impact on the transition from high school to HE. Participants were asked whether the academic learning environment had an impact

on their transition from high school to HE. The distribution of responses is shown in Figure 4.29 below.

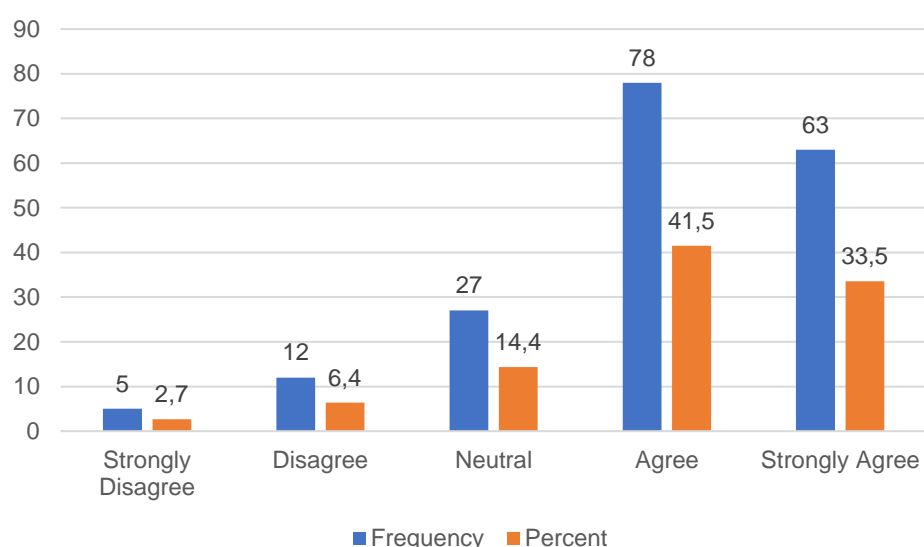


Figure 4.29: The academic learning environment had an impact on the transition from high school to higher education

The majority of the respondents agreed (41.5%) or strongly agreed (33.5%) that the academic learning environment had an impact on their transition from high school to HE. 14.4% were neutral regarding this statement, while only 6.4% disagreed and 2.7% strongly disagreed with the statement. These findings indicate that most of the students (75%) believed that the academic learning environment had an impact on their transition from high school to HE. These findings are supported by Hendrix (2019), who asserts that the academic learning environment has an impact on students and plays a crucial role in student success. This suggests that the teaching and learning approach in HE is totally different from that of high schools. Therefore, adjusting to the HE academic environment is an important consideration.

#### 4.10.5 Environmental changes, such as location and cultural shock, influenced the transition from high school to higher education

This item aimed to measure the extent to which environmental changes, such as location and cultural shock, influences the transition from high school to HE. Environmental changes are a contributing factor to dealing with transition. Students

may have difficulties adjusting to a new environment in which different cultures are involved. Some students may feel homesickness, anxiety, depression, and isolation. Participants were asked whether environmental changes, such as location and cultural shock, influenced their transition from high school to HE. The distribution of responses is shown in Figure 4.30 below.

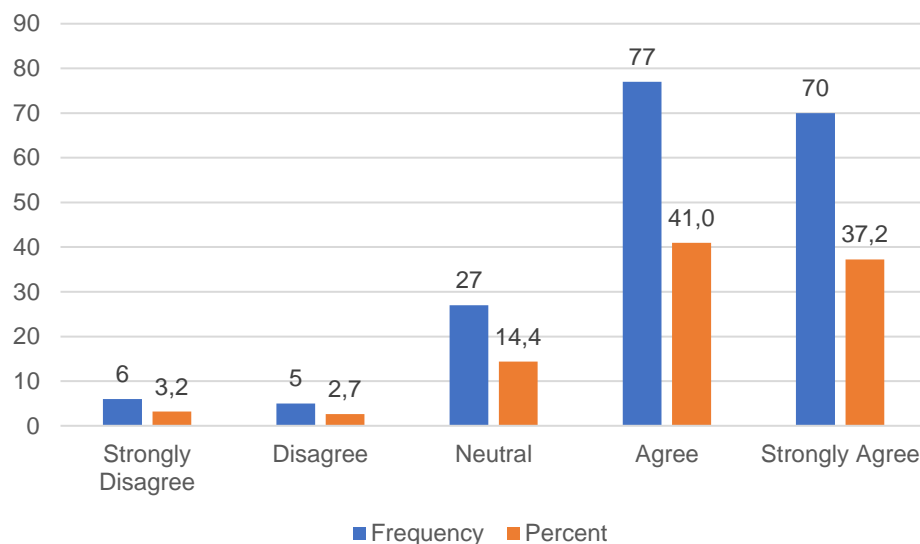


Figure 4.30: Environmental changes, such as location and cultural shock, influenced the transition from high school to higher education

The majority of the respondents agreed (41.0%) or strongly agreed (37.2%) that environmental changes, such as location and cultural shock, influenced their transition from high school to HE. 14,4% were neutral regarding this statement, while only 2.7% disagreed and 3.2% strongly disagreed with the statement. These findings indicate that most of the students (78.2%) believed that environmental changes, such as location and cultural shock, influenced their transition from high school to HE. These findings are supported by Cheng (2015), who asserts that although students experience the transition to HE in a variety of ways, the shift from a familiar to an unfamiliar environment constitutes a period of instability for almost all of them. This suggests that first-year students undergo various phases as the environmental changes influence their transition from high school to HE. The new environment is congested, and there are many unfamiliar structures that students need to understand very quickly in order to survive in an environment that is foreign to them. These

changes can evoke various emotions in first-year students, and the transition stage is crucial to the academic success of students.

#### 4.10.6 Social interactions with peers influenced a smooth transition from high school to higher education

This item aimed to measure the extent to which social interactions with peers influence a smooth transition from high school to HE. Participants were asked whether social interactions with peers influenced a smooth transition from high school to HE. The distribution of responses is shown in Figure 4.31 below.

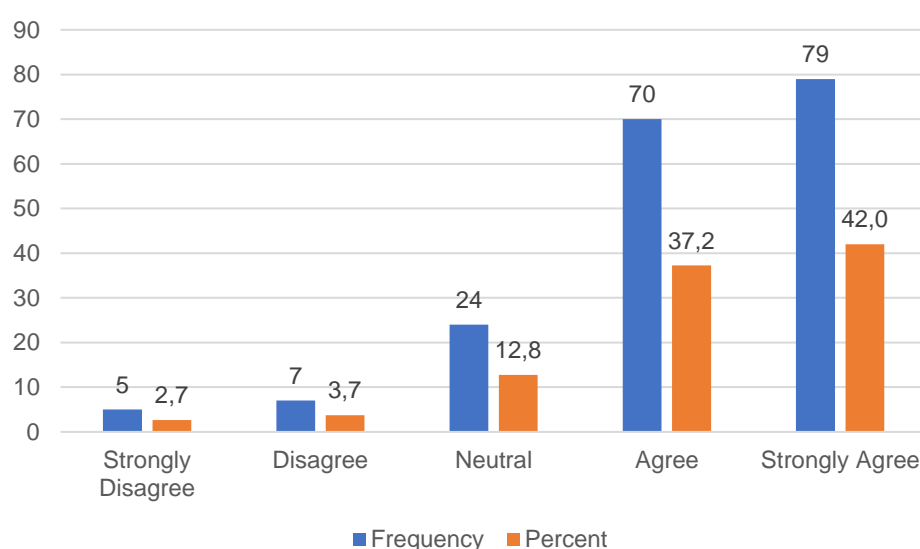


Figure 4.31: Social interactions with peers influenced a smooth transition from high school to higher education

The majority of the respondents strongly agreed (42.0%) or agreed (37.2%) that social interactions with peers influenced a smooth transition from high school to HE. 12.8% were neutral regarding this statement, while only 3.7% disagreed and 2.7% strongly disagreed with the statement. These findings indicate that most of the students (79.2%) strongly believed that social interactions with peers influenced a smooth transition from high school to HE. These findings are supported by a study conducted by Arends and Petersen (2018), who assert that the first-year transition period is recognised as an important transition from one 'cultural space' to another during which students form new relationships, some of which can be social and learning relationships in an informally structured, small community of peers and others, where

opportunities are created for them to live and learn more cohesively in a new educational space. Furthermore, the empirical findings of this study imply that having no friends makes the entire transfer to university tough, whereas having friends or acquaintances helps students settle in fast. This suggests that social interactions with peers make university life easier and enable a smoother transition.

In order to enhance the interpretation of the findings in Section B4, a section analysis is presented below.

#### 4.10.7 Section analysis

The scoring patterns for Section B4 are summarised in Figure 4.32 below.

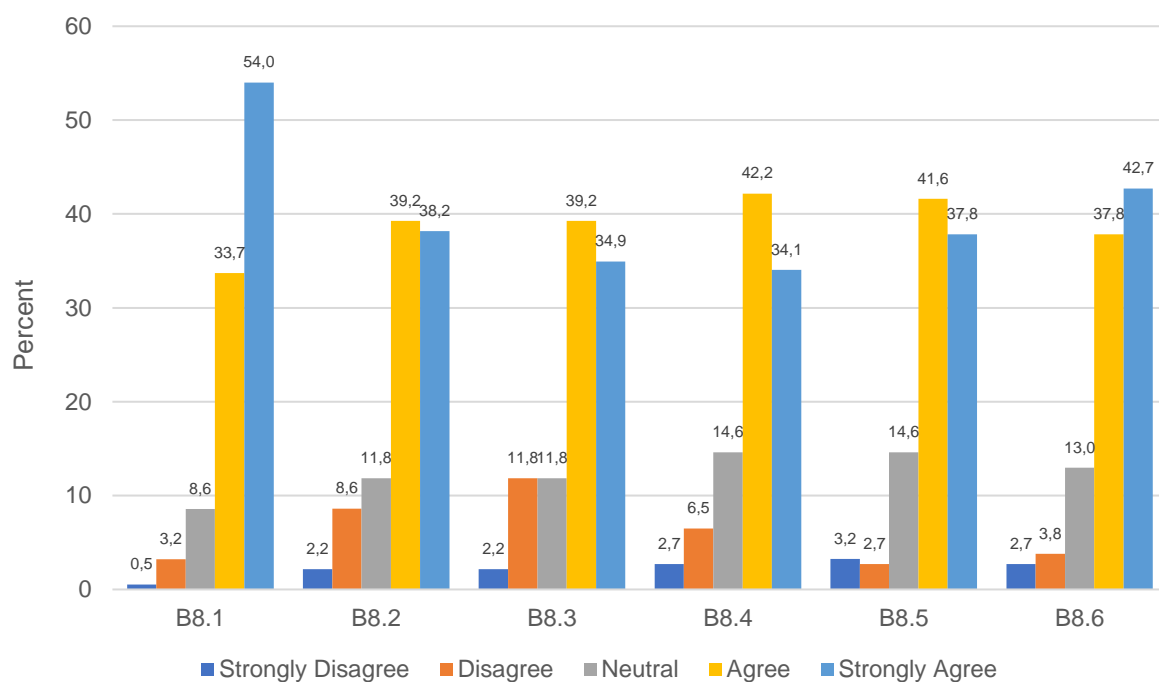


Figure 4.32: Scoring patterns for Section B4

Across all the statements that were tested, the following patterns are observed and appear to be consistent:

- There is significant agreement on all statements.
- There are no assertions on which there is a lot of disagreement.
- A few assertions have elevated degrees of impartial scores.

To determine whether the scoring patterns per sentence were significantly different for each alternative, a chi square goodness-of-fit test was used. The null hypothesis states that the same number of respondents chose each option (one at a time) for each statement. There is a significant gap between the levels of support and opposition to the alternative. The sig. highlighted values (p-values) are less than 0.05, which is the level of significance. This suggests that there was no comparability between the distributions. In this instance, the responses that respondents gave (agree, neutral, disagree) varied significantly.

The following three statements form a sub-theme (Transition challenges) according to factor analysis:

- Lack of financial support influences the transition from high school to higher education.
- Insufficient knowledge about my career choice influenced the transition from high school to higher education.
- Insufficient knowledge about the selected university influenced the transition from high school to higher education.

In relation to this sub-theme, there is a general consensus. Respondents identify that having insufficient knowledge of university structures influenced their transition from high school to university. They also indicate that a lack of financial support influenced their transition. An analysis of the scoring patterns reveals that 54% of students strongly agreed that a lack of financial support contributes to the difficulties of dealing with a transition.

Factor analysis shows that the following three statements form a sub-theme (First-year common issues):

- The academic learning environment had an impact on the transition from high school to higher education.
- Environmental changes, such as location and cultural shock, influenced the transition from high school to higher education.

- Social interactions with peers influenced a smooth transition from high school to higher education.

There are high levels of agreement in relation to this sub-theme. Respondents identify that the structure of the learning environment affected their transition from high school to university. They also indicate that a change in location and cultural shock influenced their transition to HE. An analysis of the scoring patterns reveals that 42.7% of students agree that social interactions with other students ensure a smooth transition, which suggests that students who interact with other students have a smoother transition than students who do not.

The following section discusses the findings for Section C.

#### **4.11 Section C: Interventions to support the transition of first-year students**

This section of the questionnaire focused on interventions to support the transition of first-year students. In this section, four statements were tested.

##### **4.11.1 Parental guidance**

This item aimed to measure the extent to which parental guidance was made available to support first-year students in their transition from high school to HE. Parents provide emotional and physical support to students. Participants were asked whether parental guidance was provided prior to their enrolment at university. The distribution of responses is shown in Figure 4.33 below.

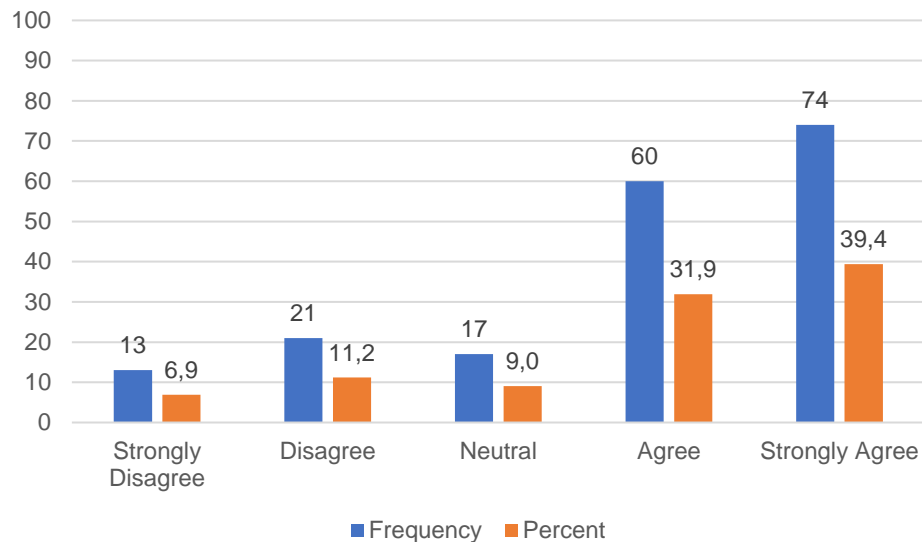


Figure 4.33: Parental guidance

The majority of the respondents strongly agreed (39.4%) or agreed (31.9%) that parental guidance was offered to them. 9% were neutral regarding this statement, while 11.2% disagreed and 6.9% strongly disagreed with the statement. These findings indicate that the majority of students (71%) believed that the parental guidance provided to them assisted in a smooth transition. These findings resonate with those of Smith (2018), who asserts that first-year students' transition is likely influenced both positively and negatively by parental involvement in their academic and social development. A study conducted by Smith, Reinke, Herman and Huang (2019) asserts that although parental guidance is typically helpful in students' adaption and success in new environments, it is less clear whether it is helpful as students move into early adulthood. Based on the empirical findings of this study, it is clear that parental guidance is key to supporting students in their transition from high school to HE.

#### 4.11.2 Career guidance

This item aimed to measure the extent to which interventions to provide career guidance were made available to support students. Career guidance is important to students as it enables them to prepare for the future and to explore different career options. Participants were asked whether career guidance was provided prior to their enrolment at university. The distribution of responses is shown in Figure 4.34 below.



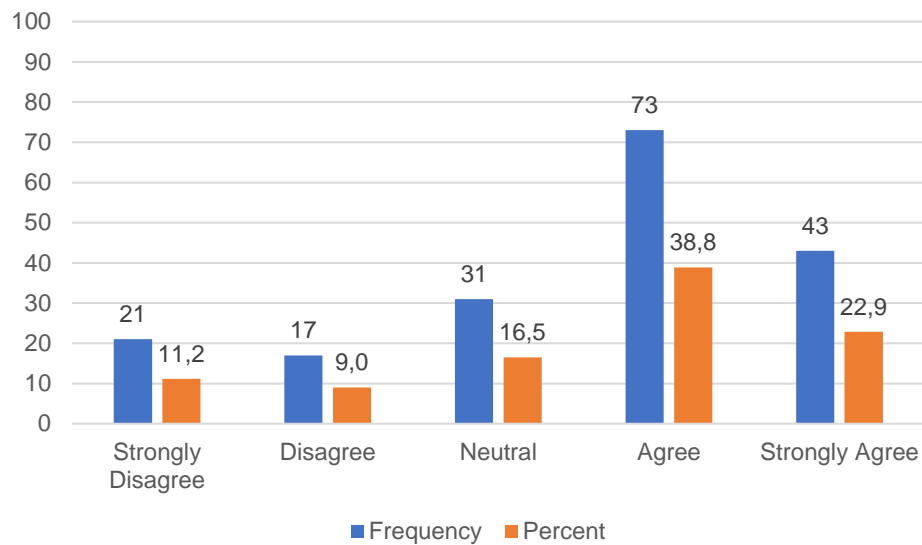


Figure 4.34: Career guidance

The majority of the respondents agreed (38.8%) or strongly agreed (22.9%) that career guidance was offered to them. 16.5% were neutral regarding this statement, while only 9% disagreed and 11.2% strongly disagreed with the statement. These findings indicate that most of the students (61.7%) believed that career guidance was offered to them. These findings resonate with those of Mafilika (2021), who asserts that the pressure to make career and HE choices is daunting for most students. When students are supported in making effective transitions from high school to HE, economic and social benefits result. This implies that first-year students require career coaching in order to make educated career options and achieve academic achievement.

#### 4.11.3 Open days

This item aimed to measure the extent to which open days were made available to prospective students. Open days at tertiary institutions provide students with information about specific courses and their prospective career opportunities. Participants were asked whether open days were made available to them prior to their enrolment at the university. The distribution of responses is shown in Figure 4.35 below.

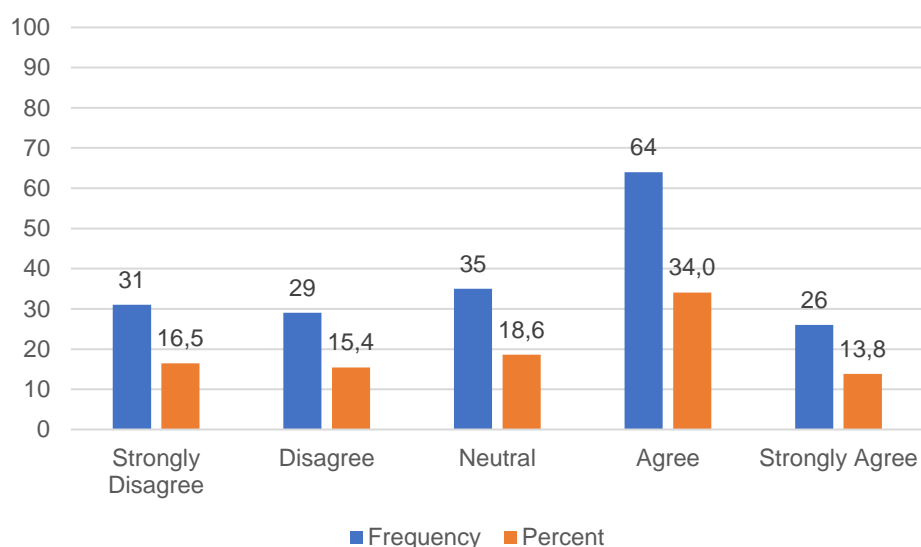


Figure 4.35: Open days

The majority of the respondents agreed that open days were made available to them (34%) or were neutral regarding this statement (18.6%). 15.4% disagreed and 16.5% strongly disagreed with the statement. Only 13.8% strongly agreed with the statement. These findings indicate that just less than half of the students (47.8%) believed that open days were made available to them. These findings are supported by MacFarlane (2022), who states that open days are extremely beneficial when narrowing down your study options because they present courses from a variety of fields. Many universities offer information sessions about each of their faculties and/or programs. This suggests that open days at tertiary institutions serve as valuable opportunities to obtain first-hand experience of the campus, the facilities available to support students, the courses offered, and the culture of the university. However, the responses indicated that not all students perceived these initiatives as informative and supportive to prospective students. This is a serious concern, as the objective of an open day is to provide students with the opportunity to visit and experience the atmosphere of the university. The open day programme conveys information about the university and can help students decide on their academic aspirations after completing grade 12.

#### 4.11.4 Advice from Life Orientation teachers

This item aimed to measure the extent to which advice from LO teachers prepares students for tertiary life. Such advice provides students with knowledge of what to

expect at university and career alignment and assures them that they are not alone. Participants were asked whether advice from LO teachers was provided to them prior to their enrolment at university. The distribution of responses is shown in Figure 4.36 below.

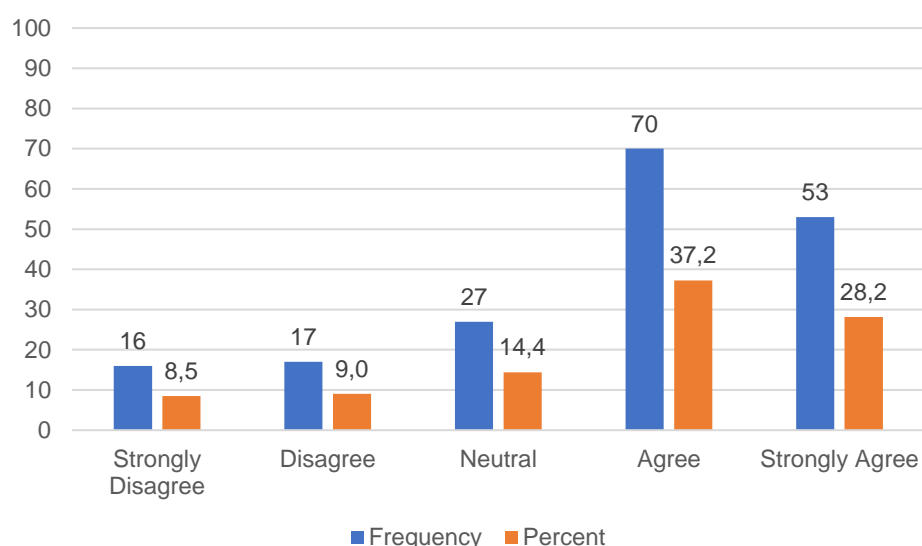


Figure 4.36: Advice from Life Orientation teachers

The majority of the respondents agreed (37.2%) or strongly agreed (28.2%) that advice from LO teachers was provided to them. 14.4% were neutral regarding this statement, while only 9% disagreed and 8.5% strongly disagreed with the statement. These findings indicate that most of the students (65.4%) believed that advice from LO teachers assisted them to understand tertiary transition better. These findings also indicate that even though many students did receive advice from LO teachers, some students did not receive such advice prior to their enrolment at university. The transition may not be as smooth for these students as for those who had been advised and supported by LO teachers. These findings are corroborated by Jacobs (2011), who claims that LO is important in providing students with the necessary knowledge to make an informed profession choice. The findings also resonate those of Dama, Mathwasa, and Mushoriwa (2020), who state that students often struggle to make the proper profession choices, and that choosing and planning for a career have become significant difficulties in life as a result of a plethora of educational alternatives.

In order to enhance the interpretation of the findings in Section C, a section analysis is presented below.

#### 4.11.5 Section analysis

The scoring patterns for Section C are summarised in Figure 4.37 below.

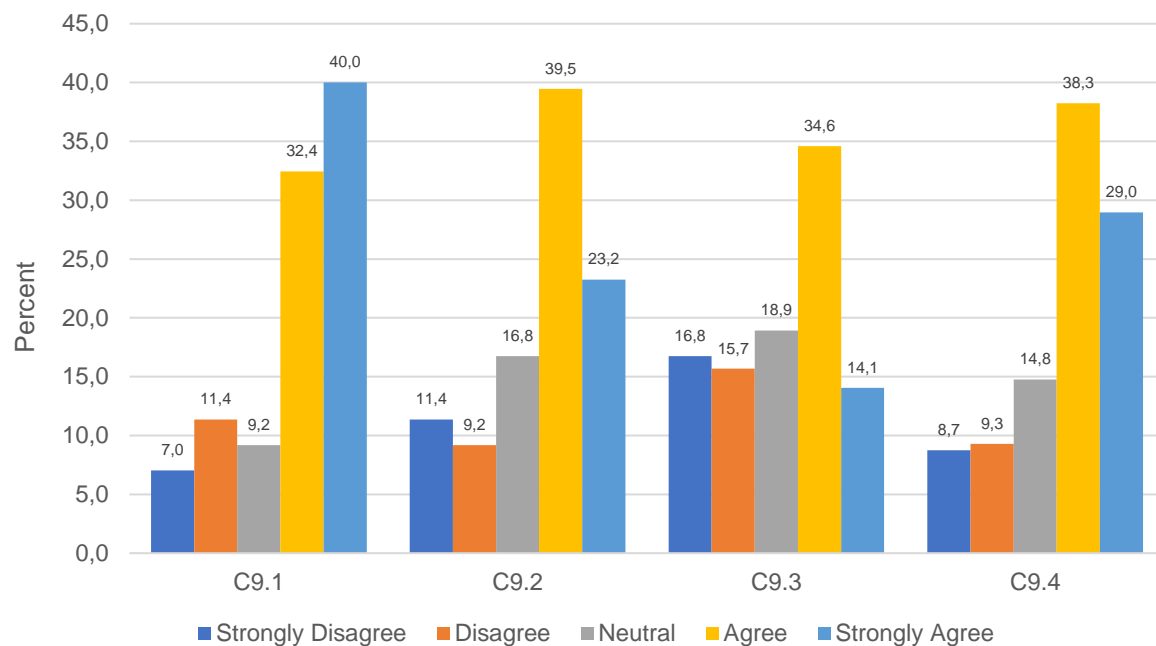


Figure 4.37: Scoring patterns for Section C

The following patterns are observed and appear to be consistent throughout the statements tested:

- All statements show significantly high levels of agreement. Some statements show lower levels of agreement than others. For all statements, agreement is higher than disagreement.
- There are no statements with high levels of disagreement.
- Some statements have high levels of neutral scores.

A chi square goodness-of-fit test was performed to see whether the scoring patterns per sentence were significantly different per alternative. The null hypothesis asserts that a same number of respondents selected each choice for each statement (one at a time). In accordance with the alternative, there is a considerable disparity in the

levels of agreement and dissent. The sig. values (p-values) that are highlighted are less than 0.05 (the level of significance). This indicates that the distributions were not comparable. That example, there were significant variances in how respondents scored (agree, neutral, disagree).

Factor analysis indicates that the following two statements comprise a sub-theme (Guidance):

- Parental guidance
- Advice from Life Orientation teachers

This sub-theme has a high and similar level of strong agreement and agreement. Respondents affirm that parental guidance and advice from LO teachers is provided to students prior to their enrolment at university. An analysis of the scoring patterns shows that 40% of students believe that parental guidance was provided to them, and that 38.3% of students believe that advice from LO teachers was provided to them prior to their enrolment at university. This implies that parents and high school teachers have attempted to provide the necessary support to students.

Factor analysis shows that the following two statements form a sub-theme (High school support strategies):

- Career guidance
- Open days

There are high and similar levels of agreement in relation to this sub-theme. Respondents affirm that career guidance and open days were made available prior to their enrolment at university. An analysis of the scoring patterns shows that 39.5% of students believe that career guidance was provided to them prior to their enrolment at university, and that 34.6% of students believe that open days were made available to them. This implies that students are receiving support interventions as they transition.

#### **4.12 Summary**

Based on the study's empirical findings, it is obvious that first-year students face challenges when they move from high school to university. The results of this study show that first-year support programmes are offered to students to provide assistance in dealing with the transition. The findings indicate that the university is aware of the gap in providing the necessary support to first-year students, and that academic support to ensure that students transition successfully has been made available. The results demonstrate that adequate support to first-year students contributes to their academic success and positively influences their transition. The findings also demonstrate that the teaching and learning process greatly impacts first-year students during their transition. The difference in approach to teaching and learning in HE, compared to that of high schools, results in difficulties with academic adjustment. The findings also indicate that additional support initiatives should be implemented from the perspective of students, rather than from the university's perspective regarding students' needs. This would clarify the expectations of students during their transition and enable the university to tailor support initiatives to students' requirements.

## **CHAPTER FIVE**

### **QUALITATIVE ANALYSIS**

#### **5.1 Introduction**

This chapter discusses the findings and results obtained from the qualitative phase of the study. The analysis consists of two parts. The first part (Section 5.4) discusses the findings obtained from the individual interview sessions with CELT administrators. The second part (Section 5.5) incorporates the focus group discussions with DUT's TMAs. The data that emerged from the interviews were deductively coded with the aid of thematic analysis. The qualitative data addresses the following objectives of this study:

- to determine which educational programmes are offered by DUT to support first-year students in their transition from high school to university; and
- to evaluate the administration of the FYS programme at DUT.

#### **5.2 Sample**

As indicated in the previous chapter, the study involved three CELT administrators who coordinated the FYSE programmes. These administrators were selected and considered because they had first-hand information about the various foundations that were needed in order for students to transition smoothly. Their inclusion was key to this study because the majority of first-year workshops were facilitated and coordinated by CELT.

#### **5.3 Research instrument**

As indicated in the previous chapter, an interview schedule was prepared which consisted of questions that addressed the following elements: first-year support programmes, factors affecting psychological and socio-social background in students, effectiveness of support programmes, and student success.

## 5.4 Individual interview sessions

This section details emerging themes from the semi-structured individual interview sessions with CELT administrators. An analysis of the data obtained from the open-ended questions resulted in identification of the themes and sub-themes highlighted in Table 5.1 below.

Table 5.1: Themes and sub-themes emerging from semi-structured individual interview sessions with CELT administrators

Theme	Sub-theme
1. First-year support programmes	1.1 First-year student experience 1.2 Technology for Learning programme 1.3 Institutional orientation 1.4 Residence Educational Programme 1.5 Open Day programme
2. Technology	
3. Challenges of online learning	
4. Empowerment and development of students	
5. Factors affecting psychological and socio-social background in students	5.1 Psychosocial support 5.2 Student-related issues
6. Student success	6.1 Induction of first-year students 6.2 Bridging the gap between high school and university
7. Effectiveness of support programmes	

### 5.4.1 Theme 1: First-year support programmes

One of the main goals of HE is to help students develop the skills, information, and attitudes necessary to function effectively as thinking citizens in a knowledge-based economy (DHET, 2013). The transition from high school to HE appears to be particularly difficult for learners. When the data is examined more closely, it becomes evident that the first year of study is marked by very high drop-out rates. DUT offers first-year support programmes that provide support to students while they transition. A discussion with the CELT office revealed that various programmes and initiatives were conducted to support first-year students. The following first-year support programmes were discussed during the interview sessions: FYSE, TFL, institutional



orientation, the Residence Educational Programme (REP), and the Open Day programme.

#### 5.4.1.1 Sub-theme 1.1: First-year student experience

Students begin their undergraduate careers with a variety of backgrounds and expectations for what to expect in college (Evensen, 2017). According to Solomon (2021) First-year seminars teach students important skills they need for success in university life. These seminars teach students essential skills, such as success strategies and planning. The individual interview sessions revealed that support programmes had been designed for the purpose of easing the transition from high school to university, and that many support programmes were offered at DUT, some of which are administered by CELT.

*“The first-year student programme assists first-year students to adapt or own their transition phase from high school to university.” (Respondent B)*

It was also revealed that the aim of the FYSE is to provide holistic support to students so that they can adapt to the living and learning environment.

*“The first-year student experience aims to provide the holistic support which has three components; the academic support, non-academic support (physio social support) and the last one is technology.” (Respondent B)*

It was revealed that FYSE is one of the initiatives that have been developed to understand the background of the students and to provide support while they transition.

*“First year student experience programme is the programme that directly then try to understand where students are coming from.” (Respondent C)*

The FYSE programme, which is run by CELT in collaboration with other departments at DUT, was said to be beneficial in understanding the cohort of students that it deals with.

*“Universities are pretty much aware that the intake of students that they have are in terms of their demographics and also their biographic are different in sense of their quantiles (where they are actually coming from) and also in terms of their language barrier issues, their race, and many other things that can speak to the preparedness of the students to well understand the anticipations from the higher education.”*  
(Respondent C)

It was also revealed that CELT offers other support programmes in addition to the FYSE programme. This suggests that DUT provides various initiatives to help and support first-year students while they transition. According to Peters (2018), The FYSE programme at DUT is based on the understanding that initiatives to improve first-year student success must begin with a focus on student learning, both inside and outside the classroom.

#### 5.4.1.2 Sub-theme 1.2: Technology for Learning programme

DUT offers a TFL programme which enables students to learn, communicate, collaborate, and increase their application of technology. The purpose and function of the TFL programme was addressed by Respondent A.

*“Programmes like TFL (Technology for Learning) assists the students to equip themselves with the basic knowledge of how to use technology, how to use Microsoft word, how to on the computer and so forth.”* (Respondent A)

The TFL program is dedicated to mentoring, training, and supporting students in learning both online and offline technologies that will enhance their learning experience at DUT. Every student must be knowledgeable and at ease with any technology component provided to them on university grounds or in industry.

#### 5.4.1.3 Sub-theme 1.3: Institutional orientation

Orientation is a formalized structure or programme of activities put in place by HE institutions to assist students to have a positive first-year experience (Nyar, 2020).

According to Chatlani (2017), a survey by OOHLALA Mobile found that over 25 000 university students who had a positive first-year orientation experience were 17% more likely to have a positive student life experience. Students who had a negative orientation experience, on the other hand, were 71% more likely to report grades of C or lower.

The first-year orientation programme is designed to introduce first-year students to university resources that will help them achieve their educational and personal goals, as well as to foster a positive attitude and stimulate interest for learning (Ngcobo, 2020). The interview sessions revealed that DUT provides institutional orientation as one of the programmes that support students while they transition from high school to university.

*“We also have the institutional orientation that is also part of the first-year student experience. It is an integrated orientation, and all departments are involved to also share their knowledge and expertise to students that do not understand how the university operates, it also helps students to be familiar with the university.”*  
(Respondent B)

Respondents A and C shared similar sentiments as Respondent B about the institution hosting yearly institutional orientation for first-year students.

The FYE at DUT prioritizes the requirements of new students, the bulk of whom are recent high school graduates (Memela, 2016). The orientation is a collaborative effort aimed at assisting students in adjusting to their new surroundings and emotionally and academically preparing them for their new adventure.

The goal of the first-year orientation program is to enable first-year students with the knowledge, abilities, and resources they need to successfully manage their transition to university (Anon, 2021). In line with this, students must be prepared for the intellectual and social learning that will comprise their educational journey. Some students will need to be acquainted with methods, procedures, expectations, and the campus community, while everyone will benefit from an orientation to their new academic community (Hoffman, Eberhardt-Alstot, and Leafstedt, 2020). The interview

sessions revealed that DUT offers its first-year orientation programme at the beginning of the year to support the transition of students.

#### 5.4.1.4 Sub-theme 1.4: Residence Educational Programme

The Siyaphumela Project was started at DUT with the aim of focusing on broadening evidence-based post-secondary student success strategies in South Africa. The aim of the REP is to provide academic and psycho-social support and development to students in residences (Siyaphumela Project, 2017). It was noted during the interview sessions that DUT offers the REP to help support students' transition.

*“There are REP tutorials, however the programmes also provide extra academic support to returning students, undergraduate students, we also have the academic advising programme, we also provide the physio social support to students.”*  
(Respondent C)

In the context of DUT, REP tutorials are conducted to assist undergraduate students living in residential halls, to assist students with the adaptation and integration procedures into the campus culture, and to help students enhance their subject-specific learning. It was mentioned during the interview sessions that the REP provides academic support to students.

*“We also have the REP, the REP basically provides academic support to students right from their first-year level of study, this could be modules that they find difficult, or this could be modules that are categorized as AT RISK.”* (Respondent C)

CELT offers tailor-made programmes for first-year students which aim to understand the challenges that first-year students are confronted with.

These findings indicate that the university understands the pressure that comes with the transition from high school to HE, and that it has developed programmes in order to provide support and ensure a smooth transition for first-year students in the areas of academic writing, critical thinking, and university life in general. These findings also

indicate that the university has been intentional in ensuring that first-year students are provided with multi-pronged support and development.

#### 5.4.1.5 Sub-theme 1.5: Open Day programme

A key benefit of attending an open day at an institution is the opportunity to attend talks regarding both academic and social life at the institution (Enia, 2018). Some institutions also offer talks for parents. These talks are valuable because they explain how courses operate and what it is like to be a student at a specific institution. The purpose of an open day is to learn more about a certain institution, see its campus, and interact with staff members. In addition, you will be able to meet current students and other prospective students who you may wind up in class with. It's essentially an information gathering investigation (Durham, 2022). In the individual interviews, participants highlighted the importance of DUT's Open Day programme to help students prepare for their transition to university life.

*“The open days programmes assist in providing guidance to the students, ensure that students enroll to the programmes they are passionate about, because they will be able to invest their energy and best commitment to it rather than coming in and taking any programme that is available.” (Respondent C)*

*“I will be speaking theoretical here, not based on CELT, with the open day, it is plan to go into the identified several high schools and educate them towards careers or programmes available at the DUT, but also listen to the students and try to insights to what their dreams are, what their career plans are, what their career interest are and based on their career interest, we then advise them to go a particular faculty or particular programme at a particular department that will put you on the path of realizing your career.” (Respondent B)*

Respondent A indicated that the Open Day programme involved the recruitment department and was not handled by CELT.

Many prospective students are unsure which university to attend. To address this issue, DUT holds a number of events throughout the year to advertise and emphasize

its services. For prospective students, attending an open day at the university they are considering attending is much more significant than the amenities, space, or buildings that the university offers.

#### 5.4.2 Theme 2: Technology

In education, technology has made it possible for knowledge to be shared immediately and for communication to be faster and more effective (Harris and Al-Bataineh, 2015). Technology has enabled students to be engaged and to learn in ways that were impossible in a traditional classroom setting. Today, technology may be the most important factor influencing the educational landscape (Johnson, Jacovina, Russell, and Soto, 2016).

In the individual interviews, participants noted that many of the challenges faced by first-year students involved technology. They indicated that they focused on equipping students with skills in how to use the available technologies.

*“We have worked with the first-years over the years, and we have come to identify some of the areas of interest and some of the challenges that are challenging our students, we dedicate and focus our full attention on equipping the students with skills on how to use the available technologies on campus, or assignments are submitted via typing or ought to be typed printed and submitted in campus or otherwise sent via email.” (Respondent B)*

Respondent A revealed that the TFL programme is one of the initiatives at DUT that aims to assist with regard to students' transition.

*“Programmes like TFL assists the students to equip themselves with the basic knowledge of how to use technology, how to use Microsoft word, how to on the computer and so forth.” (Respondent A)*

The interview participants also highlighted that the TFL initiative is primarily focused on the technology that students require.

*All these things need the adequate use of technology, relevant devices, and technology hence we try and equip them with that.” (Respondent C)*

In today’s educational system, technology is becoming more and more prevalent (Strom, 2021). Considering that technology is used in education on a daily basis, it is critical that institutions keep up with constantly changing technological advances. Technology plays an essential role in the lives of young people. Technology integration in education has proven to be advantageous, but also has certain disadvantages (Carstens, Mallon, Bataineh, and Al-Bataineh, 2021).

In the individual interviews, technology was identified as an important concern since most students experience difficulties participating in the teaching and learning process because they struggle with technology.

*“Most students are really struggling with technology and most of them do not have devices, they cannot accept the technological resources that are offered by the university because they do not have technology, some are struggling with connection because they are coming from different backgrounds.” (Respondent A)*

*“Language barrier, effective use of technology, the issue of not having mentors or motivation to be actually at university, so we deal with those thoroughly and also the issue of styles of writing, the issue of plagiarism, the issue of finding information in terms of how to search information correctly and acknowledge the authors and whatsoever.” (Respondent B)*

These findings suggest that technology-related challenges are a contributing factor to first-year student failure, and that the university needs to invest in training students how to utilize the technological resources provided by the university to assist and support them in their academic learning.

#### 5.4.3 Theme 3: Challenges of online learning

The use of the Internet and other essential technologies to generate educational materials, deliver teaching, and manage programs is known as online learning (Fry, 2001). Hrastinski (2008) differentiates between two types of online learning: asynchronous and synchronous. For online learning to be effective and efficient, instructors, organizations, and institutions must have a thorough awareness of its benefits and limitations (Hrastinski, 2008). Students confront obstacles with online learning, such as a lack of social connection, poor communication, a lack of ICT resources, and poor learning results (Barrot, Llenares, and Rosario, 2021).

In the interview sessions, participants revealed that students are confronted with various challenges regarding online learning and teaching.

*“When we have gone to the online mode of learning, I think the challenges that are confronted with the students is that they come in phase depending on what phase” (Respondent B)*

It was also revealed that at the beginning of the year, students struggled to enroll in various classes on Teams and Moodle.

*“At the beginning of the year, we always meet students that struggle to be enrolled into the various classes on Teams or Moodle, those are some of the challenges, we deal with students that do not know how to even access the course.” (Respondent B)*

Based on these findings, it is evident that the majority of first-year students come from poor backgrounds and are not familiar with a number of tools that are used by universities to assist students. Some students experience challenges and require assistance, but there is no adequate training in how to use the tools that they are required to be familiar with.



#### 5.4.4 Theme 4: Empowerment and development of students

Students in HE is expected to be innovative, skilled, and problem solvers in their fields of study (Sewagegn and Diale, 2018). In order to achieve this, teaching and learning processes in HE institutions must be correctly implemented, and the teaching approach for each course or subject must be appropriate to the nature and substance of the course or subject.

In the interview sessions, participants noted that the programmes offered at DUT contribute to the development and empowerment of students, and that when students are developed, they perform better in class and their results are improved.

*“The programmes empower and develop students in terms of academic development, attendance in classes is developed and, they develop in terms of academic and traditional learning because there is also a difference in academic and traditional learning.” (Respondent C)*

It was also noted that during the first three months at the university, first-year students are found to be overwhelmed.

*“According to our research, we also find that our students say that on their first three months in the university it is overwhelming, they do not know what to expect and they do not know what it expected of them.” (Respondent B)*

In addition, it was mentioned that the programmes offered at DUT contributed to providing knowledge and understanding of university structures.

*“Helps to develop their capacity of knowledge in terms of understanding and knowing the different structures in the university and knowing departments that are also available to assist them” (Respondent B)*

The interview sessions also revealed that some students drop out not because they are not capable, but because they lack knowledge of the university.

*“According to the recent student first year experience report, we also find that some students drop out not because they are not capable, they lack knowledge of the university, since they lack knowledge of the university, and they are not aware which department that can assist them, and they do not know where they need to go to when they need help.” (Respondent C)*

To address this concern, DUT offers programmes to help students to understand the university environment.

In the interview sessions, participants mentioned that these programmes empower first-year students and provide them with assistance on their journey in the university environment. They are provided with strategies on how to deal with various issues that they face throughout their journey.

*“For students to achieve that we need to empower them hence when we resolve issues, we teach them why we do ABCD and in doing that they understand the rationale behind the decisions we are making so that when next time they are confronted with similar issues, they know how to approach it and that is empowerment.” (Respondent A)*

This suggests that first-year students stand a better chance of transitioning when they are empowered and developed. To support the transition of students, support departments need to work together.

#### 5.4.5 Theme 5: Factors affecting psychological and socio-social background in students

Academic achievement is one of the key concerns of parents, teachers, and students in today's academic world. Academic success has been examined from both an educational and psychological perspective (Tabbodi, Rahgozar and Abadi, 2015). Various socioeconomic, environmental and psychological factors can influence students' performance at university level (Zyl-Schalekamp and Mthombeni, 2015). It was paramount in this study to understand the factors that affect the psychological and socio-social background of students at DUT. The factors that emerged from the

individual interview session with Respondent C were categorized into four sub-themes: psychosocial support, student-related issues (including poor backgrounds and responsibilities at home), hunger and food insecurity in residences, and first-generation students.

#### 5.4.5.1 Sub-theme 5.1: Psychosocial support

Students' adjustment to HE life is a multi-faceted process that includes social networking, meeting, and bonding with new acquaintances, as well as dealing with academic changes and institutional requirements (Salami, 2011). This adjustment improves students' psychosocial development (Malinga-Musamba, 2014).

It was revealed during the interview sessions that the support programmes at DUT offer psychosocial support to assist students.

*"Most of the students need physio social support in the university and they are struggling with personal problems that may not be known If you are with them in the classroom" (Respondent A)*

Swart (2020) emphasizes the need of taking into account the psychological impact of the COVID-19 epidemic and lockdown period on instructors, students, and parents. In light of this, it is critical to understand students' needs for psychosocial assistance, as well as the importance of such support for student reintegration and instruction.

#### 5.4.5.2 Sub-theme 5.2: Student-related issues

A smooth transition from high school to higher education is critical in a student's decision to stay in higher education and complete their degree. (Broglia, Mililngs and Barkham, 2018). An increasing number of students with mental health issues are enrolling in HE (Bewick, Bewick, Gill, Mulhern, Barkham and Hill, 2008).

The interview participants identified emotional challenges as an issue affecting the academic performance of students.

*“We have some emotional issues, where relationship becomes a problem, and students get destroyed and the cause of their academic year.” (Respondent A)*

The participants also revealed that home-related issues have a significant effect on students' academic performance.

*“One common issue this year was ‘calling’ where students feel called to by their ancestors and they need to leave the university or leave the residence to go and attend.” (Respondent B)*

During the individual interview sessions, it was revealed that the support programmes address the holistic nature of students, The participants also revealed that some students have responsibilities at home which can affect their academic performance.

*“We understand the students in terms of their psychological and socio social backgrounds because we know that some of the factors could be maybe a student has to support at home.” (Respondent B)*

It was mentioned that many students come from poor backgrounds and that dealing with the transition to HE may be challenging for them.

*“Some students come from poor backgrounds.” (Respondent A)*

People in poverty are as diverse as people in any other socioeconomic class. Like other groups, they represent a diverse range of values, views, dispositions, experiences, backgrounds, and life opportunities (Parrett and Budge, 2016). An opportunity to study at a HE institution is a chance for students from low-income families to improve their economic status on a personal and family level; however, it is difficult for them to achieve this goal when the economic conditions in which they live have an impact on their ability to succeed academically (Machika and Johnson, 2015).

Food insecurity is increasing, and the devastating economic impact of COVID-19 resulted in severe hunger. Students in HE institutions face food insecurity, which

threatens their academic success (Mthethwa, 2021). The #FeesMustFall movement, which began in 2015, brought attention to the issue of student hunger on university campuses. While there is a lack of statistics available on the extent of the problem, university administrators have become increasingly concerned about students who lack basic needs such as food and accommodation.

The interview sessions revealed that students face hunger and food security challenges in the residences while studying at DUT.

*“There is issue of hunger, food security in the residences.” (Respondent C)*

In order to address the many cases of hungry students reported at DUT, the Food Security Program: No Student Goes Hungry, which was run by DUT’s Student Counselling and Health Department from 2020 onwards, has been supported by contributions from staff members, cash raised by the Advancement and Alumni Relations Office, and food donations (Zuma, 2020). It was also mentioned during the interview sessions that DUT runs student counselling programmes that focus on psychosocial and psychological counselling for students.

The interview participants also noted challenges with regard to dealing with first-generation students. Students who are attending college or university and whose parents have not completed a four-year degree encounter distinct psychological challenges (Banks-Santilli, 2015). While these students’ parents and family members may be supportive of their enrolment at university, it may be seen as a disruption in the family system rather than a continuation of their education.

It was mentioned in the interview sessions that first-generation students experience challenges in adapting to the university.

*“First-year generation students which are students who are the only students whose families have made it into the universities, so they do not know what the expectations are, they do not have proper guidance.” (Respondent B)*

Educational systems can be frightening and complex, and many first-generation students struggle with administration. They may also struggle to find mentors, who are especially important since they support students and help them navigate the system (Beresin, 2021). Hearing about their parents' or other family members' college experiences will not help first-generation students overcome these challenges.

The interview sessions also emphasized the difficulty of overcoming language hurdles. Students learning a second language may find it difficult to express themselves if they do not fully understand the language; this can cause mental stress and interfere with their capacity to learn (McConville, 2019). While most students find the transition from high school to university tough, first-year students who are used to being taught in a language different than the university's medium of instruction encounter significantly greater challenges than their colleagues.

Many students drop out during their first year of study, and those who stay may be unable to finish in a reasonable amount of time due to socioeconomic considerations, with language barriers being a common stumbling block. It was noted in the interview sessions that students face the issue of language barriers while they are dealing with the transition from high school to university.

*“There is the issue of language barrier, so we need to teach students the basic presentation skills for them to be able to express themselves in the language that is used as a medium of communication or the medium of assessment in the university and also on that very same point, to understand the ways in which they are assessed because it is different from high school.” (Respondent B)*

The discussions in the interview sessions revealed that it is important to be specific and thorough in dealing with the issue of language.

*“I really think we need to more specific and more thoroughly in dealing with the issue of language, so I think we really need to have sessions that are thoroughly because DUT, I think 80% of the students we have are from the Nguni tribe and English is second language to them.” (Respondent B)*

While DUT has hosted a dialogue as part of its transformation agenda, this does not mean that the challenges of transition are resolved. The language dialogue, if held successfully, would resolve a small part of a complex problem.

These findings suggest that when first-year students are dealing with the transition phase, they experience various student-related challenges, and adequate support should be provided to them to help ease the transition. These findings also highlight that first-year students are confronted with academic and non-academic factors that negatively impact their academic performance. These findings also suggest that little support is offered to first-generation students, despite the fact that they have less knowledge about what to expect in the HE environment than other students. These findings also highlight that the support programmes offered at DUT address the challenges that are faced by students and set strategies in place to resolve these challenges so that students can have a better chance of a successful transition.

#### 5.4.6 Theme 6: Student success

Students in tertiary institutions face a variety of problems that may jeopardize their efforts to complete their studies in a timely manner. CELT's student development programmes are designed to help DUT students achieve their full academic potential across all faculties and campuses (Ngwenya, n.d). The interview participants stated that these programmes had been successful in providing support to students and had always been innovative.

*“These programmes support students successfully and they are more innovatively, and they always involve students in the creativeness of the programmes and most of them are in line with the strategic direction of the university of which it is the DUT Envision 2030” (Respondent A)*

It was also mentioned that these programmes provide academic support to ensure that students become critical thinkers.

*“We are also creating programmes that aim to help students to be creative thinkers, help students to find their own answers.” (Respondent C)*

The first year of university, according to Allen and Robbins (2008), is crucial because it establishes the framework for a student's future psychological well-being and academic path. The development of first-year student success has been a major theme in HE for decades. Because the quantity and diversity of students enrolling in HE institutions have grown over time and are likely to continue to expand, attention has focused on this issue (Van der Zanden, Denessen, Cillessen and Meijer, 2018). The Siyaphumela 2.0 project was launched in the context of DUT to increase the success of DUT students. This project was initiated with the goal of integrating and transforming student support systems and services to facilitate holistic student success (Peters, 2020). During the interview sessions, it was noted that student success is defined in many ways at different universities, and that DUT has its own definition of student success.

*“At DUT, particularly, student success means being able to pass with good marks.”*  
(Respondent C)

It was also revealed that DUT has developed a programme called “Moving the Middle” to ensure student success.

*“We have a programme that is moving the middle which has been made to hambisa, basically we are helping those students who are students who are stuck in the middle”*  
(Respondent A)

These findings highlight that the university has been intentional in providing academic support to first-year students in order to promote student success.

#### 5.4.6.1 Sub-theme 6.1: Induction of first year students

One of the most challenging adjustments in a student's life is from high school to university or college life. When new students enter an institution, they bring with them a range of views, histories, and levels of preparedness (Fomunyan, 2019). Furthermore, they are placed in an unusual setting, and many of them have no prior academic experience. As a result, welcoming new students to colleges and training them for their new roles is a critical responsibility. Student induction programs are



designed to help incoming students adjust to their new surroundings, implant the institution's ethos and culture in them, help them build ties with other students and staff, and expose them to a feeling of greater purpose and self-exploration.

The interview sessions revealed that in the context of DUT, students are given the opportunity to be inducted so that they can understand the roles of the university.

*“This is where they get a chance to be inducted and understand the roles of the university, the code of conduct, what is expected of them.” (Respondent A)*

It was also revealed that the induction phase provides students with an opportunity to acquire knowledge about the university environment.

*“On the induction phase, this is where they get to be inducted and acquire knowledge in terms of the university environment, the courses they have and the departments that are also available in the university as well as student services initiatives that can assist students.” (Respondent A)*

This suggests that the induction phase is essential as it equips first-year students with the knowledge they require, which contributes to their success.

#### 5.4.6.2 Sub-theme 6.2: Bridging the gap between high school and university.

Most first-year students experience many challenges with their courses due to the knowledge gap in their transition from high school to university (Oduaran and Bechuke, 2018). As a result, if they are not properly supported, many of them end up dropping out or taking longer to complete their studies.

It was noted in the interview sessions that there is an academic gap between high school and university, which may be one of the factors causing students to have difficulties at university.

*“We have realised that there is a gap between what is taught in high school and what is being taught at university. Some students come with very good marks from basic*

*education, but may struggle in the university, because the way that the knowledge is used and assessed is completely different” (Respondent B)*

Given that there is a misalignment between what is taught at secondary and tertiary levels, lecturers and support staff need to understand that they are not working with a homogenous group, but with a group with diverse needs.

#### 5.4.7 Theme 7: Effectiveness of support programmes

According to Bourne-Bowie (2000), student development models should prioritise the success of all students. CELT focuses on student development to address this issue. CELT focuses on identifying psychosocial, academic, and cultural impediments to learning in order to maintain a comprehensive approach to student support. CELT aids in the development of solutions that address these barriers. CELT initiatives give direct assistance to students as well as assistance to tutors and lecturers.

The interview sessions revealed that CELT uses data to measure the effectiveness of these programmes in promoting student success.

*“We are data driven, we look at data and we see the effectiveness through data because our main thing is to promote or increase student success.” (Respondent B)*

Student support services facilitate the relationship between the educational institution and its students. Students should also have access to resources that will help them engage with their studies (Monyamane and Monyamane-Limkokwing, 2020).

In the interview sessions, participants asserted that the support programmes they offer are successful because they are intentionally aimed to assist first-year students, and that they are beneficial because they provide the necessary academic support.

*“These programmes are beneficiary to students as they provide academic support.” (Respondent B)*

It was also noted during the sessions that the FYSE programme offered by CELT includes an academic component.

*“We do have first-year student experience whereby we also have the academic component, where we teach first year students how to reference, we refer them to the writing center for more knowledge, we are teaching them how to use the library resources.” (Respondent C)*

During the individual interview sessions, participants asserted that the basic knowledge that is provided to students by means of the support programmes contributes positively to the students’ academic activity. Participants also indicated that CELT operates at an institutional level in collaboration with other departments to support students, and that this collaboration assists in ensuring that the support programmes are effective.

#### 5.4.8 Summary

Based on the empirical findings, it is evident that the university has been intentional in providing academic and non-academic support to first-year students as they transition from high school to HE. The university has developed a number of support programmes that are solely designed to cater for the needs of students. However, it is a concern that most of these support programmes are not effectively marketed, and that there is no clear collaboration with other academic and support departments within the university that also deal with first-year students. The findings also indicate that the effectiveness of the support programmes is measured in order to improve these programmes. This suggests that CELT is able to refine the programmes in accordance with feedback received from students, who are the main stakeholders in these programmes. The findings also highlight that there is little awareness on the part of the university of the need to address the psychological and socio-social challenges that first-year students face as they undergo the transition phase. The findings also indicate that little support is provided to first-generation students. This is of great concern since these students enter the university with no knowledge of what to expect as none of their family members has attended university.

## 5.5 Focus group discussions

As indicated in Chapter Three, this study involved five TMAs who played an important role in supporting first-year students' transition. The TMAs were involved in the study as they offered tutorial sessions to assist first-year students with academic adjustment, which made significant contributions to these students' transition from high school to university. This section presents the responses from the focus group discussions with the TMAs. Various themes and sub-themes emerging from these responses were identified. These themes and sub-themes are shown in Table 5.3 below.

Table 5.2: Themes and sub-themes emerging from focus group interviews with TMAs

Theme	Sub-theme
1. Familiarization with technology	1.1 Lack of technology usage by students 1.2 Advantages of technology to students 1.3 The role of tutors in supporting first-year students 1.4 Challenges of tutoring 1.5 The new normal (COVID-19)
2. Transition to university learning	2.1 Initiatives used by tutors to assist students 2.2 Language barriers 2.3 The role of tutoring in academic support
3. Evaluation of support programmes	3.1 The gap between students and lecturers 3.2 Training of tutors 3.3 Challenges faced by TMAs when tutoring 3.4 Effectiveness of the tutoring programme
4. Introduction of new support programmes	4.1 Improving the management programmes

### 5.5.1 Theme 1: Familiarisation with technology

Technology usage plays an essential role in the lives of students. Technology integration in education has proven to be advantageous, but it also has certain disadvantages. It has improved student willingness and involvement, as well as learning outcomes (Carstens, Mallon, Bataineh and Al-Bataineh, 2021). The TMAs who participated in this study stated that they apply a variety of approaches to ensure that first-year students transition successfully from high school to university. This suggests that first-year students are assisted in a variety of ways in order to enable them to succeed while dealing with the transition from high school to university. These various approaches are discussed below.

#### 5.5.1.1 Sub-theme 1.1: Lack of technology usage by students

In the focus group discussions, it was noted that most first-year students find it difficult to adapt to learning at university because of a lack of technological devices to facilitate teaching and learning. The teaching and learning process is slow due to a lack of technological tools to enable students to engage effectively with their studies.

*“I apply strategies that will be familiar with technology, involve the use of videos so that the students will be educated on how to use technology as we are in an academic place and at a process of teaching and learning, we are on the 21<sup>st</sup> century, most of the plans that are aligned with the era of 21<sup>st</sup> century involves the high use of technology, and we must be educated about the changes and be more advanced than before.” (Respondent 1)*

*“Although I won’t take it as a joke, I was surprised to discover that there is a student that doesn’t know how to download documents from the phone and that you should have PDF so that you can be able to view them in PDF.” (Respondent 2)*

Respondent 3 agreed with respondent 1 in that:

*“The approach that is used to support first-year students while they transition from high school to university and for improvement is Blended Education System. Blended*

*Education System mean the application of strategies that will be familiar with technology, involve the use of videos so that the students will be educated on how to use technology as we are in an academic place and at a process of teaching and learning. We are on the 21<sup>st</sup> century, most of the plans that are aligned with the era of 21<sup>st</sup> century involves the high use of technology, and we must be educated about the changes and be advanced.” (Respondent 3)*

The COVID-19 pandemic resulted in a major change in students’ lives, as they were required to adapt to online teaching and learning. This mode of teaching and learning required knowledge of how to use technology and devices that were compatible with teaching and learning programmes. For students who did not have the financial means to purchase these devices, teaching and learning became a traumatic experience.

#### 5.5.1.2 Sub-theme 1.2: Advantages of technology to students

Due to the widespread use of technology in society, incorporating technology into teaching and learning is critical in terms of the long-term impact on how students learn (Costley, 2014). This is evident in the substantial use of online teaching and learning platforms at DUT. In the focus group discussions, the TMAs stated that they had played a significant role in assisting students to understand these platforms.

*“I assist the first-year students with how to answer quizzes, include the use of pictures and google to educate them more on what is being taught. All the processes of teaching and learning during this time of Covid-19 was part of technology advancement of blended education system.” (Respondent 1)*

It was also revealed that students were familiarized with a variety of methods that would be used to assess their performance in order to assist them to adapt successfully.

*“Students are taught that during tests and assessment’s, they will not only use pen and paper, but they must be familiar with online quizzes.” (Respondent 2)*

*“Students should be familiar with university, they should get used to the fact that technology is our way of living and nowadays not even at university level only, technology works very much or 99.9 percent.” (Respondent 4)*

The views gathered from the TMA focus group discussions provide an understanding of the effects and implications of technology integration in teaching and learning on first-year students. First-year students come from a variety of backgrounds; some are familiar with technology, and some are not. A lack of familiarity with the use of technology affects the ability of students to integrate successfully into a university that promotes the use of technology. In the focus group discussions, participants indicated that the integration of technology has resulted in students taking longer to adjust to the university’s culture and academic style of teaching and learning.

#### 5.5.1.3 Sub-theme 1.3: The role of tutors in supporting first-year students

During the focus group discussions, the TMAs provided detailed descriptions of the role of tutors in supporting first-year students.

*“As tutors, we must always teach students about university, academically, how to write their assignments and referencing style, we also make sure that we teach them about university life, remind them to know their purpose and teach them to balance academic life as well their university life.” (Respondent 3)*

*“To be a tutor means bridging the gap between students and lectures and providing a safe space for students where students can engage freely...to be a mentor, help them with difficult modules, help bridge the gap between students and lectures and since we are also students, it is easy for students to approach us to teach each other or tutor each other in a student perspective.” (Respondent 1)*

It was noted that the role of a tutor is not only to assist students academically, but also to provide encouragement to students.

*“As a tutor, you must not only focus on the academic side, but you must also educate them on university life, encourage them to join a certain sport. A tutor must act as a role model.” (Respondent 4)*

It was also noted that tutors have the responsibility to accommodate students with a diverse range of backgrounds.

*“As a tutor, I accommodate everyone in the tutoring sessions, students that finished high school long time ago and the students that finished recently so that I ensure that everyone is accommodated and fed with the right content.” (Respondent 2)*

From the responses, it is evident that tutors play a significant role in providing academic and social support, as well as mentorship, to students. This suggests that the university is invested in ensuring that first-year students receive the necessary support while they become accustomed to a new and intimidating teaching and learning environment.

#### 5.5.1.4 Sub-theme 1.4: Challenges of tutoring

During the focus group discussions, the TMAs revealed that tutors face many challenges while providing tutorial sessions to students.

The TMAs stated that they had encountered first-year students from a variety of backgrounds. Some were competent in using technology, while others were unfamiliar with technology. In some cases, students were unable to fully access and utilize services, module content, or any form of support that was provided digitally. Additionally, some students were unable to acquire the needed devices or tools to supplement their learning.

*“First-year students are coming from different backgrounds; some students do not have access to technology devices like laptop and smart phone as we are using MS Teams therefore some students are excluded from accessing education.” (Respondent 1)*



*“Students come with a certain expectation, and we want to fit in groups and end up doing things that are not okay to fund the lifestyle. Students tend to forget that they come on different backgrounds and they came to university for different purposes, and they forget the main objective that brought them to university of which is changing their homes, changing their lives and livelihood, and making their tomorrow better than it was today.” (Respondent 2)*

*“It is difficult to involve my students because they are too shy to cooperate with me. First year students miss assignments because they are not familiar with the platforms that are used, and I must report to the lectures and explain why students are not submitting assignments. There are many drop out on the first-year level due to different challenges whereas we involve motivation during the tutoring sessions.” (Respondent 3)*

*“Many students do not have smartphones and laptops and that causes a challenge as they are excluded in teaching and learning. Peer pressure is one of the challenges that are faced by many first-year students and there is many drop out in first year students.” (Respondent 4)*

This suggests that TMAs need to be provided with adequate training so that they will be able to deal with some of the challenges that are faced by students. It also suggests that TMAs who are highly technologically literate are able to use a variety of digital devices with ease to communicate with students, to deliver academic content, and to help ease students’ transition and ensure that they adjust to the academic environment.

#### 5.5.1.5 Sub-theme 1.5: The new normal (COVID-19)

In the focus group discussions, the importance of training students in how to use the various platforms that have been adopted by the university for teaching and learning since the start of the COVID-19 pandemic was highlighted.

*“We live under the new normal which is COVID-19, therefore I suggest that the university implements deep trainings on how to use the university platforms like MS*

*Teams, Moodle, Student Portal and DUT4life email so that first-year students can have knowledge on how to use these platforms.” (Respondent 1)*

*“First-year students should be provided with training on how to use the university platforms and the Technology for Learning (TFL) program under the Centre for Excellence in Learning.” (Respondent 2)*

*“It is very important for students to know how to balance their lives, more especially balancing your modules as well as the university life. Students must be taught to put most focus on academics rather than the life outside academics and also it is very important for students to have high level of technology on how to use the university platforms since we are currently on the COVID-19 pandemic. The CELT department must try and educate students on the importance and the value of the process of tutoring each other.” (Respondent 4)*

The familiarization of students with technology was a common theme that emerged from the focus group discussions. The responses indicated that the use of technology has become a norm in students’ lives, and that it is crucial to the success of students transitioning from high school to HE. A study conducted by Wildana, Maimunah, Dewi and Rofiq (2020) found that online learning was effectively facilitated by the use of applications such as WhatsApp, Zoom and Google Classroom.

These findings suggest that blended learning is becoming an established teaching and learning approach, and that first-year students need to be equipped with technical skills in order for them to be able to fully benefit from the support that is provided to them.

#### 5.5.2 Theme 2: Transition to university learning

When transitioning from high schools to universities in South Africa, first-year students face a variety of challenges, including adjustment to a very different academic environment (Ajani and Gamede, 2020). Students’ adjustment to HE life is a multi-faceted process that includes social networking, meeting, and interacting with new acquaintances, and dealing with academic changes and institutional requirements

(Salami, 2011). Malinga-Musamba (2014) suggests that this adjustment improves students' psychosocial development. This corresponds with the data that was obtained from the focus group discussions.

The first year of university study is a year of transition and adjustment, and it presents a variety of challenges that can have a beneficial or negative impact on a student in the short and long term (Daizel et al., 2005). In South Africa's HE institutions, first-year undergraduate students face a variety of challenges, which may be related to both socioeconomic and academic issues.

#### 5.5.2.1 Sub-theme 2.1: Initiatives used by tutors to assist students

In the focus group discussions, the TMAs indicated that they use a variety of approaches to assist first-year students who are dealing with the transition from high school to HE.

*"The approach that I used to support first-year students while they transition from high school to university and for improvement is Blended Education System. Blended Education System mean the application of strategies that will be familiar with technology." (Respondent 1)*

*"I have used two approaches this year which has worked for me. My tutoring classes were student centered, meaning it was broad in such a way that students are flexible, and they interact more than me in the class, they are the ones who are more active, I use 30% and the 70% is for the development of them to be critical thinkers and to increase the participation amongst them." (Respondent 2)*

*"I strongly believe in the corporative learning where I encourage my students to corporate with me because I am supporting them in modules that requires us to work together, the democratic approach creates a safe space where I encourage my students on the importance of working together, emphasize that I shouldn't be the only one who does things... The second approach I used more is student-led approach where I request one or two students to conduct a tutorial, but I do avail myself in those tutorials. This method assists me to teach them that they are valuable. I don't want to*

*feed my students with content only but to make them used and familiar with public speaking.” (Respondent 3)*

*“I also use blended education as an approach to assist my students transition successfully from high school to university.” (Respondent 4)*

Based on the focus group discussions with the TMAs, it is evident that the TMAs are equipped with knowledge and skills, and the teaching and learning approaches they apply seem to be beneficial and helpful to students when they transition from high school to HE. It seems that various teaching and learning approaches are adopted by individual TMAs to tutor students, which is a possible concern. It might be preferable for CELT to establish an applicable and beneficial teaching approach that is suitable for tutoring newly enrolled students at the university.

#### 5.5.2.2 Sub-theme 2.2: Language barriers

A language barrier, in the most basic and simplistic use of the phrase, is a lack of a common language that hinders two or more individuals from communicating verbally with one another (Friedman, 2023). While language barriers are a challenging obstacle in teaching and learning, educators can assist in overcoming these barriers by using strategies such as highlighting and clarifying academic vocabulary before introducing the lesson, providing the same content at multiple reading levels, and describing new concepts in clear, straightforward language (Elsworth, 2017).

In the focus group discussions, it was noted that language is one of the factors that can affect the successful transition of first-year students from high school to university life, and that language plays a significant role in the academic success of students.

*“There’s language barrier between students and tutors that why it is important to do a combination of languages to accommodate every student that is in the class.” (Respondent 1)*

*“Although English is the language of instruction, we cannot run away from the fact that our background determines our level of understanding, our students are struggling*

*with language barrier that why we also provide a repetition of our tutorials whereby we group students to repeat the content that was shared in class.” (Respondent 3)*

*“Tutors also accommodate in different languages to make sure that there’s no language barrier.” (Respondent 4)*

In line with the above, Makoni (2017) notes that many students have entered HE from ‘black’ schools, where teachers frequently practiced code-switching, which is the practice of moving between a learner's native language and English in order to make complex topics more accessible to them. As a result, many students struggled to gain English proficiency, which is essential for academic success.

The discussion above suggests that the TMAs understood the background of DUT’s students. As a result, the TMAs explored and used different languages to engage academically with students in order to improve the students’ understanding of the module content. It is significant that some students may experience difficulties with English as the language of instruction at DUT.

#### 5.5.2.3 Sub-theme 2.3: The role of tutoring in academic support

Academic support is an initiative and procedure used by institutions to improve students' academic achievement, particularly for students who are at risk of underachieving (Peterson, O'Connor, A. and Strawhun, 2014). Students drop out for a variety of reasons, with academic difficulty and failure being two of the most common risk factors. Academic support engages students at the most fruitful stage of their information acquisition and absorption, and instructors can make use of academic support strategies to adjust work and lesson plans in line with the existing knowledge of their students and the desired outcomes, rather than simply focusing teaching and learning structures on what is being taught (Amerstorfer and Freiin von Münster-Kistner 2021).

In the focus group discussions, it was noted that tutors fulfil a variety of roles in supporting first-year students while they transition from high school to, HE.

*“I think the main role of a tutor is to be an academic supporter meaning I provide support to students academically and I am their advisor, meaning I am honest to them and do not encourage them to cheat at no stage, I provide mentoring to them, offer guidance to them, how to approach things and how to balance your modules. As a tutor, you must not only focus on the academic side, but you must also educate them on the university life.” (Respondent 4)*

*“My work as a tutor is to ensure that all students are assisted if they have misconceptions about the chapter being taught and correct them from those misconceptions. I make sure that I focus on the chapters they have no knowledge of or chapters they have struggles with.” (Respondent 2)*

*“The role of a tutor is to be a mentor, help them with difficult module, help bridge the gap between students and lectures and since we are also students, it is easy for students to approach us to teach each other or tutor each other in a student perspective.” (Respondent 1)*

*“As tutors, we must always teach students about university, academically, how to write their assignments and referencing style. Teach them how to reference, how to do in text referencing as it is used at the DUT.” (Respondent 3)*

This suggests that the TMAs were aware of the roles they were expected to play, especially in relation to supporting first-year students. The roles identified by the TMAs seemed to be understood and applied consistently. However, the TMAs seemed to be excessively enthusiastic to assist students with a wide variety of matters, despite the existence of academic support departments at DUT, such as the Writing Centre and the Library, which were staffed with field experts who were well-trained to support students with academic writing and referencing in compliance with the university's standards. These findings suggest that the TMAs' central role of assisting students with module content is compromised when their attention is focused on other matters.

### 5.5.3 Theme 3: Evaluation of first-year support programmes

According to Schreiber, Luescher, and Moja (2021) first-year support programmes for students with various identities and the intersectionality of their identities with other factors, such as coming from disadvantaged backgrounds, being first-generation students, and living with a range of visible and non-visible disabilities, is particularly important. Support programmes and services include orientation programmes, mentoring and related support initiatives such as peer support, tutoring, academic advising, supplemental instruction, and career guidance (Smith, 2021). The importance of evaluating first-year support programmes to obtain feedback about how students are responding to them and how they can be improved was highlighted during the focus group discussions with the TMAs.

#### 5.5.3.1 Sub-theme 3.1: The gap between students and lecturers

Bowman, Vongkulluksn, Jiang, and Xie (2022) notes the importance of creating a meaningful connection between educators, students, and technology through professional development in light of the current educational environment. Effective communication between students and educators is critical, together with the required technologies to keep students linked to their curriculum regardless of their physical location (Bowman, Vongkulluksn, Jiang, and Xie 2022)

During the focus group discussions, the importance of bridging the gap between lecturers and students as a strategy to assist students with their transition was highlighted. It was noted that tutors played an important role in bridging the gap.

*“Tutors help bridge the gap between students and lecturers and since we are also students, it is easy for students to approach us.” (Respondent 1)*

It was also noted that tutors and lecturers used different methods of teaching.

*“Tutoring sessions are less formal; therefore, students are free to contact us any time, share how they think different methods can work and we have a lot of time compared*

*to lectures, lectures are about covering the syllabus and finishing the semester.”*  
(Respondent 3)

The TMAs indicated that the more informal settings of tutorial classes enable students to engage and openly share their academic struggles. Further to this, students are more likely to obtain one-on-one assistance in tutorial classes than in lecture venues in which a lecturer lectures to more than 200 students at a time. Therefore, tutorial classes are an important element in teaching and learning. As stated by the TMAs, the role of tutors and the approach applied seeks to close the gap between students and lecturers. Furthermore, students regard tutors as older peers and tend to resonate with them more easily than with their lecturers.

#### 5.5.3.2 Sub-theme 3.2: Training of tutors

Effective tutors combine extensive subject knowledge with a desire to assist others, empathy, good communication, honesty, excitement, and a sense of humor. Tutoring's ultimate purpose is to inspire students to embrace self-directed study (Anon, 2022). Ayaz (2014) states that tutoring is a beneficial activity for everyone involved, including the student, the tutor, and the school, institution, or programme. Peer tutoring enhances the self-confidence, motivation, attitude toward the subject matter and the institution in general, self-esteem, and academic accomplishment of both the tutor and the student. During the focus group discussions, participants indicated that CELT provided training for TMAs, but that this training was not adequate.

*“The Centre for Learning and Teaching does provide training to tutors but most of the strategies while tutoring, I take them from my lecturers and implement them on my classes.”* (Respondent 1)

*“I will add on what [Respondent 1] has shared with us, training is offered by the department at a given time, but it does not cover trainings on how to deal with students that are misbehaving or disrespectful.”* (Respondent 2)

*“I fully concur with my colleagues; training is offered to train to assist students with students.”* (Respondent 3)



*“Trainings are available although they are not sufficient as the other colleagues have mentioned and I think it has to do with the fact that the system at the Durban University of Technology is centralized. For example, if a student has a social issue, the counselling department is available to assist, and so forth.” (Respondent 4)*

These findings suggest that minimal training is provided to TMAs, especially in how to deal with first-year students. This is a serious concern, due to the importance of the first year of study and the fragility of most first-year students. To ensure that TMAs are capable of dealing with first-year students, it is essential that proper training in appropriate teaching philosophies to support first-year students is provided to TMAs, and that training in student management and communication skills is included by CELT. As indicated earlier, the application of different teaching and learning approaches by individual TMAs is a concern, which seems to be supported by the findings in this sub-theme.

#### 5.5.3.3 Sub-theme 3.3: Challenges faced by TMAs when tutoring

According to Gallego and Riart (2010), a tutor should be able to educate the person, prepare the professional, and educate the relationship. Rincón Igea and Rincón Igea (2000) identifies three steps that a tutor should take to accomplish this: assist students in their transition to college, assist students with their academic plans, and guide students through their transition to the workforce. Each student brings their own set of skills and knowledge to tutoring sessions, and it is the tutor's responsibility to determine what the student already understands and what skills need to be developed in order to achieve academic goals. As noted by Merrill (2022), issues do arise from time to time. In the focus group discussions, the TMAs identified various challenges that they face during the delivery of tutorials.

*“Students have ignorance, which is the lack of knowledge, they do not know the importance of tutorials and how it will assist him or her.” (Respondent 1)*

*“First-year students miss assignments because they are not familiar with the platforms that are used, and I must report to the lecturers and explain why students are not submitting assignments.” (Respondent 3)*

*“There are first-year students that are disrespectful, and it causes challenges while teaching. Some come with mindset that they are older than us.” (Respondent 4)*

Expanding further on the challenges they are faced with when delivering tutorials, the TMAs indicated that a lack of technological resources is also a challenge.

*“Some students do not have access to technology devices like laptops and smart phones as we are using MS Teams therefore some students are excluded from accessing education. Lack of data contributes to the challenges as students fail to attend classes because of data issues.” (Respondent 2)*

*“Many students do not have smartphones and laptops and that causes a challenge as they are excluded in teaching and learning.” (Respondent 4)*

The emergence of the Internet and other forms of technology has transformed the ways in which individuals, organisations, and governments communicate, disseminate, and manage information (Mikre, 2011) However, a gap exists between individuals with access to technologies and skills to use such technologies, and those without such access and skills. Technology-related challenges, including a lack of access to technology, can induce stress in students, resulting in poor mental health and a decline in their academic performance.

Students learning a second language often struggle to express themselves if they do not have a full command of that language; this can lead to emotional stress and affect their ability to learn (McConville, 2019). During the focus group discussion, the TMAs highlighted the importance of combining languages in tutorial sessions to ensure that no student is left behind in the teaching and learning process.

*“A combination of languages helps the students to understand that there are students who are coming from different backgrounds and might have some issues with understanding the content shared.” (Respondent 1)*

*“Tutors also accommodate different languages to make sure that there is no language barrier.” (Respondent 2)*

*“I fully concur with [Respondent 2] as we work together and we teach the same modules, the strategies we use are the same to support first-year students...To support the students who lack in class, we check the majority in terms of language, we assess how many students need to understand the content shared using the mother tongue language and how many students require assistance using additional languages.” (Respondent 4)*

In line with the above, Danjo (2018) notes that language can never be a neutral means of communication. The way in which language is used at home, socially, at university, and in the workplace creates additional implications and meanings that are communicated intentionally or unknowingly.

These findings indicate that students have little awareness of the importance of tutorial sessions, as evidenced by their tendency to ignore the tutors. This is a serious concern, as the tutors are appointed to ensure that students receive sufficient support while they are transitioning. Another concern is that students received minimal training in the use of the technological resources that they were required to use, which negatively affected their academic performance. These findings also indicate that the TMAs understood the identities and backgrounds of the students to whom they provided support, and that they used a variety of strategies to ensure that no student was left behind. However, as valuable as these interventions are, there is a concern regarding inclusivity and whether all languages that are spoken by students are accommodated in tutorial sessions. In order to ensure that tutorial sessions effectively provide support to all students, it is important that they cater for students who come from different provinces, as well as for international students.

#### 5.5.3.4 Sub-theme 3.4: Effectiveness of the tutoring programme

The tutoring programme is offered at DUT as one of its support strategies to ensure that first-year students transition successfully from high school to HE. During the focus

group discussion, the TMAs were asked to indicate how effective the tutoring programme has been in assisting first-year students.

*“I do not know how to measure the effectiveness of the tutoring programme, but I do have belief that these tutorials programmes of assisting first-year students are highly effective.” (Respondent 1)*

*“The performance of students or learners that we tutor has improved a lot, and I am quite sure that even their academics has greater improvements because of the positive we receive from the students we tutor. First-year tutoring programme is effective, and students have benefited a lot.” (Respondent 3)*

*“The first-year tutoring programme is very effective in assisting first-year students while they transition from high school to university.” (Respondent 4)*

These findings suggest that the TMAs believed that the tutorial sessions provided to first-year students were effective in ensuring that students transition successfully from high school to HE. However, it is concerning that the TMAs did not have an accurate tool to measure the effectiveness of the programme. To address this concern, a feedback tool could be developed by CELT and administered to first-year students. Such a feedback tool would provide students with the opportunity to rate the tutorials that were offered to them and to suggest how they could be improved or altered to match their needs.

#### 5.5.4 Theme 4: Introduction of new support programmes

Students' first year at a HE institution is critical in preparing them for future success. The growing notion that FYE is critical to academic performance in HE has prompted a focus on the FYE in student affairs and HE (Schreiber et al., 2018).

As reflected in the discussions above, DUT offers various initiatives to support first-year students with the transition from high school to university. In the focus group discussions, the TMAs proposed further developments of these initiatives to assist students to settle in more easily at the university.

*“We live under the new normal which is (Covid-19), therefore I suggest that the university implements deep trainings on how to use the university platforms like M teams, Moodle, student portal and dut4life email so that first-year students can have knowledge on how to use these platforms mentioned below. By doing so, the students will be able to communicate with lecturers and will be able to cope with academic demands.” (Respondent 1)*

*“First-year students should be provided with training on how to use the university platforms and the TFL programme under the CELT Department and the CELT department should be the one which commence first before all the tutorials schedules so that they offer the necessary trainings to students before the academic learning commences.” (Respondent 2)*

*“Students must be taught on how to balance their lives, balancing their lives is key.” (Respondent 3)*

*“It is very important for students to know how to balance their lives, more especially balancing your modules as well as the university life. Students must be taught to put most focus on academics rather than the life outside academics. It is very important for the students to have a high level of technology on how to use university platforms since we are currently on the Covid-19 pandemic. The CELT department must try and educate students on the importance and the value of the process of tutoring each other.” (Respondent 4)*

Based on these findings, it is evident that first-year students at DUT are provided with the necessary support to assist their transition from high school to HE. This indicates that the university has been intentional in ensuring that its students are provided with adequate support after they are admitted. However, the findings also suggest that CELT should invest in training first-year students in how to use the university's platforms to enable them to make use of the support that is available via these platforms. The findings also indicate that the TMAs acknowledged a need to introduce additional support programmes at the university in order to ensure that first-year students transition successfully from high school to HE.

#### 5.5.4.1 Sub-theme 4.1: Improving DUT's introductory programmes

During the focus group discussions, participants were given an opportunity to suggest additional support programmes that could be offered to assist first-year students. While the majority of the participants affirmed the need for new support programmes to assist first-year students, one participant suggested improving the existing programmes for the benefit of first-year students.

*“There is a programme in place offered by ICON which is called General Education Cornerstone, Health sciences have another programme called PPD (Personal Professional Development) and CELT offers the FYSE programme, I suggest that we combine these programmes instead of introducing more programmes to make the lives of first-year students easier and less hectic as these programmes almost offer the same things.” (Respondent 1)*

*“For the improvement of first-year students, it is not important to start new programmes, we should improve the current programmes that are offered by the university. One programme that can be introduced is university life to prevent the high number of students dropouts.” (Respondent 2)*

*“Academical programmes that are currently put in place to assist first year students are effective in supporting the transition from high school to higher education, but I highly request that the writing center hires more workers to ease the load and the number of tutors to assist students should increase. Psychologists are a scarce at the DUT, students are affected physiologically.” (Respondent 4)*

These findings indicate that the university has been intentional in providing the necessary support to first-year students, and that there is an understanding of the type of support that should be provided to first-year students while they transition from high school to HE. However, it is questionable whether these support programmes address the needs of the students. The findings suggest that the existing support programmes offered by CELT should be revised in order to ensure that students benefit from them and to avoid the redundancy of providing support that is not needed by the students.

Based on the empirical findings, it is evident that the TMAs assisted first-year students in adapting to the university life. The findings suggest that there is no need to introduce new support programmes for first-year students. However, the TMAs were adamant that adjustments to the existing programmes should be incorporated in line with students' needs and expectations. As indicated in Chapter Two, the U-Curve Theory of Adjustment was adopted as a theoretical framework for this study. These findings highlight that students undergo a number of phases while they are transitioning, and that providing the necessary support to first-year students is key to their academic success.

## **5.6 Triangulation Perspective on the findings of the study**

Based on the key findings of the study, the first -year students demonstrated that the university is taking a positive step in ensuring that they transition from high school to university by implementing first-year support programmes that are addressing their needs. This resonates with the findings from the individual interview session where it was highlighted that the first-year student programmes provide assistance in ensuring that students adapt successfully from high school to university. Whilst such findings represent a commendable effort, the findings from the focus group interview session indicated that there is a need to provide first-year students with the trainings on how to utilise the initiatives that are made available so that they can be effective in providing the necessary and required support. These findings clearly suggest that if the first-year students are unable to utilize the support programmes offered to them, it means that the use of them is futile.

Based on the key findings of the study, the first-year students indicated that the first-year tutoring programme highly impacted their transition from high school to university. These findings resonates with key findings from the focus group discussion where participants uncovered that the tutoring programme provide support to students academically, the participants also indicated that the tutorial programmes help bridge the gap between students and lecturers. These findings provides evidence that the university has done exceedingly well in ensuring that first-year students are well supported during their transition from high school to university.

Based on the empirical findings, the first-year students also revealed that lack of financial support contributed as a major factor in their transition from high school to university. This is in line with the findings from the individual interview session where the participants uncovered first-year students are confronted with psychological and socio social backgrounds where some students have to support at home and there is a challenge of food security and hunger in the residences. These findings resonates with findings from the focus group discussion where it was highlighted that undergraduate students face numerous challenges when they are transitioning from high school to university. These findings imply that the first-year period is such a crucial phase in the lives of students and the students' related challenges contribute to their academic success, there is a dire need to provide the adequate support so that the transitional phase is smoother.

## **5.7 Summary**

Transition is highly challenging for many first-year students who move away from the comfort of a familiar environment that they have known for their entire lives (Mauder, 2018). This study has identified challenges faced by first-year students transitioning from high school to HE. There are many factors, both on an institutional and individual student level, which may influence student success during transition to HE. Students' sociocultural background, socioeconomic background, prior educational experiences, academic background, and pre-arrival expectations have all been shown to influence their academic success.

The following chapter will discuss the conclusion and recommendations of the study.



## **CHAPTER SIX**

### **RECOMMENDATIONS AND CONCLUSIONS**

#### **6.1 Introduction**

The previous chapter gave a brief overview of the findings and results obtained from the qualitative phase of the study. The analysis consisted of two parts. The first part (Section 5.4) discussed the findings obtained from the individual interview sessions with the CELT administrators. The second part (Section 5.5) incorporated the focus group discussions with the TMAs. The data that emerged from the interviews were deductively coded with the aid of thematic analysis.

This chapter presents an overview of the research objectives, key findings from the literature review, key findings from the students, key findings from CELT, and key findings from TMAs. The chapter also discusses the achievement of the research objectives, the implications of the study, recommendations based on the study's findings, the limitations of the study, recommendations for future research, and conclusions of the study.

#### **6.2 Overview of research objectives**

The aim of this study was to examine the management and effectiveness of the first-year student programmes offered by DUT that are designed to manage the transition from high school to university. The following objectives were pursued:

- to identify challenges that are faced by students when they transition from high school to DUT.
- to determine which educational programmes are offered by DUT to support first-year students in their transition from high school to university.
- to determine the impact and effectiveness of the first-year introductory programmes offered by DUT; and
- to evaluate the administration of the FYS programme at DUT.

### **6.3 Key findings from the literature review**

The literature review of this study focused on the new beginning that students experience during their first year of study at university. For some students, it is their first time away from home, and for the first time they have the opportunity to make their own decisions. During this period, students gain a better understanding of themselves and their experiences. However, it is widely acknowledged that the transition to university is often accompanied by numerous challenges, including homesickness, despair, the inability to fit in, and financial insecurity. In this study, the majority of students affirmed that one of the challenges that hinders their successful transition is a lack of financial support.

According to Shange (2018), HE is recognised as a crucial engine for reshaping and repositioning South Africa and Africa as a whole. Despite the goals of sharing economic growth and social progress, challenges in HE persist. A study conducted by Daud, Norwani and Yusuf (2018) highlighted that students in HE require greater financial assistance with the costs of study and accommodation at universities as costs at public and private educational institutions rise. As a result of restricted financial resources and increased educational costs, some students may face financial difficulties in their daily lives. In this study, the participants indicated that a lack of financial support during the transition phase from high school to university influences how students adapt to university life.

The first-year student transition serves as an example of a life transition involving fundamental change, in which individuals struggle to adapt and require support and coping resources (Nyar, 2021). The first year of university study can be aptly described as a culture shock. Students' adjustment to HE life is a process involving many elements such as social networking, meeting and interacting with new friends, and coping with academic changes and institutional demands (Salami, 2011). This adjustment enhances students' psychosocial development (Malinga-Musamba, 2014).

First-year orientation programmes continue to be one of the most effective methods to promote university student retention and continued enrolment (Deggs, 2011). Orientation brings new students and institutions together to understand students'

individual and personal needs as they enter a new environment (Sullivan, 2021). Soundy (2016) asserts that greater focus is needed on the proper management of FYEPs, as students from disadvantaged communities generally possess limited knowledge and technological skills due to high levels of educational inequalities in South Africa. For these students, transition is even more difficult due to the contrast between the familiar environment from which they have moved and their new educational environment (Mauder, 2018).

## **6.4 Key findings from students**

A number of key findings that were identified from the responses of the first-year students who participated in this study are presented in this section.

### **6.4.1 Type of school attended**

The majority of the students who participated in the study (85%) attended public schools, while the remainder (15%) attended private schools. Learners who attend public schools are faced with challenges resulting from having access to fewer resources. The majority of public schools have fewer curriculum options, fewer co-curricular activities, and poor infrastructure, whereas private schools offer many advantages such as higher academic standards, a safe and secure learning environment, parental involvement, and enriched academic opportunities. This suggests that the majority of the participants in this study enrolled at the university with little knowledge about the university's culture and processes, which may contribute to them finding it difficult to adjust to university life. The findings suggest that many students who attend public schools experience significant challenges with the transition from high school to university due to poor infrastructure, underdevelopment in rural areas, and a lack of access to technology.

#### 6.4.2 Career guidance is offered by the university to assist with the transition from high school to university

More than half of the students who participated in this study (68.6%) were aware of the career guidance initiatives that were implemented by the university to help ease the transition from high school to university. However, close to 30% of the students disagreed or were neutral that career guidance offered by the university helped them transition smoothly from high school to the university. These findings indicate that despite the university's efforts to reach out to high schools in KwaZulu-Natal, not all high schools can afford to be part of the university's career guidance exposition due to financial implications, location, and other challenges. These challenges pose a threat to learners, as they result in learners missing out on career guidance initiatives that are centred around exposing grade 11 and 12 learners to career choices that they can pursue at the university. Such initiatives stimulate learners' interests, expose them to their preferred career choices, and to a certain extent improve their overall understanding of the fields or careers that they want to pursue. Therefore, the university should be urged to reach out to all high schools in KwaZulu-Natal, especially those that experience difficulties with attending the career guidance initiatives.

#### 6.4.3 The university facilitates academic programmes to support first-year students who are struggling academically

The majority of the students who participated in this study (71%) were confident that the academic programmes that are facilitated by the university support first-year students who are struggling academically. However, a significant number of students (21%) were neutral regarding this statement, while others disagreed with the statement. These findings suggest that, even though the university provides structures to help students transition smoothly, some students still find it extremely difficult to engage well with these structures and to reap their intended benefits. Therefore, more focus and attention should be directed to these students, as significant interventions are needed in order to stimulate their academic interests.

#### 6.4.4 The university introduced programmes that are necessary for assisting and supporting first-year students with their academic demands

The majority of the students who participated in this study (80%) were confident that the university has implemented support programmes that assist first-year students with their academic demands. This finding indicates that the university has largely been successful in supporting the students it enrolls, and that the structures put in place by the university to support students have been important in ensuring that students transition smoothly from high school to university. However, a significant number of students (20%) indicated that the university's programmes did not ensure that they were well supported with their academic demands. This suggests that there is a need for further attention by the university to ensuring that all students feel confident about the support programmes offered to them.

#### 6.4.5 First-year student orientation is beneficial in helping students adapt to university life

The majority of the students who participated in this study (81%) were positive that the first-year student orientation programme was beneficial in assisting them to adapt to university life. However, about 20% of the students indicated that the first-year student orientation was not beneficial or unknown to them. Only one first-year orientation programme is conducted at the beginning of the year, and some students are not yet registered at the university when the orientation programme takes place due to financial reasons, the limited number of open spaces in preferred programmes, housing allocation, and other issues. These issues result in students missing the orientation programme, and this disadvantages them from receiving comprehensive information about the university.

#### 6.4.6 First-year experience programmes facilitated by CELT assist students to cope academically

More than half of the students who participated in this study (65%) were positive that the FYSE programme facilitated by CELT provides the necessary support to ensure that students cope academically. However, a significant number of students (28.3%)

were not aware of the FYSE programme or were not confident that the FYSE programme assisted them to cope academically. This suggests that the pass rate of first-year students is compromised because they lack appropriate mechanisms to cope academically, which contributes to the dropout rate of first-year students. It also suggests that students who do not attend the workshops offered by CELT struggle to cope academically.

#### 6.4.7 The programmes offered by CELT contribute to the empowerment and development of first-year students

More than half of the students who participated in this study (66%) were confident that the university has implemented support programmes that contribute to the empowerment and development of first-year students. However, a significant number of students (30%) indicated that they were not aware of the programmes offered by CELT or were uncertain that these programmes contributed to the empowerment and development of first-year students. These findings indicate that not all students benefit from these programmes, and that there is a need for the university to reassess its marketing strategy to ensure that all students are aware of these programmes and attend them.

#### 6.4.8 The CELT programmes are necessary for promoting a smooth transition for first-year students

The majority of the students who participated in this study (70%) were confident that the CELT programmes are necessary for promoting a smooth transition for first-year students. However, a significant number of students (30%) indicated that they were unaware or uncertain of the existence or necessity of these programmes. Even though the university has been intentional in providing the required support to first-year students when they transition, challenges remain with regard to students who are unaware of the programmes that have been put in place to ensure a successful transition. Reasons for the lack of awareness regarding these programmes include the late registration of students after these workshops have already commenced, information about the workshops not being received timeously by students, ineffective

marketing of the programmes, and a lack of clear collaboration between the academic departments and CELT.

#### 6.4.9 The introductory programmes facilitated by the university helped with the transition from high school to higher education

The majority of the students who participated in this study (70%) indicated that they were confident that these programmes exist at the university and that they address the needs of the students. This suggests that the university has been successful in ensuring that the introductory programmes assist in easing students' transition. However, a significant number of students (26%) indicated that they were unaware or uncertain of the benefits of these programmes. This is similar to the number of students (30%) who indicated that they were unaware or uncertain that CELT's support programmes promoted a smooth transition for first-year students. These findings strongly indicate that despite the introduction of these initiatives by the university as an acknowledgement of the pressure that first-year students experience, there are shortcomings with regard to these programmes which contribute to the challenges of first-year students transitioning from high school to university.

#### 6.4.10 The introductory programmes introduced by the university are useful in supporting students in adapting to university life

The majority of the students who participated in this study (72%) were confident that the university's introductory programmes are useful in supporting students in adapting to university life. This finding indicates that the university caters for first-year students transitioning from high school to university. However, close to 30% of the students felt that the university had not been successful in ensuring that these programmes are effective. The findings suggest that these initiatives were not effectively marketed, or that they did not cater effectively for the students enrolled at the university.

#### 6.4.11 The introductory programmes are effective in mapping students' roles and responsibilities within the academic environment

More than half of the students who participated in this study (69%) indicated that the introductory programmes were effective in mapping students' roles and responsibilities within the academic environment. This finding suggests that the university has been successful in ensuring that students' roles and responsibilities are mapped within the academic environment, and that the university's efforts in this regard have been well-received by the majority of students. However, more than 25% of the students were unsure about this aspect of the university's initiatives or were unaware whether these initiatives exist at the university.

#### 6.4.12 Attending the introductory programme improved my holistic view of the university

More than half of the students who participated in this study (62%) indicated that attending the introductory programmes improved their holistic view of the university. However, more than 30% of students believed that the introductory programmes did not effectively provide them with a broader perspective of the university. These findings suggest that the introductory programmes lacked inclusivity and comprehensive information to help students integrate and adjust to the university with ease.

#### 6.4.13 Proper guidance is provided regarding the alignment of qualifications to industry

More than half of the students who participated in this study (62%) believed that proper guidance was provided to them regarding qualification alignment. However, more than 30% of the students indicated that the university was not successful in ensuring that proper guidance was provided regarding qualification alignment. These findings clearly demonstrate that students are not provided with sufficient knowledge regarding how their chosen qualification will assist them in finding employment after graduation.



#### 6.4.14 The departmental orientation offered to first-year students effectively addresses the objectives of the programme they are registered for

Slightly more than 50% of the students who participated in this study indicated that the orientation offered to first-year students in the Department of ICM effectively addressed the objectives of the programme they were registered for. However, more than 45% of the students were not confident that the first-year departmental orientation addressed the objectives of the programme they were registered for. These findings indicate that the Department of ICM has not been successful in providing students with comprehensive information about its programmes and their alignment to career opportunities in industry.

#### 6.4.15 Tutors provide valuable assistance in ensuring that first-year students adapt to university life

The majority of the students who participated in this study (78%) indicated that the tutors provided by the university contributed successfully to ensuring that first-year students adapt to university life. This finding resonates with the reflections of the TMAs, who stated that the tutoring programmes they provide address the needs of first-year students and that they do everything possible to ensure that first-year students are catered for. The finding that students regard tutorials as pivotal to their successful transition from high school to university indicates that the university has been successful in ensuring that students are assisted with tutorial support to enable them to engage with their studies.

#### 6.4.16 First-year tutoring programmes contribute to the successful transition of first-year students from high school to university

The majority of the students who participated in this study (80%) were confident that the first-year tutoring programmes contributed to their successful transition from high school to university. This finding suggests that the tutoring programmes seem to have played more of a pivotal role than the introductory workshops. It also indicates that students are convinced that tutors provide the necessary support to enable them to transition from high school to university and to cope academically. In addition, this

finding suggests that these support initiatives have been created out of an understanding of the challenges that first-year students experience when transitioning to ensure that students do not feel alone when they embark on this journey. The first-year tutoring programmes are less formal than lectures and are mostly conducted by peers who have passed the module that is being taught. This ensures that the students who attend the tutoring programme stand a better chance of a successful transition.

#### 6.4.17 The department is effective in providing the necessary support to first-year students while they transition from high school to university

More than half of the students who participated in this study (60%) were confident that the department is effective in providing the necessary support to first-year students while they transition from high school to university. However, more than 40% of the students indicated that effective assistance is not provided to first-year students while they transition. These findings indicate that a significant number of students are dissatisfied with the support provided by the department or are unaware of such support.

#### 6.4.18 Lack of financial support influences the transition from high school to higher education

The majority of the students who participated in this study (84%) indicated that they faced financial challenges during their transition from high school to university. This finding indicates that students who have no financial support during the transition phase are likely to drop out due to the resulting pressure. Financial support plays a significant role in the academic success of students and the necessary support should be provided to assist in easing the transition. A considerable number of students consider financial issues to be a detrimental challenge that prohibits them from transitioning successfully. This is reflected in the engagement and participation in student protests by a majority of students at the beginning of the year due to financial issues.

#### 6.4.19 Insufficient knowledge about my career choice influences the transition from high school to higher education

The majority of the students who participated in this study (72%) indicated that insufficient knowledge about their career choices influenced their transition from high school to HE. This finding indicates that on arrival at the university, students are registered for programmes that they have no knowledge of, and did not apply for, due to limited capacity in the university's programmes. Due to numerous pressures, students tend to enrol for any course or programme that is on offer for the sake of being registered at the university. This tends to hamper their smooth transition as their expectations have not been met and, subsequently, their career aspiration diminishes.

#### 6.4.20 The academic learning environment had an impact on the transition from high school to higher education

The majority of the students who participated in this study (75%) indicated that the academic learning environment influenced their transition from high school to HE. This finding is complemented by the finding that the department did not provide sufficient support to the students. These findings also suggest that first-year students have challenges with the academic learning environment as the teaching and learning environment in HE is totally different to that in high schools, and first-year students are required to adapt to this new environment in a short period of time.

#### 6.4.21 Environmental changes such as location and cultural shock influenced the transition from high school to higher education

The majority of the students who participated in this study (78.2%) indicated that environmental changes influenced their transition from high school to HE. This finding resonates with the U-Curve theory of adjustment, which was adopted in this study to explain the phases that first-year students undergo while transitioning from high school to HE. In the culture shock phase, students are shocked by their move from a familiar environment at home to an unfamiliar environment at university. This finding suggests that location and cultural shock are major factors affecting the transition from high school to HE. It also suggests that environmental changes significantly affect the

transition of students to HE, as many students have to learn different cultures and ways to cope with new academic demands during the transition period.

#### 6.4.22 Career guidance

More than half of the students who participated in this study (62%) indicated that career guidance was provided at the high schools that they attended prior to their enrolment at the university. However, more than 30% of the students indicated that career guidance was not made available to them or that they were unaware of the provision of career guidance at the high schools that they attended.

#### 6.4.23 Parental guidance

The majority of the students who participated in this study (71%) indicated that they received guidance from their parents prior to their enrolment at the university. These findings suggest that parents have been successful in ensuring that students receive the support they require when they transition from high school to university.

#### 6.4.24 Open days

Less than 50% of the students who participated in this study indicated that open days were made available to them. This suggests that half of the students were unaware of the open day programmes at the university. Since the majority of the students did not attend the open day programmes, this finding clearly suggests that the open day programmes have not been effective and have not been effectively marketed. It also suggests that the significance of open days has not been highlighted to students, which implies that students have not been motivated to participate in such initiatives. This is a critical concern, as these initiatives can positively or negatively influence students' transition from high school to university.

The key findings from the interviews with the CELT administrators are discussed in the following section.

## **6.5 Key findings from CELT**

This study has shown that DUT has been intentional in providing the necessary support to first-year students during their transition. However, there are some areas in which improvement is needed in order to ensure a smooth transition. The university has designed numerous support programmes that are facilitated by CELT and tailored to assist first-year students. These support programmes are critical to first-year student achievement as they ease the transition from high school to university and integrate first-year students into the tertiary system. These programmes are run by CELT in collaboration with other academic departments and have been beneficial in improving the university's understanding of its cohort of students.

The study found that the support programmes offered by CELT are not effectively marketed, yet these support programmes are crucial in ensuring the academic success of first-year students. The study also found that there was no clear collaboration between CELT and other academic departments within the university. Since the academic departments deal directly with first-year students, this finding is quite alarming. The study also highlighted the need for the existing support programmes provided by the university to be refined in order to address the needs of students enrolled at the institution.

DUT offers several initiatives to assist with the transition of first-year students. In addition to the FYSE programme, programmes such as TFL and REP are also offered. The findings of this study indicated that the FYSE programme provides holistic support to students to ensure that they adapt to university life. The study also revealed that the FYSE programme has three components: academic support, non-academic support, and technology. The study revealed that DUT's FYSE programme prioritises the needs of students who have recently joined the university's community, the majority of whom are recent high school graduates. However, it was not clear from the findings whether this programme caters for students' diverse needs.

In addition to the FYSE programme, CELT offers other support programmes to students. This indicates that the university is willing to provide the necessary support to enable students to transition successfully from high school to university. The study

found that the university has an understanding of the pressures facing first-year students in HE and that it has initiated these support programmes to contribute towards easing the burden of the transition phase.

DUT offers institutional orientation as a further strategy to provide adequate support to first-year students during the transition phase from high school to HE. This is further evidence that the university has an understanding of the pressures facing first-year students and that it is willing to provide the necessary support. However, the study found that a large amount of important information was shared within a short period of time in the first-year student orientation programme. This resulted in students not being able to absorb all the information that was provided to them.

The first-year transition period creates considerable stress in the lives of students and has been found to increase their distress. The stressors of the transition to HE are related to life transitions, and the resulting distress appears to have the capacity to erode self-esteem. Multiple stressors, such as academic demands, workload, pressure to succeed, pressure from educators and parents, financial burdens, and concerns about the future, can lead to the development of psychological problems in students and negatively affect their academic performance.

The study found that the psychological and socio-social backgrounds of first-year students are factors that hinder their successful transition from high school to HE. The study highlighted that the university has been intentional in ensuring that students who face challenges as a result of their psychological backgrounds and socio-social backgrounds are provided with adequate support. The study also highlighted the importance of supporting first-year students during this phase. These students require psychosocial support at the university since they struggle with personal problems that may not be known to those around them in lecture venues.

The study found that first-year students face destructive emotional challenges that significantly affect their academic performance. The study also found that home-related issues play a significant role in students' academic performance. A major common issue that affects first-year students is 'calling'. Students who experience this

issue feel that they are called by their ancestors and are required to deregister and attend to the calling.

The study found that some students support family members at home using their allowances. Some students work to meet their financial challenges, and their academic responsibilities are compromised as a result. The study also found that food security is an issue in the residences, and students face hunger in the residences. This is a major concern in the academic departments.

The key findings from the focus group discussions with the TMAs are discussed in the following section.

## **6.6 Key findings from TMAs**

The first year of tertiary study is a year of transition and adjustment for students. It presents a variety of challenges that can have a positive or negative impact on students. DUT has appointed TMAs to work closely with its first-year students and to provide them with the necessary support during their transition from high school to university. This study found that the university has put a variety of strategies in place in order to ease the transition.

The study found that the TMAs used a variety of approaches to provide assistance to first-year students. The TMAs were well equipped with the appropriate skills and knowledge, and the teaching and learning approaches they applied appeared to be beneficial to the students. The study also found that the TMAs understood the background of students enrolled at DUT and used different languages to engage academically with students. However, it is concerning that individual TMAs adopted different approaches when providing tutorial sessions to first-year students.

The study found that the TMAs fulfilled a variety of roles in supporting first-year students in their transition from high school to HE. The TMAs were aware of the roles they were expected to play with regard to supporting first-year students, and these roles were understood and consistently applied by most of the TMAs. However, it appeared that the TMAs had assumed additional roles that overlapped with those of

other support departments within the institution, and that their central role of assisting students with module content was compromised when their attention was focused on other matters.

The study found that there was minimal training support available to TMAs. No specific teaching methods were outlined by CELT to ensure that the TMAs understood what they were expected to do when tutoring first-year students. The study found that despite the intention of the university to provide support by means of the tutoring programme, the first-year students tended to ignore the tutors and undermine them, which was a major concern.

The study found that the informal settings of tutorial classes enabled students to engage and openly share their academic struggles with the TMAs. This assisted the TMAs to focus on specific areas for improvement.

The study found that DUT offered various initiatives to support first-year students with the transition from high school to university. Further developments of the existing initiatives were suggested by the TMAs to assist students to settle in more easily at the university. The study found that first-year students were provided with the necessary support during the transition phase from high school to university, and that the university had been intentional in ensuring that the TMAs were well equipped with the required knowledge and skills to provide adequate support to first-year students.

The study found that minimal training was provided to TMAs in dealing with first-year students. This finding was quite alarming due to the fragility of first-year students, especially during their transition to HE. While training was made available to TMAs, it was inadequate, and was not effective in equipping TMAs with communication skills and student management skills. Some TMAs were appointed on the basis of their academic results and lacked experience in dealing with students.

The study found that students had little awareness of the importance of first-year tutorial sessions. Students tended to ignore the tutors because the importance of the tutorial sessions was not made clear to them. The study also found that students experienced difficulties in accessing the support initiatives provided to them because



they were not made easily accessible. It was evident that there was minimal investment of resources to equip students with the technological skills to be able to use the technological resources provided to them.

The study found that DUT offered a tutoring programme as a support initiative to ensure that first-year students transition successfully from high school to HE. The TMAs who participated in the study concurred that the first-year tutoring programme was effective in ensuring that students transition successfully. However, it was concerning that the TMAs did not have an accurate tool to measure the effectiveness of the programme. A need was identified for improvement and revision of the existing support programmes offered at the university to ensure their effectiveness in serving the needs of students.

## **6.7 Achievement of the research objectives**

The conclusions of this study are formulated in accordance with the study's' research objectives.

### **6.7.1 Research objective 1: To identify challenges that are faced by students when they transition from high school to DUT**

This research objective was addressed through the empirical findings which indicated that students are confronted with many different changes as they embark on their student experience, which result in a challenging transition from high school to university. The empirical findings showed that the majority of the first-year students came from poor backgrounds, and that they were not familiar with a number of technological tools that were provided by the university to assist students. The empirical findings also showed that the challenges that hampered student transition were related to finance, insufficient knowledge, environmental changes, the academic learning environment, and social interactions with peers. In addition, it was found that blended learning presented a troubling challenge to students. Blended learning is becoming an established teaching and learning approach in the HE sector, and this study found that many first-year students find blended learning a challenge as they are not equipped with the technical skills to navigate digital teaching and learning tools.

#### 6.7.2 Research objective 2: To determine which educational programmes are offered by DUT to support first-year students in their transition from high school to higher education

This research objective was met through the empirical findings in which the CELT administrators affirmed that the university has an understanding of the challenges faced by first-year students transitioning from high school to university. Based on that understanding, the university has implemented support initiatives to ensure that first-year students are catered for when they undergo this new phase of their life. CELT offers the following support initiatives to provide the necessary support to first-year students: FYSE, REP tutorials, academic advising, and TFL. All these initiatives are designed to assist and support students to settle in and feel part of the university and are considered to have a lasting impact on students' academic achievement and social cohesion.

The empirical findings suggested that the university had been intentional in ensuring that first-year students were provided with multi-pronged support and academic development. The findings indicated that the CELT support programmes were tailored to first-year students and were developed to deepen the university's understanding of the challenges that first-year students are confronted with. However, the findings also noted that first-year students were confronted with several challenges. In particular, challenges with the usage of digital teaching and learning tools was seen as a factor contributing to the failure rate of students. The findings indicated that no training was provided by CELT to familiarise students with the various teaching and learning tools that were used at the university.

#### 6.7.3 Research objective 3: To determine the impact and effectiveness of the first-year introductory programmes offered by DUT

It was evident that the university had been intentional in providing academic and non-academic support to first-year students during their transition from high school to HE. The university provided a number of support programmes that were designed solely to cater for the needs of its students. The findings indicated that the first-year support

programmes were not effectively marketed to the first-year students, and, as a result, few students attended these programmes. The findings also indicated a lack of clear collaboration between the academic departments and CELT. Since CELT and the academic departments both play a crucial role in the transition of first-year students, these departments should collaborate to develop structures that resonate with the relevant departments, rather than offering generic workshops that are not specifically geared to academic departments. In addition, the findings noted that no clear feedback tool was used by CELT to obtain feedback from the students on how the support initiatives could be improved. This indicates a lack of effectiveness of the introductory programmes offered at the university.

#### 6.7.4 Research objective 4: To evaluate the administration of the first-year seminar programme at DUT

The findings indicated that the TMAs were equipped with knowledge and skills, and the teaching and learning approaches they applied seemed to be beneficial and helpful to students during their transition from high school to university. The findings also indicated that the TMAs applied different teaching and learning approaches, which was a concern. It was unclear why CELT had not established an applicable and beneficial teaching approach that would be suitable for newly-enrolled students at the university. The findings also highlighted that the TMAs were aware of the role they were expected to play, especially in relation to supporting first-year students. The TMAs seemed to be enthusiastic to assist students with a wide variety of matters, despite the existence of academic support departments at DUT, such as the Writing Centre and the Library, which were staffed with field experts who were well-trained to support students with academic writing and referencing in compliance with the university's standards. This suggested that the TMAs' central role of assisting students with module content could be compromised when their attention is focused on other matters. The TMAs indicated that the more informal settings of tutorial classes enabled students to engage and openly share their academic struggles, that students were more likely to obtain one-on-one assistance in tutorial classes than in lecture venues in which a lecturer lectures to more than 200 students at a time, and that students regarded tutors as older peers and tended to resonate with them more easily than with their lecturers. However, they also indicated that students had little awareness of the

importance of tutorial sessions and tended to ignore tutors. The findings indicated that first-year students were provided with the necessary support to support their transition from high school to HE, and that the university had been intentional in ensuring that its students were given adequate support after their admission.

## **6.8 Recommendations based on the study's findings**

This study has highlighted the various challenges that are faced by first-year students during their transition from high school to university. The following recommendations are made based on the empirical findings.

### **6.8.1 Recommendations based on key findings from students**

The empirical findings indicated that some students were not aware of career guidance support initiatives. It is therefore recommended that CELT should improve its marketing strategy by collaborating with high school principals in order to ensure that all high schools are targeted. The university should also make career guidance programmes available to communities in order to ensure that all prospective students are able to access in-depth knowledge of all the courses offered by the university and the admission requirements of these courses.

The study found that students were unaware of the academic programmes that were facilitated by the university to support first-year students who struggle academically. It is therefore recommended that the academic programmes facilitated by the university should be effectively marketed by the university in order to ensure that every student is aware of these programmes. In addition, it is essential that these programmes are well received by all students for whom they cater. It is recommended that the university develop evaluation surveys for distribution to students in order to provide students with an opportunity to evaluate these academic programmes and to give suggestions on how best they can be structured to be student-friendly.

The study revealed that the first-year student orientation was unproductive because it was conducted at the beginning of the year, when some of the first-year students were not yet registered. It is recommended that the university conducts its first-year

orientation programme twice a year, once at the beginning of the first semester and again at the beginning of the second semester, in order to cater for students who are unable to attend the orientation programme at the beginning of the year. Repeating the orientation programme during the course of the year would provide students with the opportunity to engage further with what the university offers and thus enable them to integrate more easily. Most importantly, this would familiarise students with the university's support departments and the variety of programmes offered to support students' social and academic integration.

The empirical findings indicated that close to 30% of the students were unaware of the FYSE programmes and did not attend the workshops, which could potentially compromise the pass rate of the first-year students. Therefore, it is recommended that FYSE workshops be offered once a month in order to cater for the majority of students. These workshops should be facilitated in conjunction with the academic departments and should be effectively marketed on the DUT student and staff portals, DUT Pinboard, and notice boards in academic departments. During lectures and tutorial sessions, lecturers and tutors should highlight the effectiveness of attending these workshops to students. The workshops should also be marketed during the first-year student orientation programme in order to improve students' awareness of these workshops. It is also recommended that the FYSE workshops be jointly coordinated by CELT and academic departments in order to develop structures that resonate with each particular department, rather than offering workshops that are too generic and not relevant to departmental curricula.

The empirical findings indicated that the majority of the students (84%) indicated that financial challenges influenced their transition from high school to university. In order to ease financial struggles in the lives of students, it is recommended that the university make financial support easily accessible to deserving students. The university should openly market the forms of financial support that it offers in order to make students aware of the options available to them when they face financial struggles. To address the concern of students resorting to protests due to hunger and financial challenges, the provision of financial support by the university, where possible, might give students the opportunity of a smooth transition and enable the university to remain strike-free.

The empirical findings indicated that the majority of the students (72%) felt that having insufficient knowledge about their career choices affected their transition from high school to university. Therefore, it is recommended that the university invest in providing personalised guidance, conducting aptitude tests, and assisting learners in understanding their abilities and career options. In addition, it is recommended that the university collaborate with high schools to arrange visits to the schools in order to educate learners about the negative impacts of pursuing a career choice without sufficient knowledge of the chosen career.

The empirical findings identified a lack of technical skills in first-year students. To address this, it is recommended that CELT offer technical skills development workshops, at least two weeks each month, to train students in the use of digital teaching and learning tools. Such training would enable first-year students to utilise the university's digital platforms, thereby bridging the technical skills gap that was identified by the students and TMAs who participated in this study.

The empirical findings indicated that in more than 50% of cases, students were unaware of the open day programme, their school was not invited to the open day programme, or learners from their high school did not arrive to attend the open day programme. It is recommended that due to transport costs, the university should redesign their approach to open days and should consider offering webinars to cater for prospective students in distant locations. In addition, it is recommended that the university issue open invitations to all high schools to attend the open day programme, and that the importance of attending the open day programme is highlighted.

#### 6.8.2 Recommendations based on key findings from CELT

The study recommends that CELT invest in intensive training for students in how to use the technological resources provided to them by the university. Such training should not be conducted on a once-off basis, but rather on an ongoing basis, in order to enable students to be confident in using the technological resources provided by the university.

The study also recommends collaboration between the university's academic departments and CELT in order to enable both the academic departments and CELT to play a role in ensuring that first-year students are consistently supported. As already mentioned, CELT and academic departments should collaborate to develop structures that resonate with each particular department, rather than offering workshops that are too generic and not relevant to departmental curricula.

The study recommends that CELT invest more resources in ensuring that support programmes are effectively marketed. As already mentioned, support programmes should be effectively marketed on the DUT student and staff portals, DUT Pinboard, and notice boards in academic departments. During lectures and tutorial sessions, lecturers and tutors should highlight the effectiveness of attending these workshops to students. The workshops should also be marketed during the first-year student orientation programme in order to improve students' awareness of these workshops.

In order to increase the rate of student participation in these workshops, students should be educated and know the importance of the support programmes. The study also recommended that CELT develop a feedback tool that can be administered to students. This would enable CELT to obtain feedback from students on how the support initiatives can be improved in order to address the needs of the students.

### 6.8.3 Recommendations based on key findings from TMAs

The key findings indicated that the TMAs applied different teaching and learning approaches to support first-year students during their transition. The study recommends that CELT establish an applicable teaching philosophy that is appropriate for tutoring students. The applicable teaching philosophy, and the importance of adopting it, should be communicated to all TMAs in order to ensure that they are aware and understand what is expected of them in terms of teaching and learning. The TMAs should be adequately trained to implement the selected teaching philosophy, and its effectiveness should be evaluated on a regular basis.

The study also found that the TMAs were not adequately trained in dealing with the responsibility of students' transition. The study recommends that TMAs be adequately

trained prior to dealing with students due to the fragility of first-year students during their transition from high school to university. The study recommends that CELT invest in offering tutoring training and support to TMAs. TMAs should also be trained in communication skills, as these are essential to tutoring. In some cases, TMAs were appointed only on the basis of their academic results and lacked the appropriate skills to deal with first-year students. Provision of the necessary training would assist TMAs to deal with students and to be aware of what is expected of them when they are appointed.

The study recommends that training of TMAs take place every three months. Each training session should provide TMAs with the opportunity to debrief, reflect, and share the challenges they have experienced in the three-month period. It should also equip them with relevant strategies to deal with the challenges they face. Such training should aim to provide TMAs with professional growth and better student management skills and assist in equipping them with modern pedagogy strategies.

## **6.9 Limitations of the study**

This study focused on only one department at DUT, namely the Department of ICM. It focused on first-year students only. The study was focusing on the first-year management programmes that are offered at DUT. In addition, the study was limited by the methodology that was used. A mixed method design was adopted for the study, but only quantitative data was collected from students.

## **6.10 Future research**

This study included only first-year students from the Department of ICM at DUT. Future research studies could include first-year students at different departments and faculties, as well as examining other studies conducted in the South African context. Future research studies could also investigate how students and institutions can assist in bridging the gap by refining existing policies and forming new policies with regard to collaboration between institutional departments to accommodate the needs of all students, especially those from poor backgrounds. Future studies could also



investigate the creation of a first-year skills development programme which focuses on improving the skills of first-year students.

## **6.11 Conclusions**

This study addressed the concern that many first-year students experience challenges with transitioning successfully from high school to university due to a variety of factors that hinder their transition. The study aimed to examine in detail the management and effectiveness of DUT's first-year student programmes that are designed to manage the transition from high school to university. The results of this study have significant potential to inform future research and support programmes aimed at assisting first-year students during their transition from high school to HE. The study highlighted the possibility of first-year students progressing well with their academic studies. The transition from high school to HE can be difficult for students, and even more so for marginalised students transitioning from rural to urban universities. Such students face adjustment challenges as a result of being in an unfamiliar city environment for the first time as well as experiencing unfamiliar teaching methods at university. To ease the transition of first-year students, support programmes should carefully monitor students so that additional academic and social support can be provided timeously to those who are underachieving. Ongoing monitoring is necessary to improve retention rates.

## REFERENCES

Adams, S. 2019. *The role of gamification in the facilitation of student engagement: an exploratory industrial psychology application* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Aderi, M., Jdaitawi, M., Ishak, N.A. and Jdaitawi, F. 2013. The Influence of Demographic Variables on University Students' Adjustment in North Jordan. *International Education Studies*, 6(2): 172-178.

Aichemer. 2021. *What is purposive sampling?* Available: <https://www.alchemer.com/resources/blog/purposive-sampling-101/> (Accessed 26 May 2021).

Ajani, O.A. and Gamede, B.T. 2020. Challenges of high school learners' transition into universities: A case of a south African rural university. *Gender and Behaviour*, 18(2): 15803-15812.

Alfiyan, A., Purnama, I.N.Z., Youlanda, W., Kaloeti, D., Sakti, V. And Sakti, H. 2021. *Psychological distress among freshmen university students*. Available: <https://www.atlantis-press.com/proceedings/icpsyche-20/125955839> (Accessed 21 June 2023).

Alharthi, M. 2020. Students' Attitudes toward the Use of Technology in Online Courses. *International Journal of Technology in Education*, 3(1): 14-23.

Alharthi, M. 2020. First-Year Students' Adjustment to University Life: A Case Study of Implementing College Buddy Program. *International Journal of Higher Education*, 9(1): 116-125.

Allen, J., Robbins, S.B., Casillas, A. and Oh, I.S. 2008. Third-year college retention and transfer: Effects of academic performance, motivation, and social connectedness. *Research in Higher Education*, 49(1): 647-664.

Amerstorfer, C.M. and Freiin von Münster-Kistner, C. 2021. *Student perceptions of academic engagement and student-teacher relationships in problem-based learning*. Available: [https://www.scienceopen.com/document\\_file/956169e3-c9d3-46c4-986a-fcc80ead1986/PubMedCentral/956169e3-c9d3-46c4-986a-fcc80ead1986.pdf](https://www.scienceopen.com/document_file/956169e3-c9d3-46c4-986a-fcc80ead1986/PubMedCentral/956169e3-c9d3-46c4-986a-fcc80ead1986.pdf)

(Accessed 21 May 2022).

Amri, Z. 2014. High school transition to university: a bridge to gap. *European Journal an exploratory study of the Durban university of technology, Midlands Centre and Teaching International*. 51(3): 244-54.

Anon, 2020(a). *Importance of curriculum*. Available: <https://impoff.com/importance-of-curriculum/> (Accessed 30 March 2022).

Anon, 2021(b). *6 reasons why curriculum matters*. Available: <https://online.fitchburgstate.edu/degrees/education/curriculum-and-teaching/reasons-why-curriculum-matters/> (Accessed 3 April 2022).

Anon, 2021(a). *Why is emotional intelligence important for students*. Available: <https://future-students.uq.edu.au/stories/why-emotional-intelligence-important-students> (Accessed 30 March 2022).

Anon. 2020(b). *First-year orientation*. Available: <https://orientation.temple.edu/first-year-orientation> (Accessed 28 March 2022).

Anon. 2020(c). *Support first-year experience*. Available: <https://fye.cofc.edu/support-first-year-experience/index.php> (Accessed 30 March 2022).

Apuke, O.D. 2017. Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(10): 40-47.

Arco-Tirado, J.L., Fernández-Martín, F.D. and Fernández-Balboa, J.M. 2011. The impact of a peer-tutoring program on quality standards in higher education. *Higher Education*, 62(1): 773-788.

Attia, S. 2021. *In-depth Interviews*. Available: <https://www.linkedin.com/pulse/in-depth-interviews-shady-attia> (Accessed 14 November 2023).

Avci, D. 2024. First year and adjustment in university life: A qualitative study to determine the needs of first year university students. Available: <https://edure.net/index.php/edure/article/view/13/9> (Accessed 24 May 2024).

Ayaz, S. 2014. *The importance of Training peer tutors*. Available: <https://www.peertutoringresource.org/wp-content/uploads/2014/05/The-Need-to-Train-Peer-Tutors.pdf> (Accessed 20 May 2023).

Badat, S. 2010. The challenges of transformation in higher education and training institutions in South Africa. *Development Bank of Southern Africa*, 8(1): 1-37.

Baik, C., Naylor, R., Arkoudis, S. and Dabrowski, A. 2019. Examining the experiences of first-year students with low tertiary admission scores in Australian universities. *Studies in Higher Education*, 44(3): 526-538.

Bajpai, N. 2011. *Business research methods*. India: Pearson Education.

Banks-Santilli, L. 2015. *Guilt is one of the biggest struggles first-generation college students face*. Available: <https://www.washingtonpost.com/posteverything/wp/2015/06/03/guilt-is-one-of-the-biggest-struggles-first-generation-college-students-face/> (Accessed 19 June 2022).

Barnett, R. and Coate, K. 2004. *EBOOK: Engaging the curriculum*. UK: Mcgraw-hill education.

Barrot, J.S., Llenares, I.I. and Del Rosario, L.S. 2021. Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and information technologies*, 26(6): 7321-7338.

Baškarada, S. 2014. Qualitative case studies guidelines. *The Qualitative Report*, 19(40): 1-25.

Batisai, K., Makhafola, K.P. and Maoba, P. 2022. Rethinking inclusion in higher education: lessons for the south African academic space. *South African Journal of Higher Education*, 36(6): 210-230.

Benner, A.D., Boyle, A.E. and Bakhtiari, F. 2017. Understanding students' transition to high school: Demographic variation and the role of supportive relationships. *Journal of youth and adolescence*, 46(1): 2129-2142.

Beresin, E. 2021. *The challenge of first-generation college students*. *Psychology Today*. Available: <https://www.psychologytoday.com/za/blog/inside-out-outside-in/202111/the-challenge-first-generation-college-students> (Accessed 22 May 2023).

Bevans, R. 2020. *Choosing the Right Statistical Test | Types & Examples*. Available: <https://www.scribbr.com/statistics/statistical-tests/> (Accessed 15 July 2022).

Bewick, B.M., West, R., Gill, J., O'May, F., Mulhern, B., Barkham, M. and Hill, A.J. 2010. Providing web-based feedback and social norms information to reduce student alcohol intake: a multisite investigation. *Journal of medical Internet research*, 12(5): 14-61.

Bexley, E., Daroesman, S., Arkoudis, S. and James, R. 2013. *University Student Finances in 2012: A Study of the Financial Circumstances of Domestic and International Students in Australia's Universities*. Centre for the Study of Higher Education.

Bhandari, P. 2020. *An Introduction to qualitative research*. Available: <https://www.scribbr.com/methodology/qualitative-research/> (Accessed 26 May 2021).

Bitzer, E.M. 2007. Attempting a fair and equitable academic workload distribution in a faculty of education. *South African Journal of Higher Education*, 21(1): 23-37.

Bourne-Bowie, K. 2000. *Retention depends on new models of student development*. Available:

<https://www.proquest.com/openview/bc8e75ac4b09e2da904164a7f8da62cf/1.pdf?pg-origsite=gscholar&cbl=27805> (Accessed 21 June 2022).

Bowman, M.A., Vongkulluksn, V.W., Jiang, Z. and Xie, K. 2022. Teachers' exposure to professional development and the quality of their instructional technology use: The mediating role of teachers' value and ability beliefs. *Journal of Research on Technology in Education*, 54(2): 188-204.

Boyce, C. and Neale, P. 2006. *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input*. Available:

[https://vol12.cases.som.yale.edu/sites/default/files/cases\\_vol12/medical\\_supply\\_solutions\\_in\\_tanzania/A-Guide-for-Designing-and-Conducting-In-depth-Interviews-for-Evaluation-Input.pdf](https://vol12.cases.som.yale.edu/sites/default/files/cases_vol12/medical_supply_solutions_in_tanzania/A-Guide-for-Designing-and-Conducting-In-depth-Interviews-for-Evaluation-Input.pdf) (Accessed 21 May 2021).

Bradshaw, T. 2019. *Importance of subject choice*. Available:

<https://russellgroup.ac.uk/news/importance-of-subject-choice/> (Accessed 11 September 2021).

Brandy, J.M., Penckofer, S., Solari-Twadell, P.A. and Velsor-Friedrich, B. 2015. Factors predictive of depression in first-year college students. *Journal of Psychosocial Nursing and Mental Health Services*, 53(2): 8-44.

Brannen, J. 2017. *Combining qualitative and quantitative approaches: an overview. Mixing methods: Qualitative and quantitative research*. 2 Park Square, Milton Park: Routledge.

Briggs, A.R.J., Clark, J. and Hall, I. 2012. Building bridges: Understanding student transition to university. *Quality in Higher Education*, 18(1): 3-21.

Brink, H., Rensburg, G. and Walt, C. 2016. *Fundamentals of Research Methodology for Healthcare Professionals*. 3<sup>rd</sup> ed. Cape Town: Juta and Company Ltd.

Broglia, E., Millings, A. and Barkham, M. 2018. Challenges to addressing student mental health in embedded counselling services: a survey of UK higher and further education institutions. *British Journal of Guidance & Counselling*, 46(4): 441-455.

Brooker, A., Brooker, S. and Lawrence, J. 2017. First year students' perceptions of their difficulties. *Student Success*, 8(1): 49-63.

Bryman, A. and Bell, E. 2015. *Business research methods*. New York: Oxford University Press.

Buote, V.M., Pancer, S.M., Pratt, M.W., Adams, G., Birnie-Lefcovitch, S., Polivy, J. and Wintre, M.G. 2007. The importance of friends: Friendship and adjustment among 1st-year university students. *Journal of adolescent research*, 22(6): 665-689.

Bustamante, J. 2019. *College Dropout Rates*. Available: <https://arc.accesslex.org/fe-barriers/30/> (Accessed 21 May 2022)

Carstens, K.J., Mallon, J.M., Bataineh, M. and Al-Bataineh, A. 2021. Effects of Technology on Student Learning. *Turkish Online Journal of Educational Technology-TOJET*, 20(1): 105-113.

Carter, D.F., Locks, A.M. and Winkle-Wagner, R. 2013. From when and where I enter: Theoretical and empirical considerations of minority students' transition to college. In *Higher Education: Handbook of Theory and Research*, 28(1) :93-149

Casanova, J.R., Cervero, A., Nunez, J.C., Almeida, L.S. and Bernardo, A. 2018. Factors that determine the persistence and dropout of university students. *Psicothema*, 30(4): 408-415.

Cele, I.N. 2018. *Experiences of academic and social transition from rural high school to first year university: a case study of the University of KwaZulu-Natal* (Doctoral dissertation).

CELT, 2016. *First Year Experience One-Stop Shop*. Available: <https://www.dut.ac.za/first-year-experience-one-stop-shop/> (Accessed 10 June 2021).

Chatlani, S. 2017. *First-year orientation key to overall student experience, new survey finds*. Available: <https://www.highereddive.com/news/first-year-orientation-key-to-overall-student-experience-new-survey-finds/505317/> (Accessed 21 February 2023).

Check, J. and Schutt, R.K. 2011. *Research methods in education*. Thousand Oaks, Sage publications.

Check, J. and. Schutt, R.K. 2012. *Research methods in education*. Thousand Oaks, Sage Publications.

Cheng, M. 2015. *Transition skills and strategies: Transition models and how students experience change*. Available: [https://research.edgehill.ac.uk/ws/portalfiles/portal/21454686/transition\\_skills\\_and\\_strategies\\_critical\\_self\\_reflection.pdf](https://research.edgehill.ac.uk/ws/portalfiles/portal/21454686/transition_skills_and_strategies_critical_self_reflection.pdf) (Accessed 30 February 2022).

Chetty, L. and Kepkey, B. 2023. Access to and effectiveness of support services for students in extended curriculum programmes at a South African university. *Journal of Student Affairs in Africa*, 11(2): 89-102.

Chidzonga, M.M. 2014. *Transition from high school to university: perspectives of first year students at the University of Zimbabwe College of Health Sciences* (Doctoral dissertation, Stellenbosch University).

Cleary, M., Walter, G. And Jackson, D. 2011. "Not always smooth sailing": Mental health issues associated with the transition from high school to college. *Issues in mental Health Nursing*, 32(4): 250-254.



Cleave, P. 2020. *What Is a Good Survey Response Rate?* Available: <https://www.smartsurvey.co.uk/blog/what-is-a-good-survey-response-rate> (Accessed 23 May 2023).

Cofield, C.S. 2019. *Factors contributing to Military- Veteran Student Success*. (Doctoral Dissertation, Walden University).

Collis, J. and Hussey, R. 2014. *Business research*. 4<sup>th</sup> ed. Basingstoke: Palgrave Macmillan.

Comevo. 2015. *Promoting Student Success with First Year Experience Programs*. Available: <https://comevo.com/promoting-student-success-with-first-year-experience-programs/> (Accessed 20 July 2022).

Connelly, L. M. 2008. Pilot studies. *Medsurg Nursing*, 17(6):411-2.

Costley, K.C. 2014. *The positive effects of technology on teaching and student learning*. Available: <https://eric.ed.gov/?id=ED554557> (Accessed 07 June 2023).  
Council on Higher Education (South Africa). 2013. *The aims of higher education*. Pretoria: Council on Higher Education.

Creswell, J.W. 2009. *Research design: Qualitative, quantitative and mixed method approaches*. 3<sup>rd</sup> ed. Thousand Oaks: Sage Publications Inc.:

Creswell, J.W. 2013. Steps in conducting a scholarly mixed methods study. Available: <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1047&context=dberspeakers;%20Sampieri,%20Robe> (Accessed 10 July 2023).

Creswell, J.W. 2014. *A concise introduction to mixed methods research*. Thousand Oaks: SAGE publications.

Creswell, J.W. and Poth, C.N. 2016. *Qualitative inquiry and research design: Choosing among five approaches*. California: Sage publications.

Creswell, J.W., Klassen, A.C., Plano Clark, V.L. and Smith, K.C. 2011. *Best practices for mixed methods research in the health sciences*. Available: [https://www.csun.edu/sites/default/files/best\\_prac\\_mixed\\_methods.pdf](https://www.csun.edu/sites/default/files/best_prac_mixed_methods.pdf) (Accessed 10 February 2021).

Crossman, S. 2019. *Pilot study in research*. Available: <https://www.thoughtco.com/pilot-study-3026449//> (Accessed 10 February 2021).

Dama, N.G., Mathwasa, J. and Mushoriwa, T. 2020. The Role of Life Orientation Teachers in Promoting Career Guidance and Counselling for Secondary School Learners. *J Sociology Soc Anth*, 11(3-4): 186-197.

Danjo, C. 2018. *Why it is okay for Bilingual Children to mix languages*. Available: <https://blog.yorks.ac.uk/schoolofelp/files/2021/01/LangLing-Staff-Research-Issue-3.pdf> (Accessed 21 June 2022).

Darby, J. 2023. *Emotional Intelligence in the Workplace - A Complete Guide*. Available: [https://www.thomas.co/resources/type/hr-guides/emotional-intelligence-workplace-complete-guide#:~:text=Emotional%20intelligence%20\(otherwise%20known%20as,overcome%20challenges%20and%20defuse%20conflict](https://www.thomas.co/resources/type/hr-guides/emotional-intelligence-workplace-complete-guide#:~:text=Emotional%20intelligence%20(otherwise%20known%20as,overcome%20challenges%20and%20defuse%20conflict). (Accessed 12 November 2023).

Data Science. 2019. *Probability sampling: Definitions and examples*. Available: <https://datascience.eu/mathematics-statistics/probability-sampling-definition-methods-and-examples/> (Accessed 10 February 2021).

Daud, N., Norwani, N.M. and Yusof, R. 2018. Students' financial problems in higher education institutions. *International Journal of Academic Research in Business and Social Sciences*, 8(10): 1558-1565.

Davies, D. and Dodd, J. 2002. Qualitative research and the question of rigor. *Qualitative Health Research*, 12(2): 279-289.

DeAngelo, L. 2014. *Programs and practices that retain students from the first to second year: Results from a national study*. Available: <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ir.20061> (Accessed 20 February 2023).

Deggs, D. 2011. Contextualizing the Perceived Barriers of Adult Learners in an Accelerated Undergraduate Degree Program. *Qualitative Report*, 16(6): 1540-1553.

Deggs, D. 2011. Students' adjustment to college: A comparison of orientation program attendees and non-attendees. *Journal of College Orientation and Transition*, 18(2): 45–50.

Delve. 2020. *How to Do Thematic Analysis*. Available: <https://delvetool.com/blog/thematicanalysis> (Accessed 28 July 2022).

Denovan, A. and Macaskill, A. 2013. An interpretative phenomenological analysis of stress and coping in first year undergraduates. *British Educational Research Journal*, 39(6): 1002-1024.

Denscombe, M. 2014. *The good research guide for small-scale social projects*. Maidenhead, England: McGraw Hill.

Denzin, N.K. and Lincoln, Y.S. 2018. *The SAGE handbook of qualitative research*. Los Angeles: SAGE.

Department of Basic Education. 2021. *Subject choice and career pathing*. Available: <https://www.education.gov.za/Informationfor/Learners/SubjectChoiceandCareerPathing/tabid/980/Default.aspx> (Accessed 11 September 2021).

Department of Higher Education and Training (DHET). 2013. White Paper on Post-School Education and Training. Available: <https://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf> (Accessed 17 March 2022).

Department of Higher Education. 2008. *Government Gazette*. Available: <https://www.dhet.gov.za/LegislationActs/Higher%20Education%20Amendment%20Act%20No.%2039%20of%202008.pdf> (Accessed 20 July 2022).

DeVito, J.A. 2014. *Interpersonal messages: Communication and relationship skills*. 3<sup>rd</sup> ed. Boston: Pearson.

Dias, D. and Sá, M.J. 2014. The impact of the transition to HE: Emotions, feelings, and sensations. *European Journal of Education*, 49(2): 291-303.

Diesel Plus. 2019. *Importance of data collection*. Available: <https://www.diesel-plus.com/the-importance-of-data-collection-10-reasons-why-data-is-so-important/> (Accessed 20 February 2021).

Dlamini, B.I., Tom, R.F., Nel, K.A. and Junior, L.K.Z. 2020. ADJUSTMENT EXPERIENCES OF FIRST-YEAR STUDENTS IN SOUTH AFRICA. *Academy of Educational Leadership Journal*, 24(2): 1-10.

Doyle, A. 2020. *What Is a Semi-Structured Interview? Definition & Examples of a Semi-Structured Interview*. Available: <https://www.thebalancemoney.com/what-is-a-semi-structured-interview-2061632#:~:text=In%20this%20type%20of%20interview,questions%20to%20guide%20the%20conversation>. (Accessed 28 May 2023).

Duncan, M.E., Quinn, C. and Nelson, K.J. 2009. *Operationalizing first year curriculum principles*. Available: <https://core.ac.uk/reader/10894450> (Accessed 28 May 2023).

Durham, S. 2022. *Attending an Open Day?* Available: <https://www.sacap.edu.za/blog/applied-psychology/open-day-benefits/> (Accessed 21 February 2023).

Dyomfana, B. 2022. *Half Of University Students Drop Out in First Year*. Available: <https://www.careersportal.co.za/news/half-of-university-students-drop-out-in-first-year> (Accessed 10 June 2023).

Earnest, D.R. and Dwyer, W.O. 2010. In their own words: An online strategy for increasing stress-coping skills among college freshmen. *College Student Journal*, 44(4): 888-901.

Editage. 2019. *Importance of research ethics*. Available: <https://www.editage.com/insights/importance-of-research-ethics/> (Accessed 20 February 2021).

Edward, D. 2016. *Better academic support for students may help lower university attrition rates*. Available: <https://theconversation.com/better-academic-support-for-students-may-help-lower-university-attrition-rates-66395#:~:text=Stronger%20academic%20support%20for%20students,big%20influence%20over%20retention%20rates>. (Accessed 21 January 2023).

Enia, X. 2018. *Benefits of Going To an Open Day (Or Two, Or Three)*. Available: <https://www.ucas.com/connect/blogs/benefits-going-open-day-or-two-or-three%E2%80%A6> (Accessed 22 March 2021).

Estevez, M. 2014. *Importance of surveys*. Available: <https://www.foliomag.com/importance-surveys/> (Accessed 20 July 2021).

Etikan, I. and Bala, K. 2017. Sampling and Sampling Methods. *Biometrics & Biostatistics International Journal*, 5(6): 215–217.

Etikan, I., Musa, S.A. and Alkassim, R.S. 2016. Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1): 1-4.

Evans, D., Borriello, G.A. and Field, A.P. 2018. *A review of the academic and psychological impact of the transition to secondary education*. Available: <https://core.ac.uk/download/pdf/161530085.pdf> (Accessed 20 September 2022).

Evans, S. and Morrison, B. 2011. The first term at university: Implications for EAP. *ELT Journal*, 65(4): 387-397.

Evensen, K. 2017. Benefits and level of satisfaction a first-year orientation program delivers for freshmen in college. M. Tech., Taylor University. Available: <https://core.ac.uk/download/pdf/229363751.pdf> (Accessed 21 July 2022).

Ezeh, J. 2020. *Effects of unqualified teachers on students' academic performance*. Available: <https://www.linkedin.com/pulse/effects-unqualified-teachers-students-academic-performance-jane-ezeh-1f> (Accessed 15 September 2021).

Fauvelle, L. 2020. *Qualitative research: 3 types of interviews*. Available: <https://www.intotheminds.com/blog/en/qualitative-research-3-types-of-interview/> (Accessed 20 July 2021).

Fennell, P. 2020. The Transitional Experiences of International Students Studying in the United States. M. Tech., Eastern Illinois University. Available: <https://thekeep.eiu.edu/cgi/viewcontent.cgi?article=5836&context=theses> (Accessed 21 July 2022).

Fernandez, M.A. 2022. *What is a First-Generation College Student?* Available: <https://www.collegeraptor.com/getting-in/articles/questions-answers/what-is-a-first-generation-college-student/> (Accessed 10 September 2022).

Fitzpatrick, B., Berends, M., Ferrare, J.J. and Waddington, R.J. 2020. *Virtual charter schools and online learning during COVID-19*. Available: <https://www.brookings.edu/blog/brown-center-chalkboard/2020/06/02/virtual-charter-schools-and-online-learning-during-covid-19/> (Accessed 25 March 2022).

Fok-Trella, A. 2020. *How Culture Shock Can Affect Your Transition to a New School Community*. Available: <https://blog.concordiashanghai.org/how-culture-shock-can-effect-your-transition-to-a-new-school> (Accessed 22 July 2023).

Fomunyan, K.G. 2019. *Students and institutional preparedness for educational encounters: Views of the margin. Education systems around the world*. Available: <https://www.intechopen.com/chapters/64601> (Accessed 15 January 2023).

Freer, S. 2016. *The first-year experience movement: History, practice, and implications for student development professionals*. Available: [https://pillars.taylor.edu/cgi/viewcontent.cgi?article=1192&context=acsd\\_growth](https://pillars.taylor.edu/cgi/viewcontent.cgi?article=1192&context=acsd_growth) (Accessed 09 August 2023).

Friedman, A. 2023. *What Are Language Barriers?*. Available: <https://www.theclassroom.com/what-are-language-barriers-12082501.html> (Accessed 22 September 2023).

Fry, K. 2001. E-learning markets and providers: some issues and prospects. *Education+ Training*, 43(4/5): 233-239.

Fundi Connect. 2018. *High school guidance – subject choice*. Available: <https://fundi.co.za/fundiconnect/life-orientation-whats-point/> (Accessed 15 September 2021).

Gallego, S. and Riart, J. 2010. Mentoring and guidance in the 21st century: new perspectives. Available: <https://core.ac.uk/download/pdf/81137066.pdf> (Accessed 21 September 2021).

Gentling, K.M. 2016. *First-year experience: International Students*. Available: <https://digitalcollections.sit.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=3911&context=capstones> (Accessed 25 August 2022).

George, T. 2021. *Mixed Methods Research | Definition, Guide & Examples*. Available: <https://www.scribbr.com/methodology/mixed-methods-research/> (Accessed 14 November 2023).

Glen, S. 2019. *Target population: Definition, examples*. Available: <https://www.statisticshowto.com/target-population-definition-examples/> (Accessed 20 July 2021).

Glenn, S. 2018. *Importance of curriculum teaching*. Available: <https://classroom.synonym.com/importance-curriculum-teaching-6189570.html> (Accessed 09 September 2021).

Gogigintala, S.P. 2020. *Purpose of data collection*. Available: <https://whataftercollege.com/data-science/purpose-of-data-collection/> (Accessed 10 February 2021).

Goldman, L. 2019. *What is depression and what can I do about it*. Available: <https://www.medicalnewstoday.com/articles/8933> (Accessed 23 May 2022).

Gres, S., Ulriksen, M.D., Döhler, M., Johansen, R.J., Andersen, P., Damkilde, L. and Nielsen, S.A. 2017. *Statistical methods for damage detection applied to civil structures*. Available: <https://core.ac.uk/download/pdf/84877915.pdf> (Accessed 29 July 2023).

Gu, Q., Schweisfurth, M. and Day, C. 2010. *Learning and growing in a 'foreign' context: Intercultural experiences of international students*. Available: <https://www.tandfonline.com/doi/epdf/10.1080/03057920903115983?needAccess=true> (Accessed 20 February 2023).

Hammersley, M. and Traianou, A. 2012. *Ethics in qualitative research: Controversies and contexts*. London: Sage Publications Ltd.

Hanson, Melanie. 2023. *College Dropout Rates*. Available: <https://educationdata.org/college-dropout-rates/> (Accessed 30 September 2023).



Harris, J.L., Al-Bataineh, M.T. and Al-Bataineh, A. 2016. *One to One Technology and its Effect on Student Academic Achievement and Motivation*. Available:

[https://web.archive.org/web/20200215072827id\\_/https://www.cedtech.net/download/one-to-one-technology-and-its-effect-on-student-academic-achievement-and-motivation-6182.pdf](https://web.archive.org/web/20200215072827id_/https://www.cedtech.net/download/one-to-one-technology-and-its-effect-on-student-academic-achievement-and-motivation-6182.pdf) (Accessed 21 June 2023).

Harvey, L., Drew, S. and Smith, M. 2006. *The first-year experience: a review of literature for the Higher Education Academy*. Available:

<https://www.qualityresearchinternational.com/Harvey%20papers/Harvey%20and%20Drew%202006.pdf> (Accessed 07 May 2022).

Hashim, B. 2019. *Pragmatic research approach (mixed methods)*. Available:

<https://www.slideshare.net/BahrozHashim/pragmatic-research-approach-mixed-methods> (Accessed 17 October 2022).

Hassel, S. and Ridout, N. 2018. *An investigation of first-year students' and lecturers' expectations of university education*. Available:

[https://publications.aston.ac.uk/id/eprint/31974/1/Hassel\\_et\\_al\\_2018\\_Frontiers\\_in\\_Psychology.pdf](https://publications.aston.ac.uk/id/eprint/31974/1/Hassel_et_al_2018_Frontiers_in_Psychology.pdf) (Accessed 19 October 2023).

Heale, R. and Twycross, A. 2015. *Validity and reliability in quantitative studies*.

Available: <https://ebn.bmj.com/content/18/3/66> (Accessed 12 May 2023).

Heale, R. and Twycross, A. 2018. What is a case study? *Evidence-based nursing*, 21(1): 7-8.

Hellstén, M. 2007. International student transition: Focusing on researching international pedagogy for educational sustainability. *International Education Journal: Comparative Perspectives*, 8(3): 79-90.

Hendrix, E. 2019. *How Your Surroundings Affect the Way You Study*. Available:

<https://www.ucas.com/connect/blogs/how-your-surroundings-affect-way-you-study> (Accessed 12 July 2022).

Herkulaas, M. and Oosthuizen, L.L. 2020. First-year student transition at the University of the Free State during Covid-19: Challenges and insights. *Journal of Student Affairs in Africa*, 8(2): 31-44.

Hilsdon, J. 2014. Peer learning for change in higher education. *Innovations in Education and Teaching International*, 51(3): 244-254.

Hoffman, J., Eberhardt-Alstot, M. and Leafstedt, J. 2020. *Orienting Students to Online Learning: A Must for Student Success*. Available: <https://er.educause.edu/articles/2020/5/orienting-students-to-online-learning-a-must-for-student-success> (Accessed 08 February 2023).

Hrastinski, S. 2008. Asynchronous and synchronous e-learning. *Educause Quarterly*, 31(4): 51-55.

Hughes, G. 2016. *Transition distress: A psychological process*. Available: <https://repository.derby.ac.uk/item/930q1/transition-distress-a-psychological-process> (Accessed 20 February 2022).

Hughes, G. and Smail, O. 2015. Which aspects of university life are most and least helpful in the transition to HE? A qualitative snapshot of student perceptions. *Journal of Further and Higher Education*, 39(4):466-480.

IBM, n.d. *SPSS Statistics 26.0.0*. Available: <https://www.ibm.com/docs/en/spss-statistics/26.0.0> (Accessed 22 September 2023).

Intgrty. 2016. *The research paradigms: Positivism*. Available: <https://www.intgrty.co.za/2016/07/19/the-research-paradigms-positivism/> (Accessed 21 July 2021).

Jacobs, A. 2011. *Life Orientation as Experienced by Learners: A Qualitative Study in North-West Province*. *South African Journal of Education*, 31(2): 212-223.

Jaffer, F. and Garraway, J. 2016. Understanding gaps between student and staff perceptions of university study in South Africa: A case study. *Journal of Student Affairs in Africa*, 4(1): 65-76.

Jamelske, E. 2009. Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education*, 57(1): 73-391.

Jimenez, J. 2010. "Towards a new university tutoring project in the European Higher Education Area". *Spanish Journal of Guidance and Psychopedagogy* (REOP), 21(1): 37-44.

Johannsson P. and Perjons E. 2014. *Research strategies and methods. In An Introduction to Design Science*. Cham: Springer. Available: [https://link.springer.com/chapter/10.1007/978-3-319-10632-8\\_3](https://link.springer.com/chapter/10.1007/978-3-319-10632-8_3) (Accessed 25 May 2021).

Johnson, A.M., Jacovina, M.E., Russell, D.G. and Soto, C.M. 2016. *Challenges and solutions when using technologies in the classroom*. Available: <https://files.eric.ed.gov/fulltext/ED577147.pdf> (Accessed 14 November 2023).

Jonh, V. 2013. *Dropout rate points to lack of support*. Available: <https://mg.co.za/article/2013-05-17-dropout-rate-points-to-lack-of-support/> (Accessed 10 July 2022).

Jooste, R. 2023. *Bridging the gap: we are combating the high school dropout rates*. Available: <https://kybacademy.co.za/bridging-the-gap-for-students-transitioning-to-tertiary-studies/> (Accessed 23 May 2024).

Jovancic, N. 2021. *8 Demographic Questions Every Quality Survey Needs to Contain*. Available: <https://www.leadquizzes.com/blog/demographic-questions/> (Accessed 13 November 2023).

Kampen, M. 2019. *5 ways to make teacher professional development effective*. Available: <https://www.prodigygame.com/main-en/blog/teacher-professional-development/> (Accessed 27 March 2022).

Karmick Institute. 2017. *The impact of choosing the wrong career: How to overcome it*. Available: <https://blog.karmickinstitute.com/impacts-choosing-wrong-career/> (Accessed 17 March 2022).

Kaushik, V. and Walsh, C.A. 2019. Pragmatism as a research paradigm and its implications for social work research. *Social sciences*, 8(9): 1-17.

Kazi, A.S. and Akhlaq, A. 2017. Factors affecting students' career choice. *Journal of Research and Reflections in Education*, 2(2): 187-196.

Kazmi, S.F., Pervez, T. and Mumtaz, S. 2011. In-service teacher training in Pakistani schools and total quality management (TQM). *Interdisciplinary Journal of Contemporary Research in Business*, 2(11): 238-248.

Kennedy, G.J. and Tuckman, B.W. 2013. An exploration into the influence of academic and social values, procrastination, and perceived school belongingness on academic performance. *Social Psychology of Education*, 16(3): 435-470.

Kenton, W. 2019. *Population definition*. Available: <https://www.investopedia.com/terms/p/population.asp/> (Accessed 30 May 2020).

Kerr, M. 2017. *Depression and College Students*. Available: <https://www.healthline.com/health/depression/college-students> (Accessed 10 July 2022).

Kettle, M. 2017. *International student engagement in higher education: Transforming practices, pedagogies and participation*. Available: <https://core.ac.uk/download/pdf/78106548.pdf> (Accessed 10 July 2023).

Khan, A. 2017. *Why Interpersonal Skills are important for students?* Available: <https://www.jagranjosh.com/articles/why-interpersonal-skills-important-for-students-1505913283-1> (Accessed 10 July 2022).

Khan, M.A. and Law, L.S. 2015. An integrative approach to curriculum development in higher education in the USA: A theoretical framework. *International Education Studies*, 8(3): 66-76.

Khasawneh, M. and Yaseen, A.B. 2017. Critical success factors for e-learning satisfaction, Jordanian Universities' experience. *Journal of Business & Management (COES&RJ-JBM)*, 5(1): 56-69.

Khumalo, M. 2021. *Dut To Host Orientation Week for First Year Students*. Available: <https://www.dut.ac.za/dut-to-host-orientation-week-for-first-year-students/> (Accessed 10 July 2022).

Kiah, C.M. 2016. *Global First Year program helps international students adapt to American college life*. Available: <https://news.fiu.edu/2016/global-first-year-program-helps-international-students-adapt-to-american-college-life> (Accessed 22 June 2022).

Kift, S. 2015. A decade of transition pedagogy: A quantum leap in conceptualising the first-year experience. *HERDSA Review of Higher Education*, 2(1): 51-86.

Koch, A. 2018. *How academic and extracurricular workload and stress impacts the mental and physical health of college students*. Available: <https://core.ac.uk/download/pdf/232841705.pdf> (Accessed 22 March 2022).

Krishnaswamy, K.N., Sivakumar, A.I. and Mathirajan, M. 2006. *Management research methodology: Integration of principles, methods and techniques*. India: Pearson Education.

Kruger, N. 2019. *Fixing The First-Year Experience: Studying Student Success At UWC*. Available: <https://www.uwc.ac.za/study/research-and-innovation/news-and-events/fixing-the-first-year-experience-studying-student-success-at-uwc-462>

(Accessed 21 March 2022).

Kuada, J.E. 2012. *Research methodology: A project guide for university students*. Available: <http://web.a.ebscohost.com.dutlib.dut.ac.za/ehost> (Accessed 22 March 2021).

Larabi-Marie-Sainte, S., Jan, R., Al-Matouq, A. and Alabduhadi, S. 2021. The impact of timetable on student's absences and performance. *Plos one*, 16(6): 253-256.

Larkin, K., Rowan, L., Garrick, B. and Beavis, C. 2016. *Student perspectives on first year experience initiatives designed for pre-service teachers in their first weeks of university study*. Available: [https://web.archive.org/web/20200709063706id\\_/https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1594&context=jutlp](https://web.archive.org/web/20200709063706id_/https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1594&context=jutlp) (Accessed 22 March 2021).

Larmar, S. and Ingamells, A. 2010. Enhancing the first-year university experience: Linking university orientation and engagement strategies to student connectivity and capability. *Research in Comparative and International Education*, 5(2): 210-223.

Leask, B. 2015. *Internationalizing the curriculum*. Available: <https://www.daneshnamehicsa.ir/userfiles/files/1/16-%20Internationalizing%20the%20Curriculum.pdf> (Accessed 29 August 2022).

LeBlanc, N.J and Marques, L. 2019. *Anxiety in college: What we know and how to cope*. Available: <https://www.health.harvard.edu/blog/anxiety-in-college-what-we-know-and-how-to-cope-2019052816729> (Accessed 25 September 2021).

Lee, S. 2019. *Strategies for supporting first-year students*. Available: <https://www.turnitin.com/blog/10-strategies-for-supporting-first-year-students> (Accessed 30 September 2021).

Li, R. 2021. The role of teacher-student interpersonal relations in flipped learning on student engagement. *Frontiers in Psychology*, 12(1): 741-810.

Lodge, L. 2020. *The importance of a good transition*. Available: <https://www.oneeducation.co.uk/news-blog/the-importance-of-a-good-transition> (Accessed 3 April 2022).

Lombard, J.P. 2018. *Factors that influence the transition from high school to higher education: The case of the Junior Tukkies Programme* (Doctoral dissertation, University of Pretoria).

MacFarlane, R. 2022. *7 Reasons to Attend Open Days*. Available: <https://insiderguides.com.au/reasons-attend-open-days/> (Accessed 20 August 2022).

Machika, P. and Johnson, B. 2015. Postgraduate students' experience of poverty and academic success at a university of technology in South Africa. *South African Journal of Higher Education*, 29(6): 167-181.

Maflika, T. 2021. *The importance of career guidance in schools*. Available: <https://www.iol.co.za/education/the-importance-of-career-guidance-in-schools-05c8fd37-d3f1-4abd-8583-92e4e04beb10> (Accessed 17 March 2022).

Makara Fuller, K.A., Fishman, B., Karabenick, S.A. and Teasley, S. 2015. Students' interpersonal connections with peers and staff at the start of higher education.

Makondo, L. 2018. *DUT's First Year Academy Workshop, A Great Success!* Available: <https://www.dut.ac.za/duts-first-year-academy-workshop-a-great-success/> (Accessed 20 July 2023).

Malau-Aduli, B.S., Adu, M.D., Alele, F., Jones, K., Drovandi, A., Mylrea, M., Sfera, K., Ross, S. and Jennings, E. 2021. Adjusting to university: Perceptions of first-year health professions students. *PloS one*, 16(5): 1-19.

Malinga–Musamba, T. 2014. First-year course experience and college adjustment: A case study. *Journal of Psychology in Africa*, 24(3): 278-280.

Mangal, S.K. and Mangal, S. 2015. *Emotional intelligence: Managing emotions to win in life*. Delhi: PHI Learning Pvt. Ltd.

Manspal, J.P. 2018. *Factors of Undecidability in Career Choices of Grade 11 General Academic Track Students. Basis for Career Decision-Making Program*. Available: <https://www.grin.com/document/455104> (Accessed 12 July 2022).

Mapfumo, J. and Nkoma, E. 2013. Freshmen: Guidance and counselling received in high school and that needed in university. *International Journal of Scientific and Research Publications*, 3(12): 1-10.

Maree, J.G. 2015. Research on life design in (South) Africa: A qualitative analysis. *South African Journal of Psychology*, 45(3): 332-348.

Martin, A. 2014. *Interpersonal relationships and students' academic and non-academic development: What outcomes peers, parents, and teachers do and do not impact*. Available: [https://www.researchgate.net/profile/Andrew-Martin-22/publication/281156340\\_Interpersonal\\_Relationships\\_and\\_Students'\\_Academic\\_and\\_Non-Academic\\_Development/links/587c605d08aed3826ae8f78a/Interpersonal-Relationships-and-Students-Academic-and-Non-Academic-Development.pdf](https://www.researchgate.net/profile/Andrew-Martin-22/publication/281156340_Interpersonal_Relationships_and_Students'_Academic_and_Non-Academic_Development/links/587c605d08aed3826ae8f78a/Interpersonal-Relationships-and-Students-Academic-and-Non-Academic-Development.pdf) (Accessed 21 February 2023).

Marwala, T and Mpedi, L. 2022. *If we want to fix our economy, we must increase university graduation rates*. Available: <https://www.dailymaverick.co.za/opinionista/2022-11-29-if-we-want-to-fix-our-economy-we-must-increase-university-graduation-rates/> (Accessed 20 July 2023).

Matt, B. *The Importance of New Student Orientation for Students*. Available: <https://transferca.org/importance-of-new-student-orientation/> (Accessed 27 June 2022).



Maunder, R.E. 2018. Students' peer relationships and their contribution to university adjustment: The need to belong in the university community. *Journal of Further and Higher Education*, 42(6): 756-768.

Maymon, R., Hall, N.C. and Harley, J.M. 2019. Supporting first-year students during the transition to higher education: The importance of quality and source of received support for student well-being. *Student Success*, 10(3): 64-75.

McCombes, S. 2021. *How to create a research design*. Available: <https://www.scribbr.com/research-process/research-design/> (Accessed 17 July 2021).

McConville, K. 2019. *Language barriers in the classroom: From mother tongue to national language*. Available: <https://concernusa.org/news/language-barriers-in-classroom/> (Accessed 20 May 2023).

McCoy, S., Smyth, E., Watson, D. and Darmody, M. 2014. *Leaving school in Ireland: A longitudinal study of post-school transitions*. Available: <http://corneliusyoung.ie/wp-content/uploads/2014/10/Leaving-School-in-Ireland.pdf> (Accessed 17 July 2021).

McGhie, V. 2017. Entering university studies: identifying enabling factors for a successful transition from school to university. *Higher Education*, 73(1): 407-422.

McGhie, V.F. 2012. *Factors impacting on first-year students' academic progress at a South African university* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

McKay, T., Naidoo, A. and Simpson, Z. 2018. Exploring the challenges of first-year student funding: An intra-institutional case study. *Journal of Student Affairs in Africa*, 6(1): 9-32.

McKenna, S., Richardson, J. and Manroop, L. 2011. Alternative paradigms and the study and practice of performance management and evaluation. *Human Resource Management Review*, 21(2): 148-157.

McKenzie, K. 2019. The Effects of Poverty on Academic Achievement. *BU Journal of Graduate Studies in Education*, 11 (2): 21-26.

Mackenzie, N. and Knipe, S. 2006. Research dilemmas: Paradigms, methods, and methodology. *Issues in Educational Research*, 16(2): 193-205.

McLean, M. and Walker, M. 2022. *Low-Income Students, Human Development and Higher Education in South Africa: Opportunities, obstacles, and outcomes*. *African Minds*. Available: [https://www.africanminds.co.za/wp-content/uploads/2022/05/9781928502395\\_txt.pdf](https://www.africanminds.co.za/wp-content/uploads/2022/05/9781928502395_txt.pdf) (Accessed 14 February 2023).

McMahon, M. 2020. *Focus group interview*. Available: <https://www.wisegeek.com/what-is-a-focus-group-interview.htm> (Accessed 07 July 2020).

McMillan, H. and Schumacher, S. 2010. *Researcher in education*. London: Pearson.

McNabb, D.E. 2015. *Research methods for political science: Quantitative and qualitative methods*. New York: Routledge.

Mele, A, M. 2020. *Leading Through Anxiety*. Available: <https://hbr.org/2020/05/leading-through-anxiety> (Accessed 14 November 2023).

Memela, N. 2016. *Preparing First Year Students for Higher Education*. Available: <https://www.dut.ac.za/preparing-first-year-students-for-higher-education/> (Accessed 21 October 2022).

Mendoza, H. and Hontiveros, E.P. 2017. Academic achievement, emotional intelligence and fluid intelligence as predictors of intrinsic career success of graduate students: Basis for career development program. *Asian journal of social sciences & humanities*, 6(1): 9-20.

Mercado, M and Espano, G. 2021. *Students adapt to the new environment*. Available: <https://scotscoop.com/adapting-to-a-new-school-environment/> (Accessed 20 June 2023).

Mergal, B.B.C., Thomas, N., Pak, C. and Lalog, K. 2019. Emotional intelligence and its relationship to stress and transition shock amongst first-year college students. *Abstract Proceedings International Scholars Conference*, 7(1): 54-68.

Merhi, R., Paniagua, Á.S.E. and Descals, F.J.P. 2018. The role of psychological strengths, coping strategies and well-being in the prediction of academic engagement and burnout in first-year university students. *Psychological Action*. 15(2): 51-68.

Merriam Webster Website. 2023. *High School*. Available: <https://www.merriam-webster.com/dictionary/high%20school> (Accessed 20 August 2023).

Mikre, F. 2011. The roles of information communication technologies in education: Review article with emphasis to the computer and internet. *Ethiopian Journal of Education and Sciences*, 6(2): 109-126.

Millet, H.K. 2015. *The year of change: Challenges faced by first year students based on individual identities*. Senior Honors Projects. Available: <https://commons.lib.jmu.edu/cgi/viewcontent.cgi?article=1024&context=honors201019> (Accessed 24 August 2022).

Mittelmeier, J., Rogaten, J., Long, D., Dalu, M., Gunter, A., Prinsloo, P. and Rienties, B. 2019. Understanding the early adjustment experiences of undergraduate distance education students in South Africa. Available: <https://pdfs.semanticscholar.org/1b3f/011902a3103d52633d788de6b7df95b2bc1a.pdf> (Accessed 21 June 2023).

Mngomezulu, S., Dhunpath, R. and Munro, N. 2017. Does financial assistance undermine academic success? Experiences of 'at risk' students in a South African university. *Journal of Education*, 68: 131-148.

Mofoka, K.G. 2016. *The effects of tertiary students' financial problems on academic performance: the case of Motheo Technical Vocational Education and Training in Bloemfontein* (Doctoral dissertation, University of KwaZulu-Natal).

Montgomery, C. 2010. *Understanding the international student experience*. New York: Palgrave Macmillan.

Monyamane, B. and Monyamane, L. 2020. *Lecturers and Leaders Perceptions about Co-Teaching: A Case of Limkokwing University, Botswana*. Available: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3585736](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3585736) (Accessed 29 May 2023).

Moodley, P. and Singh, R.J. 2015. *Addressing student dropout rates at South African universities*. Available: [https://openscholar.dut.ac.za/bitstream/10321/1648/1/Moodley\\_Alt\\_Special%20Edition\\_No17\\_2015.pdf](https://openscholar.dut.ac.za/bitstream/10321/1648/1/Moodley_Alt_Special%20Edition_No17_2015.pdf) (Accessed 25 June 2022).

Moore, A., Nguyen, A., Rivas, S., Bany-Mohammed, A., Majeika, J. and Martinez, L. 2021. *A qualitative examination of the impacts of financial stress on college students' well-being: Insights from a large, private institution*. Available: <https://journals.sagepub.com/doi/full/10.1177/20503121211018122> (Accessed 14 February 2023).

Moreku, C. 2022. *First Year Students Assisted to Transition from High School to University*. Available: <https://www.dut.ac.za/first-year-students-assisted-to-transition-from-high-school-to-university/> (Accessed 10 September 2022).

Morton, S., Mergler, A. and Boman, P. 2013. Managing the transition: The role of optimism and self-efficacy for first-year Australian university students. *Australian Journal of Guidance and Counselling*, 24(1): 90-108.

Mthethwa, A. 2021. *Research highlights alarming hunger among tertiary education students*. Available: <https://www.dailymaverick.co.za/article/2021-03-22-research-highlights-alarming-hunger-among-tertiary-education-students/> (Accessed 12 February 2022).

Mtshweni, B.V. 2022. Adjustment and socioeconomic status: how do these factors influence the intention to dropout of university? *South African Journal of Psychology*, 52(2): 262-274.

Mudhovozi, P. 2012. Social and academic adjustment of first-year university students. *Journal of Social Sciences*, 33(2): 251-259.

Mudzielwana, N.P. and Maphosa, C. 2013. The influence of context in the South African higher education system: A social realist critique. *Journal of Sociology and Social Anthropology*, 4(3): 75-181.

Murff, S.H. 2005. The impact of stress on academic success in college students. *ABNF Journal*, 16(5): 102-104.

Mzikhulu, N. 2022. *Reasons why students make bad choices in choosing a career*. Available: <https://ihararejobs.com/blog/reasons-why-students-make-bad-choices-in-choosing-a-career/> (Accessed 20 April 2022).

Ndukwu, D. 2020. *Questionnaires: Types, definition, examples and how to design your own*. Available: <https://www.kyleads.com/blog/questionnaire/> (Accessed 24 May 2020).

Nelson, K., Kift, S., Humphrey, J. and Harper, W. 2006. A blueprint for enhanced transition: Taking a holistic approach to managing student transition into a large university. Available: <https://core.ac.uk/download/pdf/10875901.pdf> (Accessed 21 July 2023).

Nelson, V. 2014. *The culture shock adjusting to college*. Available: <https://www.collegeparentcentral.com/2014/11/the-culture-shock-of-adjusting-to-college/> (Accessed 15 November 2021).

New Delhi. 2020. *6 reasons why teacher training programme is essential for a robust smart school future in India*. Available: <https://www.indiatoday.in/education-today/featurephilia/story/6-reasons-why-teacher-training-programme-is-essential-for-a-robust-smart-school-future-in-india-1740223-2020-11-12> (Accessed 25 February 2022).

Ngcobo, N. 2020. *DUT gears up for its annual first-year orientation*. Available: <https://www.dut.ac.za/dut-gears-up-for-its-annual-first-year-orientation-programme/> (Accessed 21 August 2023).

Ngwenya, T, H. n.d. *Student Development Programmes*. Available: <https://www.dut.ac.za/wp-content/uploads/2014/10/Programmes.pdf> (Accessed 20 May 2022).

Nkomo, N. 2019. The research design (lecture notes). Research Methodology (RSCH101). Department of Information and Corporate Management, Office (21 February 2021).

Nkosi, B. 2015. *Of the 18% of matrics registered at universities, half drop out*. Available: <https://mg.co.za/article/2015-05-21-18-of-matrics-register-at-universities-half-drop-out/> (Accessed 23 May 2022).

Nowell, L.S., Norris, J.M., White, D.E. and Moules, N.J. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1):16-40.

Ntuli, S and Haffajee, F. 2016. *Challenges Of Transition from High School to University: An Exploratory Study of The Durban University of Technology, Midlands Centre*. Available: <https://www.siyaphumelela.org.za/conf/2016/data/Presentation6.pdf> (Accessed 23 July 2022).

Nyamwange, J. 2016. Influence of Student's Interest on Career Choice among First Year University Students in Public and Private Universities in Kisii County, Kenya. *Journal of Education and Practice*, 7(4): 96-102.

Nyar, A. 2020. How to Improve University Orientation: Seven Good Practice Strategies for South Africa. *Journal of Student Affairs in Africa*, 8(2): 123-135.

Nyar, A. 2021. The 'Double Transition' for first-year students: Understanding the impact of Covid-19 on South Africa's first-year university students. *Journal of Student Affairs in Africa*, 9(1): 77-92.

Nzama, T. 2015. *Reducing Drop Out Rate*. Available: <https://www.dut.ac.za/reducing-dropout-rates/> (Accessed 22 June 2022).

O'Reilly, K. 2012. *Ethnographic methods*. 2 Park Square, Milton Park: Routledge.

Oduaran, A. and Bechuke, A.L. 2018. *Bridging the knowledge gap of South African first year students in the transition from high school to university*. Available: [https://www.researchgate.net/publication/338450144\\_Bridging\\_the\\_knowledge\\_gap\\_of\\_South\\_African\\_first\\_year\\_students\\_in\\_the\\_transition\\_from\\_high\\_school\\_to\\_university](https://www.researchgate.net/publication/338450144_Bridging_the_knowledge_gap_of_South_African_first_year_students_in_the_transition_from_high_school_to_university) (Accessed 20 July 2022).

Olson, K. 2014. *Impact of depression and anxiety on college transition stress*. Available: <https://minds.wisconsin.edu/bitstream/handle/1793/77336/Impact%20of%20Anxiety%20on%20College%20Transition.pdf?sequence=1&isAllowed=y> (Accessed 14 November 2023).

Omar, C.M.Z.C. 2014. The need for in-service training for teachers and its effectiveness in school. *International Journal for Innovation Education and Research*, 2(11): 1-9.

Open Colleges. 2018. *Don't Overload Students: Assigning Too Much Work Discourages Learning*. Available: <https://www.opencolleges.edu.au/blogs/articles/don-t-overload-students-assigning-too-much-work-discourages-learning> (Accessed 22 October 2022).

Orellana, D., Segovia, N. and Rodríguez Cánovas, B. 2020. Student dropout in online higher education programs: literature review. *Journal from Education superior*, 49(194): 47-64.

Packer, R. and Thomas, A. 2021. Transitions to further education: listening to voices of experience. *Research in Post-Compulsory Education*, 26(2): 212-230.

Pancer, S.M., Hunsberger, B., Pratt, M.W. and Alisat, S. 2000. Cognitive complexity of expectations and adjustment to university in the first year. *Journal of Adolescent Research*, 15(1): 38-57.

Panda, P. 2022. *Reasons why teacher training is the need of the hour*. Available: <https://www.mentoriam.com/blog/five-reasons-why-teacher-training-is-the-need-of-the-hour> (Accessed 27 March 2022).

Pandey, S.C. and S. Patnaik, S. 2014. Establishing reliability and validity in qualitative inquiry. *Journal of Development and Management Studies*, 12(1): 5743-5753.

Park, Y.S., Konge, L. and Artino, A.R. 2020. The positivism paradigm of research. *Academic Medicine*, 95(5): 690-694.

Parker, H., Hughes, A., Marsh, C., Ahmed, S., Cannon, J., Taylor-Steeds, E., Jones, L. and Page, N. 2017. *Understanding the different challenges facing students in transitioning to university particularly with a focus on ethnicity*. Available: <https://core.ac.uk/download/pdf/143472885.pdf> (Accessed 21 July 2023).

Parker, J.D., Hogan, M.J., Eastabrook, J.M., Oke, A. and Wood, L.M. 2006. Emotional intelligence and student retention: Predicting the successful transition from high school to university. *Personality and Individual differences*, 41(7): 1329-1336.



Parrett, W. and Budge, K. 2016. Tough questions for tough times. On Poverty and Learning: On Poverty and Learning: Readings from Educational Leadership. Available: <https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/books/On-Poverty-and-Learning-sample-chapters.pdf> (Accessed 21 May 2023).

Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C. and Wilens, T. 2015. College students: mental health problems and treatment considerations. *Academic Psychiatry*, 39(1): 503-511.

Pedro, Y.V. 2017. *Experiences and perceptions of life orientation teachers in guiding learners about nursing as a career of choice* (Doctoral dissertation, Stellenbosch University).

Pengpid, S. and Peltzer, K. 2020. Psychological distress and its associated factors among school-going adolescents in Tanzania. *Psychological Studies*, 65(2): 174-181.

Perry, C.J., Lausch, D.W., Weatherford, J., Goeken, R. and Almendares, M. 2017. International students' perceptions of university life. *College Student Journal*, 51(2): 279-290.

Peterkin, C. 2016. *Why are students prone to making wrong career choices?* Available: <https://www.advisorpedia.com/growth/why-are-students-prone-to-making-wrong-career-choices/> (Accessed 29 March 2022).

Peters, W. 2015. *Making life easier in the first year*. Available: <https://www.dut.ac.za/making-life-easier-in-the-first-year/> (Accessed 10 July 2023).

Peters, W. 2018. *Dut's First Year Academy Workshop, A Great Success*. Available: <https://www.dut.ac.za/duts-first-year-academy-workshop-a-great-success/> (Accessed 20 June 2022).

Peters, W. 2020. *Siyaphumelela 2.0 Project Officially Launched to Improve Dut Student Success*. Available: <https://www.dut.ac.za/siyaphumelela-2-0-project-officially-launched-to-improve-dut-student-success/> (Accessed 23 May 2020).

Petersen, N.F. and Arends, D. 2018. The role of first-year experience excursion in promoting social integration at university: Student teachers' views. *South African Journal of Childhood Education*, 8(1): 1-9.

Peterson, R.L., O'Connor, A. and Strawhun, J. 2014. *Academic Supports & Tutoring*. Available: <https://k12engagement.unl.edu/strategy-briefs/Academic%20Supports%209-11-14.pdf> (Accessed 20 May 2023).

Polit, D.F. and Beck, C.T. 2012. *Nursing research: Generating and assessing evidence for nursing practice*. 9<sup>th</sup> ed. Philadelphia: Lippincott Williams and Wilkins.

Punch, K.F. and Oancea, A. 2014. *Introduction to Research Methods in Education* California, Thousand Oaks: SAGE Publications.

Raleigh, A. 2016. *The importance of Grade 9 subject choice*. Available: <https://www.abassessments.co.za/the-importance-of-grade-9-subject-choice> (accessed 11 September 2021).

Rashid, Y., Rashid, A., Warraich, M.A., Sabir, S.S. and Waseem, A. 2019. Case Study Method: A Step-by-Step Guide for Business Researchers. *International Journal of Qualitative Methods*, 18(1): 1-13.

Resnik, J.D. and David, B. 2015. *What is ethics in research and why is it important*. Available: <https://www.niehs.nih.gov/research/resources/bioethics/whatis/> (Accessed 25 April 2020).

Rice, F., Frederickson, N. and Seymour, J. 2011. Assessing pupil concerns about transition to secondary school. *British Journal of Educational Psychology*, 81(2): 244-263.

Rincón Igea, DD and Rincón Igea, BD. 2000. Personalised tutoring at the university, Cuenca Editions of the university of Castilla la Mancha. Available: <https://www.academypublication.com/issues/past/jltr/vol01/02/01.pdf> (Accessed 21 May 2022).

Robb, C.A. 2017. College student financial stress: Are the kids alright?. *Journal of Family and Economic Issues*, 38(1): 514-527.

Rodrigo. 2017. *Different research strategies you can use in your dissertation*. Available: <https://writepass.com/journal/2017/06/dissertation-structure-different-research-strategies-you-can-use-in-your-dissertation/> (Accessed date 27 May 2021).

Roser, M. 2022. *Millions of children learn only very little. How can the world provide a better education to the next generation?* Available: <https://ourworldindata.org/better-learning> (Accessed 14 November 2023).

Ross, P.T. and Bibler Zaidi, N.L. 2019. Limited by our limitations. *Perspectives on medical education*, 8(1): 261-264.

Rouse, M. 2016. *What Does Computer Literate Mean?* Available: <https://www.techopedia.com/definition/23303/computer-literate> (Accessed 10 July 2022).

Roy, P. 2020. Career Guidance: A Way of Life. *Multidisciplinary Journal*, 19(39): 22-31.

Ruiz, N. and Fandos, M. 2014. The role of mentoring in higher education: Improving student academic success and career goals. *International Journal of Organizations*, 3(12): 89-100.

Rutland, C.S., Dobbs, H. and Töttemeyer, S. 2016. How does student educational background affect transition into the first year of veterinary school? Academic performance and support needs in university education. *Journal of Veterinary Medical Education*, 43(4): 372-381.

Rzayeva, S. 2021. *How to adapt in a new environment*. Available: <https://blog.ut.ee/how-to-adapt-in-a-new-environment/> (Accessed 10 May 2022).

Sacred Heart University. 2023. *Organizing Academic Research Papers: Types of Research Designs*. Available: <https://library.sacredheart.edu/c.php?g=29803&p=185902> (Accessed 23 June 2023).

Saira, N.Z. and Hafeez, M. 2021. A critical review on discussion and traditional teaching methods. *Psychology and Education Journal*, 58(1): 1871-1886.

Salami, S.O. 2011. Personality and psychological well-being of adolescents: The moderating role of emotional intelligence. *Social Behaviour and Personality: an international journal*, 39(6): 785-794.

Shawky, F. 2024. *Navigating the shift: from high school to university*. Available: <https://www.linkedin.com/pulse/navigating-shift-from-high-school-university-paramount-students-ythsf> (Accessed 22 May 2024).

Salkind, N.J. 2010. *Encyclopedia of Research Design*. California, Thousand Oaks: Sage Publications.

Salomao, A. 2023. *Understanding What is Theoretical Framework*. Available: <https://mindthegraph.com/blog/what-is-theoretical-framework/> (Accessed 20 August 2023).

Sandoval, M.J. 2021. *Workload negatively affects mental health*. Available: <https://tower.mastersny.org/8245/opinion/workload-negatively-affects-mental-health/> (Accessed 10 July 2022).

Sargrad, S. 2020. *Why computer literacy matters during the COVID-19 pandemic*. Available: <https://www.forbes.com/sites/scottsargrad/2020/09/16/why-computer-literacy-matters-during-the-covid-19-pandemic/?sh=4a2c569258d7> (Accessed 25 March 2022).

Sattar, A. and Awan, A.G. 2019. The impact of teachers' training on the academic achievements of students. *Global Journal of Management, Social Sciences and Humanities*, 5(3): 402-424.

Saunders, M., Lewis, P. and Thornhill, A. 2009. *Research methods for business students*. New York: Pearson education Ltd.

Saunders, M., Lewis, P. and Thornhill, A. 2012. *Research methods for business students*. Harlow: Pearson Education Ltd.

Saunders, M.N., Lewis, P., Thornhill, A. and Bristow, A. 2015. *Understanding research philosophy and approaches to theory development*. Available: <https://oro.open.ac.uk/53393/> (Accessed 12 May 2023).

Schall, J., Wallace, T.L. and Chhuon, V. 2016. 'Fitting in' in high school: How adolescent belonging is influenced by locus of control beliefs. *International Journal of Adolescence and Youth*, 21(4), 462-475.

Schreiber, B., Luescher, T.M. and Moja, T. 2016. *The first-year experience, student transitions and institutional transformation*. Available: <https://pdfs.semanticscholar.org/a635/211659fb90e7f3eb12cf09bbb79bece1c843.pdf> (Accessed 12 May 2023).

Schreiber, B., Luescher, T.M. and Moja, T. 2018. *Articulation and continuities: First-year experience in higher education*. Available: <https://pdfs.semanticscholar.org/b247/5a40122fa997c6fdd4dc1e6bd003df499898.pdf> (Accessed 12 May 2023).

Schreiber, B., Luescher, T.M. and Moja, T. 2021. *Developing Successful Transition Support for Students in Africa: The Role of Academic Advising*. Available: [https://www.researchgate.net/profile/Thierry-Luescher/publication/357392542\\_Developing\\_Successful\\_Transition\\_Support\\_for\\_Students\\_in\\_Africa\\_The\\_Role\\_of\\_Academic\\_Advising/links/628521e77582c44c470b7](https://www.researchgate.net/profile/Thierry-Luescher/publication/357392542_Developing_Successful_Transition_Support_for_Students_in_Africa_The_Role_of_Academic_Advising/links/628521e77582c44c470b7)

[a89/Developing-Successful-Transition-Support-for-Students-in-Africa-The-Role-of-Academic-Advising.pdf](#) (Accessed 12 May 2023).

Schweitzer, K. 2019. *Curriculum Design: Definition, Purpose and Types*. Available: <https://www.thoughtco.com/curriculum-design-definition-4154176> (Accessed 23 June 2022).

Scotland, J. 2012. Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9): 9-16.

Segal, T. 2022. *Culture Shock Meaning, Stages, and How to Overcome*. Available: <https://www.investopedia.com/terms/c/culture-shock.asp#:~:text=Key%20Takeaways-,Culture%20shock%20refers%20to%20feelings%20of%20uncertainty%2C%20confusion%2C%20or%20anxiety,or%20study%20abroad%20for%20school>. (Accessed 29 May 2022).

Sekaran, U. and Bougie, R. 2016. *Research methods for business: A skill building approach*. 7<sup>th</sup> ed. Chichester: John Wiley & Sons.

Sewagegn, A.A. and Diale, B.M. 2019. Empowering learners using active learning in higher education institutions. Available: <https://core.ac.uk/download/pdf/286396193.pdf> (Accessed 12 June 2023).

Shabalala, T. 2018. *Kabelo Mahalane Motivates Students at DUT*. Available: <https://www.dut.ac.za/kabelo-mabalane-motivates-students-at-dut/> (Accessed 23 May 2023).

Shaikh, A. and Nikooherafmaher, S. 2022. “The effects of Digitalization on students’ learning experience after the rise of the Covid-19 Pandemic”: A Qualitative study on institutional and student behaviours because of disruptive digitalization after the rise of the Covid-19 pandemic. Available: <https://www.diva->

<portal.org/smash/record.jsf?pid=diva2%3A1668364&dswid=3205> (Accessed 22 March 2023).

Shange, N.S. 2018. *Experiences of students facing financial difficulties to access Higher Education in the case of the University of KwaZulu-Natal* (Doctoral dissertation, school of Built Environment and Development Studies Faculty of Humanities, University of KwaZulu-Natal).

Sharma, G. 2017. Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3(7): 749-752.

Sheehan, N. 2021. *Summer Programs for First-Year Students Bridge the Gap Between High School and College*. Available: <https://news.worcester.edu/summer-programs-for-first-year-students-bridge-the-gap-between-high-school-and-college/> (Accessed 20 June 2022).

Showkat, Nayeem and Parveen, Huma. 2017. *In-depth Interview*. Available: [https://www.researchgate.net/publication/319162160\\_In-depth\\_Interview/citation/download](https://www.researchgate.net/publication/319162160_In-depth_Interview/citation/download) (Accessed 20 July 2012).

Shozi, T. and Haffajee, F. 2017. Examining First-year Student Experiences: What Informs their Contraceptive Choices? A Case Study of the Durban University of Technology. *Journal of Human Ecology*, 57(1-2): 11-19.

Shrestha, N. 2021. Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1): 4-11.

Shudifat, R.E.M. and Al-Husban, R.Y. 2015. Perceived sources of stress among first-year nursing students in Jordan. *Journal of Psychosocial Nursing and Mental Health Services*, 53(6): 37-43.

Sikhwari, T.D., Ravhuhali, F., Lavhelani, N.P. and Pataka, F.H. 2019. Students' perceptions of some factors influencing academic achievement at a rural South African university. *South African Journal of Higher Education*, 33(4): 291-306.

Smith, R. 2016. *The ethics of the research excellence framework*. Available: [https://www.ied.edu.hk/ele/2016/REF/161031-The\\_REF.pdf/](https://www.ied.edu.hk/ele/2016/REF/161031-The_REF.pdf/) (Accessed 26 April 2020).

Smith, T.E., Reinke, W.M., Herman, K.C. and Huang, F. 2019. Understanding family–school engagement across and within elementary-and middle-school contexts. *School Psychology*, 34(4): 363-375.

Solomon, S. 2021. *Why All Students Should Take a First-Year Seminar*. Available: <https://www.bestcolleges.com/blog/why-take-a-first-year-seminar/> (Accessed 21 July 2023).

Soundy, N.L. 2016. *The transition from high school to university: Challenges faced by first-year B.Ed. students at a university of technology* (Doctoral dissertation, Tshwane University of Technology).

Sreekumar, D. 2023. *What is a Theoretical Framework? How to Write It* (with Examples). Available: <https://researcher.life/blog/article/what-is-a-theoretical-framework-how-to-write-it/> (Accessed 12 September 2023).

Stauffer, B. 2020. *What is a curriculum and how do you make one?* Available: <https://www.aeseducation.com/blog/what-is-a-curriculum> (Accessed 09 September 2021).

Steph. 2020. *What is interpretivism?* Available: <https://philonotes.com/index.php/2020/09/25/what-is-interpretivism/> (Accessed 25 May 2021).

Strayhorn, T.L. 2012. *College students' sense of belonging: A key to educational success*. New York, NY: Routledge.

Strom, A., 2021. *The negative effects of technology for students and educators*. Available: [https://nwcommons.nwciowa.edu/education\\_masters/326/](https://nwcommons.nwciowa.edu/education_masters/326/) (Accessed 29 May 2022).



StudyUSA. 2021. *What are the difference between a school, college, and university in the USA?* Available: <https://www.studyusa.com/en/a/107/what-is-the-difference-between-a-school-college-and-university-in-the-usa> (Accessed 20 September 2021).

Sullivan, J.L.G. 2021. *The Impact of Orientation Programs on New Student Engagement and Transition* (Doctoral dissertation, Northeastern University).

Tabbodi, M., Rahgozar, H. and Makki Abadi, M.M. 2015. *The relationship between happiness and academic achievements*. Available: <https://core.ac.uk/download/pdf/230057952.pdf> (Accessed 24 June 2022).

Taherdoost, H. 2016. *Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research*. Available: <https://igntu.ac.in/eContent/IGNTU-eContent-858468696214-MSW-2-Dr.HanjabamShukhdebaSharma-SOCIALWORKRESEARCH-1,2,3,4,5.pdf> (Accessed 24 June 2022).

Tanga, M. and Maphosa, C. 2018. *Academic Hurdles Facing Undergraduate Students at One South African University*. Available: <https://files.eric.ed.gov/fulltext/EJ1194271.pdf> (Accessed 24 June 2022).

Tanny, T. 2018. *Survey research*. Available: <https://www.slideshare.net/TahminaTanny/survey-research-design/> (Accessed 20 July 2021).

Tavakol, M. and Wetzel, A. 2020. Factor Analysis: a means for theory and instrument development in support of construct validity. *International Journal of Medical Education*, 11(1): 245-247.

Terenzini, P.T. and Reason, R.D. 2014. *Rethinking Between-College Effects on Student Learning: A New Model to Guide Assessment and Quality Assurance*. Available: [https://link.springer.com/chapter/10.1007/978-981-4585-81-1\\_4](https://link.springer.com/chapter/10.1007/978-981-4585-81-1_4) (Accessed 07 February 2023).

Tett, L., Cree, V.E. and Christie, H. 2017. From further to higher education: transition as an on-going process. *Higher Education*, 73(1): 389-406.

The World Declaration on Higher Education. 1998. World Conference on Higher Education in the Twenty-first Century: Vision and Action. Available: <https://unesdoc.unesco.org/ark:/48223/pf0000141952.::~:~:text=Higher%20education%20includes%20%27all%20types,by%20the%20competent%20State%20authorities%27.> (Accessed 13 July 2021).

Thomas, L. 2012. Building student engagement and belonging in higher education at a time of change. *Paul Hamlyn Foundation*, 100(1):1-99.

Thompson, M., Pawson, C. and Evans, B. 2021. Navigating entry into higher education: The transition to independent learning and living. *Journal of Further and Higher Education*, 45(1): 398-1410.

Thuo, M. and Edda, M. 2017. Transition to university life: Insights from high school and university female students in Wolaita Zone, Ethiopia. *Journal of Education and Practice*, 8(4): 45-54.

Tom, R.F. 2015. *Adjustment experiences and coping strategies of first-year students at the University of Limpopo* (Turfloop Campus) (Doctoral dissertation, University of Limpopo).

UNESCO. 2011. *Curriculum*. Available: <http://www.ibe.unesco.org/en/glossary-curriculum-terminology/c/curriculum-plural-curricula> (Accessed 09 September 2021).

Van Broekhuizen, H., Van der Berg, S. and Hofmeyr, H. 2017. *Higher education access and outcomes for the 2008 national matric cohort*. Available: <https://resep.sun.ac.za/wp-content/uploads/2016/10/Van-Broekhuizen-et-al.pdf> (Accessed 10 September 2021).

van der Meer, J., Stephens, S. and Pratt, K. 2018. First semester academic performance: The importance of early indicators of non-engagement. *Student Success*, 9(4): 1-12.

van der Zanden, P.J.A.C., Denessen, E., Cillessen, A.H. and Meijer, P.C. 2018. Educational Research Review. Available: [https://www.researchgate.net/profile/Petrie-Van-Der-Zanden/publication/322392651\\_Domains\\_and\\_predictors\\_of\\_first-year\\_student\\_success\\_A\\_systematic\\_literature\\_review/links/5a7d4dbe458515dea40f5666/Domains-and-predictors-of-first-year-student-success-A-systematic-literature-review.pdf?origin=journalDetail&tp=eyJwYWdlIjoiam91cm5hbERldGFpbCJ9](https://www.researchgate.net/profile/Petrie-Van-Der-Zanden/publication/322392651_Domains_and_predictors_of_first-year_student_success_A_systematic_literature_review/links/5a7d4dbe458515dea40f5666/Domains-and-predictors-of-first-year-student-success-A-systematic-literature-review.pdf?origin=journalDetail&tp=eyJwYWdlIjoiam91cm5hbERldGFpbCJ9) (Accessed 08 February 2023).

Van Rooij, E.C., Jansen, E.P. and van de Grift, W.J. 2018. First-year university students' academic success: the importance of academic adjustment. *European Journal of Psychology of Education*, 33(1): 749-767.

Velentgas P., Dreyer, N. A, Nourjah P., Smith S.R, Torchia M. M. 2013. *Developing a Protocol for Observational Comparative Effectiveness Research: A User's Guide*. Rockville: Agency for Healthcare Research and Quality (US). PMID: 23469377.

Vinz, S. 2022. *What Is a Theoretical Framework?* | Guide to Organizing. Available: <https://www.scribbr.com/dissertation/theoretical-framework/> (Accessed 23 May 2023).

Virginia Tech. 2018. *Research methods guide: Interview research*. Available: <https://guides.lib.vt.edu/researchmethods/interviews/> (Accessed 21 July 2021).

Walia, A and Chetty, P. 2020. *How to formulate a research strategy?* Available: <https://www.projectguru.in/how-to-formulate-a-research-strategy/> (Accessed 14 November 2023).

Walia, S. and Chetty, P. 2020. *How to formulate a research strategy*. Available: <https://www.projectguru.in/how-to-formulate-a-research-strategy/> (Accessed 28 May 2021).

Walker, M. and Mkwanaenzi, F. 2015. Challenges in accessing higher education: A case study of marginalized young people in one South African informal settlement. *International Journal of Educational Development*, 40(1): 40-49.

Wangeri, T., Kimani, E. and Mutweleli, S.M. 2012. Transitional challenges facing university first year students in Kenyan public universities: A Case of Kenyatta University. *Interdisciplinary Review of Economics and Management*, 1(2): 43-50.

Wargadinata, W., Maimunah, I., Eva, D. and Rofiq, Z. 2020. Student's responses on learning in the early COVID-19 pandemic. *Tadris: Journal of Education and Teacher Training*, 5(1): 141-153.

Watts, Z. 2018. *What to expect from your college workload*. Available: <https://thesignpostwsu.com/119191/science-tech/what-to-expect-from-your-college-workload/> (Accessed 22 October 2022).

Williams, M. 2019. *Why is curriculum important?* Available: <https://www.classcraft.com/blog/why-is-curriculum-important/> (Accessed 22 August 2022).

Williams, M., Coare, P., Marvell, R., Pollard, E., Houghton, A. and Anderson, J. 2015. *Understanding provision for students with mental health problems and intensive support needs*. Brighton, England: Institute for Employment Studies.

Wilson, J. 2010. *Essentials of business research: A guide to doing your research*. London: SAGE.

Wilson, V. 2014. Research methods: triangulation. *Evidence Based Library and Information Practice*, 9(1): 74–75.

Wilson-Strydom, M. 2015. University access and theories of social justice: Contributions of the capabilities approach. *Higher Education*, 69(1): 143-155.

Wits Website. 2020(a). *First Year Experience*. Available: <https://www.wits.ac.za/students/first-year-experience/> (Accessed 07 November 2020).

Wits Website. 2020(b). *First year Mentors*. Available: <https://www.wits.ac.za/students/first-year-experience/> (Accessed 07 November 2020).

Worcester State University. 2020(a). *First Year Residential Experience*. Available: <https://www.worcester.edu/First-Year-Residential-Experience/> (Accessed 17 April 2021).

Worcester State University. 2020(b). *First year student's orientation*. Available: <https://www.worcester.edu/Orientation/> (Accessed 17 April 2021).

Workman, J. L. 2015. Exploratory students' experiences with first-year academic advising. *The Journal of the National Academic Advising Association*, 35(1): 5-12.

World Health Organisation. 2023. *Depression*. Available: <https://www.who.int/news-room/fact-sheets/detail/depression> (Accessed 12 August 2023).

Wrench, A., Garrett, R. and King, S. 2014. Managing health and well-being: Student experiences in transitioning to higher education. *Asia-Pacific Journal of Health, Sport, and Physical Education*, 5(2): 151-166.

Wuryaningsih, W., Susilastuti, D., Darwin, M. and Pierewan, A. 2019. Effects of web-based learning and F2F learning on teachers' achievement in teacher training program in Indonesia. *International Journal of Emerging Technologies in Learning (iJET)*, 14(21): 123-147.

Xaba, S. 2020. *A successful HR orientation*. Available: <https://www.dut.ac.za/a-successful-hr-first-year-students-orientation/> (Accessed 30 March 2022).

Yam, S. 2010. Tutoring strategies to engage first-year students in the transition to university learning: the students' perspective. In *Proceedings of the 16th Annual Pacific Rim Real Estate Society Conference, 24-27 January 2010, Intercontinental Hotel, Wellington, New Zealand*.

Yan, Z. and Sendall, P. 2016. First Year Experience: How We Can Better Assist First-Year International Students in Higher Education. *Journal of International Students*, 6(1): 35-51.

Yazan, B. 2015. Three approaches to case study methods in education: Yin, Merriam, and Stake. *The qualitative report*, 20(2): 134-152.

Yikealo, D., Tareke, W. and Karvinen, I. 2018. *The level of stress among college students: A case in the college of education*. Available: <https://osjournal.org/ojs/index.php/OSJ/article/view/1691> (Accessed 12 May 2023).

Zikmund, W.G. and Babin, B.J. 2010. *Essentials of marketing research*. 9<sup>th</sup> ed. Canada: Cengage Learning.

Zulu, N. 2022. *DUT hosted the Siyaphumelela Student Success task team (SSTT) meeting*. Available: <https://www.dut.ac.za/dut-hosted-the-siyaphumelela-student-success-task-team-sstt-meeting/> (Accessed 06 August 2023).

Zuma, S. 2020. *Glenwood Superstar Supports Dut to Ensure That No Student Goes Hungry*. Available: <https://www.dut.ac.za/glenwood-superspar-supports-dut-to-ensure-that-no-student-goes-hungry/> (Accessed 19 June 2023).

Zuma, S. 2021. *DUT to host orientation week for first-year students*. Available: <https://www.dut.ac.za/dut-to-host-orientation-week-for-first-year-students/> (Accessed 26 August 2023).

Zuma, S. 2022. *First Year Students Assisted to Transition from High School To University*. Available: <https://www.dut.ac.za/first-year-students-assisted-to-transition-from-high-school-to-university/> (Accessed 12 September 2023).



## APPENDIX A: LETTER OF INFORMATION AND CONSENT FORM

### Appendix B



### LETTER OF INFORMATION

**Title of the Research Study:** The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management

**Principal Investigator/s/researcher:** Musa Grace Mbonambi, Bachelor's Degree

**Co-Investigator/s/supervisor/s:** Musawenkosi Ngibe, PhD and Mbali Msomi: Master's Degree

**Brief Introduction and Purpose of the Study:** Moving away from a familiar environment to an unfamiliar one and not knowing what to expect can evoke different emotions like being uneasy about what to come. Transition is a crucial stage in the first year, it plays a major role in the academic performance of first-year students. If the transition is not handled appropriately, it could be the beginning of a downfall to the student's academic performance and social involvement.

This study aims to examine the management and effectiveness of first-year student programmes offered by the DUT that are designed to manage the transition gap from high school to higher education.

#### **Purpose of the Study**

The purpose of this study is to examine the management and effectiveness of first-year student programmes offered by the DUT that are designed to manage the transition gap from high school to higher education.

**Outline of the Procedures:** Questionnaires will be distributed to registered first-year students at the Durban University of Technology. Interviews will be held with the Centre for Learning and Teaching (CELT) and Tutor Mentor Advisors (TMA's). If current COVID-19 restrictions are still in place, then the use of survey monkey or google forms will be used to collect data. Interviews will be held on MS Teams.

**Risks or Discomforts to the Participant:** There will be no risks or discomforts related to the study.

**Explain to the participant the reasons he/she may be withdraw from the Study:** The participants will not be forced to partake in the study. The participants will be entitled to withdraw from the study at any time should they wish to do so, and they will continue to receive the appropriate standard of care. The participants will have access to the researcher any time if they need to consult and they will be given the dissertation upon request.

**Benefits:** First-year students who are the major participants in the study will directly benefit from the study by having more knowledge on the support programmes offered by the Durban University of Technology to support the transition of first-year students. Centre for Learning and Teaching (CELT) and Tutor Mentor Advisors. (TMA's) will directly benefit from the study by having knowledge on whether the current support programmes they offer to first-year students are effectiveness in ensuring students transition successfully from high school to university.

**Remuneration:** Kindly note that, participation in this study is free and will not result in any form of remuneration.

**Costs of the Study:** The Participants are not expected to cover anything.

**Confidentiality:** Anonymity and confidentiality will be maintained, as the information of the participants, identify and names will not be disclosed- all data will be coded, only the supervisor, researcher and the statistician will have access to the data. This aligns with the POPI Act (protection of personal information), where written consent will be obtained, all the information will be accurate, de-identified, stored securely and deleted after five years.

**Results:** The dissertation will be made available to the DUT library. The dissertation will also be disseminated in the form of a journal type to be published in an accredited journal. The study will be made available to the participants upon request.

**Research-related Injury:** The study will be conducted online, therefore there will be injuries as interaction with the participants will be done online.

**Storage of all electronic and hard copies including tape recordings:** Data collection and analysis will be online. Therefore, data collected in the study will be stored on cloud storage (iCloud).

**Persons to contact in the Event of Any Problems or Queries:** (Musawenkosi Ngibe, [musawenkosi1@dut.ac.za](mailto:musawenkosi1@dut.ac.za)) Please contact the researcher (079 217 2451), my supervisor (031 373 5858) or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L Liganiso on 031 373 2577 or [researchdirector@dut.ac.za](mailto:researchdirector@dut.ac.za).

**General:**

A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.





## CONSENT

**Full Title of the Study:** The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management

**Names of Researcher/s:** Musa Grace Mbonambi

**Statement of Agreement to Participate in the Research Study:**

- I hereby confirm that I have been informed by the researcher, Musa Grace Mbonambi about the nature, conduct, benefits, and risks of this study - Research Ethics Clearance Number: \_\_\_\_\_.
- I have also received, read, and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

<b>Full Name of Participant Thumbprint</b>	<b>Date</b>	<b>Time</b>	<b>Signature / Right</b>

I, \_\_\_\_\_ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

<b>Full Name of Researcher</b>	<b>Date</b>	<b>Signature</b>
<b>Full Name of Witness (If applicable)</b>	<b>Date</b>	<b>Signature</b>
<b>Full Name of Legal Guardian (If applicable)</b>	<b>Date</b>	<b>Signature</b>

***Please note the following:***

Research details must be provided in a clear, simple, and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade 10 level- use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counselling (Department of Health, 2004).

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g., parent, sibling, friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g. a wrong date or spelling mistake, a new document has to be completed. The incomplete original document has to be kept in the participant's file and not thrown away, and copies thereof must be issued to the participant.

***References:***

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes* <http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at: [http://www.nhrec.org.za/?page\\_id=14](http://www.nhrec.org.za/?page_id=14)

**NOTE: Information in brackets in the Letter of Information is to be used as a guide in completing the Letter of Information. This information as well as the general section at the end of the Letter of Information and Consent document must be deleted before attaching the document to the PG 2a.**

## APPENDIX B: QUESTIONNAIRE



### RESEARCH QUESTIONNAIRE

#### **Research Topic**

The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management

Dear Participant

I am currently enrolled for Master of Management Sciences in Administration and information Management (Faculty of Accounting and Informatics), perusing a masters project titled: The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management. This questionnaire is designed to study the transition from high school to higher education institution. The answers that will be provided by you will assist the researcher in understanding the challenges that influence transition better. Thank you very much for your time and cooperation. I greatly appreciate your contribution in furthering this research endeavor.

**Name of Researcher:** Ms. M.G Mbonambi

Student No-21615605

079 217 2451

[21615605@dut4life.ac.za](mailto:21615605@dut4life.ac.za)

Department of Information and Corporate Management  
Durban University of Technology

**INSTRUCTIONS FOR COMPLETION:**

- Please indicate your answers by making use of the sign "X" or "✓" to indicate your answer,
- Please kindly complete all questions and where necessary, justify your answer.

**SECTION A: DEMOGRAPHICS**

The Section below is intended to provide the researcher with data regarding research participants. The data will help the researcher to understand the background of the research participants.

**1. Please Indicate your age group**

1. Less than 18 years	2. 18-20 years	3. 21-30 years	4. More than 30 years

**2. Please indicate your gender**

1. Male	
2. Female	

**3. The highest level of education attained**

1. No Formal Education		2. Matric		3. Certificate	
4. Diploma		5. Post Graduate Degree		6. Other	

**4. Type of School Attended**

1. Public School	
2. Private School	
3. Other, please specify	

**SECTION B: PROGRAMMES THAT ARE ADOPTED TO AID THE SMOOTH TRANSITION**

The section below is intended to investigate the type of support provided to first-year students by the selected university.

Please indicate your answer by ticking (X) the relevant and applicable option below. Where "1" represents your highest level of disagreement and "5" representing your highest level of agreement with the statements.

	Strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly agree 5
<b>5. EDUCATIONAL PROGRAMMES OFFERED BY THE INSTITUTION TO SUPPORT THE TRANSITION OF HIGH SCHOOL LEARNERS TO THE UNIVERSITY</b>					
5.1. Career guidance is offered by the University to assist with the transition from high school to university.					
5.2. The University facilitate academic programmes to support first-year students who are struggling academically.					
5.3. The University introduced programmes that are necessary for assisting and supporting first-year students on their academic demands.					
5.4. The first-year students' orientation is beneficial in helping students adapt to university life.					
5.5. The University facilitates social programmes to support first-year students to adapt to university social life.					

5.6.	First-year student experience (FYSE) programmes facilitated by the CELT assists students to cope academically.					
5.7.	The programmes that are offered by the University (CELT Department) contribute to the empowerment and development of the first-year student.					
5.8.	The University (CELT Department) programmes are necessary for promoting a smooth transition for first-year students					
<b>6. THE IMPACT AND EFFECTIVENESS OF THE FIRST-YEAR INTRODUCTORY PROGRAMMES</b>						
6.1.	The introductory programmes facilitated by the University helped with the transition from high school to higher education.					
6.2.	The introductory programmes introduced by the University are useful in supporting students to adapt to the university life					
6.3.	The introductory programmes offered by the University assisted in familiarizing the students with the university facilities/supporting structures.					
6.4.	The introductory programme was effective in mapping student's roles and responsibilities within					

	the academic environment.					
6.5.	Interactive participation amongst students is encouraged during the introductory programmes.					
6.6.	Having attended the introductory programmes, I feel confident to be part of the University.					
6.7.	Attending the introductory programme improved my holistic view of the university					
<b>7. THE EFFECTIVENESS OF THE DEPARTMENT OF INFORMATION AND CORPORATE MANAGEMENT ORIENTATION PROGRAMME</b>						
7.1.	Proper guidance is provided in terms of the qualification alignment to the industry.					
7.2.	The departmental orientation offered to first-year students effectively address the objectives of the programme registered for.					
7.3.	Tutors provide great assistance in ensuring that first-year students adapt to university life.					
7.4.	First-year tutoring programmes contribute to the successful transition of first-year students from high school to university.					
7.5.	The department is effective in providing necessary support to first-year students while					



they transition from high school to university.					
<b>8. CHALLENGES FACED BY FIRST-YEAR STUDENTS WHEN THEY TRANSITION</b>					
8.1. Lack of financial support influences the transition from high school to higher education.					
8.2. Insufficient knowledge about my career choice influenced the transition from high school to higher education.					
8.3. Insufficient knowledge about the selected university influenced the transition from high school to higher education.					
8.4. The academic learning environment had an impact on the transition from high school to higher education.					
8.5. Environmental changes (e.g., location and cultural shock) influenced the transition from high school to higher education.					
8.6. Social Interactions with other peers influenced a smooth transition from high school to higher education.					



**SECTION C: INTERVENTIONS TO SUPPORT THE TRANSITION OF FIRST-YEAR STUDENTS**

**9. Please indicate if these interventions to support successful transition were available to you.**

<b>Intervention</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>
Parental advice					
Career Guidance					
Open Days at Tertiary					
Advice from L.O Teachers					

**YOUR PARTICIPATION IS HIGHLY APPRECIATED.**

## APPENDIX C: STRUCTURED INTERVIEW SCHEDULE

### STRUCTURED INTERVIEW SCHEDULE AND QUESTIONS

#### Research Topic

The management of the first-year student programmes at the Durban University of Technology: A case of Business and Information Management

#### Name of Researcher: Ms. M.G Mbonambi

Student No-21615605

079 217 2451

[21615605@dut4life.ac.za](mailto:21615605@dut4life.ac.za)

Department of Information and Corporate Management

Durban University of Technology

#### Name of Supervisor: Dr M Ngibe

031 373 5858

[musawenkosin1@dut.ac.za](mailto:musawenkosin1@dut.ac.za)

Department of Information and Corporate Management

Durban University of Technology

#### ETHICAL CONSIDERATIONS AND DECLARATION:

##### Please be assured that:

- The primary responsibility of the researcher as far as this study is concerned is to treat the information given by the respondents as confidential as possible,
- The researcher will comply with the professional standards governing the conduct of the research at DUT,
- Informed consent will be asked from the participants prior to the interviews.
- Anonymity and confidentiality will be assured: identity of participants will not be disclosed.
- Self-esteem and self-respect of the subjects involved will not be violated,
- If a respondent does not wish to participate or avail themselves for the interview, the individual's desires will be respected and will not be forced to participate,
- There will be no misrepresentation or distortion in reporting the data collected during the study.
- The data collected from this study is solely intended for academic purposes, no other reasons than that.
- Ethical clearance was granted on this research study by the Faculty Research Ethics Committee.

Date of Interview: \_\_\_\_\_

Time of Interview: \_\_\_\_\_

<b>1. EFFECTIVENESS OF THE SUPPORT PROGRAMMES AIMED AT ASSISTING FIRST-YEAR STUDENTS TO COPE WITH TRANSITIONING</b>
---

- 1.1 What are the different programmes offered by the Durban University of Technology to support the transition of first-year students from high school to university?

---

---

---

- 1.2 What is the distinction between the First-year Programmes (FYP) offered by the University and those offered by the CELT Department?

---

---

---

- 1.3 What is the rationale and intentions of this FYP?

---

---

---

---

- 1.4 Which area/s do this FYP mainly focus on and why?

---

---

---

- 1.5 How is the effectiveness of these programmes measured by your Department to ensure that they tackle issues related to the transition of learners to the University?

---

---

---

## **2. EFFECTIVENESS OF SUPPORT PROGRAMMES**

2.1 How are support programmes serving the purpose of assisting first-year students transition from high school to university?

---

---

---

2.2 How are the support programmes promoting student success?

---

---

---

2.3 How effective are these programmes in supporting student transition?

---

---

---

## **3. REACHING OUT TO PROSPECTIVE STUDENTS BEFORE THEY BECOME DURBAN UNIVERSITY OF TECHNOLOGY STUDENTS**

3.1 What type of initiatives carried out by your Department to support high school learners?

---

---

---

---

3.2 Does career guidance promote student success? If yes or no, substantiate your answer.

---

---

---

---

3.3 What is the purpose of an Open Days Programme and how does it support the transition of learners from higher school to University?

---

---

---

---

---

---

- 3.4 Do the Introductory Programmes help in mapping first-year's roles and responsibilities at the university? Please substantiate your answer.

---

---

---

---

---

---

<b>4. TRANSITION FROM HIGH SCHOOL TO UNIVERSITY</b>
---

- 4.1 What are the different types of first-year student programmes introduced by your Department to promote the successful transition from high school to the university?

---

---

---

- 4.2 How are the programmes offered by the CELT Department promote the empowerment and development of first-year students?

---

---

---

- 4.3 What type of challenges does your Department face when dealing with first-year student's transition?

---

---

---

4.4 Which are the most common challenges that you have identified as affecting first-year students when they transition?

---

---

---

---

4.5 Which other additional programmes do you think can be introduced by your Department to support the transition of first-year students?

---

---

---

---

4.6 Do you believe that the first-year students' programmes offered by the CELT Department are beneficial and assisting students in meeting their academic demands?

---

---

---

---

Thank you for participating in this study

## APPENDIX D: FOCUS GROUP INTERVIEW SCHEDULE

### FOCUS GROUP INTERVIEW SCHEDULE AND QUESTIONS

#### Research Topic

The management of the first-year student programmes at the Durban University of Technology: A case of Business and Information Management

#### Name of Researcher: Ms. M.G Mbonambi

Student No-21615605

079 217 2451

[21615605@dut4life.ac.za](mailto:21615605@dut4life.ac.za)

Department of Information and Corporate Management  
Durban University of Technology

#### Name of Supervisor: Dr M Ngibe

031 373 5858

[musawenkosin1@dut.ac.za](mailto:musawenkosin1@dut.ac.za)

Department of Information and Corporate Management  
Durban University of Technology

#### ETHICAL CONSIDERATIONS AND DECLARATION:

##### Please be assured that:

- The primary responsibility of the researcher as far as this study is concerned is to treat the information given by the respondents as confidential as possible,
- The researcher will comply with the professional standards governing the conduct of the research at DUT,
- Informed consent will be asked from the participants prior to the interviews.
- Anonymity and confidentiality will be assured: identity of participants will not be disclosed.
- Self-esteem and self-respect of the subjects involved will not be violated,
- If a respondent does not wish to participate or avail themselves for the interview, the individual's desires will be respected and will not be forced to participate,
- There will be no misrepresentation or distortion in reporting the data collected during the study.
- The data collected from this study is solely intended for academic purposes, no other reasons than that.
- Ethical clearance was granted on this research study by the Faculty Research Ethics Committee.

Date of Interview: \_\_\_\_\_

Time of Interview: \_\_\_\_\_

**1. FIRST-YEAR STUDENTS TUTORING/ MENTORING**

- 1.1 What are the different approaches used by tutors to support first-year students when they transition from high school to university?

---

---

---

---

- 1.2 How effective is the first-year tutoring programme in assisting first-years? Please elaborate.

---

---

---

---

- 1.3 Which additional initiatives can be introduced by first-year tutors to support the transition of first-year students?

---

---

---

---

**2. FIRST-YEAR STUDENT TRANSITION**

- 2.1 What type of assistance is provided by tutors in ensuring that first-year students adapt to university life?

---

---

---

---



2.2 What role do Tutors play in ensuring good performance and academic success of first-year students?

---

---

---

---

2.3 What types of initiatives are implemented by Tutors to assist first-year students that may have some difficulties in understanding the modules being taught?

---

---

---

---

2.4 What is the overall aim and role of a Tutor, especially in supporting first-year students?

---

---

---

---

2.5 How does the Tutor Mentor Advising (TMA) initiative contribute to the successful transition of students from high school to university?

---

---

---

---

2.6 How effective is the TMA programme in ensuring a smooth transition of first-year students?

---

---

---

---

2.7 What are the challenges of tutoring first-year students?

---

---

---

---

---

2.8 Do you think tutors are adequately trained by the university (CELT Department) to deal with first-year students?

---

---

---

---

---

2.9 What do you think can be done more to help first-years cope with the transition?

---

---

---

---

---

2.10 Which other first-year programmes do you suggest can be introduced to assist first-year students to better manage the transition from high school to university?

---

---

---

---

Thank you for participating in this study

## APPENDIX E: ETHICAL CLEARANCE



Faculty Research Office  
Durban University of Technology  
Date: 5 July 2021

Student: Musa Grace Mbonambi  
Student Number: 21615605  
Degree: Master of Management Sciences in Administration and Information Management  
Email: 21615605@dut4life.ac.za  
Supervisor: Dr Musawenkosi Ngibe  
Supervisor email: musawenkosi1@dut.ac.za

Dear Ms Mbonambi

### ETHICAL APPROVAL: LEVEL 2

I am pleased to inform you that the Faculty Research Ethics Committee (FREC) following feedback from two reviewers has granted preliminary permission for you to conduct your research 'The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management undergraduates'

### When ethics approval is granted:

You are required to present the letter at your research site(s) for permission to gather data. Please also note that your research instruments must be accompanied by the letter of information and the letter of consent for each participant, as per your research proposal.

This ethics clearance is valid from the date of provisional approval on this letter for one year. A student must apply for recertification 3 months before the date of this expiry.

Recertification is required every year until after corrections are made, after examination, and the thesis is submitted to the Faculty Registrar.

A summary of your key research findings must be submitted to the FRC on completion of your studies.

Kindest regards.

Yours sincerely,

Dr Mogiveny Rajkoomar  
FREC Chair  
Faculty of Accounting and Informatics  
Durban University of Technology  
Ritson Campus  
Durban, South Africa  
4001

## APPENDIX F: GATEKEEPER'S LETTER



*Directorate for Research and Postgraduate Support  
Durban University of Technology  
Tromso Annexe, Steve Biko Campus  
P.O. Box 1334, Durban 4000  
Tel.: 031-3732576/7  
Fax: 031-3732946*

11<sup>th</sup> August 2021  
Ms Musa G Mbonambi  
Department of Information and Corporate Management  
Faculty of Accounting and Informatics  
Durban University of Technology

Dear Ms Mbonambi

### **PERMISSION TO CONDUCT RESEARCH AT THE DUT**

Your email correspondence in respect of the above refers. I am pleased to inform you that the Institutional Research and Innovation Committee (IRIC) has granted **Gatekeeper Permission** for you to conduct your research "The management of the first-year student programme at the Durban University of Technology: A case of Business and Information Management undergraduates" at the Durban University of Technology.

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

We would be grateful if a summary of your key research findings would be submitted to the IRIC on completion of your studies.

Kindest regards.  
Yours sincerely



DR LINDA ZIKHONA LIGANISO  
DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT DIRECTORATE

## APPENDIX G: RELIABILITY TEST

### RELIABILITY

```

/VARIABLES=B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

```

### Reliability

Notes	
Output Created	22 12:39:05
Comments	
Input	Data C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas DataSet1
	Filter <none>
	Weight <none>
	Split File <none>
	N of Rows in 188
	Matrix Input
Missing Value	Definition of User-defined missing values are treated as missing. Cases Used Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 /SCALE('ALL VAI
Resources	Processor T 00:00:00.00
	Elapsed Tim 00:00:00.00

[DataSet1] C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav

### Scale: ALL VARIABLES

#### Case Processing Summary

		N	%
Cases	Valid	183	97,3
	Excluded <sup>a</sup>	5	2,7
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

#### Reliability Statistics

onbach's Alp	N of Items
0,745	8

RELIABILITY

/VARIABLES=B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7

/SCALE('ALL VARIABLES') ALL

/MODEL=ALPHA.

#### Reliability

Notes		
Output Created	22 12:39:17	
Comments		
Input	Data	C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in	188
Matrix Input		
Missing Value	Definition of User-defined missing values are treated as missing.	
	Cases Used Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax	RELIABILITY /VARIABLES=B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7 /SCALE('ALL VARIABLE	
Resources	Processor Time:00:00:00.02	
	Elapsed Time:00:00:00.02	

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	182	96,8
	Excluded <sup>a</sup>	6	3,2
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

Reliability Statistics		
onbach's Alp	N of Items	
0,802	7	

RELIABILITY  
/VARIABLES=B7.1 B7.2 B7.3 B7.4 B7.5  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.

Reliability

Notes		
Output Created	22 12:39:30	
Comments		
Input	Data	C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in	188
Matrix Input		

Missing Value	Definition of User-defined missing values are treated as missing.
Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=B7.1 B7.2 B7.3 B7.4 B7.5 /SCALE('ALL VARIABLES') ALL
Resources	Processor T00:00:00.02 Elapsed Tim00:00:00.01

Scale: ALL VARIABLES

Case Processing Summary			
		N	%
Cases	Valid	185	98,4
	Excluded <sup>a</sup>	3	1,6
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

Reliability Statistics	
onbach's Alp	N of Items
0,779	5

RELIABILITY  
/VARIABLES=B8.1 B8.2 B8.3 B8.4 B8.5 B8.6  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.

#### Reliability

Notes	
Output Created	22 12:39:42
Comments	
Input	Data C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active DatasDataSet1
	Filter <none>
	Weight <none>
	Split File <none>
	N of Rows in 188
Matrix Input	
Missing Value	Definition of User-defined missing values are treated as missing.
Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax	RELIABILITY /VARIABLES=B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 /SCALE('ALL VARIABLES')
Resources	Processor T00:00:00.00 Elapsed Tim00:00:00.02

Scale: ALL VARIABLES



Scale: ALL VARIABLES

#### Case Processing Summary

	N	%
--	---	---

Cases	Valid	183	97,3
	Excluded <sup>a</sup>	5	2,7
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

#### Reliability Statistics

onbach's Alp	N of Items
0,774	6

RELIABILITY

/VARIABLES=C9.1 C9.2 C9.3 C9.4

/SCALE('ALL VARIABLES') ALL

/MODEL=ALPHA.

#### Reliability

##### Notes

Output Created	22 12:40:01	
Comments		
Input	Data	C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in	188
	Matrix Input	
Missing Val	Definition of User-defined missing values are treated as missing.	
	Cases Used Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax	RELIABILITY /VARIABLES=C9.1 C9.2 C9.3 C9.4 /SCALE('ALL VARIABLES') ALL /MOI	
Resources	Processor Ti	00:00:00.00
	Elapsed Tim	00:00:00.00

Scale: ALL VARIABLES

#### Case Processing Summary

	N	%
Valid	183	97,3

		N	%
Cases	Valid	183	97,3
	Excluded <sup>a</sup>	5	2,7
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

#### Reliability Statistics

onbach's Alp	N of Items
0,712	4

RELIABILITY

```

/VARIABLES=B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7 B7.1 B7.2
B7.3 B7.4 B7.5 B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 C9.1 C9.2 C9.3 C9.4
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA

```

#### Reliability

Notes	
Output Created	22 12:40:11
Comments	
Input	Data C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas DataSet1
	Filter <none>
	Weight <none>
	Split File <none>
	N of Rows in 188
Matrix Input	
Missing Value Definition of User-defined missing values are treated as missing.	
Cases Used Statistics are based on all cases with valid data for all variables in the procedure.	
Syntax	RELIABILITY /VARIABLES=B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 B6.1 B6.2 B6.3 B
Resources	Processor Time00:00:00.00
	Elapsed Time00:00:00.00

Scale: ALL VARIABLES

#### Case Processing Summary

		N	%
Cases	Valid	166	88,3
	Excluded <sup>a</sup>	22	11,7
	Total	188	100,0

a. Listwise deletion based on all variables in the pr

	Section	Number of Items	Cronbach's Alpha
B5	Educational	8	0,745
B6	The Impact	7	0,802
B7	The Effective	5	0,779
B8	Challenges	6	0,774
C9	Interventions	4	0,712
	Overall	30	0,847

RIABLES') ALL /MODEL=ALPHA.

6.4 B6.5 B6.6 B6.7 B7.1 B7.2 B7.3 B7.4 B7.5 B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 C9.1 C9.2 C9.3 C9.4 /SCALE('ALL \

## APPENDIX H: CHI-SQUARE TEST

	Chi-Square	df	Asymp. Sig.
Age group	76,128	2	< 0.001
Gender	4,17	1	0,041
Highest level of education	158,468	2	< 0.001
Type of school attended	89,894	1	< 0.001
Career guidance is offered by the University to assist with the transition	83,348	4	< 0.001
The University facilitate academic programmes to support first-year students	89,123	4	< 0.001
The University introduced programmes that are necessary for a smooth transition	135,344	4	< 0.001
The first-year students' orientation is beneficial in helping students	160,139	4	< 0.001
The University facilitates social programmes to support first-year students	146,77	4	< 0.001
First-year student experience (FYSE) programmes facilitated by the University	127,733	4	< 0.001
The programmes that are offered by the University (CELT Department)	103,775	4	< 0.001
The University (CELT Department) programmes are necessary for a smooth transition	123,241	4	< 0.001
The introductory programmes facilitated by the University help first-year students	133,624	4	< 0.001
The introductory programmes introduced by the University are necessary	116,473	4	< 0.001
The introductory programmes offered by the University assisted first-year students	125,777	4	< 0.001
The introductory programme was effective in mapping student's transition	127,519	4	< 0.001
Interactive participation amongst students is encouraged during the introductory	98	4	< 0.001
Having attended the introductory programmes, I feel confident to start my tertiary	113,668	4	< 0.001
Attending the introductory programme improved my holistic view of tertiary	99,181	4	< 0.001
Proper guidance is provided in terms of the qualification alignment	64,66	4	< 0.001
The departmental orientation offered to first-year students effective	42,851	4	< 0.001
Tutors provide great assistance in ensuring that first-year students	135,54	4	< 0.001
First-year tutoring programmes contribute to the successful transition	142,278	4	< 0.001
The department is effective in providing necessary support to first-year students	81,473	4	< 0.001
Lack of financial support influences the transition from high school to tertiary	199,711	4	< 0.001
Insufficient knowledge about my career choice influenced the transition	113,086	4	< 0.001
Insufficient knowledge about the selected university influenced the transition	97,28	4	< 0.001
The academic learning environment had an impact on the transition	110,973	4	< 0.001
Environmental changes (eg.. location and cultural shock) influenced the transition	129,027	4	< 0.001
Social Interactions with other peers influenced a smooth transition	133,676	4	< 0.001
Parental advice	84,595	4	< 0.001
Career Guidance	54,703	4	< 0.001
Open Days at Tertiary	25,784	4	< 0.001
Advice from LO Teachers	62,437	4	< 0.001

## APPENDIX I: CROSSTABS – BIOGRAPHICAL

Gender \* Age group

		Crossstab			Total	
		Age group				
			< 18	18 - 20	21 - 30	
Gender	Male	Count	4	38	38	80
		% within Gen	5,0%	47,5%	47,5%	100,0%
		% within Age	50,0%	37,3%	48,7%	42,8%
		% of Total	2,1%	20,2%	20,2%	42,8%
	Female	Count	4	64	40	108
		% within Gen	3,7%	59,3%	37,0%	100,0%
		% within Age	50,0%	62,7%	51,3%	57,4%
		% of Total	2,1%	34,0%	21,3%	57,4%
Total	Count	8	102	78	188	
	% within Gen	4,3%	54,3%	41,5%	100,0%	
	% within Age	100,0%	100,0%	100,0%	100,0%	
	% of Total	4,3%	54,3%	41,5%	100,0%	

Chi-Square Tests

	Value	df	Asymptotic Sig. (2-sided)	Exact Sig. (1-sided)	Exact Probability
Pearson Chi	2,565 <sup>a</sup>	2	0,277	0,284	
Likelihood R	2,567	2	0,277	0,284	
Fisher-Exact	2,638			0,274	
Linear-by-Linear	1,265 <sup>b</sup>	1	0,272	0,298	0,057
N of Valid Cases	188				

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 3,40.

b. The standardized statistic is -1,098.

Highest level of education \* Age group

		Crossstab			Total	
		Age group				
		< 18	18 - 20	21 - 30		
Highest level of education	Matric	Count	7	81	58	144
		% within Hig	4,9%	56,3%	38,9%	100,0%
		% within Age	87,5%	79,4%	71,8%	76,8%
		% of Total	3,7%	43,1%	29,8%	76,8%
	Certificate	Count	1	8	11	20
		% within Hig	5,0%	40,0%	55,0%	100,0%
		% within Age	12,5%	7,8%	14,1%	10,8%
		% of Total	0,5%	4,3%	5,9%	10,8%
	Diploma	Count	0	13	11	24
		% within Hig	0,0%	54,2%	45,8%	100,0%
		% within Age	0,0%	12,7%	14,1%	12,8%
		% of Total	0,0%	6,9%	5,9%	12,8%
Total	Count	8	102	78	188	
	% within Hig	4,3%	54,3%	41,5%	100,0%	
	% within Age	100,0%	100,0%	100,0%	100,0%	

	% of Total	4,3%	54,3%	41,5%	100,0%
--	------------	------	-------	-------	--------

#### Chi-Square Tests

	Value	df	Significant	2-sided Sig.	1-sided Sig.	Probability
Pearson Chi	3,250 <sup>a</sup>	4	0,517	0,504		
Likelihood R	4,258	4	0,372	0,455		
Fisher-Freer	2,955			0,514		
Linear-by-Li	1,524 <sup>b</sup>	1	0,217	0,231	0,127	0,035
N of Valid Ci	188					

a. 2 cells (22,2%) have expected count less than 5. The minimum expected count is .85.

b. The standardized statistic is 1,234.

#### Type of school attended \* Age group

##### Crosstab

		Age group			Total	
		< 18	18 - 20	21 - 30		
Type of scho	Public	Count	7	86	68	159
		% within Typ	4,4%	54,1%	41,5%	100,0%
		% within Age	87,5%	84,3%	84,6%	84,6%
		% of Total	3,7%	45,7%	35,1%	84,6%
	Private	Count	1	16	12	29
		% within Typ	3,4%	55,2%	41,4%	100,0%
		% within Age	12,5%	15,7%	15,4%	15,4%
		% of Total	0,5%	8,5%	6,4%	15,4%
Total		Count	8	102	78	188
		% within Typ	4,3%	54,3%	41,5%	100,0%
		% within Age	100,0%	100,0%	100,0%	100,0%
		% of Total	4,3%	54,3%	41,5%	100,0%

#### Chi-Square Tests

	Value	df	Significant	2-sided Sig.	1-sided Sig.	Probability
Pearson Chi	.058 <sup>a</sup>	2	0,971	1,000		
Likelihood R	0,081	2	0,970	1,000		
Fisher-Freer	0,080			1,000		
Linear-by-Li	.005 <sup>b</sup>	1	0,943	1,000	0,544	0,141
N of Valid Ci	188					

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 1,23.

b. The standardized statistic is .072.

#### Highest level of education \* Gender

##### Crosstab

		Gender		Total
		Male	Female	
Matric	Count	65	79	144
	% within Hlg	45,1%	54,9%	100,0%
	% within Gen	81,3%	73,1%	78,6%

Highest level	Certificate	% of Total	34,6%	42,0%	76,6%
		Count	8	12	20
		% within Hig	40,0%	60,0%	100,0%
	Diploma	% within Ger	10,0%	11,1%	10,6%
		% of Total	4,3%	6,4%	10,6%
		Count	7	17	24
		% within Hig	29,2%	70,8%	100,0%
		% within Ger	8,8%	15,7%	12,8%
		% of Total	3,7%	9,0%	12,8%
Total		Count	80	108	188
		% within Hig	42,6%	57,4%	100,0%
		% within Ger	100,0%	100,0%	100,0%
		% of Total	42,6%	57,4%	100,0%

**Chi-Square Tests**

	Value	df	Asymptotic Sig. (2-sided)	Exact Sig. (1-sided)	Exact Probability
Pearson Chi	2,267 <sup>a</sup>	2	0,332	0,341	
Likelihood R	2,279	2	0,320	0,330	
Fisher-Exact	2,159			0,341	
Linear-by-Linear	2,142 <sup>b</sup>	1	0,143	0,170	0,086
N of Valid Cases	188				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,51.

b. The standardized statistic is 1,463.

#### Type of school attended \* Gender

**Crosstab**

		Gender		Total	
		Male	Female		
Type of scho	Public	Count	62	97	159
		% within Type	39,0%	61,0%	100,0%
		% within Gen	77,5%	89,8%	84,6%
		% of Total	33,0%	51,6%	84,6%
	Private	Count	18	11	29
		% within Type	62,1%	37,9%	100,0%
		% within Gen	22,5%	10,2%	15,4%
		% of Total	9,6%	5,9%	15,4%
Total	Count	80	108	188	
	% within Type	42,6%	57,4%	100,0%	
	% within Gen	100,0%	100,0%	100,0%	
	% of Total	42,6%	57,4%	100,0%	

**Chi-Square Tests**

	Value	df	Asymptotic Sig. (2-sided)	Exact Sig. (1-sided)	Exact Probability
Pearson Chi	5,342 <sup>a</sup>	1	0,021	0,025	0,018
Continuity C	4,440	1	0,035		
Likelihood R	5,269	1	0,021	0,025	0,018
Fisher's Exact Test				0,025	0,018
Linear-by-Linear	5,314 <sup>a</sup>	1	0,021	0,025	0,018

N of Valid Cases	188				
------------------	-----	--	--	--	--

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.34.

b. Computed only for a 2x2 table.

c. The standardized statistic is -2.305.

**Type of school attended \* Highest level of education: Crosstabulation**

		Highest level of education			Total
		Matric	Certificate	Diploma	
Type of school	Public	Count	119	17	23
		% within Type	74,8%	10,7%	14,5%
		% within Hg	82,6%	85,0%	95,8%
		% of Total	63,3%	9,0%	12,2%
	Private	Count	25	3	1
		% within Type	88,2%	10,3%	3,4%
		% within Hg	17,4%	15,0%	4,2%
		% of Total	13,3%	1,6%	0,5%
Total		Count	144	20	24
		% within Type	76,6%	10,6%	12,8%
		% within Hg	100,0%	100,0%	100,0%
		% of Total	76,6%	10,6%	12,8%

**Chi-Square Tests**

	Value	df	Significance	2-sided Sig.	1-sided Sig.	Probability
Pearson Chi	2,748 <sup>a</sup>	2	0,253	0,249		
Likelihood R	3,534	2	0,171	0,218		
Fisher-Freer	2,643			0,280		
Linear-by-Linear	2,514 <sup>b</sup>	1	0,113	0,147	0,068	0,035
N of Valid Cases	188					

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.66.

b. The standardized statistic is -1.585.



## APPENDIX J: FACTOR ANALYSIS

### FACTOR

```

/VARIABLES B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7 B7.1 B7.2
B7.3 B7.4 B7.5 B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 C9.1 C9.2 C9.3 C9.4
/MISSING LISTWISE
/ANALYSIS B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7 B7.1 B7.2
B7.3 B7.4 B7.5 B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 C9.1 C9.2 C9.3 C9.4
/PRINT INITIAL KMO EXTRACTION ROTATION
/CRITERIA FACTORS(5) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.

```

### Factor Analysis

Notes		
Output Created	122 12:42:23	
Comments		
Input	Data	C:\Users\singh\OneDrive\Stats Analysis\2022\Musa Mbonambi\Musa - Data.sav
	Active Datas	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in	188
Missing Value	Definition of MISSING	EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax	FACTOR /VARIABLES B5.1 B5.2 B5.3 B5.4 B5.5 B5.6 B5.7 B5.8 B6.1 B6.2 B6.3 B6.4 B6.5 B6.6 B6.7 B7.1 B7.2 B7.3 B7.4 B7.5 B8.1 B8.2 B8.3 B8.4 B8.5 B8.6 C9.1 C9.2 C9.3 C9.4	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03
	Maximum Memory	105448 (102.977K) bytes

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0,718
Bartlett's Test of Sphericity	Approx. Chi-Square	2147,219
	df	435
	Sig.	0,000

### Communalities

	Initial	Extraction
Career guidance	1,000	0,443
The University of the South	1,000	0,460
The University of the North	1,000	0,287
The first-year students	1,000	0,356
The University of the West	1,000	0,489
First-year students	1,000	0,564
The program	1,000	0,614
The University of the East	1,000	0,596

The introduction	1,000	0,563
The introduction	1,000	0,463
The introduction	1,000	0,391
Interactive p	1,000	0,663
Having atten	1,000	0,673
Attending th	1,000	0,685
Proper guid	1,000	0,507
The departm	1,000	0,648
Tutors provi	1,000	0,615
First-year tu	1,000	0,606
The departm	1,000	0,576
Lack of fina	1,000	0,412
Insufficient l	1,000	0,571
Insufficient l	1,000	0,596
The academi	1,000	0,444
Environmen	1,000	0,437
Social Inter	1,000	0,401
Parental ad	1,000	0,415
Career Guic	1,000	0,655
Open Days	1,000	0,437
Advice from	1,000	0,226

Extraction Method: Principal Component

Component	Initial Eigenvalues			Total Variance Explained			Rotation Sums of Square	
	Extraction Sums of Squared Loadings			Rotation Sums of Square				
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance
1	6,069	20,230	20,230	6,069	20,230	20,230	3,260	10,932
2	3,169	10,564	30,794	3,169	10,564	30,794	3,188	10,626
3	2,198	7,326	38,120	2,198	7,326	38,120	3,147	10,490
4	2,017	6,722	44,842	2,017	6,722	44,842	2,849	9,495
5	1,847	6,155	50,997	1,847	6,155	50,997	2,836	9,454
6	1,671	5,570	56,567					
7	1,349	4,498	61,064					
8	1,272	4,239	65,303					
9	1,027	3,424	68,727					
10	0,996	3,320	72,047					
11	0,821	2,737	74,784					
12	0,748	2,494	77,278					
13	0,688	2,292	79,570					
14	0,652	2,173	81,744					
15	0,600	1,999	83,743					
16	0,581	1,935	85,678					
17	0,513	1,712	87,390					
18	0,471	1,569	88,959					
19	0,448	1,495	90,453					
20	0,411	1,369	91,823					
21	0,382	1,275	93,097					
22	0,346	1,153	94,250					
23	0,291	0,971	95,221					
24	0,282	0,939	96,161					

25	0,271	0,905	97,065					
26	0,229	0,762	97,828					
27	0,199	0,664	98,491					
28	0,173	0,577	99,069					
29	0,143	0,478	99,546					
30	0,136	0,454	100,000					

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
Career guid	0,357	0,361	0,414	-0,032	0,113
The Univers	0,402	0,218	0,484	-0,028	0,127
The Univers	0,375	0,174	0,306	-0,121	-0,089
The first-ye	0,504	-0,064	-0,020	0,113	-0,291
The Univers	0,628	-0,260	0,019	-0,002	-0,163
First-year st	0,498	-0,311	-0,047	0,193	-0,424
The program	0,452	-0,266	-0,017	0,379	-0,441
The Univers	0,528	-0,338	0,070	0,263	-0,359
The introdu	0,580	-0,033	0,192	-0,079	-0,354
The introdu	0,620	0,132	0,245	-0,217	-0,233
The introdu	0,547	-0,114	0,257	-0,288	-0,043
The introdu	0,545	-0,092	0,020	-0,271	0,108
Interactive p	0,505	-0,047	-0,332	-0,514	0,176
Having atten	0,547	-0,040	-0,389	-0,464	-0,076
Attending tl	0,450	-0,080	-0,473	-0,499	-0,052
Proper guid	0,390	0,342	-0,483	-0,069	-0,016
The departm	0,356	0,516	-0,467	0,179	0,075
Tutors provi	0,362	0,440	-0,166	0,507	-0,078
First-year tu	0,365	0,387	-0,212	0,527	-0,020
The departm	0,400	0,412	-0,413	0,204	0,182
Lack of fina	0,405	-0,267	0,074	0,093	0,403
Insufficient l	0,421	-0,321	-0,092	0,286	0,449
Insufficient l	0,537	-0,315	-0,040	0,219	0,400
The acaden	0,471	-0,226	0,107	0,091	0,390
Environmen	0,447	-0,265	0,289	0,061	0,282
Social Inter	0,482	-0,171	0,106	0,109	0,340
Parental ad	0,294	0,456	0,315	-0,082	-0,126
Career Guic	0,211	0,710	0,317	-0,058	0,056
Open Days	0,091	0,607	0,163	-0,080	0,165
Advice from	0,248	0,396	-0,008	-0,082	-0,026

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

**Rotated Component Matrix<sup>a</sup>**

		Component				
		1	2	3	4	5
Career guid	B5.1	0,011	0,175	0,636	-0,033	0,082
The Univers	B5.2	0,082	0,277	0,611	-0,043	-0,025
The Univers	B5.3	0,195	0,080	0,481	0,101	-0,022

The first-year	B5.4	0,532	0,102	0,126	0,147	0,156
The University	B5.5	0,548	0,313	0,105	0,280	0,009
First-year students	B5.6	0,730	0,117	-0,059	0,108	0,053
The program	B5.7	0,756	0,111	-0,072	-0,070	0,140
The University	B5.8	0,739	0,223	-0,003	0,014	0,020
The introduction	B6.1	0,568	0,072	0,357	0,223	-0,020
The introduction	B6.2	0,412	0,089	0,537	0,313	0,002
The introduction	B6.3	0,305	0,269	0,380	0,341	-0,193
The introduction	B6.4	0,177	0,334	0,231	0,440	-0,029
Interactive	B6.5	-0,004	0,233	0,064	0,775	0,068
Having attended	B6.6	0,204	0,077	0,041	0,781	0,122
Attending the	B6.7	0,132	0,038	-0,069	0,807	0,100
Proper guidance	B7.1	0,048	-0,037	0,061	0,440	0,553
The department	B7.2	-0,023	0,001	0,106	0,222	0,766
Tutors provide	B7.3	0,231	0,047	0,189	-0,164	0,705
First-year tutors	B7.4	0,213	0,108	0,122	-0,153	0,715
The department	B7.5	-0,028	0,154	0,089	0,203	0,709
Lack of final	B8.1	0,064	0,632	0,020	0,087	-0,002
Insufficient	B8.2	0,101	0,713	-0,159	0,030	0,162
Insufficient	B8.3	0,182	0,728	-0,060	0,106	0,135
The academic	B8.4	0,097	0,645	0,093	0,100	0,022
Environment	B8.5	0,178	0,593	0,187	0,026	-0,134
Social interaction	B8.6	0,123	0,598	0,127	0,089	0,063
Parental advice	C9.1	0,089	-0,090	0,618	0,019	0,132
Career Guidance	C9.2	-0,165	-0,099	0,732	-0,047	0,282
Open Days	C9.3	-0,290	-0,071	0,525	-0,004	0,268
Advice from	C9.4	-0,009	-0,069	0,350	0,157	0,271

Extraction Method: Principal Component Analysis. Rotation Method: Varimax

a. Rotation converged in 6 iterations.

Component Transformation Matrix					
Component	1	2	3	4	5
1	0,545	0,514	0,394	0,441	0,298
2	-0,350	-0,398	0,605	-0,045	0,592
3	0,075	0,153	0,655	-0,480	-0,558
4	0,286	0,230	-0,222	-0,757	0,493
5	-0,702	0,708	-0,016	0,005	0,077

Extraction Method: Principal Component Analysis. Rotation Method: Varimax