EXPERIENCES OF ADMINISTERING LARGE CLASSES: A CASE STUDY OF A FACULTY OF MANAGEMENT SCIENCES AT A UNIVERSITY OF TECHNOLOGY

By

Bonginkosi Ernest Shangase

Submitted in fulfilment of the requirements of the Master of Management Sciences in Administration and Information Management

Department of Information and Corporate Management
Faculty of Accounting and Informatics
Durban University of Technology
Durban, South Africa

APRIL 2023

APPROVED FOR FINAL SUBMISSION

Supervisor: Date: 04/04/2023
Dr JP Skinner

Co-supervisor: Date: 04/04/2023
Mr BP Qwabe

DECLARATION

I, **Bonginkosi Ernest Shangase**, wish to declare that this dissertation is my own work, except for the findings where indicated, and that all sources used in this study were properly acknowledged through complete referencing.

	04 APRIL 2023
Bonginkosi Ernest Shangase	**Date**

ABSTRACT

Gradual increases in student intake (massification) at South African universities have created significant difficulties for both academics and administrative support staff to effectively manage hundreds of students crowded into large lecture halls or classrooms. Large class discourses have been a focus of research for several decades, but none of these studies have investigated the administration of large classes in Universities of Technology in South Africa, nor have they focused on the integration of the experiences of all the principal stakeholders. The study investigated the experiences of students, academics, and administrative support staff in administering large classes, with specific reference to three departments at a selected University of Technology. The study used a mixed methods approach, involving questionnaires to students and lecturers and semi-structured interviews conducted with administrative support staff. The study's conceptual and theoretical framework was systems theory, enabling an overview of systems of lecturing, tutorials, and administration, as well as academic support systems, which all influence each other. The study findings established the value of systems theory for envisaging a closer coordination between different university respondent groups and operating systems. Results indicated that most academic staff members experience a heavy administrative workload, while secretaries were often not informed as to the nature and extent of their expected administrative duties. The findings also indicated that most students felt that large classes prevented them from receiving individual attention, and that the number of tutors available was insufficient. The study recommends the university to appoint more teaching assistants and tutors to assist academic staff with the large class administrative workload, while various teaching and learning strategies may help to deal more effectively with large classes. More detailed job descriptions should ensure greater awareness of expected support required from secretaries. Moreover, the findings provide academics, administrative staff, and students with insights to collaborative approaches that could address large class challenges effectively, as well as strategies for their administration. While the findings only apply to one university, they will be of interest to other South African universities of technology with similar class sizes.

Keywords*: Large classes; massification; university administration; system integration; student support services.*

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Almighty God for giving me the strength to pursue this research project; without Him, it would not have been a success.

My special thanks go to my Supervisor: Dr Jane Skinner for the exceptional supervision, support, and wisdom on this research project, which has enlightened me. You have made an enormous contribution to the knowledge I now possess.

Bongani Penuel Qwabe, my Co-supervisor, your support towards this research project will not go unnoticed, it is greatly appreciated.

I would also like to thank academic staff, students, and administrative support staff (secretaries) for participating in this study.

Dr Gill Henry (Statistician), thank you for your assistance.

I would like to express my gratitude to Pastor AN Mkhosana and (the late) Pastor MM Mkhosana and Family for funding my first undergraduate studies after spending so many years without funds to further my studies. This master's degree is dedicated to the Mkhosana Family for their significant contribution to my life. Words cannot express how grateful I am. Without them I would not be where I am today. Your contribution to my career, which has completely transformed my life, will always be appreciated. Even now, I am grateful to them and to God Almighty for using them for my career breakthrough. Thank you so much Mkhosana Family.

Lastly, I would like to specially dedicate this master’s degree to my father, Mr Bhekumuzi Shangase, and my (late) Mother, Mrs Thulisiwe MaGoge Shangase and Family (my brothers, sisters, nephews, and nieces), for the support and encouragements they gave me. I believe I have made you all proud!

TABLE OF CONTENTS

DECLARATION ii
ABSTRACT iii
ACKNOWLEDGEMENTS iv
TABLE OF CONTENTS v
LIST OF FIGURES xi
LIST OF ABBREVIATIONS xiv
CHAPTER 1: INTRODUCTION TO THE STUDY 1
1.1 INTRODUCTION 1
1.2 CONTEXT OF THE STUDY 1
1.3 RESEARCH PROBLEM 2
1.4 AIMS AND OBJECTIVES 3
1.5 RATIONALE FOR THE STUDY 4
1.6 RESEARCH METHODOLOGY 4
1.7 THEORETICAL FRAMEWORK 5
1.8 SIGNIFICANCE OF THE STUDY 6
1.9 SCOPE OF THE STUDY 6
1.10 DEFINITION OF TERMS 6
1.10.1 Large classes 6
1.11.2 Massification 7
1.11.3 Academic Administration 7
1.11.6 Student Support Service (SSS) 7
1.11 CONTENT OF THE CHAPTERS 8
1.12 CONCLUSION 9
CHAPTER 2: LITERATURE REVIEW 10
2.1 INTRODUCTION 10
2.2 INTERNATIONAL COUNTRIES' PERSPECTIVES ON LARGE CLASSES 11
2.3 AFRICAN COUNTRIES' PERSPECTIVES ON LARGE CLASSES 12
2.4 SOUTH AFRICAN PERSPECTIVE ON LARGE CLASSES 13
2.5 THE IMPACT OF LARGE CLASSES ON ACADEMIC STAFF 14
2.5.1 Workload impacts and distortions. 14
2.5.2. Teaching and Learning 17
2.5.3 Research 18
2.5.4 Community Service 18

2.5.5 Implications of large classes on instructional time and classroom management 19
2.6 THE IMPACT OF LARGE CLASSES ON STUDENTS 20
2.6.1 Students' engagement 20
2.7.2 Students' performance 20
2.7.3 Students' discipline 21
2.7.4 Student's learning environment. 21
2.8 OPPORTUNITIES OFFERED BY LARGE CLASSES 21
2.8.1 Strategies for teaching large classes 22
2.9 The role of Tutoring and Tutors in Higher Education 25
2.9.1 The value of tutorials: A South African perspective. 25
2.10 THE IMPACT OF LARGE CLASSES ON ADMINISTATIVE SUPPORT STAFF 27
2.10.1 The role of administrative support staff in administrative activities 28
2.11 THE ADMINISTRATIVE ROLE OF ACADEMIC STAFF 30
2.12 RELATIONSHIP BETWEEN ACADEMIC STAFF, ADMINISTRATIVE STAFF AND STUDENTS IN HEI'S 31
2.13 GAPS IN THE LITERATURE 33
2.14 THEORETICAL FRAMEWORK 33
2.15 CONCLUSION 35
CHAPTER 3: RESEARCH METHODOLOGY 36
3.1 INTRODUCTION 36
3.2 RESEARCH DESIGN 36
3.2.1 QUANTITATIVE AND QUALITATIVE DESIGN ASPECTS (MIXED METHODS) 37
3.3 TARGET POPULATION 38
3.4 SAMPLE SIZE 38
3.5 SAMPLING FRAME 39
3.5.1 CONVENIENCE SAMPLING 39
3.6 DATA COLLECTION 40
3.6.1 QUESTIONNAIRES/SURVEY 40
3.6.2 QUESTIONNAIRE DESIGN 41
3.6.2.1 QUESTIONNAIRE FOR ACADEMIC STAFF 42
3.6.2.2 QUESTIONNAIRE FOR STUDENTS 42
3.6.3 INTERVIEWS 43
3.7 PILOT TESTING OF THE QUESTIONNAIRE 44

3.8 ADMINISTRATION OF A QUESTIONNAIRE 45
3.9 ETHICAL CONSIDERATIONS 45
3.10 ANONYMITY AND CONFIDENTIALITY 46
3.11 RELIABILITY AND VALIDITY 46
3.12 DATA ANALYSIS 47
3.13 CONCLUSION 48
CHAPTER 4: DATA ANALYSIS, RESEARCH FINDINGS AND INTERPRETATION 49
4.1 INTRODUCTION 49
4.2 INTERPRETATION OF THE QUALITATIVE RESULTS 49
4.2.1 BIOGRAPHICAL ANALYSIS FOR ACADEMIC STAFF QUESTIONNAIRE 49
4.2.2 SECTIONAL ANALYSIS OF ACADEMICS' TEACHING EXPERIENCES ... 54
4.2.3 If your response to Question 5 was "Agree" or "Strongly agree", please list the resources you think are required in order to address large classroom challenge. 68
4.2.3.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Resources which lecturers believe are required in order to address large classroom challenges. 69
4.2.4 Indicate any additional challenges that need to be addressed in order to improve the administration of large classes. 70
4.2.4.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Additional challenges experienced by lecturers that need to be addressed in order to improve the administration of large classes. 70
4.2.5 What strategies are you currently using to overcome the challenges of large classes? 72
4.2.5.1 CONTENT ANALYSIS OF QUALITATIVE ANALYSIS: Strategies that were currently used by lecturers to overcome the challenges of large classes. ... 72
4.3 ANALYSIS OF DATA FROM THE QUANTITATIVE METHOD (STUDENTS QUESTIONNAIRE) 74
4.3.1 BIOGRAPHICAL ANALYSIS FOR STUDENTS' QUESTIONNAIRE 74
4.3.2 SECTIONAL ANALYSIS OF STUDENTS' PERCEPTIONS & EXPERIENCES 76
4.3.3. List the support services that the above centres (TLDC, Writing Centre, Student counseling) have provided to you, and which you find useful in helping students in large classes. 85
4.3.3.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Support services provided to students by TLDC, Writing Centre, and Student Counseling that they find useful in assisting students in large classes. 86

4.3.4 List other support services related to large classes that you would like to see provided by these support centers in the near future. 87
4.3.4.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Other support services related to large classes that students would like to see provided by these support centers in the near future. 88
4.3.5 State any other particular personal experiences from being in a large class. 89
4.3.5.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Other particular personal experiences from being in a large class. 90
4.3.6 What strategies do you use to overcome difficulties which you experience from being within a large class? 92
4.3.6.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Strategies students used to overcome difficulties which they have experienced from being within a large class. 92
4.3.7 Do you have any additional suggestions that you feel will help students in large classes at the university? 95
4.3.7.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Suggestions that students felt will help them in large classes at the university. 95
4.4 DATA FROM QUALITATIVE ANALYSIS (INTERVIEWS) 97
4.4.1 Do you encounter any challenges regarding administering a large number of students in your department? If so, what are those challenges? 97
4.4.2 How do large classes affect your daily administrative workload? 98
4.4.3 Do you think this institution has a clear workload model that is adhered to within your faculty? Please explain. 98
4.4.4 Are there any additional tasks related to teaching and learning in large classes that were assigned to you that previously were purely academic staff functions? If yes, what are those functions? 99
4.4.5 Do you get adequate support from lecturing staff in carrying out administrative tasks? Please explain what kind of support you get from academic staff. 99
4.4.6 When you were appointed, were you provided with a clear indication of the nature of administrative support that you would be asked to provide for academic staff especially, with large classes in your department? 100
4.4.7 To how many academic staff in your department do you provide administrative support? 100
4.4.8 What do you think needs to be done to minimize/address any challenges that may come with administering large classes? 100
4.5 CONCLUSION 101
CHAPTER 5: DISCUSSION OF FINDINGS 103
5.1 INTRODUCTION 103

5.2 DISCUSSION ON ACADEMIC STAFF EXPERIENCES IN TEACHING LARGE CLASSES 103
5.2.1 Administrative workload of academic staff 103
5.2.2 Stress levels 103
5.2.3 Administrative staff support to academic staff 104
5.2.4 Disciplining of students 104
5.2.5 Lack of resources 105
5.2.6 Layout of the lecture halls 106
5.2.7 Conducting assessments and provision of assessment feedback 106
5.2.8 Students' academic performance 106
5.3 DISCUSSION ON STUDENTS' PERCEPTIONS AND EXPERIENCES OF LARGE CLASSES 107
5.3.1 Individual attention from lecturers 107
5.3.2 Tutorial System 108
5.3.3 Students' engagement during lectures and class activities. 108
5.3.4 Students' motivation to attend classes 109
5.3.5 Academic support provided by support service centres to students in 109
large classes. (TLDC, Writing Center, Student Counseling) 109
5.4 DISCUSSION ON ADMINISTRATIVE SUPPORT STAFF EXPERIENCES ON LARGE CLASSES – (INTERVIEWS). 110
5.4.1 Administrative support to large number of students 110
5.4.2 Administrative workload 110
5.4.3 Additional tasks related to teaching and learning 111
5.4.4 Support from academic staff in carrying out administrative tasks 111
5.4.5 Nature of support should administrative staff provide for academic staff… 111
5.5 CONCLUSION 112
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS 113
6.1 INTRODUCTION 113
6.2 ACHIEVEMENT OF RESEARCH OBJECTIVES ON KEY FINDINGS 113
6.2.1 OBJECTIVE 1**:** To identify the experiences of academic staff members with regards to administering large classes. 113
6.2.2 OBJECTIVE 2: To determine students' perspectives on their experiences in relation to the administration of large classes and how these affect their learning. 117
6.2.3 OBJECTIVE 3: To understand the administrative support staff experiences with regards to the administration of large classes. 119

6.2.4 OBJECTIVE 4: To identify integrated approaches for addressing the challenges experienced. 120
6.3 SUGGESTIONS FOR FUTURE RESEARCH 123
6.4 LIMITATIONS OF THE STUDY 123
6.5 CONCLUSION 123
LIST OF REFERENCES 125

APPENDICES

Appendix A – Ethical clearance letter 143
Appendix B – IREC letter of information and consent form 144
Appendix C – Letter of requesting permission to conduct the study 147
Appendix D – Permission letter to conduct study 148
Appendix E – Academic staff questionnaire 149
Appendix F – Student's questionnaire 154
Appendix G – Academic secretaries interview schedule 158
Appendix H – Proof of editing 161

LIST OF FIGURES

Figure 4.1: Gender of the respondents ……. 51
Figure 4.2: Age of the academics ……... 51
Figure 4.3: Academic rank of the respondents ……. 52
Figure 4.4: Highest qualifications of the respondents ……. 52
Figure 4.5: Departments of the respondents ……. 53
Figure 4.6: Lecturing experience of respondents in years ……. 54
Figure 4.7: Employment status of respondents……. 54
Figure 4.8: I am able to discipline my students effectively in large classes…. 55
Figure 4.9: I am able to monitor my students' attendance in large classes…. 55
Figure 4.10: Lecturing large classes does not expose me to high levels of stress ……... 56
Figure 4.11: Conducting assessments in large classes is manageable ……... 57
Figure 4.12: In large classes I am able to provide assessment feedback timeously……... 57
Figure 4.13: In large classes I am able to identity at-risk students …… 58
Figure 4.14: In large classes it is possible to monitor my students' learning 58
Figure 4.15: In large classes I am able to engage with students during class activities ……... 59
Figure 4.16: Despite large class numbers I am able to get to understand my students' strengths and weaknesses..... 59
Figure 4.17: Large class numbers do not have a serious impact on my students' academic performance ……. 60
Figure 4.18: Teaching aids are as effective in large classes as they are in small classes ……... 61
Figure 4.19: The layout of the lecture halls is adaptable to large class sizes… 61
Figure 4.20: Teaching large classes online enables me to engage more with my students than when teaching in traditional contact lectures ……. 62
Figure 4.21: Conducting lectures to large classes online allows me to give my students more individual attention than when teaching in contact lectures …… 63
Figure 4.22: The administrative workload for large classes is manageable…. 63
Figure 4.23: Administrative staff members provide sufficient administration support to me for my large classes ……. 64

Figure 4.24: Despite additional administrative duties with large classes, I am able to perform other core academic activities (research & community engagement) ……. 65
Figure 4.25: I still find it manageable to teach the small groups formed by subdividing the large classes for lab and tutorial purposes ……. 65
Figure 4.26: Assistance required by academic staff in administering large classes ……. 66
Figure 4.27: Number of students per subject – 1st Subject ……. 67
Figure 4.28: Number of students per subject – 2nd Subject …… 67
Figure 4.29: Number of students per subject – 3rd Subject ……. 68
Figure 4.30: Number of students per subject – 4th Subject ……. 68
Figure 4.31: Lack of resources has an impact on effective teaching of large classes ……. 69
Figure 4.32: Gender of the respondents ……. 75
Figure 4.33: Race of the respondents ……. 76
Figure 4.34: Age of the respondents ……. 76
Figure 4.35: Program's respondents registered for ……. 77
Figure 4.36: Despite the large classes, I feel that I am noticed, and my concerns ……. 78
Figure 4.37: In large classes I still get individual attention from my lecturers… 78
Figure 4.38: In large classes I still feel motivated to attend my classes Frequently ……. 79
Figure 4.39: Feedback from lecturers is as timeous in large classes as it is in small classes ……. 80
Figure 4.40: Lack of resources in large classes does not affect my academic Performance …… 80
Figure 4.41: As part of a large class, I am in a small group tutorial…… 81
Figure 4.42: Besides being in a crowded classroom (when COVID laws permit), I still find it easy to read what is being projected on the screen by my lecturer …… 82
Figure 4.43: The layout of the lecture halls is adequate to accommodate us in large class numbers …… 82
Figure 4.44: In large classes (either contact face to face classes or online

classes) I still feel at ease to ask questions, to approach my lecturer, or others for help ……... 83
Figure 4.45: Being in large classes does not stop me from engaging in class Activities……. 84
Figure 4.46: Regardless of being in large class I do not loose concentration while the lecture is in progress ……. 84
Figure 4.47: Academic support is provided by support service centres to students in large classes - (TLDC) …… 85
Figure 4.48: Academic support provided by support service centres to students in large classes - (Writing Centre) ……. 86
Figure 4.49: Services provided by support service centres to students in large classes – (Student Counseling Centre).……. 87

LIST OF ABBREVIATIONS

COVID	Coronavirus Disease
CV	Curriculum Vitae
HE	Higher Education
HEI's	Higher Education Institutions
HoD's	Head of Departments
HRD	Human Resources and Development
IREC	Institutional Research Ethics Committee
IT	Information Technology
LMS	Learning Management System
MUT	Mangosuthu University of Technology
OMT	Office Management and Technology
PBL	Project Based Learning
QA's	Questions and Answers
SA	South Africa
SPSS	Statistical Package for Social Sciences
SSS	Student Support Service
SWD's	Students with Disabilities
TA's	Teaching Assistants
TLDC	Teaching and Learning Development Centre
UoT's	Universities of Technology
USA	United States of America
WIL	Work Integrated Learning

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

The study investigated the impact of massification and its effects on academic staff, students, administrative support staff and support services at a selected university of technology. It explains how current issues related to large class management faced by academics and students affect their teaching and learning, as well as how administrative support staff and support services units (Teaching and Learning, Student Counselling, and the Writing Centre) are affected and interconnected. This chapter will briefly discuss the context of the study, provide a rationale justifying the importance of the study and outline the research methods used. It will also define and clarify key terminology, briefly explain the conceptual framework, explain the significance of the study, and give an outline the content of the dissertation's chapters.

1.2 CONTEXT OF THE STUDY

Machika, Troskie-de Bruin and Albertyn (2016:375) highlight that the increase in numbers of students entering South African universities "creates a challenge to effectively manage hundreds of students gathered together in large lecture halls or classrooms" (Machika *et al*: 375). Several aspects concerning the large class phenomenon are known and accepted by South African academics. These include increased resource requirements, special lecturing skills, and appropriate facilities that allow for a variety of teaching methods, appropriate seating, and the latest technological resources.

Tjønneland (2017:2) shows that, despite these challenges, "this signifies a sharp rise in student numbers in South Africa and a major improvement in access to higher education" (Tjønneland, 2017:2). Most of the expansion is due to higher enrolment of black students. Rossouw (2018) agrees that tertiary institutions are experiencing rapid increases in student numbers and adds that "the complexities this brings have been exacerbated by unrest on campuses throughout South Africa as a result of the campaign for free higher education and the subsequent pressure to manage student fees" (Rossouw, 2018:253). These factors have contributed towards tertiary

institutions having to find innovative ways to ensure that teaching and learning can continue uninterrupted.

Chiwandire and Vincent (2019) point out that universities globally are experiencing a significant decline in government subsidies and an increase in student fees, which have negatively affected universities, in a variety of ways. For instance, McGrath, Henham, Corbett, Durazzi, Frearson and Janta (2015) conducted a comparative study which investigated admission systems to higher education across ten European countries, focusing particularly on how these countries manage the inclusion of students who suffer from disabilities (SWDs) (McGrath, et al, 2015). The study found that cutbacks in public funding resources reduced equity in admissions to higher education for many students (McGrath *et al.* 2015:9). The context of administering higher educational institutions at a time of diminished government subsidies and increasing student numbers is therefore a globally significant one.

However, it can be noted that no recent studies have addressed the administration of large classes within UoTs in South Africa, and none have involved the impact on various different stakeholders – students, lecturers, support services and administrative staff, which have been included in this study. This research hopes to help fill this gap.

1.3 RESEARCH PROBLEM

A large body of literature for an example, Asodike and Onyeike, 2016; Al-Obaydi and AL-Bahadli 2017 confirms that small classes are preferable to large class sizes in reaching optimum satisfaction of stakeholders, and optimum outcomes in terms of throughput rates, pass rates and quality of passes. This of course will admit of some exceptions, particularly with the case of able and powerful personalities in lecturing positions, but even these are impacted by the additional challenges encountered in administration where a lack of resources and of appropriate workspaces is added the problem of numbers (e.g., Mutia, 2018). In this situation, the issues can become chronic from an administrative and management perspective. That this is the case in most South African universities is indicated by the most recent Higher Education Management Information System (HEMIS) figures indicating that 40 percent of

students drop out of university in their first year of study, and that overall graduation rates are only 23 percent (HEMIS 2017: 84). It is within this context that this study is undertaken. The problem(s) are therefore almost a given, although their extent and nature, and the best ways of mitigating them in the chosen context of a representative South African UoT, are not known and are the focus of this study.

It appears that the gradual increase in student intake *(massification)* at the selected UoT has resulted in an increase in class size without a proportional increase in the number of academic staff members employed. This is posing serious challenges to both academics and administrative staff members. The personal experiences of the researcher, who is a lecturer in the Faculty of Management Sciences at the selected university, along with untested evidence, indicate that the challenges of administering large classes in this context have not been resolved. Lastly, research, along with experience of the researcher, also shows that students who attend large classes do not perform as well academically as those who attend smaller classes (for example, Diette and Raghav, 2015:273). Therefore, the focus of this research was to determine academics', students', and administrative support staff experiences with large classes in the Faculty of Management Sciences at the selected University of Technology, and, although the findings cannot be generalized beyond this faculty, there are lessons to be learned from the study that may be of interest to other institutions experiencing similar challenges.

1.4 AIMS AND OBJECTIVES

The main aim of this case study was to understand the specific experiences of academic staff, students, and administrative support staff in administering large classes. Three departments were identified within a Management Sciences Faculty in a South African University of Technology, situated within a large township, in order to identify positive ways of handling the challenges posed. In order to achieve this aim, the research set the following objectives:

- To identify the experiences of academic staff members with regards to administering large classes;
- To determine students' perspectives of their experiences in relation to the administration of large classes and how these affect their learning;

- To understand the administrative support staff experiences with regards to the administration of large classes.
- To identify integrated approaches for addressing the challenges experienced.

The critical questions were the following:

- What experiences do academic staff members encounter in administering and teaching large classes?
- What experiences do students encounter in studying in the context of large classes and how do these affect their learning?
- What experiences do support staff face in relation to the administration of large classes?
- What integrated solutions can be suggested to address the identified challenges?

1.5 RATIONALE FOR THE STUDY

The researcher's inspiration for conducting this research stems from his position as a lecturer in the Office Management and Technology (OMT) department at the selected University, where he has observed the problems and challenges of large class administration, and his desire to identify ways forward. Particular attention was given to how large classes affect academics administratively; how they affect students' academic performance and how they affect administrative staff's duties. The study focused on third year students during academic year 2021 from three (3) programs in the Faculty of Management Sciences at the selected University.

1.6 RESEARCH METHODOLOGY

A mixed methods approach was used, which included both quantitative and qualitative methodologies. Closed questions were used to collect quantitative data in two sets of questionnaires, one for academic staff and the other for students. Most of the statements in the questionnaires were statements to which respondents were asked to respond on a Likert scale that ranged from "strongly agree" to "strongly disagree." Qualitative data was obtained from the open-ended questions in the questionnaires and the 'additional comments' provided at the end of the questionnaires, and from the interviews with administrative staff. Questionnaires for academic staff were personally

distributed by the researcher to the academic staff offices. Eighteen academic staff responded to the survey out of a total of twenty-four academic staff members from the three departments namely: Office Technology, Human Resources Management, Public Administration and Economics that were identified for the study. Questionnaires for students were also distributed to them personally in class. From the total of 725 students who were enrolled for third year courses in 2021 across three departments identified for this study, 500 students responded to the survey, the other students being absent on the day the questionnaires were administered. All the questionnaires were accompanied by a letter of information and consent, explaining the aims of the study, and assuring respondents of the confidentiality of the information.

Semi-structured interviews with administrative support staff were used to collect further qualitative data. The study's target population is discussed, and the use of non-probability, convenience sampling as a method of selecting respondents for the study is explained and justified further in Chapter 3 of the dissertation. The population for this study comprised academics, students, academic secretaries, and the faculty officer.

1.7 THEORETICAL FRAMEWORK

The theoretical framework selected for this study is the systems theory, which is explained by Bridgen (2017:18) as “the interdisciplinary study of systems. A system is a cohesive conglomeration of interrelated and interdependent parts which can be natural or human-made. Changing one part of a system may affect other parts or the whole system” (Bridgen 2017:18). Luhmann and Talcott (2018) agree that **“**systems theory is an interdisciplinary theory about the nature of complex systems in nature, society, and science, and is a framework by which one can investigate and/or describe any group of objects that work together to produce some result” (Luhmann and Talcott, 2018). ‘Systems Theory’ was selected for this study because this way of understanding requires awareness of the interconnections of the different parts of the complex system which makes up the teaching and learning which takes place at any university. ‘Systems Theory’ involves the interdependence of different systems (in this case the administrative system, the tutorial system, support systems – academic, student counselling, and the lecturing system in a HE institution) which, taken together,

will enable the problem to be better understood and viable solutions more convincingly determined.

1.8 SIGNIFICANCE OF THE STUDY

Literature in the field widely confirms that large class teaching is less beneficial for throughputs, pass-rates, and quality of passes (i.e., educational outputs of the 'core business' of HE) than can be obtained with smaller classes. This problem is therefore well established but its current impact, and best mitigating tactics, for Universities of Technology in South Africa in the context of diminishing resources, is not currently known and is the subject of the research. This study should assist the university to better understand the experiences faced by students in large classes and how these affect their learning, and to understand academic and administrative problems associated with large classes, in order to provide students, lecturers, administrative staff and senior management with strategies as to how these challenges can be alleviated. It is intended that the study's results and recommendations will provide new insights into the nature of the problems and possible solutions. The findings of the study, although not generalisable beyond the university which is the subject of the case study, should, as suggested above, also provide some new information that is relevant to several South African public universities, all of which are grappling with issues of large-class administration, benefiting university officials, academics, policymakers, and other stakeholders.

1.9 SCOPE OF THE STUDY

The study was confined to a University of Technology in South Africa. It covered only three departments within the Faculty of Management Sciences. There are three faculties within the university of which this faculty is the largest. These departments were selected as each has large class sizes.

1.10 DEFINITION OF TERMS

1.10.1 Large classes

Researchers contend that there is no exact definition of a large class. This differs from one country to another and from one teaching situation to another. Obanya, Shabini and Okebukola (2010) point out that the idea of a 'large class' depends on the

discipline. For example, disciplines such as engineering, science, and medicine would normally have smaller numbers as opposed to arts, humanities, and social sciences which have larger numbers. However, the average perception of a large class could be set at approximately 50 students according to Boubabouri and Chadli, 2020.

1.11.2 Massification

Hornsby and Osman (2014) define massification as “a term used to describe the rapid increase in student enrolment that was witnessed towards the end of the twentieth century” (Hornsby and Osman, 2014:711). They further describe massification as a process that “challenges the traditional form of universities as centres of elite education where only a select few gain access” (Hornsby and Osman 2014:711).

1.11.3 Academic Administration

According to Sumer and Yuner (2021) explain that administrative support services enable basic program functions such as course planning, admissions, registration, maintaining student records, and administering financial services to be provided. Encyclopaedia Dictionary (2021) defines academic administration as “a branch of university or college employees responsible for the maintenance and supervision of the institution and separate from the faculty or academics” (Encyclopaedia Dictionary, 2021). While ‘administrative staff’ is the term commonly used in South Africa, the term ‘professional staff’ is increasingly applied in other countries. In the USA ‘administrative staff’ applies specifically to the top management positions in the university. This dissertation adopts the definition given here by Sumer and Yuner (2021)

1.11.6 Student Support Service (SSS)

Shaheen *et al* (2020) define Student Support Service (SSS) as services that deliver additional support to the student. These include educational assistance, including, academic, intellectual, and educational challenges. These support services also provide students with different advice and support concerning such issues as housing, financial support, health and wellness, and counselling (Shaheen *et al* 2020:223).

1.11 CONTENT OF THE CHAPTERS

This study consists of six chapters:

Chapter One provides a short overview of the study. With the support of current relevant literature, the research problem is outlined. The study's main aim and specific objectives, as well as the significance and scope of the investigation and an explanation of the theoretical framework, were all explained. The chapter concludes with a summary of each of the five chapters' contents.

Chapter Two provides a review of the literature relevant to the research, as well as further expanding and clarifying essential themes. The literature review considers examples of various large-class management practices applied in South Africa and abroad. Job descriptions for academic staff members and academic secretaries were provided by Department of Human Resources and Development at the selected University.

Chapter Three outlines the research methodology adopted in the collection and analysis of data in this study. Justifications are provided for the methodologies selected. The target population, sampling methods, data collection method and data analysis techniques used in this study are described and details of the questionnaire design are presented. Limitations and delimitations of the study are outlined, and ethical considerations are explained

Chapter Four provides a detailed analysis of the data based on an interpretation of the survey and interview session results. Quantitative data is presented in both tabular and graphic formats.

Chapter Five: provides a discussion of the main results. This chapter discusses all the data that were acquired during the research procedure in accordance with the aims and objectives of this study, in the light of the literature previously identified.

Chapter Six is the study's final chapter. It provides recommendations and conclusions based on the research findings and the literature (secondary data) discussed. This

chapter also includes recommendations for future research and a discussion of the study's limitations.

1.12 CONCLUSION

This chapter provided a synopsis of the dissertation and contextualized it. It includes a justification for the study, an explanation of the research aims and objectives, theoretical framework and a description of the methodology used to attain the intended results. The rationale for conducting the study was explained, a definition of terms was provided, and an outline of the chapters were presented. A detailed literature review will be presented in the chapter that follows. The literature review presents and examines secondary literature sources that are relevant to this study.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The primary purpose of a literature review is to evaluate each work in terms of its contribution to understanding the research problem, as well as to identify any gaps in the literature that may be found. (Fink, 2014). Hart (2018:3) further explains that a literature review is important because it provides further understanding of the topic, through discussion of what has already been researched, how it has been researched, and what the key issues are. Snyder (2019:333) adds that a literature review is a method of 'synthesizing' research findings and identifying areas where additional research is needed.

This chapter presents the literature concerning administration of large classes in higher education institutions internationally, in neighbouring countries, and in South Africa. It will discuss the impact of large classes on academic staff focusing on two broad categories: academic issues and academic administration. Academic issues include increased workloads and the distortions this may cause, involving teaching and learning, research, and community participation. Concerning academic administration, this chapter discusses academics' administrative role in the administration of large classes, academics' instructional time and classroom management. Thereafter it will provide strategies for teaching large classes and opportunities provided by large classes. The chapter also discuss the impact of large class sizes on students' learning, focusing on students' engagement, performance, discipline, and the learning environment. It further discuss the impact of large classes on administrative support staff, focusing on their changing roles towards teaching and learning, and their support roles in administrative activities. Therefore, this chapter explores the experiences of academics, students, and administrative support staff, focusing on their roles and responsibilities in the administration of large classes. Lastly, this chapter will also provide a theoretical framework of the study.

Large class has been a thorny issue for most academics in South African universities for the past three decades. There are several challenges associated with administration of large classes identified by different authors. Authors such as Marais

(2016) agree that overcrowded classrooms have been part of South African higher education for several years and are likely to remain a part for the immediate future and maybe even for the long-term. The increase in numbers entering South African universities results in a challenge to effectively manage these large groups of students in lecture halls or in smaller venues. To make provision for responsible massification that does not negatively affect the quality of students' ability to learn, it is necessary to identify the perspective of students and other stakeholders. Several aspects related to the large class phenomenon are well known and are accepted by South African academics (Machika, Troskie-de Bruin and Albertyn 2014:375). Lynch and Pappas (2017:199) find that the increasing access to higher education around the world is generally understood by academics as both a teaching and administrative problem because it adds a variety of challenges to classroom teaching that do not exist in traditionally sized courses.

2.2 INTERNATIONAL COUNTRIES' PERSPECTIVES ON LARGE CLASSES

Chiwandire and Vincent (2019:2) point out that universities everywhere are experiencing a significant decline in government subsidies and a consequent increase in student fees, which has negatively affected their functioning, including the support they are able to provide for students, and especially for students with disabilities McGrath et al (2015:5) conducted a comparative study which "analysed admission systems to higher education across ten European Union member countries, focusing on how these countries deal with the inclusion of Students with Disabilities" (McGrath *et al*, 2015:5). The study found that this reduction in public funding reduced or impacted negatively on equity in admission to higher education, particularly for those students with disabilities (McGrath *et al.* 2015:5). The context is therefore the ongoing issue of administering higher educational institutions at a time of diminished government subsidies and increasing student numbers.

An article published by the University of Texas in the USA (2016) found that larger classrooms affect the academic achievement of students because there are more distractions and there is less opportunity for personal interactions between lecturers and students. It also found that it is easy for a student to go unnoticed in a large crowd of students, and that a large classroom can therefore hinder students' success, so that they need to learn coping strategies.

Al-Obaydi and AL-Bahadli (2017:2) in the paper presented in Iraq, “the problems associated with teaching in large classes can be physical, psychological, and/or technical”. Al-Obaydi and AL-Bahadli (2017:2) affirm that the problems can be identified as the following:

- *“Discomfort*: Many teachers worry about the physical constraints imposed by large numbers in confined classrooms.
- *Control*: Some teachers feel worried by the discipline aspects of large classes.
- *Individual attention*: Many good teachers are concerned that they are neglecting the needs of their students as individuals.
- *Evaluation*: Teachers feel a responsibility for checking all their students' work but are unable to do so; and
- *Learning effectiveness*: All teachers want their students to learn. They are understandably worried if they do not know who is learning what”.
  (Al-Obaydi and AL-Bahadli, 2017:2)

2.3 AFRICAN COUNTRIES’ PERSPECTIVES ON LARGE CLASSES

A study conducted in Algeria by Aoumeur (2017:356) indicates that in large classes, students are more likely to be absent from classes. He finds that attendance in such contexts is very difficult to control, and that most lecturers believe that absenteeism should not be allowed and that an efficient attendance system should be instituted (Aoumeur 2017:356) this is not easy to achieve. This author also argues that the students who do not attend classes regularly miss opportunities to learn from their lecturers and other students. Those who attend regularly clearly have a better chance to master the content of the curriculum. He further established that “one of the most critical problems faced by students in large classes is the feeling of isolation” (Aoumeur 2017:356). Students are not only anonymous to the lecturers but also to one another. Also “students who perceive that they are anonymous often feel less personally responsibility for learning, have a decreased motivation to learn, and attend class less frequently” (Aoumeur, 2017:356).

A study conducted in Nigeria by Ayeni and Olowe (2016:65) found that in smaller classes lecturers spent more time with individual students, while large classes present more difficulties not only for classroom management, but also for student control, and for marking, planning, and assessment. These authors also affirm that lecturers are put under more strain when faced with large classes. In small classes, it is easier for lecturers to notice problems and to give feedback, identifying particular needs, and adapting their teaching to meet them. It is also possible to set individual targets for students in small class situations, and to develop better relationships with, and have more knowledge of, their students.

A study conducted in Zimbabwe, Ghana and Nigeria also found that classrooms that are severely overcrowded are a major cause of stress and burnout among lecturers (Marais, 2016). Overcrowding in Nigerian classrooms was found to have been the normal experience of lecturers since 2004, making effective teaching and learning difficult, and inculcating a sound teacher/student relationship almost impossible. Another study discloses that class sizes are also extremely high in most universities in Kenya, where classes with students' numbers ranging up to 200 occur frequently, again undermining effective teaching and learning (Marais, 2016).

2.4 SOUTH AFRICAN PERSPECTIVE ON LARGE CLASSES

Machika, Troskie-de Bruin and Albertyn (2015:375) found that "the increase in numbers of students entering South African universities creates a challenge to effectively manage hundreds of students together in large lecture halls or classrooms. Several aspects related to the large class phenomenon are known and accepted by South African academics. These aspects include increased resource requirements, in particular specialised lecturing skills, and sufficient and appropriate facilities that allow a variety of teaching methods, a flexible approach to seating, and improved technological resources" (Machika *at al* 2015:375).

Tjønneland (2017:2) notes the sharp increase in student numbers in South Africa, although this also shows a major improvement in access to higher education particularly for black students. Rossouw (2018:253) confirms that "tertiary institutions are experiencing rapid increases in student numbers, and the complexities this brings

have been exacerbated by unrest on campuses throughout South Africa as a result of the campaign for free higher education and the subsequent pressure to manage student fees" (Rossouw, 2018:253). All of these issues mean that tertiary institutions have to consider new ways to make sure that teaching and learning can continue without interruption.

Another study conducted in South Africa by Matoti and Lenong (2018) affirms that the issue of large classes in Higher Education is not new. They find that "teaching of large classes is at odds with the professional competence required of teachers" (Matoti and Lenong, 2018:174). Although their study focused on issues of teaching and learning in large, under-resourced science classes in high schools, their study indicates that the problem of large classes starts in high schools and therefore affects the intake of first-year students at universities. These authors also see it as important to look into effective strategies for promoting and maintaining student engagement in large classes (Matoti and Lenong 2018:174).

Moodley (2015:150) researched the difficulties faced by lecturers with large classes at the Universities of Limpopo and of Zululand in South Africa. He established that large classes are particularly prevalent in first-year courses across most disciplines. The study also confirms that lecturers did not enjoy teaching large classes and were often obliged to use traditional lecturing methods in these classes. Mulryan-Kyne (2010) as cited by Moodley (2015:153) notes that, while some lecturers are not troubled when faced with large class teaching, overall, there are significant problems that lecturers face regarding ensuring student learning, and their own effective functioning in large class settings (Moodley 2015:153).

2.5 THE IMPACT OF LARGE CLASSES ON ACADEMIC STAFF

2.5.1 Workload impacts and distortions.

Basarudin, Yeon, Yaacob and Yusof (2016) state that "*the workload of academic staff members is grouped into: Teaching and supervision (TS), Research and consultation (RC), Administrative work (AW), Publication (P) and Community service (CS*)" (Basarudin *et al.,* 2016). Perks (2013:15) indicates that "an academic workload identifies the different activities undertaken by members of academic staff and

allocates an agreed time 'budget' to each one". He further states that "this allows academics, their departments, and their institutions to construct a clear and comprehensive picture of who is doing what and how much time they are dedicating to it. It covers all members of academic staff, all activities, and all work-related time" (Perks, 2013:15). Miller (2019:633) points out that "many universities divide their academic workloads according to a model of 40 per cent teaching, 40 per cent research, and 20 per cent administration and service. However, increasing demands on academic time, make this balance hard to achieve, since teaching and administration frequently impinge on research time" (Miller 2019:633). Moreover, regular academic activities may not fit into the workload time available.

A study conducted by Al Hinai and Bajracharya (2014:19) as cited by Qwabe (2016) reveals that "most academic staff members are still not satisfied with the time they spend on administration" (Qwabe, 2016:18). In addition, Al Hinai and Bajracharya (2014) reports that academic staff members do 'complex work' in an increasingly demanding environment which adds to the amount of stress that they experience. Another study conducted by Shah, Jaffari, Aziz, Ejaz, Ul-Haq and Raza (2011:256) found that "in today's working world every employee, including academics, appears to be exposed to a workload problem and everyone is under a range of 'stress variables', both at work and in their personal lives, which can ultimately affect both their health and their work performance Hence, workload and stress issues are rising day-by-day, which increases the need for ongoing research aimed at finding ways to help resolve these issues" (Shah *et al.* 2011:256).

Basarudin, Yeon, Yaacob and Yusof (2016:74) highlights that "workloads of academic staff members are different according to their disciplines and the university they work for. Normally, workloads of academic staff go beyond the time they spend in classrooms teaching or the time they spend on research activities" (Basarudin, *et al,* 2016:74). They also point out that "the globalisation process has affected the higher education fraternity administratively and financially" (Basarudin, *et al,* 2016:74). These authors also found that academics are "trusted with large responsibilities that rob them of their academic freedom, provide them with more workload challenges in teaching, and face them with further accountability challenges" (Basarudin, *et al,* 2016:74). The above sentiments closely reflect the situation in the university that is being

investigated. For example, the University has three faculties namely: Management Sciences, Engineering and Natural Sciences. The Faculty of Management Sciences has the largest student intake compared to the other two faculties. For example, the Faculty of Management Sciences enrols up to 300 students per programme whereas the Faculty of Engineering takes less than 50 students in their programmes. Currently, the researcher in his programme is involved in numerous additional challenging responsibilities such as programme reviews, curriculum development, programme development, selection of new students, writing research proposals, papers and other publications, attending departmental and other committee meetings, participating in community engagement projects and general administration. All the above listed challenging responsibilities rob the researcher of his academic freedom and contribute towards work overload and distortions.

Scholars such as Nasir, Ahmad, Mohamed and Awang (2019) note that “the problem of overwork on account of the many responsibilities of academics is becoming more prevalent in the educational literature. Having up to 24 hours of teaching each week has prevented a good balance between academic and non-academic responsibilities being achievable”. Nasir *et al*, (2019:153) confirm that most academic staff members are now required to work more than normal working hours, further contributing to high levels of stress.

“Universities are the only organizations focused on dual core functions of knowledge creation and knowledge transmission through the process of research and teaching” (Hosain 2016:3). Academics’ must fulfil many responsibilities at the same time including lecturing, researching, and publishing, as well as holding administrative posts, being involved in committees, and performing community service, along with other professional work which may improve their university’s image (Nasir *et al.* 2019, Hosain 2016, Rahman and Avan 2016). Nnadozie (2015) adds that “academic activities are complex and multidimensional, and the complex nature of academic workloads must be considered in the process of model development” (Nnadozie, 2015:463). This author also notes the other duties involving academic administration and meetings and that the workload of an academic is the combined time spent on academic and administrative duties.

2.5.2. Teaching and Learning

Teaching and learning in large classes can present many challenges, both inside and outside of the classroom as explained by Dewi (2019). He points out that most teachers agree that teaching a small class is “easier, more exciting, and less time and energy consuming” than teaching larger classes. Large classes can present difficulties that small classes are less prone to.

Basarudin *et al.* (2016:76) note that the core of academic work, which involves teaching, learning and community engagement, now demands a deeper appreciation of the nature of student learning, with the current focus on learning outcomes, and higher demands of those courses that require a professional approach to university teaching. May (2020) states that current overcrowding can have negative effects on lecturers in the following ways:

- **“Teacher morale**: Teaching in a crowded lecture theatre is stressful because the lecturer, design lesson plans that allow students to do work that they can complete on their own, rather than involving group work or projects that require more space. Also, academics generally lack sufficient office space for personal work or for meetings with students.
- **Lecture halls resources**: Overcrowded lecture theatres often lack space for additional equipment such as computer stations, while science and art equipment may also need to be sacrificed”
  (May 2020).

Lloyd-Strovas (2015) concurs with many of the issues discussed above. Effective teaching and assessment strategies are crucial for effective student learning, but lecturers often feel that they cannot practise a variety of methods, such as higher-order questioning and active learning strategies. Biggs (1999) on the other hand, is of the opinion that effects of class size are varied and contextual. Biggs suggests that peer teaching is a very powerful teaching strategy which can be employed by lecturers when they have large classes. He further suggests that take-home assessment tasks, self- and peer-assessment could be another teaching strategy to be used by lecturers with large class sizes.

There are factors that need to be taken into consideration, for instance, the nature of the subject being taught, and the teaching spaces and facilities that are available for the resources required. The above issues reflect exactly what happens in the researcher's institution. The programs that are offered in the faculties of Engineering and Natural Science take a small number of students as compared to the Faculty of Management Sciences which takes many students. The above-mentioned challenges are currently being experienced by the Faculty of Management Sciences due to large class sizes, while the Engineering and Natural Science faculties are less affected.

2.5.3 Research

Academics are also expected to get involved in the process of research and publishing of new knowledge, as a contribution to society (Rahman and Avan, 2016). Academics are also expected to publish papers in reputable journals for performance appraisal. This is because "teaching and research have remained as core university functions universally and, since they are interdependent, academics are expected to excel at both" (Rahman and Avan, 2016:147). Nasir *et al*. (2019) add that the role of academics has required them to be involved in the whole range of activities and responsibilities including publications, consultations with students, and administrative work for both their profession and the community. However, time spent in administrative activities has left the academics with less time for research and professional development (Nasir *et al.* 2019:152).

2.5.4 Community Service

Community service involves academics' participation in committees or organizations beyond the university (Makhbul and Khairuddin, 2014). These activities can include services to government; to professional associations, or to public and community organizations, and activities such as the external examination of theses, and consultancy work involving other universities. Large class commitments often hamper community participation (Makhbul and Khairuddin, 2014).

Basarudin *et al.* (2016:78) also explain that lecturers have a responsibility to society in respect of both research (adding to knowledge) and to social welfare. These responsibilities as members of society involve establishing contacts with others, for

instance, industrial or professional bodies, in order to enhance the quality of their institution's academic programs (Basarudin *et al.* 2016:78). This can be done either locally or at international level by, for instance, delivering lectures or presenting their research findings. However, once again, the challenge of increased students' enrolment results in less time for community participation. All of these accumulated challenges require additional skills and strategies in order to cope.

2.5.5 Implications of large classes on instructional time and classroom management

According to Asodike and Onyeike (2016) the negative effects of large classes on academics' lecturing skills and classroom management require additional planning. They note that there is a need for F the physical and psychosocial environment required to administer large classes effectively. Large classes make time management more difficult, requiring more time to be devoted to completing an exercise rather than to substantive instruction. Task management and behaviour management are also more challenging, "leaving less time for actual instruction" (Asodike and Onyeike, 2016:31).

Jerez, Ortiz, Rojas and Henriquez (2018:766) argue that "large group activities are an undeniable reality of higher education institutions these days. They can be difficult to manage and administer but they also allow the development of significant learning experiences" (Jerez *et al.* 2018:766). These authors further elaborate that the way teaching and learning processes are handled becomes critical, as "this involves a process of planning, implementation, and evaluation of activities before, during and after the class which is very different from small or regular sized groups" (Jerez *et al.* 2018:766)

Opoku-Asare *et al.* (2014) affirm that "with large classes, teachers are not able to reach all students or adopt group methods to promote active student participation in learning activities and enable the students to gain a deeper and longer-lasting understanding of the topics, as well as the motivation for students to learn independently" (Opoku-Asare *et al.*, 2014:123). Furthermore, "teachers find it difficult to monitor student behaviour and maintain a high learner attention rate. In this situation, fewer students

can perform, and slow-paced students may be left behind and suffer" (Opoku-Asare *et al.,* 2014:123).

2.6 THE IMPACT OF LARGE CLASSES ON STUDENTS

2.6.1 Students' engagement

Marais (2016) finds that "overcrowding has a variety of disruptive consequences for student behaviour. For example, students cannot pay attention or participate at the required level of intensity because classmates are noisy and restive, thus affecting academic achievement negatively. Students, and particularly those who need extra support, cannot rely on individual care from lecturers" Marais (2016:3) while this author argues that the learning environment ought to support learners' motivation to participate in group or individual learning activities. Again, this research confirmed that "overcrowded classrooms tend to be teacher-centred, and learning is passive, with the result that students may lose motivation" (Marais, 2016:3).

Exeter, Ameratunga, Ratima, Morton, Dickson, Hsu, and Jackson (2010:761) agree that "active learning approaches have the potential to promote student engagement with lecturers, but this becomes more challenging as class sizes increase and teachers of very large classes face difficulty in ensuring that students enrolled in their course are engaged with the course content" (Exeter *et al.* 2010:761). Another study conducted by Esia-Donkoh and Antwi (2015) conceptualized student engagement in two ways, being, social engagement (how a student interacts socially) – that is with peers or lecturers in either socially engaging or in antisocial ways, and academic engagement (their active participation in the learning process) (Esia-Donkoh and Antwi, 2015). These scholars found that students in smaller classes, are generally more engaged, both socially and academically, leading to higher academic achievement.

2.7.2 Students' performance

Marais (2016) also found that excessive class size affects student performance negatively on account of the disciplinary problems often encountered in large classes. Students in smaller classes generally scored higher marks, this on account of the better, less disruptive, learning environment. Learning activities, such as group work, could take place more easily in smaller classes. Their findings indicated that if one or

more students behave badly, other students were influenced (Marais 2016, Cortes, Moussa, and Weinstein 2012). May (2020) adds that "students who are seated in proximity in a classroom may also find it difficult to focus on the lecture, also contributing to lower test scores" (May, 2020).

2.7.3 Students' discipline

Research conducted by Mustafa, Mahmoud, Assaf, Al-Hamadi and Abdulhamid (2015) confirms the above findings regarding classroom management. They find that larger classes are "noisier and more prone to pushing, crowding, and hitting, impacting negatively on classroom discipline. One lecturer often cannot cope with such situations in the classroom on his/her own and lecturers lose valuable lesson time in such circumstances because they spend most of the lesson time trying to control students" (Mustafa *et al.* 2015:178).

2.7.4 Students' learning environment

Imtiaz (2014) as well as Khumalo and Mji (2014) agree that overcrowded classrooms are "unsupportive learning environments and may even affect the learners' physical health" (Imtiaz, 2014:251). They found that overcrowded classrooms are "unhygienic, because if one learner has a contagious infection, then others can be easily infected" (Imtiaz, 2014:251). Drame and Kamphoff (2014) note that overcrowded classrooms are also challenging for students with attention or behavioural disorders, as well as for those with hearing or vision impairments.

However, there is evidence from the literature that strategies can be found for addressing and improving the situation even within situations of massification. This is discussed below.

2.8 OPPORTUNITIES OFFERED BY LARGE CLASSES

Some positive as well as many negative things have been reported by different authors regarding large classes in higher education, and a few scholars have investigated the special opportunities offered by large classes. A study conducted by Asodike and Onyeike (2016) argues that there is evidence for teaching in large classes giving lecturers the opportunity to improve their teaching and presentation skills, as well as

management skills and especially evaluation skills. With so many students, there are many opportunities to get peers to work together, compare notes, discuss issues raised in lectures, and benefit from the variety of opinions expressed (Asodike and Onyeike, 2016). These scholars also found that students in large classes have increased opportunities to share their ideas and experiences. If effectively managed, large classes can become involved in project work, where students learn to share responsibilities, developing valuable leadership and interpersonal skills that will be of value to them in the future (Asodike and Onyeike, 2016).

Jawitz (2013) argues that the "dominant view that large classes in higher education are a bad thing, which should be avoided wherever possible, is one that needs to be challenged. This scholar feels that not enough attention has been paid to the advantages and opportunities that exist and that lectures can still play an important role in student learning" (Jawitz, 2013). He argues that formal lectures are ideal for providing an overview of the discipline and for introducing and reinforcing the principal concepts and phenomena that students need to understand. Lectures can make interesting links between the course material, students' own lives, and the issues faced in the broader society. He points to the skills of motivational speakers who engage large audiences successfully (Jawitz, 2013), noting their strong sense of their own identity, their confidence in their authority, and their credibility. He feels that these are areas in which many academics, particularly those new to lecturing, need substantial support. Wood (2009) agrees that teaching large classes, by providing lecturers with a large and highly diverse population of students, should be seen as a positive opportunity for effective teaching and learning.

Thus, the literature indicates that large classes can offer both positive and negative opportunities for both academics and students, although large classes pose many challenges administratively.

2.8.1 Strategies for teaching large classes

Asodike and Onyeike (2016:31) argue that to teach effectively in large classes strategic grouping of students is required. It is possible to break large classes into groups of 15 or 20, particularly in situations where new or difficult information is going to be imparted (Asodike and Onyeike, 2016:31). These groups can either be tutorial

groups or else collaboration can be organised between groups of students within a lecture hall. It is also suggested that the lecturer can put students into smaller groups on a regular basis, with each member of the group given an opportunity to take a leadership role, ensuring that any member of a group can gain this experience and assist the lecturer. Group leaders can provide a range of supportive activities to the lecturer (Asodike and Onyeike, 2016) but without adequate planning, a lecturer is unlikely to be able to control a class, whether large or small. They believe that "who fails to plan, plans to fail" (Asodike and Onyeike, 2016:31).

Integrating Technology: Wilsman (2015) suggests strategies to help instructors handle some of the challenges associated with large classes. He suggests the use of online discussion boards as being good for all students but especially for quieter students who are normally reluctant to participate in a big group. He also suggests the use of clickers to encourage participation and also social media such as Twitter, Voice Threads, and Brightspace (Wilsman, 2015). In addition, Jawitz (2015) mentions that "investment in new technologies, including multimedia presentation technology and learning management systems such as Blackboard" are invaluable and adds that Blackboard "can provide significant learning experiences to large numbers of students at the same time. Podcasting and video recording technologies allow students to review what happened in class, while the use of mobile response technology, such as clickers, can facilitate interactive learning during lectures" (Jawitz, 2015:142). Within less economically developed countries, however, Tatnall (2019) acknowledges that barriers such as limited access to computers, limited funding, electricity cuts and lack of ICT training, may provide barriers to successful implementation. In this regard other researchers have suggested that universities should find fund raising strategies, such as offering short courses, in order to generate more funds to meet new technological requirements for Learning Management Systems – LMS's (Tatnall, 2019).

Teaching assistants (TAs) can also play an important role in class instruction as explained by Lynch (2017:203). He further elaborates that these will be more visible, vocal, and accessible for learning support than typical undergraduate classes that fail to use them. Undergraduate TAs provide extra eyes and voices. They are "sources of energy, working with groups and helping keep discussions on track" (Lynch 2017:203). Lynch also stresses that "peer teachers may also benefit from teaching, as it can

stimulate high level processing of the information required for the preparation, as well as the delivery, of education" (Lynch, 2017:203). Nguyen (2015:78) agrees that lecturers can use other strategies to cope with large classes: using group work and pair work; using role-play and oral presentations and, as Lynch suggests, using student leaders who can take responsibility for helping others, as group leaders, monitors, or teaching assistants. These strategies are also relevant to tutorials (Nguyen 2015:78).

According to Ramsden (2003) as cited by Moodley (2015) "with large classes it seems plausible that there would be limited interaction between students and lecturers in the classroom; a high level of student anonymity; and a course dominated by instructive teaching" (Moodley (2015:154). He therefore proposes "six principles to be used to ensure that quality teaching is still maintained, namely: a high level of interest in, and explanation of, their discipline; concern and respect for students and student learning; using appropriate assessment and feedback; providing clear goals and intellectual challenge to the students; promoting independence, control, and active engagement in the classroom; and a willingness to learn from other students taking their course. The universality of these principles provides the lecturer with the impetus for strategizing other ways to conduct large classes" (Ramsden 2003:145).

Based on above authors discussions, at the institution being investigated, students are subdivided into groups of 30 each for practical subjects due to large class sizes and limited infrastructural resources. In the content-based subjects', students are subdivided into small groups for task allocation (group work). Each group has group leaders to report back on the task given. Integration of technology has been implemented e.g., MS Teams, Blackboard, Moodle, Edmodo, and other Learning Management Systems (LMS's) especially during the Covid 19 pandemic to conduct lectures which provided opportunities for all students to participate in the course. Teaching assistants (tutors) are provided, and they also play a significant role in providing tutorials and a voice for lecturers to cope with large classes. At the selected UoT, tutorial programmes are coordinated by the Teaching and Learning and Development Centre (TLDC) who are responsible for the appointment of Tutors and the funding of the tutorial programme. The centre also provides training programs and support programs to Tutors and Teaching Assistant (TA's). While these are all aspects

promoted in the university literature, according to students' qualitative responses, material for online classes is often insufficient, tutorial numbers are large and tutors are not paid generously, indicating that the system could be improved.

2.9 The role of Tutoring and Tutors in Higher Education

In South Africa, postgraduate student tutors are given significant roles to play in supporting and developing student learning in higher education (Clarence, 2016). This author explains that tutoring duties can include, assisting in assessment or evaluation of students' work, including assignments and tests, and consulting with students beyond set tutorial times. This author acknowledges the valuable role tutors play in supporting students' learning but notes that there is a wide disparity in the kinds of professional or educational training and development provided to tutors by their universities and by the lecturers for whom they tutor (Clarence, 2016). De Smet, Van Keer, De Wever and Valcke (2010) also argues that the use of tutoring to enhance student development and success has been model used for a long time - always based on a close relationship between the student and the tutor. Lee, Hong, and Choi (2016) and Morillas and Garrido (2014:90) agree that tutoring programmes are an important aspect of academic institutions although they are only one way of developing student engagement. "Tutoring forms an integral part of a university's teaching-learning process and can be characterised as a basic strategy for improving students' academic success and professional goals" (Morillas and Garrido, 2014:90).

2.9.1 The value of tutorials: A South African perspective.

McKay (2016) states that many South African universities are grappling with tutor-related issues" (McKay, 2016:54). "A number of themes emerge from these studies. Within the context of massification, a tutorial system is seen as pivotal to broadening participation and improving throughput rates of underprepared students" (McKay 2016:54). McKay also affirms that tutorials have a positive impact on academic performance – so much so that skipping tutorials was linked to academic failure. "There was a statistically significant difference between the academic performance of students who attended tutorials and those who did not" (McKay 2016:54). Hlatshwayo (2013:219) adds that "much work has been conducted on the value that tutorials offer to students, such as promoting deep learning, enabling active engagement, lowering student stress levels, building cognitive strengths that support the acquisition and

retention of skills and knowledge, and promoting a passion for the discipline. Therefore, tutorials play a significant role in promoting student academic success" (Hlatshwayo, 2013:219).

Faroa (2017) argues that "the importance of tutoring in higher education can also be seen in its value for students who are at risk of dropping out, and for gender equality and the integration of minorities and/or previously excluded groups. By promoting equal opportunities to learn, equal access to educational resources and social cohesion, tutoring has a role to play in redressing inequalities, therefore tutoring can serve as a vehicle through which to tackle complex social problems" (Faroa, 2017:2) while also helping to address the challenges of large classes. In addition, Bettes and Burrell (2014:16) affirm that "complex social problems such as social inclusion should be tackled by processes and strategies which already exist in higher education. One such strategy may therefore be tutoring as a tool for engagement. Thus, the role of tutoring is multifaceted and implicit in teaching and learning, thereby fulfilling an invaluable role in student, graduate, and professional development as well as in promoting student engagement" (Bettes and Burrell, 2014:16).

Based on the above discussions from different authors and the researcher's personal experiences, tutoring has played a vital role in students' success within the institution identified for this study. Students are divided into small(er) groups from each course for tutoring purposes for them to have equal access to limited resources e.g., computer labs. However, due to an inadequate number of tutors and resource constraints, 300 students are typically divided into groups of plus/minus 50 students meaning that tutors in fact handle quite large numbers. For computer-based modules, students are divided into smaller groups of 30, each lab having 30 computers. Tutors are selected based on their academic performance, and the department monitors the selection process. TLDC provides them with training. They submit claims using student attendance registers obtained during tutorial sessions, and they are paid R50 per hour from the TLDC budget. Venues are however not adequate for the conduct of a sufficient number of tutorials.

These challenges impact administrators also but are only one of the issues experienced by the university's administrative staff in situations of massification.

2.10 THE IMPACT OF LARGE CLASSES ON ADMINISTATIVE SUPPORT STAFF

Brown (2020) finds that administrative and support staff are now playing an increasingly central role in higher learning institutions**.** This author sees the most noticeable change in their role as related to their increasing involvement in what was formerly understood as specifically academic work. This author sees this as the result of increasing workloads carried by academic staff on account of rising student numbers, leading to academics delegating some of their responsibilities to administrative staff. This author also found that administrative and support staff reported a growing involvement in teaching functions. Departmental secretaries are also taking on more tasks previously carried out by academics making their position increasingly important to the operation of academic teaching departments. This shift has, of course, important effects on these administrators themselves (Brown 2020). At the University of Technology being investigated, for instance, in the Faculty of Management Sciences, administrators are actively involved in the following duties which previously were purely academic functions: selection of students for undergraduate and post graduate studies and placements and monitoring of students for Work Integrated Learning.

Jung and Shin (2015) note the significance of these changing roles for global competition, claiming that the role of administrative staff members has become crucial in this context. The broader scope of work includes “quality assurance, teaching and research support, finance management, facility management and master planning, so that the competency of administrative staff is a core factor in organizational effectiveness” (Jung and Shin, 2015:881). These authors agree that “administrative staff play a critical role in planning, budgeting and international networking as well as supporting conventional teaching and research work. Universities have developed various training programs to improve administrative staff members' job competency” (Jung and Shin, 2015:881). This can be noted also at the selected university, where the academic secretaries provide administrative support services to academic staff with their research work, for example, data collection, distribution of surveys and collection of completed surveys, and organising focus groups for students and researchers (academics). These administrators also help students with their research work (proposals) if their research focus is in line with administration. They perform

mentorship duties to students who are placed within their offices for work integrated learning. Furthermore, they also provide administrative support services to academic staff in coordination of community outreach projects with different stakeholders. Based on the above involvement in different responsibilities their scope has become far wider than general office work. Pulda (2015) notes that teaching and administrative work are challenging in different ways, but both groups (lecturers and administrators) should be able to work together towards achieving the goal of enhancing the educational opportunities they offer to all students.

2.10.1 The role of administrative support staff in administrative activities

Davies (2018) notes that in this context, 'support' refers to all the administrative work which academic secretaries or administrators perform for academic staff in order to enable them to perform their own specific academic roles well and without being overburdened. He sees these administrators as playing a key role in all academic institutions. The role of administrator is both a challenging and varied field of work, whether they work in central administration or in specific university faculties or departments (Daves 2018). The duties devolved to departmental administrators vary from one university to another but always include being the main point of contact for both staff and students. Departmental administrators are responsible for non-teaching duties such as student admissions, course registration, and materials disbursement. They also administer faculty finances, including being involved in financial planning and monitoring. Other secretarial duties often include coordinating staff meetings, dealing with publicity, coordinating events, and dealing with complaints (Daves, 2018; Lamptey, Umude and Atteh 2020).

Lamptey *et al.* (2020) add that university administrators are also responsible for "non-teaching duties of employee welfare, records handling, students learning materials, students' navigation through college, career services and any other service that supports the university's objective of teaching and learning, research, and community service" (Lamptey *et al,* 2020:7). They point out that the services associated with some of the functions of a university's administrative staff are also associated with the functions of the teaching staff. These authors argue that this calls for a stronger and more strategic student-centred collaboration between the teaching and administrative staff to produce the desired calibre of students (Lamptey *et al*. 2020:7).

Abedi-Boafo (2015) states that “administration is an activity that requires getting the work of an organization done by utilizing and coordinating the efforts of others. In this context, the Faculty Officer has a role and responsibility to coordinate and direct affairs at the Faculty in getting things done within the University’s settings” (Abedi-Boafo 2015:140). He further points to the importance of the Faculty Officer as far as the administration of the University is concerned. S/he “is an essential working partner of the Registrar, in the University administration” (Abedi-Boafo, 2015:140).

The scope of secretarial duties at the selected university is outlined in a document (Job Description) obtained from the Department of Human Resources and Development. This states that academic secretaries should provide a general secretarial and administrative service to the Head of the Department and staff as directed by the HOD, specifically with regards to the following:

Secretarial Duties includes:

- Taking, compiling, and distributing meeting minutes;
- Typing correspondence, reports, and other documents;
- Handling and distributing correspondence and internal mail;
- Establishes and maintains efficient filing and record-keeping procedures;
- Manages the HOD's appointment calendar;
- Provides telephonic support (messages/queries);
- Schedule’s meetings; and
- Arranges travel/accommodation.

  (Department of Human Resources and Development, MUT)

Administrative support, for example:

- Process requisitions for printing of learning material;
- Monitors and orders stationery supplies;
- Maintains up-to-date staff timetables;
- Coordinate’s salary claims of tutoring staff;
- Helps with student registration formalities, e.g., screening student results;
- Oversees maintenance of office equipment;
- Liaises with non-academic internal departments as required; and

- Helps coordinate experiential visits of students involved in experiential programmes.
  (Department of Human Resources and Development, MUT)

Reception, for example:

- Staffs departmental/programme enquiry counter to assist with and/or redirect student queries; and
- Receives and welcomes guests and visitors.
  (Department of Human Resources and Development, MUT)

Records, for example:

- Maintains accurate and up-to-date students' records;
- Maintains test and examination master files;
- Processes all diploma applications prior to submission to examination department;
- Organises distribution of logbooks to students involved in experiential learning programmes
  (Department of Human Resources and Development, MUT)

2.11 THE ADMINISTRATIVE ROLE OF ACADEMIC STAFF

While administrative staff duties are increasingly overlapping with academic duties, as discussed above, it is also true that "academic staff are responsible for more administrative duties in areas such as admissions, timetabling, examinations, and assessment of progress and student attendance" (Smith, 2020). While higher education lecturers are "employed by universities and higher education establishments to undertake teaching, research, and administrative duties within a specialist subject area" (Suragee, 2020), This author further identified the following administrative and semi-administrative roles and responsibilities undertaken by academics in higher education:

- Selection of course applicants.
- lecture planning, preparation, and research
- contact and teaching time with students.
- checking and assessing students' work
- encouraging personal development via tutorial or pastoral work

- invigilating examinations
- attending staff meetings
- general administration
- writing research proposals, papers, and other publications
- reading academic journals
- supervising PhD students and research staff
- managing research budgets
- attending and speaking at conferences and seminars.
  (Suragee, 2020)

Ayorinde, Haruna, and Ezra (2017) note that “academic staff may carry a full academic workload and also be involved in the administrative work of the institution. This may lead to inefficiency as job efficiency of academics will be optimal only when they are not stressed in their work” (Ayorinde *et al.* 2017:42).

Qwabe (2016:18) argues that “academic staff members (junior lecturers, lecturers, and senior lecturers) are all required to participate in and contribute to academic administration. This includes student admissions, timetabling and examinations. However, it is noted that senior lecturers perform more administrative duties than their more junior colleagues. Their additional academic administration includes supervision of staff as delegated by the HOD, administration and management of subject, tuition, and research, and they may undertake projects or additional duties. For example, research coordination, quality promotion, industrial liaison and external engagements are all expected of senior lectures but not of less senior academics” (Qwabe 2016:18).

2.12 RELATIONSHIP BETWEEN ACADEMIC STAFF, ADMINISTRATIVE STAFF AND STUDENTS IN HEI’S

Shahzad, Irshad, AJKU, Shahid, Nawaz and Scholar (2016) state that “these three pairs of relationships are organized according to three types of location: the pedagogical relationship, administrative contacts, and social exchanges. However, the pedagogical relationship is dominated by the relationship between teacher and student”, but she also saw that “the role of non-teaching staff is influenced by relationships between students themselves (mutual aid, collective work)” (Shahzad *et al*. 2016:33). “Similarly, the contacts students make with non-teaching staff are not

only administrative in nature but often relate directly to the lessons themselves. In this sense, the personal administrative staff can be considered para-teaching staff" (Shahzad *et al*. 2016:33).

Bovill and Felten (2016) find that there is limited literature regarding the role of administrative staff in universities, "and much of what there is focuses on perceived tensions between non-academic and academic staff. For instance, McInnis (1998) found that non-academic staff generally have a negative view of their relationship with academics and that academic staff are often perceived as guilty of undermining or undervaluing administrative skills" (Bovill and Felten, 2016). Conway (2012) also indicated that "the relationship between academic and administrative staff members in universities had become increasingly strained, causing a rift between them" (Conway, 2012: 37). An additional issue was raised by Teferra and Altbach (2004) who found several years ago that "non-academic staff of African educational institutions were beginning to assume a disproportionate presence in HEIs and that they were therefore beginning to be perceived by academics as taking away the resources needed for the basic functions of universities which are teaching and research" (Teferra and Altbach, 2004:31).

Welsh and Metcalf (2016) conclude that "the disconnection between academic staff and administrative staff members reduces their opportunities or weakens their ability to work as a team or collectively" (Welsh and Metcalf, 2016:445-468). However, it has also been claimed by Kuo that "academics and administrative staff members in universities play an equally critical and central role in higher education in fulfilling the missions of education, research advancement and public service" (Kuo 2017:43) and Kuo's study pointed also to "situations where academic staff and administrative staff members show high levels of respect towards each other's intellectual and professional contributions" (Kuo 2017:43).

Darabi, Macaskill, and Reidy (2017) reveal that "with the increasing number of students, heavy workloads and administrative burdens, poor administrative and managerial support are identified as sources of stress amongst academics in a predominantly teaching-focused university" (Darabi, *et al*, 2017:576). As discussed above, "heavy workloads due to increases in class sizes are identified as another

stressor at work as academics feel that they cannot deliver as well as they would like" (Darabi *et al.* 2017: 576). In addition, this study reveals that "academics attribute aspects of this heavy workload to the quantity of administration they are required to undertake. They believe that increasing administration is wasted time that they could spend on teaching and other aspects of their work and that it should be done by administrators. Increased demands of administrative work interfered with both teaching and research amongst academics. Poor levels of support for administration and what appeared to be poor local management are concerns for many academics, reporting that it increased their stress levels" (Darabi *et al.* 2017). Academics in the current study emphasise support from colleagues and time management as positive coping strategies. Kinman and Wray (2013) also reported that "receiving support from colleagues can reduce stress at work" (Kinman and Wray, 2013).

2.13 GAPS IN THE LITERATURE

It is noted that none of the studies discussed above have addressed the recent or current experiences with regards to the teaching and administration of large classes specifically in UoTs in South Africa, and none have involved a combination of the different stakeholders – students, lecturers, support services (academic support, student counselling, writing centre) and administrative staff, which have been included in this study. Therefore, this research intends to fill this gap.

2.14 THEORETICAL FRAMEWORK

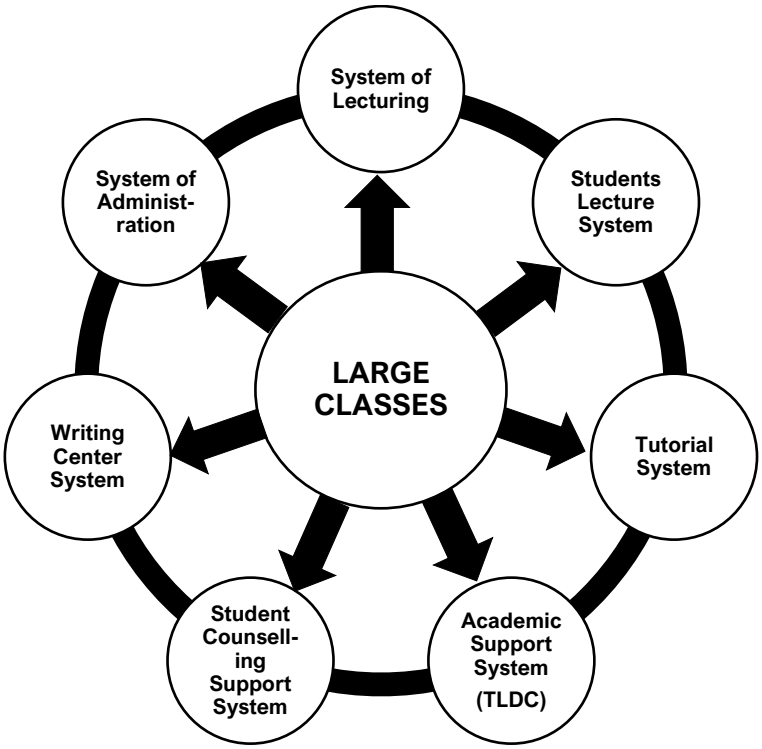
A conceptual framework "is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied" (Adom, Adu-Gyamfi, Agyekum, Ayarkwa, Dwumah, Abass, Kissi, Osei-Poku and Obeng-Denteh, 2016:439). They further state that "it is linked with the concepts, empirical research and important theories used in promoting and systemizing the knowledge espoused by the researcher. Furthermore, it is the researcher's explanation of how the research problem will be explored. Therefore, the conceptual framework presents an integrated way of looking at a problem under study" (Agyekum *et al*: 439)

Akech (2017) agrees that "the conceptual framework describes and explains the concepts used in the study, their relationships with each other, and how they are to be measured. It is like a mind-map or created image to enable easier understanding"

(Akech, 2017). Miles and Huberman (1994) opine that conceptual frameworks can be "graphical or in a narrative form showing the key variables or constructs to be studied and the presumed relationships between them" (Miles and Huberman, 1994:18).

This study adopts an interpretivist, pragmatic paradigm which accepts "that truth is constructed by individuals within their context" (Bougie and Sekaran, 2020: 23). It also adopts the insights of systems theory as relevant to the various systems within the university administration with which it is concerned. Kapp *et al.* (2017) define 'Systems thinking' as "an approach to a problem that considers how components within the larger structure operate and interact over the lifecycle of the system and how to optimize the design, implementation, and evaluation of that system. Systems thinking' can best be described as the application of system concepts to frame our understanding of the world, and it is also about possible future action—what ought to be or could be" (Kapp *et al*. 2017). They further elaborate that a system "includes at least two elements that interact; the elements are all interdependent and are integrated in ways that continually affect each other in feedback loops over time and which operate as a whole towards a common purpose" (Kapp *et al*. 2017). For this study the following systems will be included: the system of lecturing, the system of administration, the tutorial programs, and academic support systems, including counselling, the writing centre and the TLDC - all of which influence each other. It is believed that this approach will allow for better informed recommendations than if the problem were researched only from, for instance, the students' point of view. Systems theory to be used in this study is illustrated below in diagram 1.

Diagram 1: Systems Theory



2.15 CONCLUSION

This chapter presented relevant literature on massification and perspectives of large classes in international and neighbouring countries, and in South African. It included an overview of the impact of large classes on academic staff, students, and administrative support staff, and the interrelationship between these three principal stakeholders in Higher Education Institutions. The conceptual framework involving systems theory was explained and some of the strategies for teaching large classes involving the challenges and opportunities offered by large classes were also discussed. It can be noted that none of the literature was found to focus on South African Universities of Technology, and none of them included the various systems within the university which all have an impact and are in various ways dependent on each other. The goal of this study was to close that gap. The next chapter provides a detailed overview of the research methodology that was employed in the study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research approach used in this study is described and explained in this chapter. The research design, target population, sample size, sampling frame, sampling type, and data collection methods will be discussed, including questionnaire types, questionnaire pretesting, questionnaire administration, reliability and validity, ethical considerations, and how the data were analysed will be explained. Interview schedules and interviews conducted will also be discussed.

3.2 RESEARCH DESIGN

The research was designed within an interpretive research paradigm, which accepts that reality is socially constructed. According to Almalki (2016), “study design is largely concerned with the researcher's goals, uses, objectives, intentions, and plans while working within the constraints of location, time, money, and availability” (Almalki 2016:290). He further mentions that “any research design is a reflection of the researcher's ideas. Researchers must ponder on the tactics they intend to utilize inside their study, which will guide their methodology, and they must–seek to justify–the knowledge claims and theoretical viewpoints that they bring to any research” (Almalki, 2016:290). Creswell (2017) agrees that “researchers must question themselves about the knowledge claims and theoretical perspectives they bring to any research, reflect on the strategies they intend to use within their study, which will inform their methods, and question how they will collect and analyse information” (Creswell, 2017:1). In order to answer the researcher's questions about the phenomena of large classes, this study used both quantitative and qualitative methods (that is, mixed methods) in the setting of a case study.

According to Heale and Twycross (2018) “a case study is an in-depth investigation of a person, a group of people, or a unit where the researcher investigates in-depth data relating to several variables” (Heale and Twycross, 2018:7). Rashid (2019) defines case study research as “a methodology that helps in exploration of a phenomenon within some particular context through various data sources, and it undertakes the exploration through a variety of lenses in order to reveal multiple facets of the

phenomenon. In a case study, a real-time phenomenon is explored within its naturally occurring context, with the consideration that context will create a difference" (Rashid 2019).

A case study was chosen for this study because the objective was to understand the experiences of academics, students, and administrative support staff within the university context, most specifically their experiences with the administration of large classes. The case could not be considered without the context within which it occurred.

3.2.1 QUANTITATIVE AND QUALITATIVE DESIGN ASPECTS (MIXED METHODS)

Da Silva (2017:4) defines a mixed methods study as one in which quantitative and qualitative methodologies are purposefully combined or integrated as part of the research. Schoonenboom and Johnson (2017) add that "mixed methods research encompasses a researcher or a group of researchers combining elements of both qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, and inference techniques) for the broad purposes of breadth and depth of understanding and corroboration" (Schoonenboom and Johnson, 2017:108). Creswell and Clark (2017) add that mixed methods research "provides insights that go beyond distinct quantitative and quantitative outcomes. Researchers get fresh knowledge that is more than the sum of the two parts by integrating the methodologies" (Creswell and Clark, 2017:13). As a result, questionnaires and interviews were used to obtain both quantitative and qualitative data from the respondents in this study. The researcher used questionnaires to collect information from respondents before conducting interviews with other respondents who were also targeted for this study. The information obtained from the student questionnaire covered many of the same questions asked in the interviews with both academic and administrative staff, allowing facts and experiences from different respondents to be corroborated. Carter, (2014) define this 'triangulation' as "the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena" (Carter, Arshad and Mason, 2014). They further state that "triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources" (Carter *et al,* 2014).

3.3 TARGET POPULATION

McLeod (2019) defines a target population as the whole group of people from which the sample will be drawn. Sekaran and Bougie (2019) add that "the target population is the total group of people, events, or items of interest that the researcher desires to explore in order to draw conclusions (using sample statistics)" (Sekaran and Bougie, 2019:222). The target population for this study consisted of 780 respondents who were made up of academic staff, students (3rd Years), and non-academic support staff in the following departments: Office Technology, Public Management, and Human Resources Management, all of which are within the Faculty of Management Sciences. These three departments were chosen for the study because they have the largest number of students enrolled throughout the institution's three faculties, which made them appropriate for investigating the phenomenon of large classes.

The following is a list of the respondents who made up the study's target population:

Students' Population Size (3rd Years only): (185) Students from the Department of Office Technology, (280) Students from the Department of Human Resources Management. (260) Students from the Department of Public Administration and Economics.

Academics' Population Size: (08) Academic staff from the Department of Office Technology, (08) Academic staff from the Department of Human Resources Management, (08) Academic staff from the Department of Public Administration and Economics.

Administrative Staff Population Size: (01) Secretary from the Department of Office Technology, (01) Secretary from the Department of Human Resources Management, (01) Secretary from the Department of Public Administration and Economics and (01) Faculty Officer from the Faculty of Management Sciences. HEMIS Department at a selected University of University was contacted for information on departmental registration figures and staff sizes per department within the Faculty of Management Sciences identified for the study.

3.4 SAMPLE SIZE

Friedman, Furberg, DeMets, Reboussin and Granger (2015:165) explain that the sample size of the study should be considered early in the planning phase, otherwise

there may be no formal sample size estimate. Instead, the size of the study is determined by the number of participants accessible to the researcher at any given time. In this research study the number of students who attended a certain lecture in each of the identified classes at a third-year level in the year 2021, as per each department identified for the study, was used to determine a convenience sample in this study. A census approach was used for academic staff and administrative support staff. “The census method is a method of statistical enumeration where all members of the population are studied” (Leedy and Ormrod, 2014:50).

A separate questionnaire was designed and administered to all lecturing staff. Further probing was found to be essential, thus follow-up interviews with three lecturing staff were conducted. Interviews were conducted with all departmental secretarial staff who had been identified for the study in order to understand their experiences in relation to administering large classes and the Faculty Officer was included in the study since he is the only person in the Faculty of Management Sciences who has an overview over most of the administrative affairs for students.

3.5 SAMPLING FRAME

Martinez-Mesa, González-Chica, Duquia, Bonamigo, and Bastos (2016) state that “a sample frame is a set of individuals that can be selected from the target population given the sampling process used in the study” (Martinez-Mesa *et al*:237). Sekaran and Bougie (2016) define a sampling frame as “a representation of all units or elements in the population from which the sample is drawn” (Sekaran and Bougie 2016:268). They also point out that a sample size of 278 should be sufficient to validate the research findings if the population is 652 (Sekaran and Bougie 2016).

3.5.1 CONVENIENCE SAMPLING

Shantikumar (2018) explains that convenience sampling is perhaps the easiest method of sampling, because participants are selected based on availability and willingness to take part. “Although useful results can be achieved, they are subject to significant bias since individuals who choose to participate are likely to differ from those who do not (volunteer bias), and the sample may not be representative of other factors such as age or sex”. “All non-probability sampling approaches have the

potential of volunteer bias" (Shantikumar 2018; Sekaran and Bougie 2019). Sekaran and Bougie (2019:233) add that convenience sampling is inexpensive and simple to conduct, but there is no way of knowing how representative the research results are. It is frequently utilized to get quick information (Sekaran and Bougie, 2019).

Because it would be difficult to deliver the questionnaire to all the students in the study groups, the researcher employed non-probability sampling (convenience sampling) for this study. "Convenience sampling, also known as incidental or opportunity sampling, involves selecting the nearest individuals to act as responders and repeating the process until the needed sample size is attained or until those who are available and accessible at the time are chosen" (Amir 2016:20). This was accomplished by getting the views of students who attended a lecture on a day that was convenient for the researcher and a lecture. It was noted that there were no bias in the selection of this group.

3.6 DATA COLLECTION

Kabir (2016:202) defines data collection as the process of acquiring and measuring information on variables of interest, in an established systematic manner that allows one to answer stated research questions, test hypotheses, and evaluate outcomes. This study's primary data was collected by means of questionnaires and interviews, while secondary data was collected from literature sources.

3.6.1 QUESTIONNAIRES/SURVEY

"A survey instrument is a set of pre-defined questions used to gather information from people in person, over the internet, or through other means" (Phillips 2017:8). Questionnaires are "one of the most frequently used data collection tools" (Taherdoost 2016:2). This author explains that the primary goal of a research questionnaire is to collect relevant information in the most accurate and valid manner possible. Stefan (2018) points out that additional benefits include the fact that "questionnaires are the most cost-effective ways to collect quantitative data, particularly self-administered questionnaires, which eliminates the need to hire surveyors to conduct face-to-face interviews and provides the ability to quickly collect large amounts of information from a large number of people in a relatively short period of time" (Stefan, 2018). He also

points out that questionnaires provide a quick approach to obtain data, and that questionnaire surveys allow respondents to remain anonymous. The researcher chose to employ questionnaires for this study for the reasons stated above.

3.6.2 QUESTIONNAIRE DESIGN

Etikan and Bala (2017:220) suggest that before constructing any questionnaire, the researcher must consider the goal and objectives to be attained, as well as the questionnaire's duration and administration time. The questionnaire should be well written and presented in a professional manner to capture the respondent's attention. The questionnaire arrangement should begin with easy questions and end with more difficult ones. This study used a questionnaire to examine academic staff's current experiences with administration of large classes, as well as students' experiences and the impact on support staff services. The researcher was able to collect data efficiently across the three departments of the Faculty of Management Sciences by using questionnaires for this investigation. He personally distributed the questionnaire to the academic staff, and completed questionnaires were collected from departmental secretaries. The researcher also gave the questionnaire to students personally, and completed questionnaires were collected from class representatives. Students and academic staff were given the opportunity to fill out questionnaires. There were both open-ended and closed-ended questions on both sets of surveys. Participants were asked open-ended questions to allow them to construct and express their own thoughts and reactions. The statements on the questionnaire employed a Likert-type rating scale with the following categories: strongly disagree/disagree/neutral/strongly agree/agree, with number ratings ranging from 1 to 5. The space for "additional comments" was provided to allow respondents to add any information that was not covered in the Likert scale questions. (See Appendix F)

A Letter of Information and Consent Form was included in each questionnaire (see Appendix C). The title of the research study, the researcher's name, the supervisor's name, the objective of the study, the methods for filling out the questionnaire, and any risks or benefits to the participants were all included in this letter. The participants were told that they could withdraw the study at any moment and that their identities and confidentiality would be protected. In the case that participants had any problems or questions, the responsible persons' contact information was provided. The above

information was presented to reassure participants that proper ethical procedures had been followed. Respondents signed the consent forms.

3.6.2.1 QUESTIONNAIRE FOR ACADEMIC STAFF

The purpose of this survey was to identify experiences that academic staff members face when teaching and administering large classes in the Faculty of Management Sciences at the selected university. The full-time and part-time academic staff questionnaire contained eight pages and two sections (section A and B), as well as a letter of information and consent form. Section A, which dealt with biographical facts, included seven questions (numbered 1.1 to 1.7) that asked about age, gender, race, academic rank, highest qualification, lecturing experience, work status, and department affiliation. For statistical considerations, this was included in the study. There were twenty-three questions in Section B. (2.1 to 2.23). Some of the questions were closed, while others were open-ended, allowing respondents to provide justifications for their responses. At the end of the questionnaire, there was also space for additional comments (see Appendix E). With the use of the material from the literature review, questions were created.

3.6.2.2 QUESTIONNAIRE FOR STUDENTS

The purpose of this survey was to learn about students' perspectives and experiences with large classes, as well as how this affects their academic achievement. As previously stated, the student questionnaire was divided into two portions (Section A and Half B), with the first section containing biographical information and the second section containing open and closed questions (see Appendix B). Section A included biographical information such as age, gender, race, academic level, and department affiliation. For statistical considerations, this was included in the study. Section B was created to collect students' thoughts and experiences. Closed and open-ended questions were included in Section B, allowing respondents to provide explanations for their responses. At the end of the questionnaire, there was space for further comments. Questions were created with the use of the material from the literature review.

3.6.3 INTERVIEWS

“Interviews can provide researchers with extensive and thorough qualitative data for understanding participants' experiences, how they characterize those experiences, and the meaning they make of those experiences” (Castillo-Montoya 2016:811). As a result, the researcher chose to conduct interviews to learn more about the participants' perspectives on this phenomenon. Interviews were conducted with administrative support staff (departmental secretaries and faculty officer) in the following departments of the Faculty of Management Sciences: Office Technology, Human Resources and Public Administration, and Economics.

3.6.3.1 SEMI-STRUCTURED INTERVIEWS

“Qualitative semi-structured interviews are one of the most common and commonly utilized data collection methods in the social sciences”, as emphasised by Evans and Lewis (2018:6). They are useful since they allow researchers to investigate subjective perspectives and collect detailed accounts of people's experiences. Evans and Lewis (2018) further explain that “an interview schedule is typically employed, which allows the researcher to address a specific topic while enabling the respondent to react in their own words and explore concerns and themes that are important to them” (Evans and Lewis, 2018:6). As a result, the interview “should be guided by the schedule, but it should also allow for the development of additional significant issues throughout the interview. The interview should resemble a 'flowing conversation' in this regard” (Evans and Lewis 2018: 6). DeJonckheere and Vaughn (2019) agree that “the goal of utilizing semi-structured interviews for data collection is to collect information from key informants who have personal experiences, attitudes, perceptions, and beliefs about the issue of interest. When a researcher wants to collect qualitative, open-ended data, investigate participant opinions, feelings, and beliefs about a certain topic, and delve deeply into personal and often sensitive matters, semi-structured interviews are an excellent data collection strategy” (DeJonckheere and Vaughn, 2019: 2).

A semi-structured interview schedule was employed for this study, and interviews with departmental secretaries and the faculty officer were conducted, all of them were asked the same questions (See Appendix G). Asking the same questions was important for corroborating answers and noting any differences between participants

and between different groups of participants. However, during the interview session, interviewees were given the opportunity to expand on other questions and, also, respondents were invited for further comments, allowing them to convey any additional personal feelings. Departmental secretaries and the faculty officer were contacted via email to inquire about their availability for interview sessions. The email included a letter granting permission to undertake the research. The researcher and interviewees discussed the dates and times of the interviews. The interviews took place over the course of a week. It was the researchers' intention to include the Faculty Officer, but he was unavailable for the interview. In the offices of the secretaries, one-on-one interviews were conducted. It took 20–30 minutes to interview departmental secretaries. With the participants' permission, all interviews were recorded with an audio recorder.

3.7 PILOT TESTING OF THE QUESTIONNAIRE

Dikko (2016:521) defines a pilot study as a scaled-down version of a research data collection method, or a trial run undertaken in advance of a full-scale study which may be used to pre-test a research instrument. Dikko (2016:521) also emphasizes the importance of a pilot study in improving the quality and efficiency of the main investigation. A pilot research is commonly used to "assess the viability of methodologies, procedures, questionnaires, and interviews, as well as how they work together in a specific setting. It can also disclose ethical and practical concerns that could stymie the main study if it were not undertaken" (Doody and Doody, 2015).

As a result, fifteen (15) students and Six (6) academic staff members were sampled for preliminary testing in order to evaluate the content validity of the data collection method chosen for this study, as well as to validate the study's feasibility. A total of fifteen (15) students were chosen for pilot testing from three of the study's departments - 5 students per department. Six (6) academic staff members were chosen from three (3) departments for the study - 2 lecturers per department. Academic secretaries and faculty officer were not given any tests prior to being interviewed. The questionnaires were also provided to the Statistician prior to the pilot study to draw on his expertise to improve the questionnaire's integrity and validity, as well as to analyse the results once the surveys were completed. The researcher clarified imprecise and ambiguous

statements in this research project after the pilot study was completed. Minor changes were suggested to rearrange the headings of the statements to start with Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree. The suggested changes were addressed in consultation with the supervisor of this study. The pilot's responses were not included in the main study.

3.8 ADMINISTRATION OF QUESTIONNAIRES

Chetty (2016:1) emphasizes the importance of accurately administering a questionnaire and selecting a sample from the population. It aids the researcher in gathering actual data, as well as finding appropriate research responses to queries and fulfilling research objectives. The type of research instrument used and how it is administered are also determined by the approach and methods chosen (Chetty, 2016). Arrangements were made with lecturers and tutors for a brief slot to administer the questionnaire with third year students during their timetabled lecture periods. Students were also approached in the OMT departmental computer laboratories. All participants in this study received questionnaires that were personally delivered to them. The researcher explained the instructions for completing the questionnaire as well as the ethical procedures such as consent and withdrawal from participating in the study. The researcher urged all respondents to complete the survey and answered the queries that arose during the data collection process. The students returned their completed surveys to their class representatives, who were then contacted by the researcher. Academic staff returned their completed surveys to their departmental secretaries, after which the researcher followed up with the secretaries. All completed surveys were personally collected by the researcher from departmental secretaries and class representatives.

3.9 ETHICAL CONSIDERATIONS

Akaranga and Makau (2016:2) emphasise that research ethics is a field of applied ethics with well-defined principles and guidelines that define their conduct. Researchers must respect the dignity of their participants and responsibly disclose the material gathered during their studies, according to research ethics guidelines (Akaranga and Makau, 2016). Ethics are defined as a set of values and ethical standards that ensure that the researcher behaves with integrity towards the participants of a study. Fouka and Mantzorou (2011) outline that respondents must

consent, be able to withdraw at any time, be guaranteed privacy, the purpose of the study must be clearly stated, and all communication must be done with integrity and transparency.

The Institutional Research Ethics Committee (IREC) at the selected university granted written authorization to conduct the research investigation (Appendix D), which had already been approved by DUT (IREC) (Appendix B). All questionnaires were included with letters of information and consent forms (Appendix C). The respondents were told by the researcher that the information they provided would be kept strictly confidential and anonymous. The Letter of Information explained the research study's title, as well as why and how participants should participate. The contact information for the researcher and supervisor was given to the participants in case they had any questions about the study. Participants in the study were advised that participation was optional and that they had the option not to participate or else to withdraw from the study.

3.10 ANONYMITY AND CONFIDENTIALITY

Respondent information should be treated as totally confidential, and one of the researcher's key responsibilities is to protect his or her privacy (Serakan and Bougie 2019:159). The researcher was the only one who collected data in this study. Each respondent received a Letter of Information and Consent that guaranteed their privacy. Respondents in this survey were informed that their responses would be kept confidential and would not be shared with any third party. The study's participants were also guaranteed anonymity, and all information acquired from the study was kept private. The interviews were recorded, but they were not linked to any of the participants' names, and they were only available to the researcher and his supervisor. The study's data was kept private, and no participants' names were divulged either during the study or when the results are published. Data will be destroyed after a period of five years.

3.11 RELIABILITY AND VALIDITY

Heale and Twycross (2015) state that “reliability refers to a study’s measure of consistency. The constancy of a measurement is referred to as reliability. For example,

a participant completing a motivational instrument should have about the same replies each time the test is done" (Heale and Twycross 2015:66). Sekaran and Bougie (2019) add that "a reliability is a test of how consistently a measuring device measures whatever notion it is measuring" (Sekaran and Bougie, 2019:208).

Validity is "a measure of how successfully a constructed instrument measures the concept it was designed to measure" (Sekaran and Bougie, 2019). Validity in research is defined by Leung (2015) as "the 'appropriateness' of the instruments, methods, and data. Whether the research question is appropriate for the desired outcome, whether the methodology chosen is appropriate for answering the research question, whether the design is appropriate for the methodology, whether the sampling and data analysis are appropriate, and whether the results and conclusions are appropriate for the sample and context" (Leung, 2015: 324). According to Sekaran and Bougie (2019), "validity is a test of how well a developed instrument measures the particular concept it is intended to measure; in other words, validity is concerned with whether we measure the right concept, while reliability is concerned with measurement stability and consistency" (Sekaran and Bougie, 2019:208). The researcher in this study used the results of the pilot study to improve the study's validity and reliability. The pilot study had already established that the questionnaire provided the kinds of data needed to address the research questions.

3.12 DATA ANALYSIS

To extract relevant information from data, "computations, and evaluation (data analysis)" were undertaken "to retrieve pertinent and helpful information buried in the data for further manipulation and interpretation" (Ibrahim 2015:99). When it comes to data analysis, one of the most important parts is data preparation. It entails the coding of the information gathered. The term "analysis" refers to the process of summarizing and organizing obtained data in order to provide answers to the queries (Ibrahim 2015:99). After the researcher had gathered all the questionnaires, a qualified statistician coded, captured, and analysed the questions and responses using the then most recent version of Statistical Package for Social Scientists (SPSS) version (25.0), and all captured questionnaires were numbered. Qualitative responses were categorized into similar response groups. Quantitative statistics included descriptive

statistics, factor analysis, as well as statistics on reliability and validity. The findings of the data collection were presented in the form of charts and graphs.

Discourse analysis was used to examine the data gathered through interviews (qualitative data). Discourse analysis, according to Luo (2020), “is a research method for examining written or spoken language in connection to its social context. Its goal is to learn how language is used in everyday settings” (Luo, 2020). Thematic analysis was also used by the researcher in this study to analyse data by developing themes from qualitative data. According to Caulfield (2019), “thematic analysis is the process of identifying patterns or themes within qualitative data. It is also referred as a method of analysing qualitative data that is typically applied to a set of texts, such as interviews or transcripts” (Caulfield, 2019). Delve and Limpaecher (2020) go on to explain that “this method entails reading through a data set (such as transcripts from in-depth interviews or focus groups) and identifying trends in meaning across the data to derive themes. Thematic analysis is an active process of reflexibility in which the researcher's subjective experience is central to deriving meaning from data” (Delve and Limpaecher, 2020).

3.13 CONCLUSION

This chapter included an outline of the methodology used to conduct this study. It presented the population and sampling technique that were employed during the collection of data. Questionnaires and semi-structured interviews were used involving recognised data collection instruments. Both qualitative and quantitative data were collected using these two devices. The participants filled out the questionnaires individually. Interviews with non-academic employees were conducted (secretaries and faculty officer). Pretesting of the questionnaire was also done to ensure that the study's reliability and validity were not compromised. Before the pretesting, all questionnaires and interview questions were forwarded to the statistician. To ensure that the research was carried out within established ethical constraints, ethical considerations were explored. The study's findings are presented in the next chapter.

CHAPTER 4: DATA ANALYSIS, RESEARCH FINDINGS AND INTERPRETATION

4.1 INTRODUCTION

The methodology used in collecting the data was discussed in the previous chapter. Bougie and Sekaran (2019:254) report that after data have been collected, the next step is to analyse them to answer the research questions. Before analysing the data, some preliminary steps need to be completed: cleaning data, analysing data, visualising, and sharing of findings. This helps to ensure that data are accurate, complete, and suitable for further analysis. These steps were employed by the researcher with the help of the statistician in cleaning data. The last three steps of data analysis, visualising and sharing of findings are the ones to be discussed in this chapter.

The chapter provides a detailed analysis of the findings from the data and an interpretation of the results obtained from academic staff, students, and administrative support staff in order to understand the phenomenon being investigated. The objectives of this study include identifying the experiences of academic staff members with regards to administering large classes; determining students' perspectives on their experiences in relation to the administration of large classes and how these affect their learning; and understanding the administrative support staff experiences with regards to the administration of large classes. The data collected from the respondents was analysed with SPSS version 25.0. The results are presented as descriptive statistics in the form of graphs and other figures.

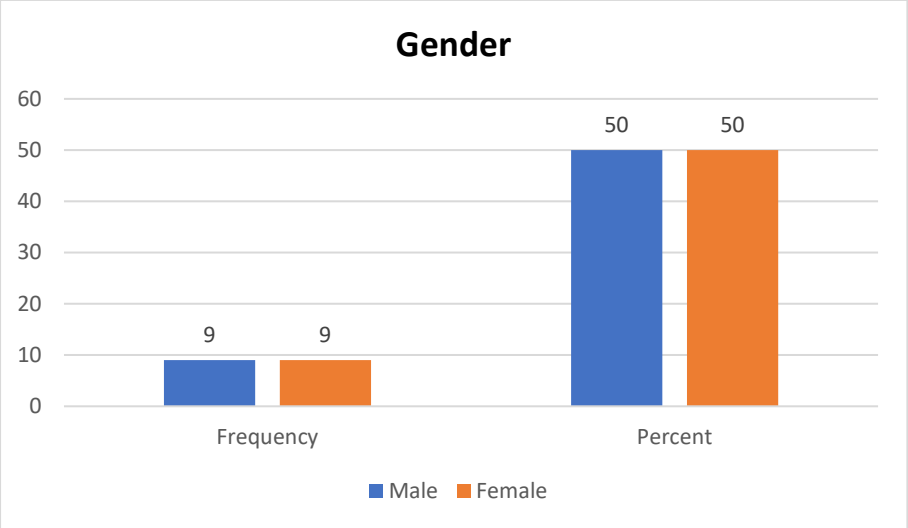
4.2 INTERPRETATION OF THE QUANTITATIVE RESULTS

4.2.1 BIOGRAPHICAL ANALYSIS FOR ACADEMIC STAFF QUESTIONNAIRE

The researcher targeted all 24-academic staff from the three departments identified for the study (Office Technology, Human Resources Management, and Public Administration & Economics) and 18 responded, giving a 75 percent response rate. Participants were requested to provide their personal information on the questionnaire for statistical consideration only. The biographical information included age, gender,

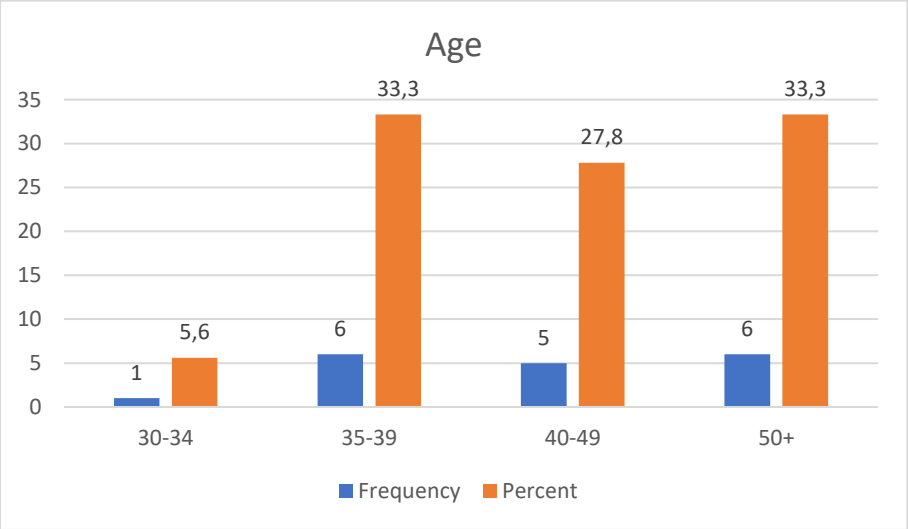
race, academic rank, highest qualification, lecturing experience, work status, and department affiliation.

Figure 4.1 Gender of the respondents



The results in figure 4.1 show that 9 (50 percent), exactly half of respondents were males and the other half were females. These findings indicate an equal balance between the genders.

Figure 4.2 Age of the academics



The findings in figure 4.2 show that exactly one third (⅓) of respondents 6 (33.3 percent) were within age category 35–39 years, while another one third (⅓) of respondents 6 (33.3 percent) were within the age category of 50 and above, and 5 (27.8 percent) respondents were within age category 40-49 years and remaining 1

(5.6 percent) respondent was within age category of 30–34 years. These results indicate most academic staff participated in this study were senior academics.

Figure 4.3 Academic rank of the respondents

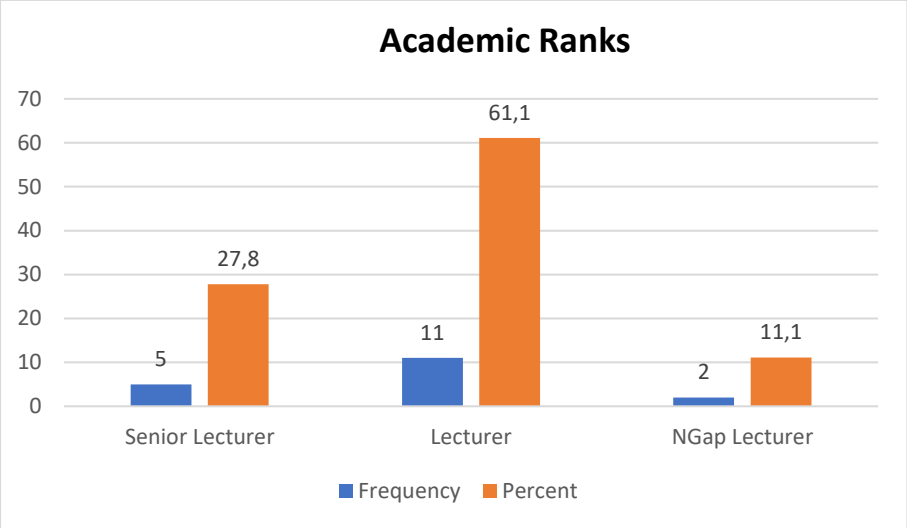
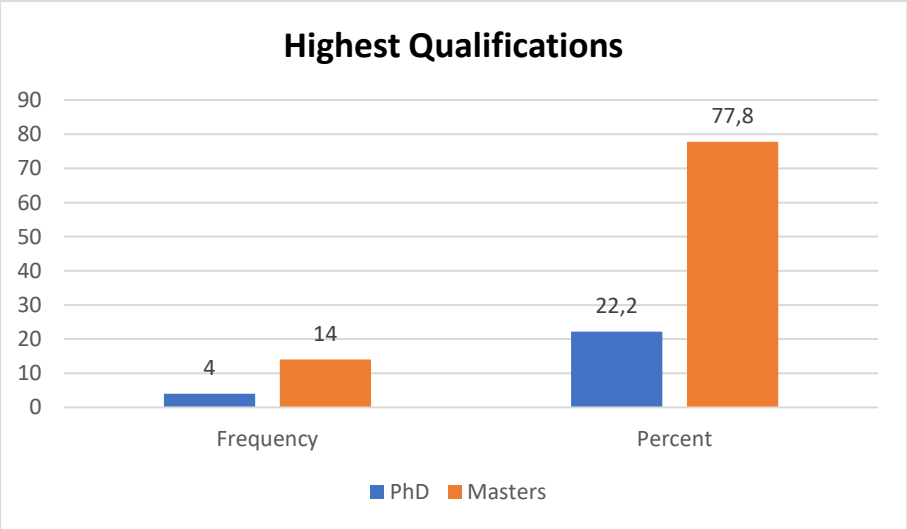


Figure 4.3 shows that the majority of 11 (61.1 percent) respondents who participated in this study were lecturers, 5 (27.8 percent) were senior lecturers, and 2(11.1 percent) were in NGap lecturers. Thus, the spread was roughly equivalent to what could be expected indicating an appropriate spread of responses from the full population of academic staff from the departments identified for the study.

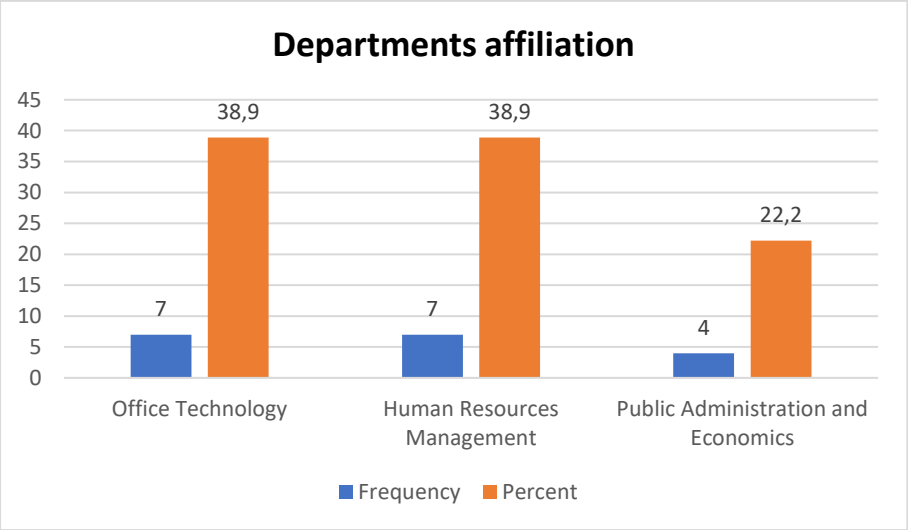
Figure 4.4 Highest qualifications of the respondents



The findings in figure 4.4 show the educational highest qualifications of respondents as 14 (77.8 percent) having master's qualifications, while 4 (22.2 percent) have doctorates. It was noted that there were no respondents without a master's

qualification. Therefore, these results indicate that most academics in these departments identified for this study do meet the minimum requirements of lecturing, but several (78 percent) academics require to pursue their studies further to obtain doctoral degrees and 22 percent to obtain post-doctoral fellowships. However, if other departments within this faculty or other faculties were included in the study these results could have arrived at a different conclusion.

Figure 4.5 Departments of the respondents



According to the findings in figure 4.5, 7 (38.9 percent) respondents who participated in this study were from the Department of Office Technology, while also 7 (38.9 percent) respondents were from the Department of Human Resources Management, and 4 (22 percent) were academic staff from the Department of Public Administration and Economics. This reflects the fact that two departments had an equal number of academic staff participated in the study, while the other department had a slightly lower number. Each was therefore well represented.

Figure 4.6 Lecturing experience of respondents in years

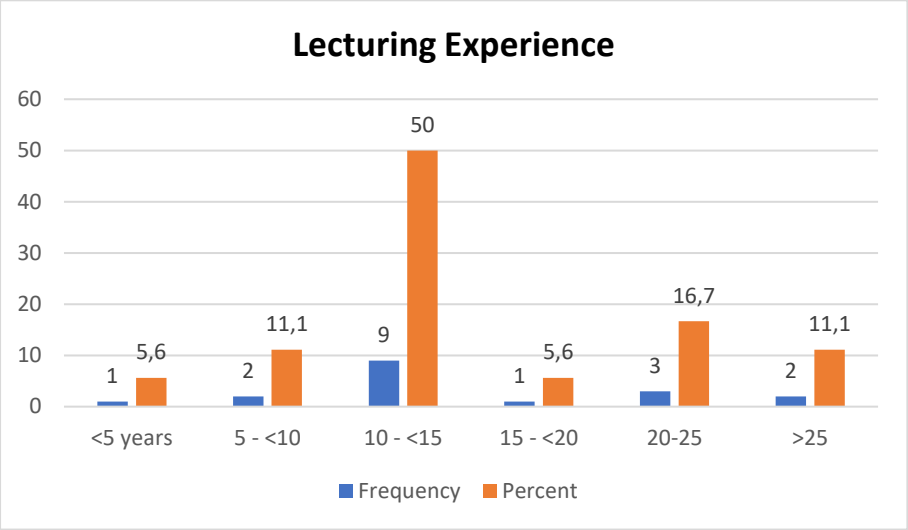
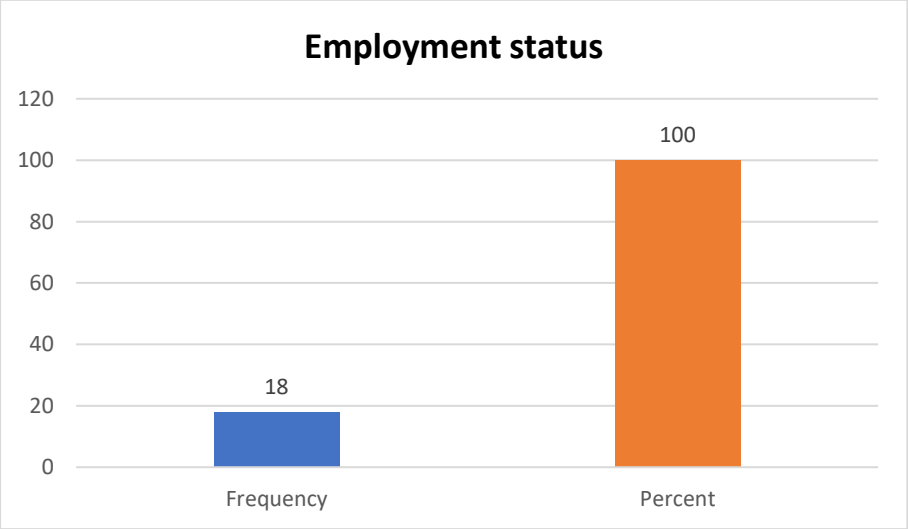


Figure 4.7 shows that exactly half of respondents (nine - which was the highest response rate) had between 10 and15 years lecturing experience while three (16.7 percent) had 20-25 years, and there were two (11.1 percent) respondents with more than 25 years lecturing experience. This shows that the respondents were highly experienced. Two (11.1 percent) had between five- and ten-years' experience, one had between 15 and 20 years and only one (5.6 percent) had less than five years lecturing experience.

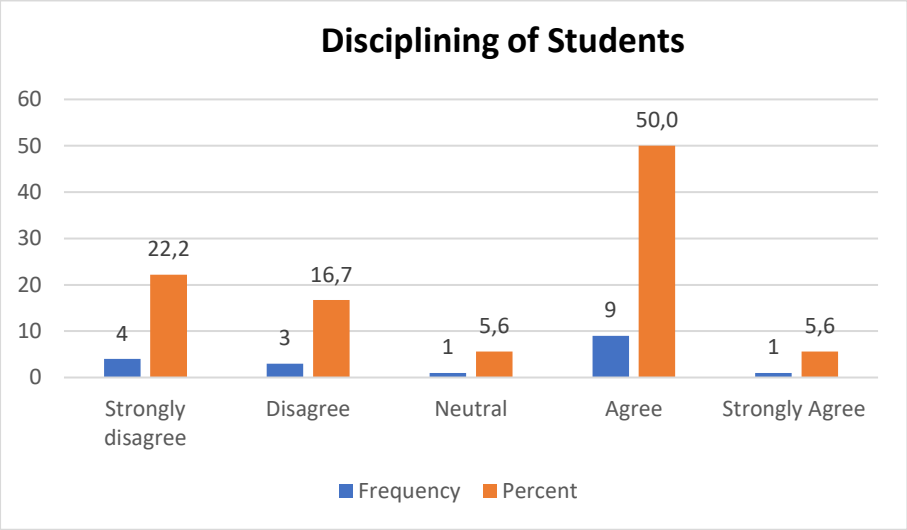
Figure 4.7 Employment status of respondents



The findings in figure 4.7 indicate that all 18 (100 percent) of academic staff participated in this study were employed on a permanent basis. However, if other departments from other faculties were included in the study these results could have arrived at a different conclusion.

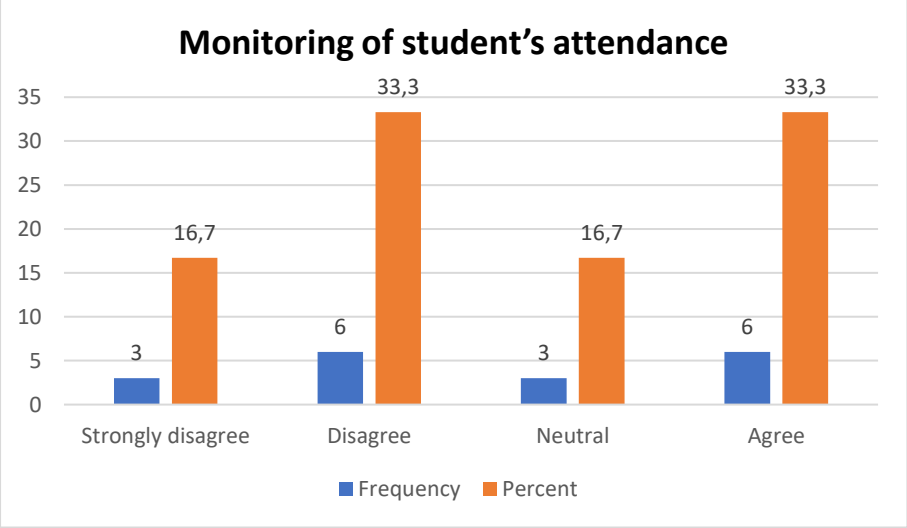
4.2.2 SECTIONAL ANALYSIS OF ACADEMICS' TEACHING EXPERIENCES

Figure 4.8 I am able to discipline my students effectively in large classes



The findings in figure 4.8 reveal that more than half 10 (56.6 percent) of academic staff agreed or strongly agreed that they are able to discipline their students effectively in large classes. However, 7 (38.9 percent) strongly disagreed or disagreed, and 1 (5.6 percent) academic remained neutral. These results clearly show that more than half of academic staff believed that they could control their students' behaviour in large classes. More interestingly however, a large number 7 (38 percent) (although not the majority) felt unable or uncertain about their disciplining ability although all are well qualified, and most are very experienced.

Figure 4.9: I am able to monitor my students' attendance in large classes



The results in figure 4.9 show that 9 (50 percent) or exactly half of respondents disagreed or strongly disagreed that they can monitor their students' attendance in large classes. However, 6 (33.3 percent) or exactly one third of respondents agreed and 3 (16.7 percent) respondents remained neutral. This clearly reflects that only half of the academic staff felt able to monitor their students satisfactorily in their large class sizes, while a quarter of academics were not able, and the remaining three academics remain not sure. This is an indication that, indeed, something needs to be done to address large classes challenges.

Figure 4.10 Lecturing large classes does not expose me to high levels of stress

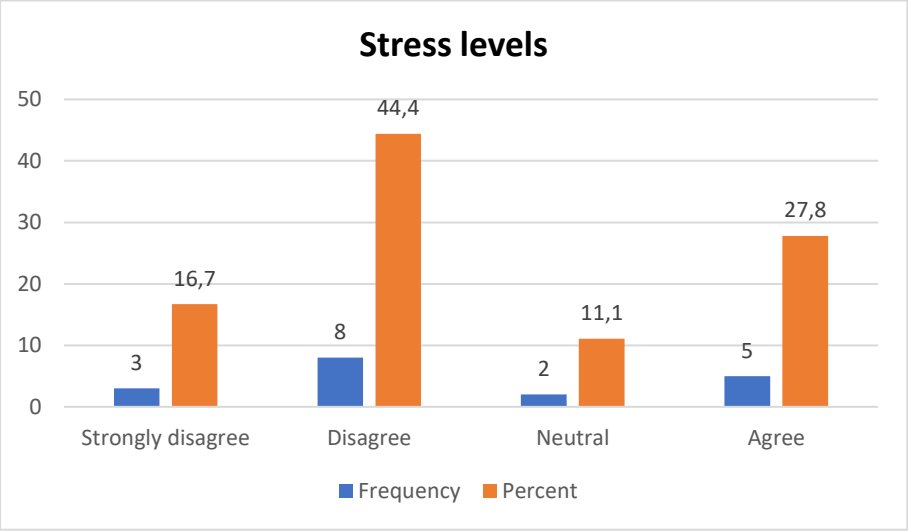


Figure 4.10 shows that the majority of respondents (11 – 61.1 percent) disagreed or strongly disagreed that lecturing large classes does not expose them to high levels of stress – that is they did feel high stress levels. It should be noted that quite large number 5 (27.8 percent) of respondents just agreed, 2 (11.1 percent) remained neutral. This clearly reflects that the majority of academic staff members believed that large class sizes expose them to high levels of stress.

Figure 4.11 Conducting assessments in large classes is manageable

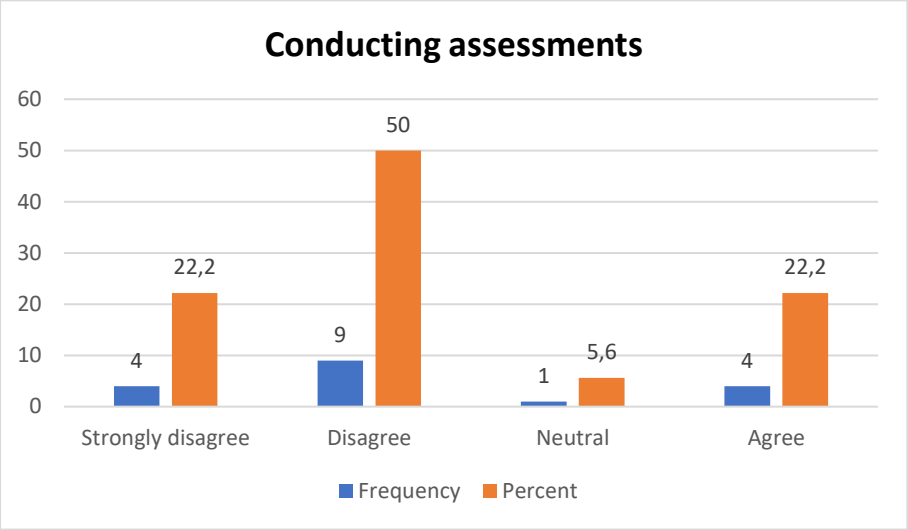


Figure 4.11 show that a majority of 13 (72.2 percent) respondents disagreed or strongly disagreed that conducting assessments in large classes in manageable, while 4 (22 percent) agree and it was noted that there were no respondents who strongly agreed, and 1(5.6 percent) respondent remained neutral. This indicates that assessing big groups of students remains a challenge for most academic staff.

Figure 4.12 In large classes I am able to provide assessment feedback timeously

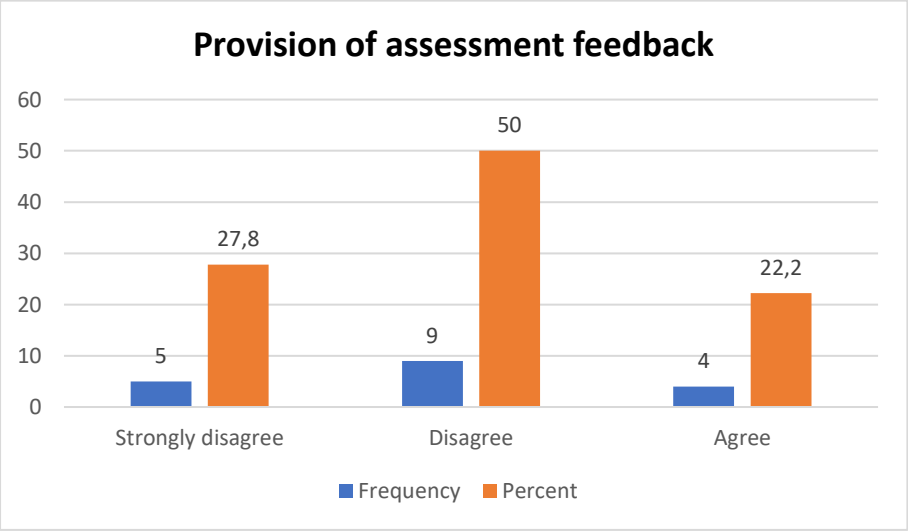


Figure 4.11 shows that a majority of 14 (77.8) respondents disagreed or strongly disagreed that academics are able to provide feedback timeously, while 4 (22.2 percent) respondents agreed. It was also noted that there were no academic staff strongly agreed with this notion. These findings reveal that a majority of the academics

struggle to provide assessment feedback to students timeously due to large class numbers.

Figure 4.13 In large classes I am able to identity at-risk students.

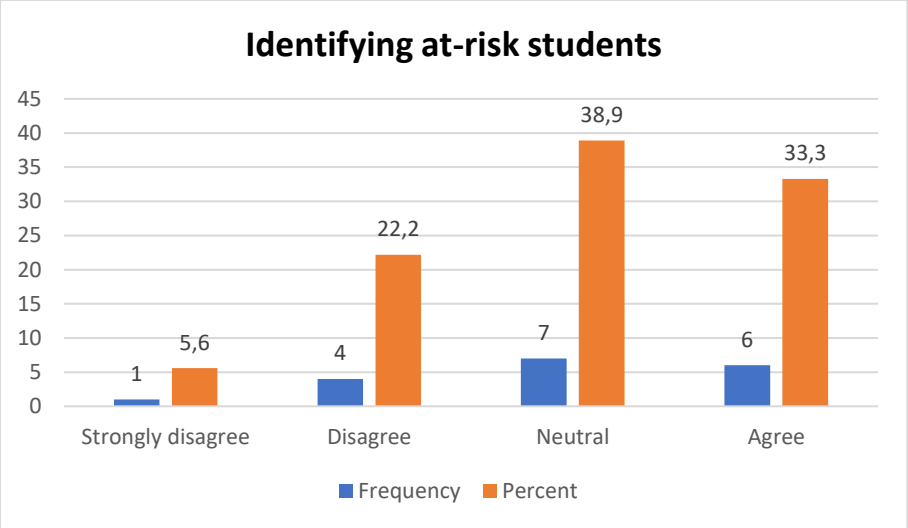
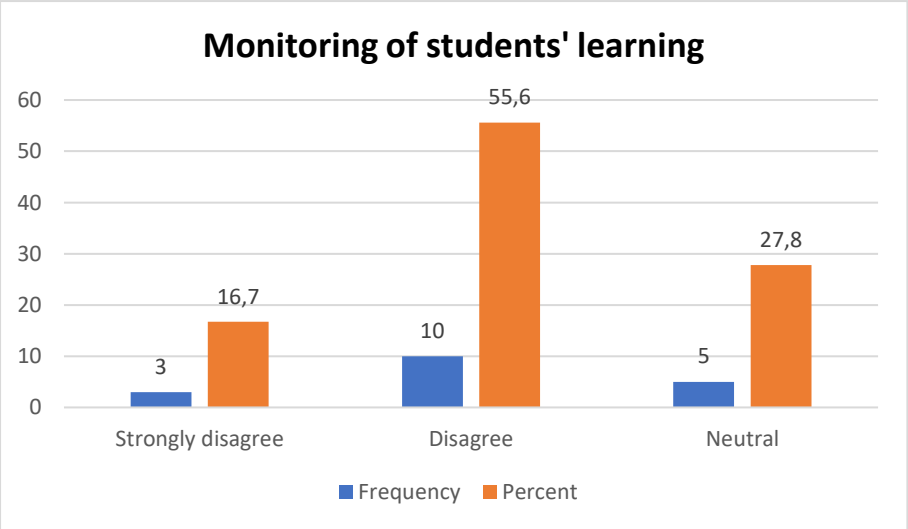


Figure 4.13 shows that 7 (38.9 percent) respondents remained neutral that academics can be able to identify at-risk students in large classes, while exactly one third (⅓) of respondents 6 (33.3 percent) agreed, and 5 (27.8) respondents disagreed or strongly disagreed. These results indicate that many academics were uncertain about identifying at-risk students in large classes and many indicated that it is difficult.

Figure 4.14 In large classes it is possible to monitor my students' learning



The results in figure 4.14 show that the majority of respondents 10 (55.6 percent) disagreed that it is possible to monitor students' learning in large classes. The second largest number of respondents 5(27.8 percent) remained neutral while 3 (16.7 percent)

strongly disagree. It was noted that there were no respondents who agreed or strongly agreed. These results indicate that most academics find it difficult to monitor student learning in large class sizes.

Figure 4.15 In large classes I am able to engage with students during class activities.

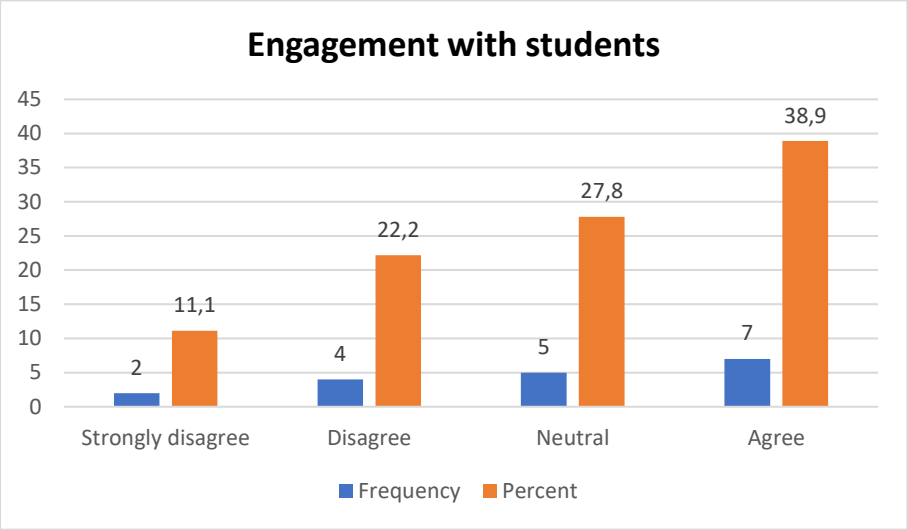


Figure 4.15 shows that 7 (38.9 percent) respondents are able to engage with students in large classes during class activities, while exactly one third (⅓) of respondents 6 (33.3 percent) disagreed or strongly disagreed, and 5 (27.8 percent) remained neutral. These results reveal that many academic staff are struggling to engage with their students during class activities due to large class numbers.

Figure 4.16 Despite large class numbers I am able to get to understand my students' strengths and weaknesses.

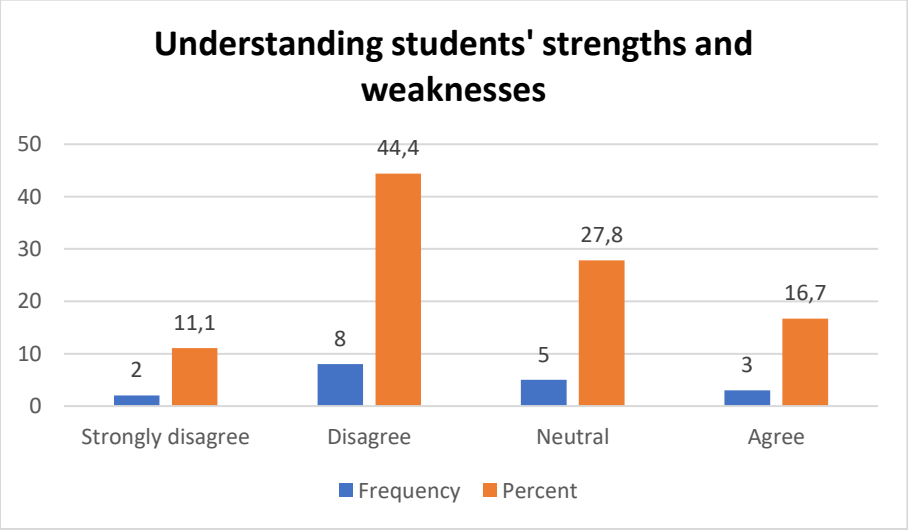


Figure 4.16 indicates that more than half of respondents 10 (55.5 percent) disagreed or strongly disagreed that, despite large classes, they can identify students' strengths and weaknesses, whereas 5 (28.7 percent) remained neutral, and only 3 (16.7 percent) agreed. It was noted that no respondent strongly agreed. These findings show that many academics still struggle to identify students' strengths and weaknesses in large classes.

Figure 4.17 Large class numbers do not have a serious impact on my students' academic performance

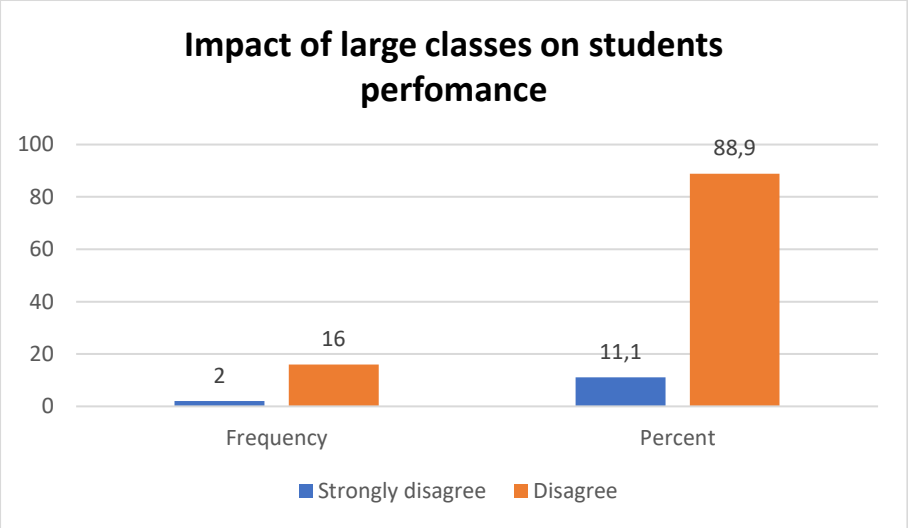
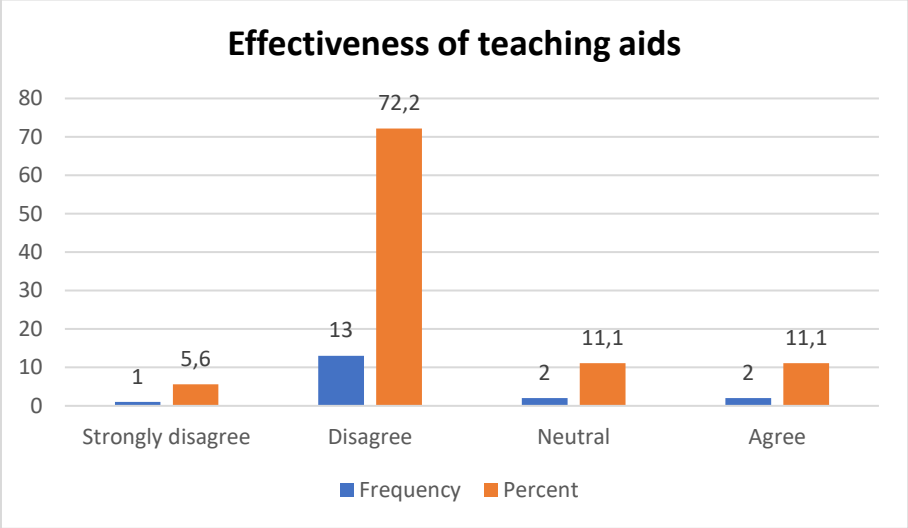


Figure 4.17 demonstrate that 18 (100 percent) of respondents disagreed or strongly disagreed that large class numbers do not have a serious impact on their students' academic performance**.** It was noted that there were no respondents who agreed, strongly agreed or were neutral. These results reveal that all of the academic staff believe that large classes have an impact on students' academic performance.

Figure 4.18 Teaching aids are as effective in large classes as they are in small classes



The results in figure 4.18 show that a majority of 14 (77.8 percent) respondents disagreed or strongly disagreed that teaching aids are as effective in large classes as they are in small classes, while 2 (11.1 percent) respondents agreed, and the other 2 (11.1 percent) respondents remained neutral. These findings reveal that the majority of academics confirm that utilizing teaching aids in large classes is less effective than in small classes.

Figure 4.19 The layout of the lecture halls is adaptable to large class sizes

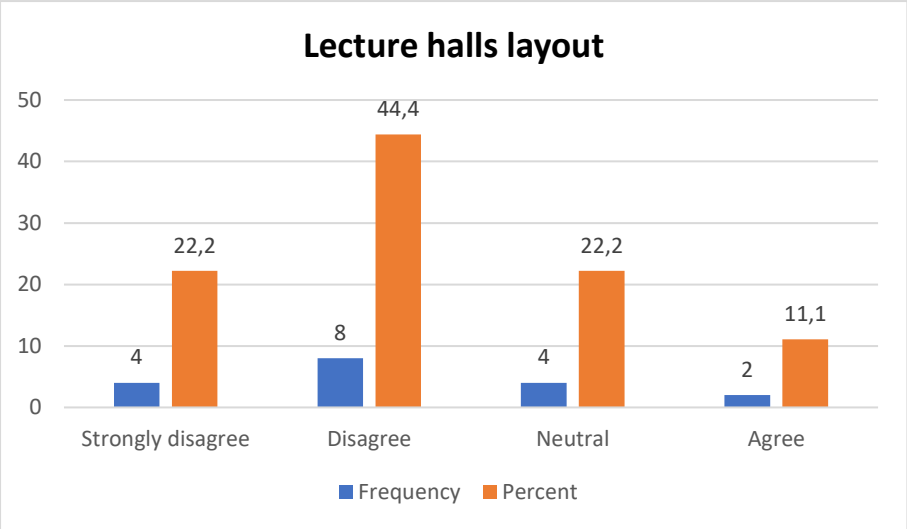


Figure 4.19 shows that 12 (66.6 percent) of the respondents disagreed or strongly disagreed that the layout of the lecture halls is adaptable to large class sizes, whereas 4 (22.2 percent) respondents remain neutral, with only 2 (11.1 percent) of the

respondents agreeing. These findings clearly signify that infrastructure is a major concern for most academics.

Figure 4.20 Teaching large classes online enables me to engage more with my students than when teaching in traditional contact lectures

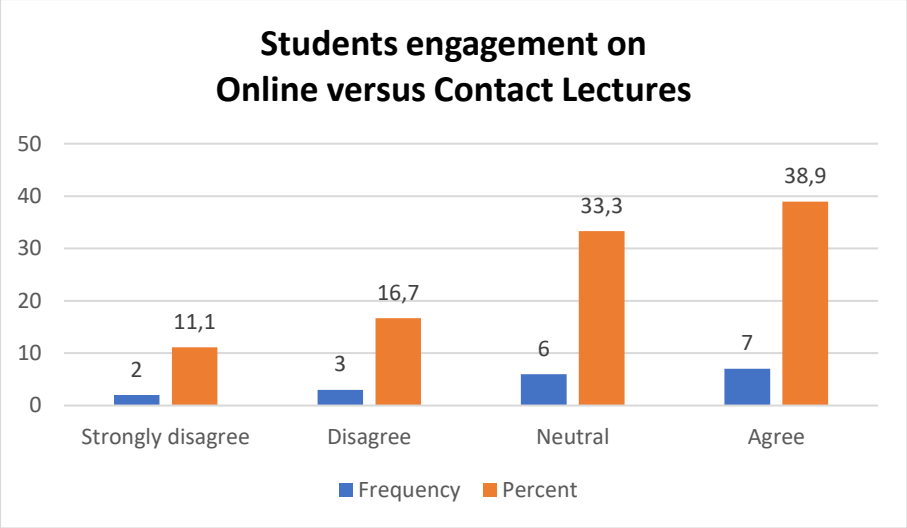
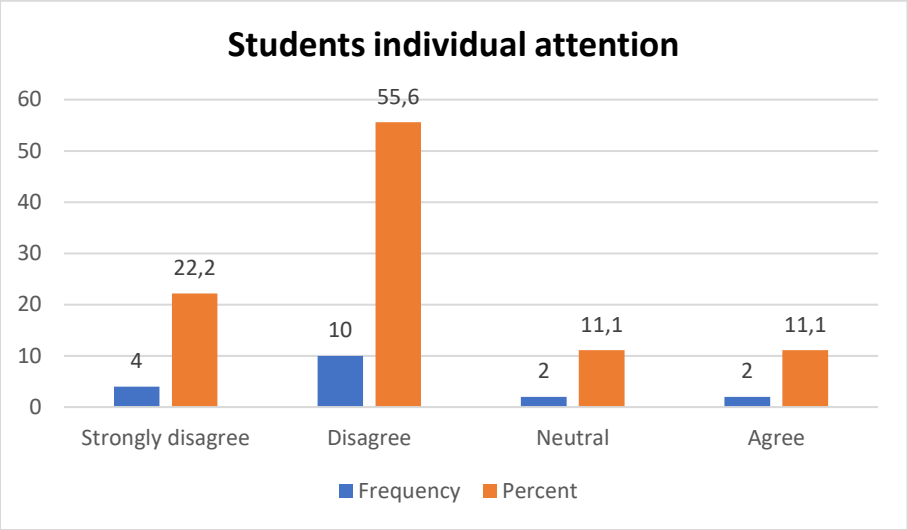


Figure 4.20 indicates that 7 (38 percent) respondents agreed that teaching online allows them to engage with students more effectively than teaching in traditional contact lectures, whereas 6 (33.3 percent, exactly one third) of respondents remained neutral and remaining 5 (27.8 percent) respondents disagreed or strongly disagreed. These findings show that many academic staff prefer online lectures as it allows them to engage with their students more than traditional face-to-face lectures while a large number of academics (exactly one third) remain unsure.

Figure 4.21 Conducting lectures to large classes online allows me to give my students more individual attention than when teaching in contact lectures



The results illustrated in figure 4.2 show that the majority of the respondents 14 (77.8 percent) disagreed or strongly disagreed that conducting online lectures to large classes allows them to give students more individual attention than when teaching in contact lectures, while two respondents agreed, and another two respondents remained neutral. These findings reveal that most academics believe that teaching online is difficult because it does not allow them to provide students as much attention as teaching in a face-to-face lecture.

Figure 4.22 The administrative workload for large classes is manageable

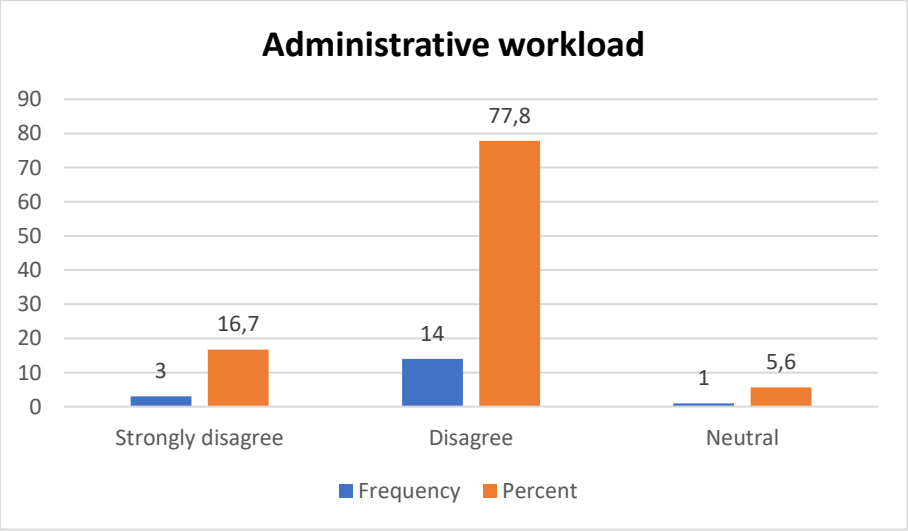


Figure 4.22 indicates that the great majority of respondents 17 (94.5 percent) disagreed or strongly disagreed that the administrative workload of large classes is

manageable, while 1 (5.6 percent) respondent remained neutral. It was noted that there were no respondents who agreed or strongly agreed. These results clearly demonstrate that most academics are struggling to adequately manage their administrative workload due to excessive class sizes.

Figure 4.23 Administrative staff members provide sufficient administration support to me for my large classes

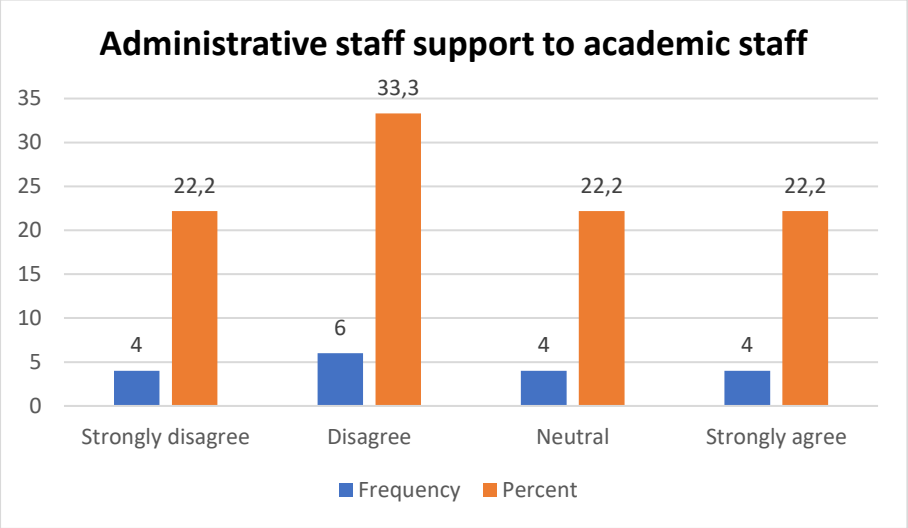


Figure 4.23 shows that the majority of respondents 10 (55.5 percent) disagreed or strongly disagreed that administrative staff provide adequate administration support to academics with large classes, whereas 4 (22.2 percent) respondents strongly agreed, and 4 (22,2 percent) respondents remained neutral. This reflects the fact that more than half of academic staff with large class sizes receive less support from administrative staff than they would like, but that four academic staff strongly disagreed with the statement, indicating that good administrative support is still possible with large class numbers. The remaining four academic staff were-unsure.

Figure 4.24 Despite additional administrative duties with large classes, I am able to perform other core academic activities (research & community engagement)

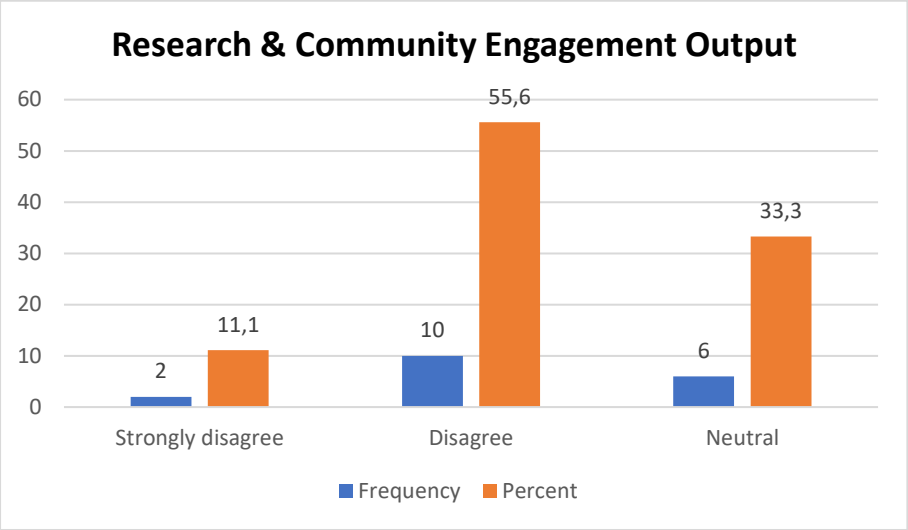


Figure 4.24 shows that 12 (66.7 percent) disagreed or strongly disagreed with the statement that despite additional administrative burdens associated with large classes, they are able to engage in other core academic activities such as research and community engagement, while 6 (⅓) remained neutral and 2 (11.1 percent) strongly disagree. It was noted that there were no respondents agreed and strongly agreed. These results indicate that many academics are unable to cope with the additional administrative tasks of large classes, which has a detrimental influence on their research productivity and community participation.

Figure 4.25 I still find it manageable to teach small groups formed by subdividing the large classes for lab and tutorial purposes

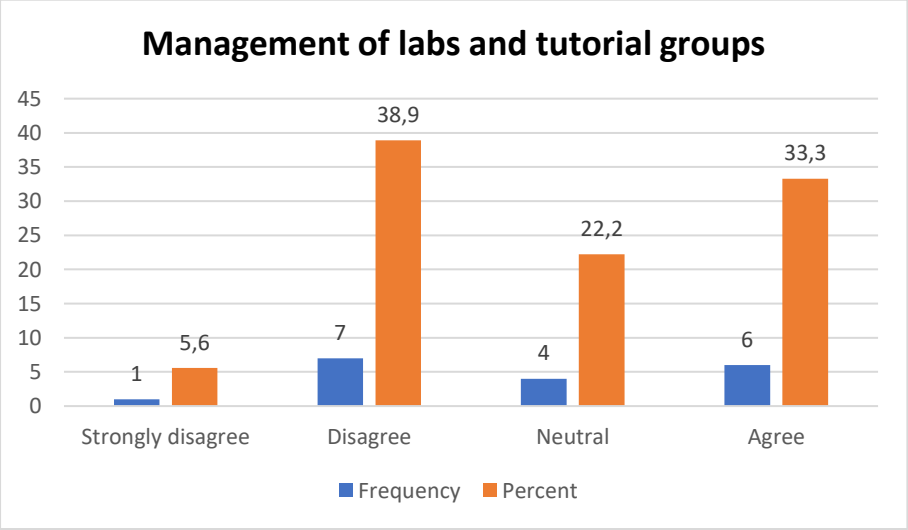


Figure 4.25 shows that the highest number of respondents 8 (44.5 percent) disagreed or strongly disagreed that teaching small groups formed by subdividing big classes for lab and tutorial purposes is manageable, while exactly one third (⅓) of respondents agreed and the remaining 4 (22.2 percent) respondents were neutral. These results demonstrate that many academic staff still struggle to manage small groups that emerge from large classes.

Figure 4.26 Assistance required by academic staff in administering large classes

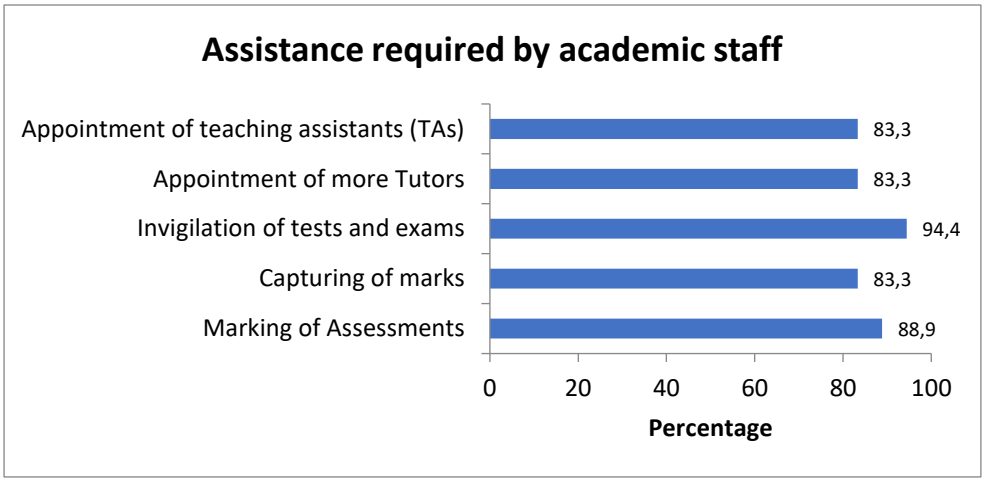


Figure 4.26 demonstrates the further assistance that academics believe to be required in the administration of large classes. 15 (83 Percent) respondents wanted the appointment of more teaching assistants (TAs), 15 (83 percent) require appointment of tutors, 17(94 percent) of respondents require greater assistance in invigilation of tests and exams, 15 (83 percent) respondents require assistance in capturing of assessments marks and 16 (88 percent) respondents require assistance in marking of assessments. These findings reveal that most academics require extensive support in these critical areas of their responsibilities, which is intensified by large class sizes.

Figure 4.27 Number of students per subjects – Subject 1

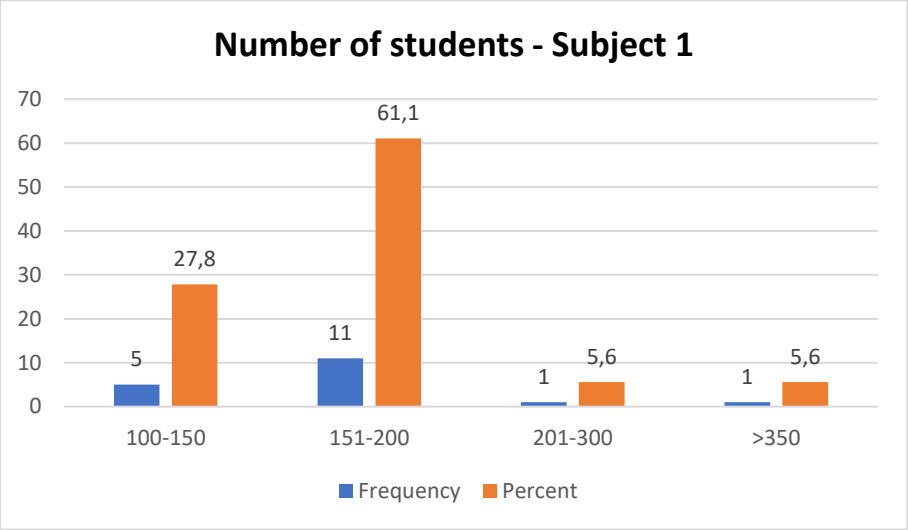
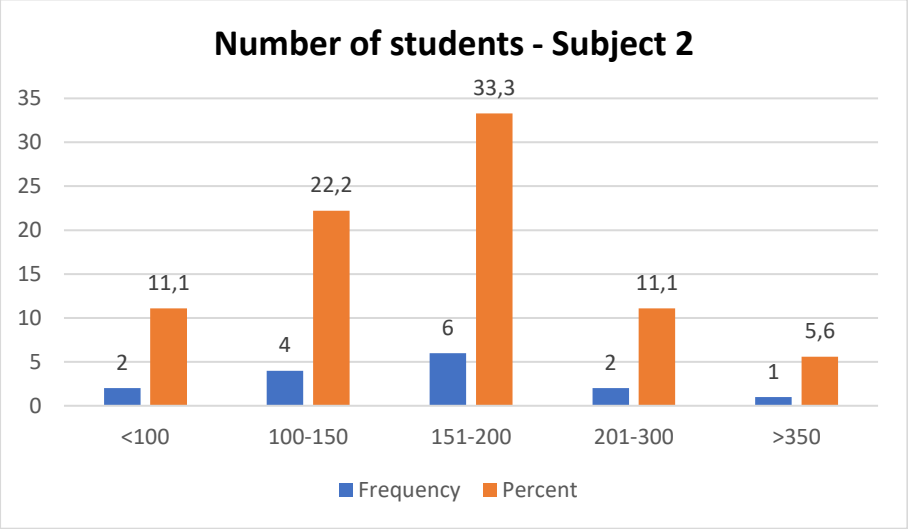


Figure 4.27 shows that the majority of respondents 11 (61.1 percent) have 151-200 students in their 1st Subject, while 5 (27.8 percent) respondents have 100-150 students, 1(5.6 percent) respondent have 201-300 students and remaining 1 (5.6 percent) respondent has above 350 students. This reflects that majority of academic staff are under the burden of large class sizes.

Figure 4.28 Number of students per subject – Subject 2



The results in figure 4.27 reveal that 6 (33.3 percent or one third) of respondents had large class numbers in their 2nd subject, while 4 (22.2 percent) had 100-150 students, two (11.1 percent) respondents had 201-300 students, and two (11.1 percent) respondents had less than 100 students and remaining 1 (5.6 percent) respondent had students above 350. These findings reflect that academic staff are still experiencing large class numbers in their additional subjects.

Figure 4.29 Number of students per subject – Subject 3

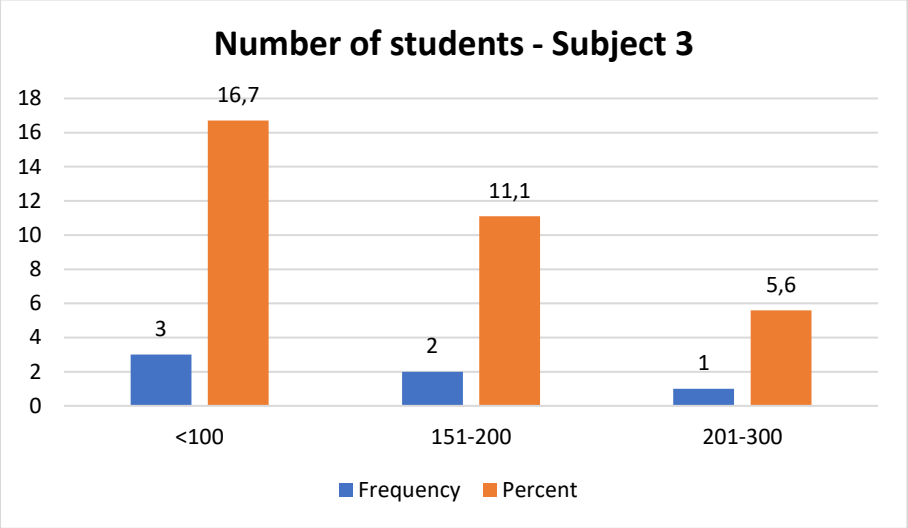


Figure 4.29 shows that three (16.7 percent) respondents had less than 100 students in their 3rd subject, while two (11.1 percent) had 151-200 students, and one (5.6 percent) had 201-300 students. These results reflect that few academics staff had less than 100 students in their classes.

Figure 4.30 Number of students per subjects – Subject 4

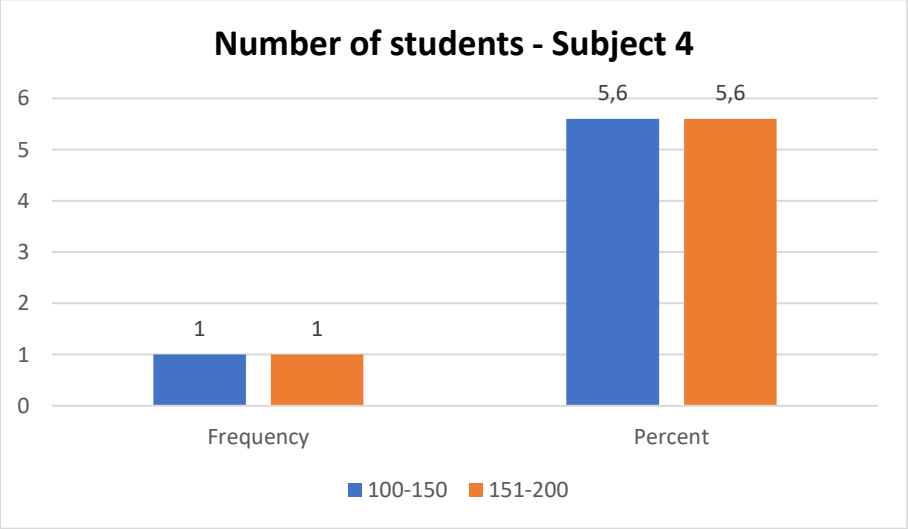


Figure 4.30 reveals that 1 (5.6 percent) respondent had 100-150 students while one (5.6 percent) respondent had 151-200 students in their 4th subject. These findings indicate that there are few academic staff with 100-150 students and academic staff with 151-200 students in their 4th subject. However, it was noted that that there were no staff with less than 100 students. This research focused on third-year

undergraduate diploma courses, which had larger class sizes than post-graduate courses.

Figure 4.31 Lack of resources has an impact on effective teaching of large classes

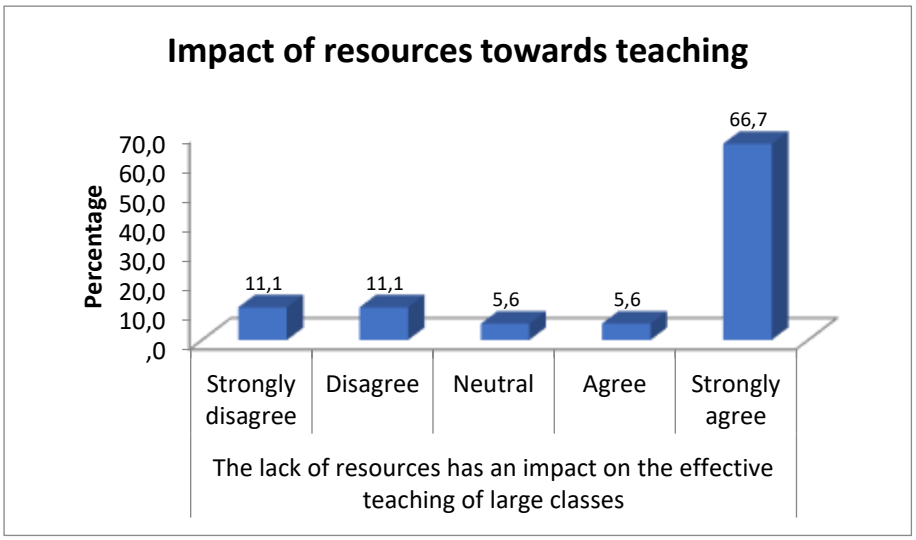


Figure 4.31 shows that the majority of 13 (72.3 percent) respondents either agreed or strongly agreed that a lack of resources has an impact on effective teaching of large classes, while 4 (22 percent) of respondents disagreed or strongly disagreed, and one (5.6 percent) respondent remained neutral. These findings clearly show that most academics believed that a lack of resources has an impact on effective large-class teaching.

4.2.3 If your response to Question 5 was "Agree" or "Strongly agree", please list the resources you think are required in order to address large classroom challenge

Responses to the question of listing the resources which lecturers think are required in order to address large classroom challenge, if their responses to Question 5 was "Agree" or "Strongly Disagree", are given below in content analysis of qualitative findings. Respondents provided a list of resources they believe are needed to address the large class challenge, which were classified by the researcher into three (3) themes: *Technical support, Tutor support, and Lack of Infrastructure*. These themes were identified from data (students' responses). To identify themes, the researcher

followed this method as suggested by Caulfield (2019): the researcher familiarized himself with the entire data set; generated initial codes; searched for themes; collated with supporting data; reviewed themes; defined and named themes; and provided write-ups in the content analysis of qualitative findings below.

4.2.3.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Resources which lecturers believe are required in order to address large classroom challenges

Technical support

Lecturers' responses indicated an overwhelming focus on the need for effective and up-to-date technical support both in the form of personal technical equipment for students and lecturers, and better equipped lecture halls and labs. Support from technicians was also seen as insufficient. Some demands might be considered as beyond the normal budgets of most UoTs, for instance "*digital televisions are needed*"; "*Installed microphones for voice projections*" and "*large lecture halls*" – while others indicated that current systems are not working efficiently: "*Internet connectivity should be improved within campuses and in students' residences*". "*Smartboards are not working in some lecture halls due to viruses*". "*Data for students for online classes should be provided timeously*". The state of electrical wiring in labs was seen as a danger. Responses from lecturers clearly indicated that "*ITS system be upgraded*" to reduce their administrative burden of manually processing borderline cases such as "*filling and signing of graduate forms*". Other lecturers indicated that "*ITS System being utilised is not upgraded*" and cannot process borderline cases, so lecturers have to do it manually.

Tutor support

Responses strongly indicated that "additional tutors are needed"; Lab support is insufficient: "*one tutor for 170 students is not sufficient*"; "*Tutors should be allocated data allowance for online tutorials*" and tutors should be better remunerated. Lecturers' responses also revealed that due to insufficient tutors, tutorial sessions are compromised "*tutorial classes should be increased*", there are "*no online tutorials*" for students hence "*tutors are not given data and laptops to work with*".

Lack of Infrastructure

Lecturers' responses strongly revealed that infrastructure is still the most difficult challenge for most academic staff with large classes. Responses strongly indicated that "*lecture venues are not sufficient*"; "*more lecture halls with enough sitting plan are required*" while others indicated that "*more computer labs with bigger capacity are needed which accommodates at least 40-50 students*". The state of the current lecture halls and computer labs was deemed not conducive to accommodate large class number. Lecturers suggested that "*more lecture theatres and computer labs*" need to be built to address this challenge.

4.2.4 Indicate any additional challenges that need to be addressed in order to improve the administration of large classes

Responses to the question concerning additional challenges experienced by lecturers that need to be addressed in order to improve the administration of large classes, are given below in content analysis of qualitative findings. Lecturers provided more insight in their responses, which were grouped by the researcher into four (4) themes: *Resource Implication, Monitoring and Attendance, Assessments, Administrative Support.*

4.2.4.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Additional challenges experienced by lecturers that need to be addressed in order to improve the administration of large classes

Resource Implications

Responses from lecturers indicated that there are several challenges related to teaching and learning, such as "*insufficient data for online classes and meetings*", "*laptops not changed regularly*". These challenges must be addressed in order to improve administration of large classes. According to the responses from lecturers, resource's implications remain the most difficult challenge for academic staff with large class sizes. "*lecture halls and computer labs are insufficient*" to accommodate a large number of students. Lecturers' responses strongly indicated that the state of the

"*existing computer labs are not user-friendly*" to students with "*physical disabilities*." Lecturers felt that "*computer labs are not well designed*" to accommodate "*students with disabilities*" who use wheelchairs. Lecturers proposed that the "*university invest in proper infrastructure*" to accommodate a large number of students, such as "*building open plan classes*," "*improve infrastructure layout*" by building more large lecture halls to try and accommodate students," and "*having to open a new satellite or branch*" where one faculty can be transferred to and operate, leaving the old buildings and its infrastructure to those faculties that accommodate fewer learners.

Monitoring and Attendance

The lecturers' responses revealed that many are still struggling to "*monitor students' performance*" in large classes, despite their experience. Other lecturers expressed concern about "*controlling noise in large lecture theatres*." Lecturers also indicated that students in large classes are "*not committed to attending their lectures*," which has a negative impact on their academic success. Their responses also indicated that student attendance in large classes remains a challenge, resulting in "*poor academic performance.*" It was noted through their responses that students in large groups are "*less motivated to attend classes*" because they "*feel they are not noticed*", and "*their concerns are not addressed*" by respective lecturers due to large class size.

Assessments

The responses of lecturers confirmed that conducting assessments for large classes remains a major challenge for most academic staff. Their responses indicated that "*assessments take longer, particularly oral presentations*," as well as "*lab practical assessments*," which are typically conducted in sessions (groups) due to "*small capacity of our labs*." Other lecturers responded that "*marking takes longer*" because of large class sizes, causing them to "*delay in providing students with assessment feedback.*" Their responses also revealed that assessing large groups of students has a "*negative impact on assessment quality*" because it "*compromises the quality of the assessment*" because all groups write the same assessment paper throughout these sessions.

Administrative Support

The responses of lecturers revealed that they are struggling with the administrative workload that comes with teaching large classes. These are the challenges of "*conducting assessments*," "*marking of test and exam assessments*," "*invigilation of tests and exams*," and "*capturing assessment marks in the system*." The responses from lecturers strongly indicated that marking and invigilating assessments for longer hours are "*stressful and time consuming*" due to large class sizes. Lecturers expressed a need for significant administrative assistance and proposed the "*recruitment of marking assistants*" "*more faculty assistants*" to assist lecturers with administrative workloads in marking and marks capturing. "*Support from university senior management*" was also deemed "*inadequate*" in addressing these administrative issues affecting academic staff with large classes.

4.2.5 What strategies are you currently using to overcome the challenges of large classes?

Responses to the question concerning which strategies lecturers are currently using to overcome the challenges of large classes, are given below in content analysis of qualitative findings. The findings in the content analysis below revealed that respondents had a variety of well-defined strategies for dealing with large classes. Respondents provided more insight in their responses, which were categorized by researcher into three (3) themes: *Online Teaching, Groups, and Assessment.*

4.2.5.1 Strategies that were currently used by lecturers to overcome the challenges of large classes

Online Teaching

According to the responses from lecturers, most academic staff have discovered online teaching and learning to be a common strategy for overcoming large class challenges. According to their responses, they have used "more online teaching" than traditional contact lectures. They also stated that they have "*used a variety of Learning Management Systems - LMS's*" such as Ms Teams, Blackboard, Moodle, and WhatsApp to enhance their teaching and learning in their courses. They also stated that they "*provided online questions and answers - QA's sessions*" with students within

their courses by using LMSs, and that they "*used breakout sessions*" during online lectures through Ms Teams whenever they are discussing something or doing a task. Their responses also revealed that they conducted "*online consultation sessions*" with their students for the purpose of providing individual attention.

Groups

According to lecturers' responses, "*dividing students into small groups*" was another strategy used by academic staff to address the challenge of large class sizes. Responses indicated that lecturers divided students into small groups and "*encouraged peer learning*" by assigning them tasks. They proposed that students for practical subjects be divided into "*30 per group*" based on computer lab capacity for lectures and tutorials. Other lecturers suggested that when doing class activities such as discussion exercises, students be "*grouped into 2-5*". Lecturers stated that groups provide "*major educational benefits*" such as giving "*attention to individual students*," "*monitoring class performance*," "*attendance*", and being able to "*finish their syllabus faster*" because group sizes are smaller.

Assessment

Some lecturers, according to their responses, used "*group work*" as an assessment strategy, which reduced assessment time "*more group work - cuts down on assessment times*." Group work has significant educational benefits in addition to reducing assessment time. Academic staff used an online assessment strategy to "*reduce time spent on marking*," according to responses from lecturers, and they have used a variety of Learning Management Systems, including "*Blackboard, Moodle and Microsoft Teams*." These types of online assessments include "*multiple choice questions and quizzes*", and they alleviate the stress of marking and provide "*assessment feedback to students on time*." They also stated that they have used group assessments such as "*group assignments*" and "*oral group presentations*" to overcome the challenge of large class sizes, whereas other lecturers stated that group assessments "*compromises full participation of students*" because there will always be social loafers within those groups. Lecturers indicated that "*individual assessments strategies*" such as tests and exams were also used, but there is no way to overcome the challenge of large class numbers with exams because all learners must sit for exams individually.

4.3 ANALYSIS OF DATA FROM THE QUANTITATIVE METHOD (STUDENTS QUESTIONNAIRE)

4.3.1 BIOGRAPHICAL ANALYSIS FOR STUDENTS' QUESTIONNAIRE

The researcher targeted all 725 students across three (3) departments selected for the study and 500 students responded, giving a 68 percent response rate. Participants were requested to provide their personal information on the questionnaire for statistical consideration only. The biographical information includes gender, race, age, program registered for.

Figure 4.32 Gender of the respondents

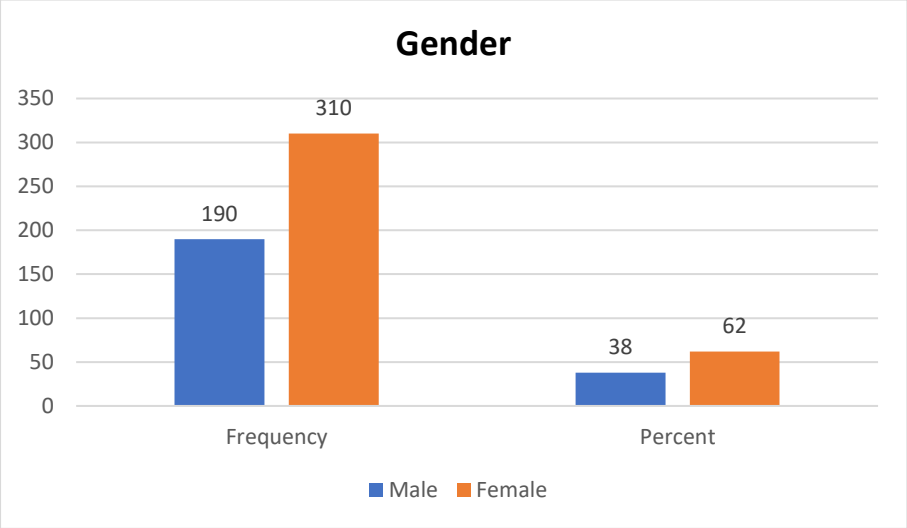
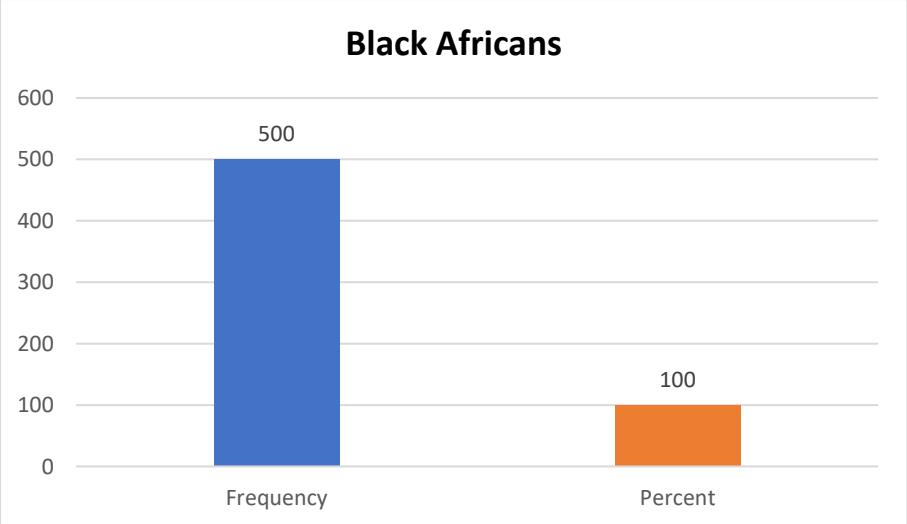


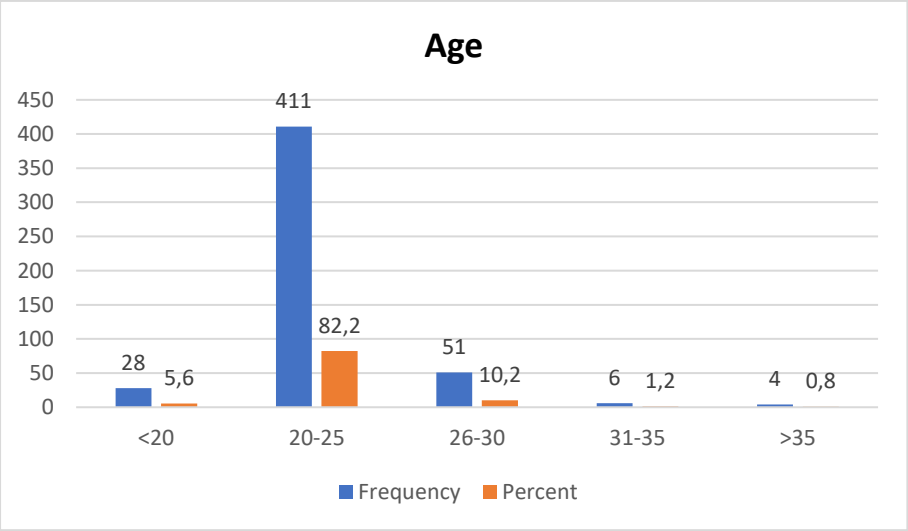
Figure 4.32 indicates that there were nearly twice as many female respondents (62 percent) as males.

Figure 4.33 Race of the respondents



The results in figure 4.33 show that the race of the respondents participated in the study from three departments were 500 (100 percent) all black Africans. This reflects that majority of students in the Faculty of Management Sciences within the three departments selected for the study are dominated by black Africans. However, if other departments from other faculties were included on this study these results would have arrived at different conclusions. Statistics obtained from the academic administration office at the UoT identified for the study show that students of other races are registered from other faculties. According to statistics, there were 15 Indian students in the Faculty of Engineering and 17 Coloured students in the Faculty of Natural sciences. It was noted that the Faculty of Management Sciences was entirely composed of African students, with no students of other races.

Figure 4.34 Age of the respondents



As would be expected from groups of undergraduate students, the great majority of the respondents were within the age group 20 – 25 years. Only 5.6 percent were under twenty. It is interesting to note however that almost twice this percentage (10,2 percent) were between 26 and 30 years of age indicating that older students may be returning to study in order to increase their chances of being employed at this time of severe unemployment, especially amongst the youth of South Africa.

Figure 4.35 Programs respondents registered for

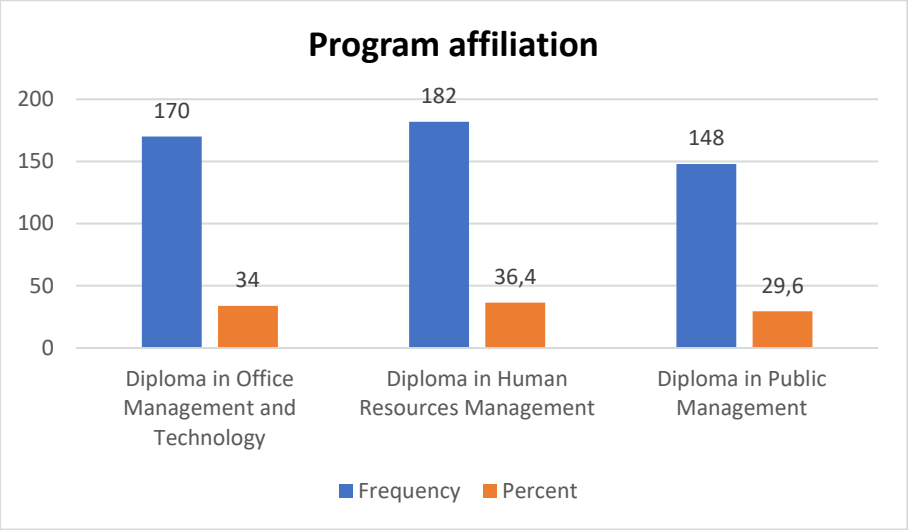


Figure 4.35 shows that the highest number of respondents 182 (36 percent) were students enrolled in a Diploma in Human Resources Management program, while a comparable number, 170 (34 percent) respondents were students enrolled in a Diploma in Office Management and Technology program, and the lowest number of respondents 148 (29.6 percent) were students enrolled in a Diploma in Public Management program. This reflects an adequate number of students from each program took part in this study.

4.3.2 SECTIONAL ANALYSIS OF STUDENTS' PERCEPTIONS & EXPERIENCES

Figure 4.36 Despite the large classes, I feel that I am noticed, and my concerns are attended to

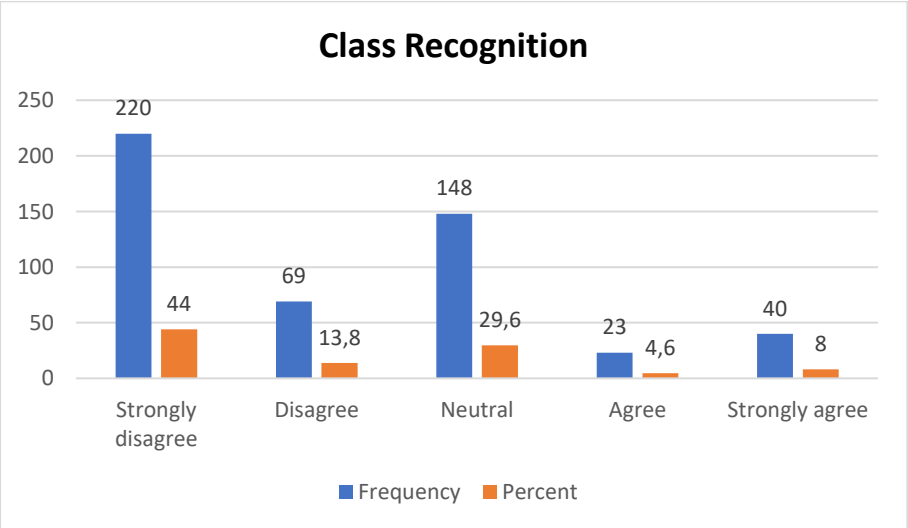


Figure 4.36 demonstrates that 289 (57.8 percent) or a majority of respondents disagreed or strongly disagreed. Figure 4.36 demonstrates that 220 (44 percent) respondents strongly disagreed that they are noticed and that their concerns are addressed despite big class numbers, while 69 (13 percent) disagreed, 144 (29 percent) respondents remained neutral and remaining 63 (12.6 percent) of respondents agreed or strongly agreed. These findings show that the majority of students claim that they are not recognized in large classes, and their concerns are not properly addressed.

Figure 4.37 In large classes I still get individual attention from my lecturers

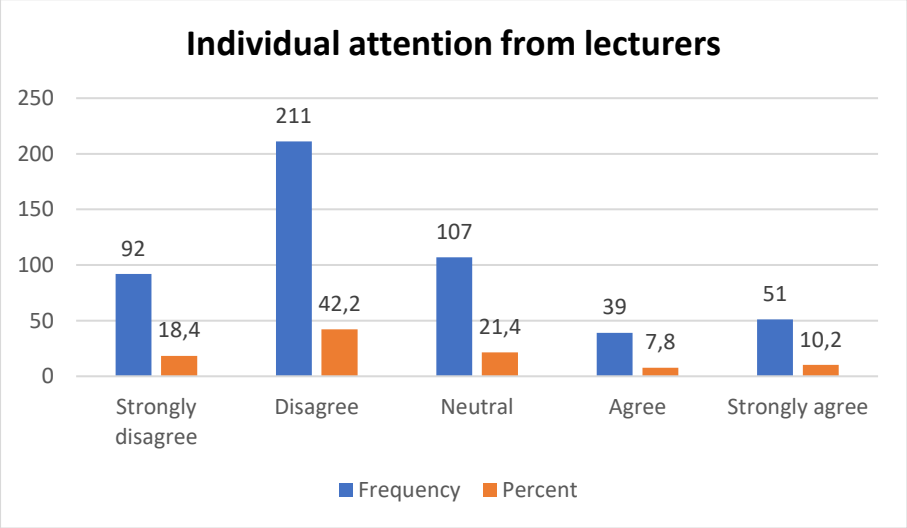


Figure 4.37 indicates that 211 (42 percent) respondents disagreed that they get individual attention from their lecturers, while 92 (18.4 percent) respondents strongly disagreed, 107 (21.4 percent) respondents remained neutral, 39 (7.8 percent) respondents agreed, and 51 (10.2 percent) strongly agreed. These findings show that most students believe they do not receive individual attention from their lecturers in large classes, while very few of the respondents agreed or strongly agreed.

Figure 4.38 In large classes I still feel motivated to attend my classes frequently

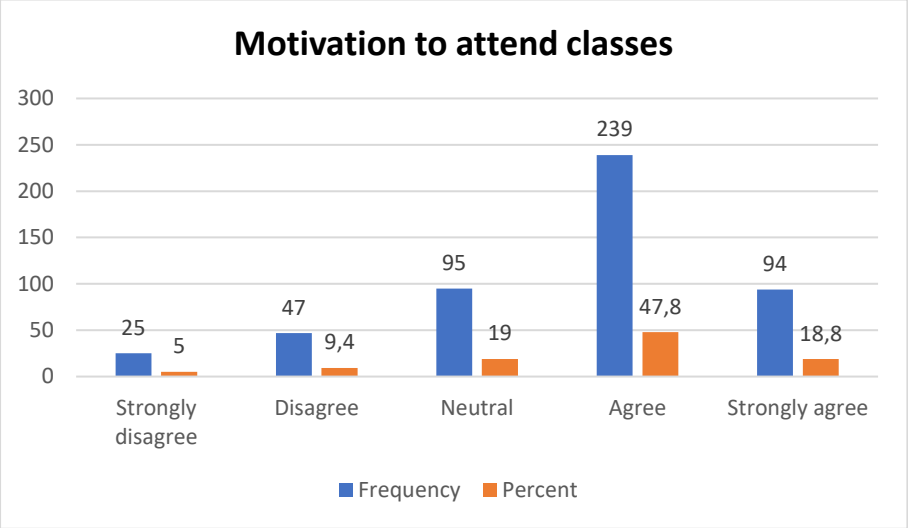
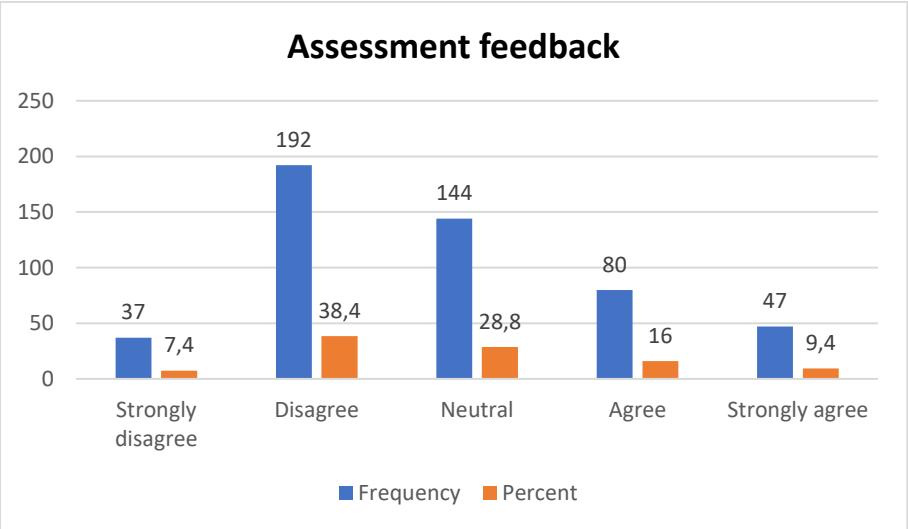


Figure 4.38 reveals that 333 (66.6 percent) or the majority of respondents agreed or and strongly agreed that they are still motivated to attend their classes on a regular basis in large classes, while 95 (19 percent) respondents remained neutral, and 72 (14.4 percent) respondents disagreed and strongly disagreed. This indicates that the majority of students, regardless of class sizes, are motivated to attend their lectures.

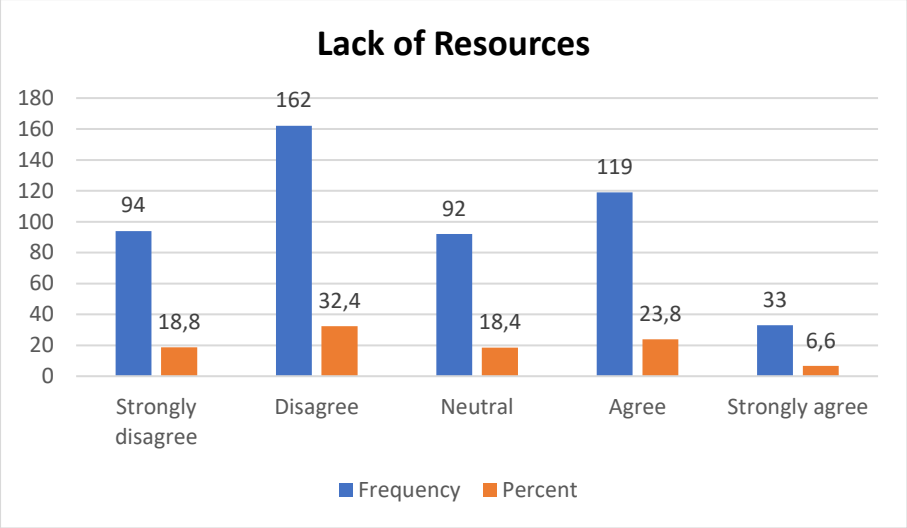
Figure 4.39 Feedback from lecturers is as timeous in large classes as it is in small classes



The findings in figure 4.39 reveal that 229 (45.8 percent) highest number of respondents disagreed or strongly disagreed that feedback from lecturers is as timeous in large classes as it is small classes, while 144 (28.8 percent) respondents remain neutral, and a quarter of respondents 127 (25,4 percent) agreed and strongly

agreed. This shows that most students believed that lecturers do not provide assessment feedback timeously due to large class numbers.

Figure 4.40 Lack of resources in large classes does not affect my academic performance



The results in figure 4.40 demonstrate that majority of respondents 256 (51.2 percent) disagreed and strongly disagreed that lack of resources in large classes does not affect their academic performance, while 152 (30.4 percent) respondents agreed and strongly agreed, and 92 (18.4 percent) respondents remain neutral. These findings show that the majority of students claim that lack of resources has a negative impact on their academic achievement.

Figure 4.41 As part of a large class, I am in a small group tutorial

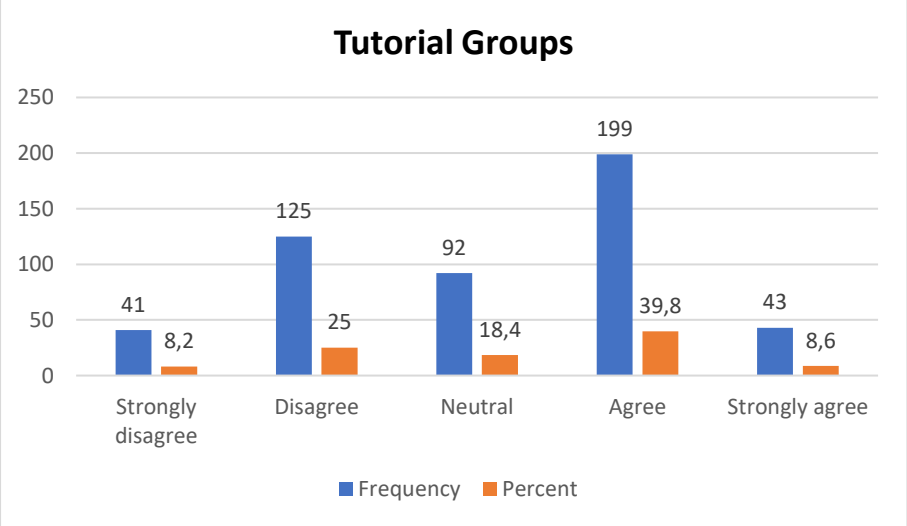


Figure 4.41 shows that 242 (48.4 percent) agreed or strongly agreed that they are in small group tutorial classes as part of large classes, while nearly one third (⅓) of respondents 166 (33.2 percent) disagreed or strongly disagreed, and 92 (18.4 percent) respondents remained neutral. These results clearly show that most students claim that they are in small group tutorials emanating from large class sizes, while the large number of 92 students remained unsure whether they are in a small group of tutorial or not. Therefore, this clearly indicates that some students are not confident with the tutorial system and, as evidenced by their responses, they do not want to be perceived as being too critical of the system.

Figure 4.42 Besides being in a crowded classroom (when COVID laws permit), I still find it easy to read what is being projected on the screen by my lecturer

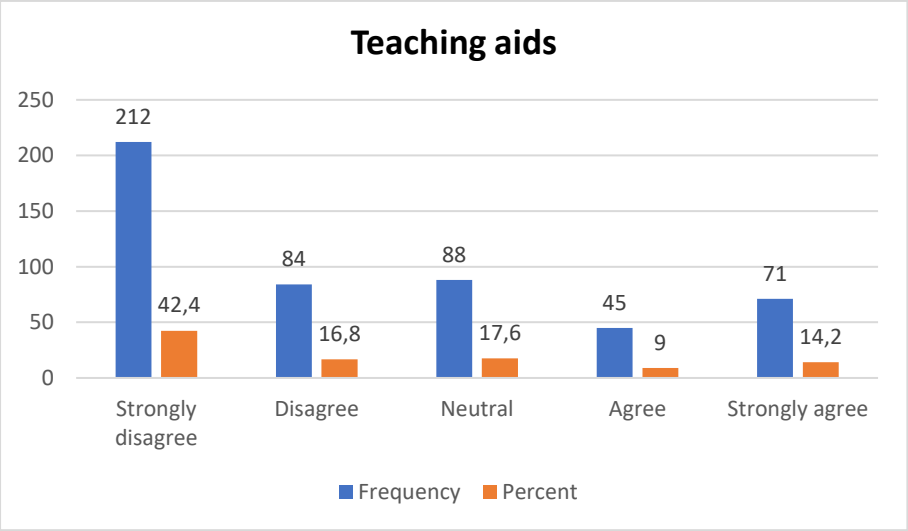


Figure 4.42 shows that the majority of 296 (59.2 percent) respondents disagreed or strongly disagreed that despite the crowded classroom, they find it easy to read what is projected on the screen by the lecturer, whereas 116 (23.2 percent) nearly a quarter of respondents agreed or strongly agreed, while 88 (17.6 percent) respondents remained neutral. This indicates that the majority of students find it difficult to read teaching aids displayed on screens in lecture halls.

Figure 4.43 The layout of the lecture halls is adequate to accommodate us in large class numbers

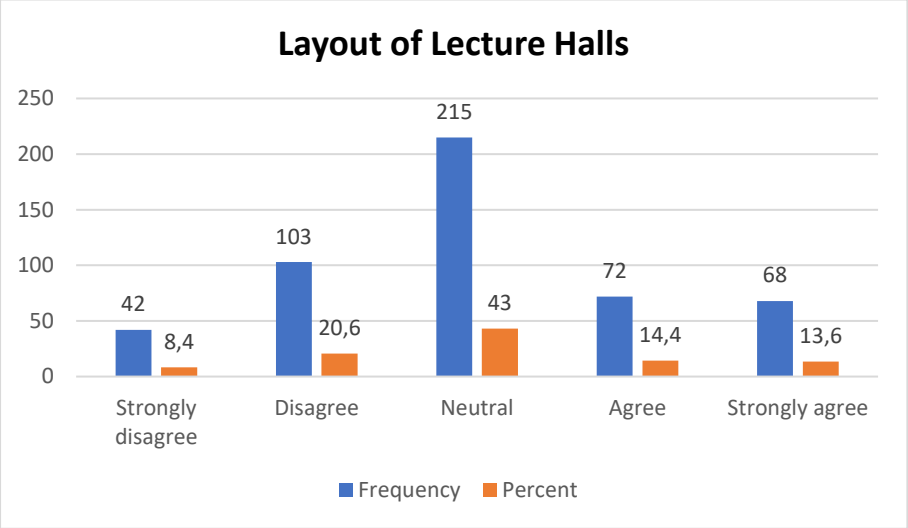


Figure 4.43 reveals that highest response rate of respondents 215 (43 percent) were neutral that the lecture hall layout is adequate to accommodate them in their large classes, however 145 (29 percent) respondents disagreed or strongly disagreed, and 140 (28 percent) respondents agreed or strongly agreed. These results reflect that most students are uncertain whether lecture hall floor plans are suitable to accommodate large class sizes. This clearly indicates that some students were unsure whether the layout structure of the lecture halls was adequate to accommodate them, as evidenced by their responses, while a reasonable 28 percent of respondents agreed or strongly agreed.

Figure 4.44 In large classes (either contact face to face classes or online classes) I still feel at ease to ask questions, to approach my lecturer, or others for help

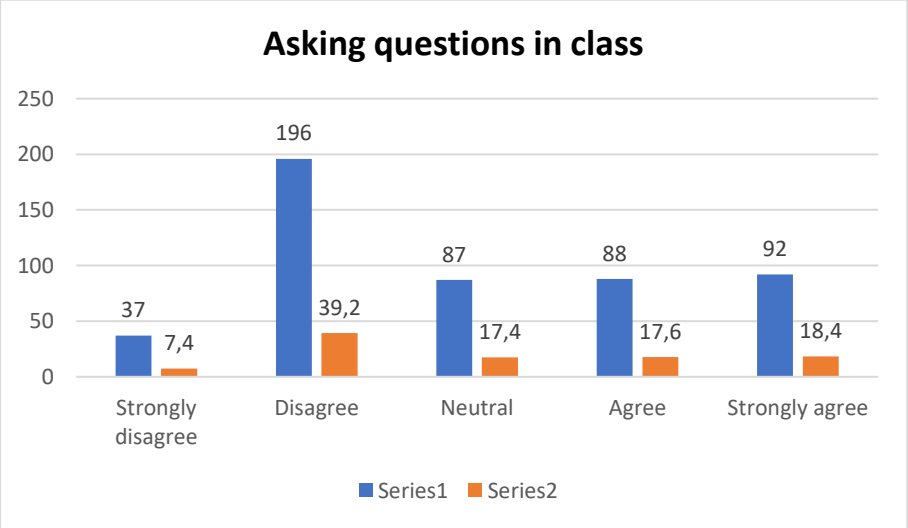


Figure 4.45 indicates that 233 (46.6 percent) respondents disagree or strongly disagree with the assertion that they still feel at ease asking questions and approaching their lectures and others for help in large classes, however 180 (36 percent) respondents agreed or strongly agreed, and 87 (17.4 percent) respondents remained neutral. This clearly reflects that many students believed that they are not comfortable asking questions, providing answers to questions posed during lectures, or seeking assistance from classmates or tutors.

Figure 4.45 Being in large classes does not stop me from engaging in class activities

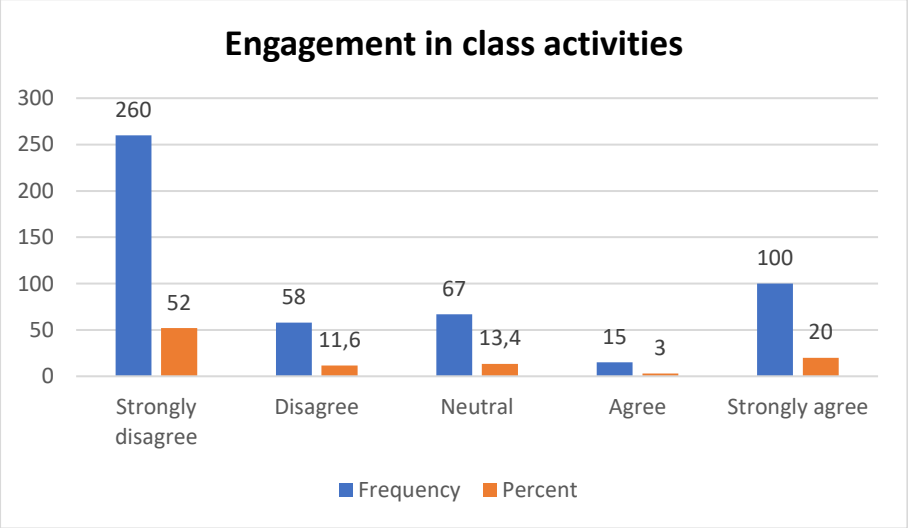
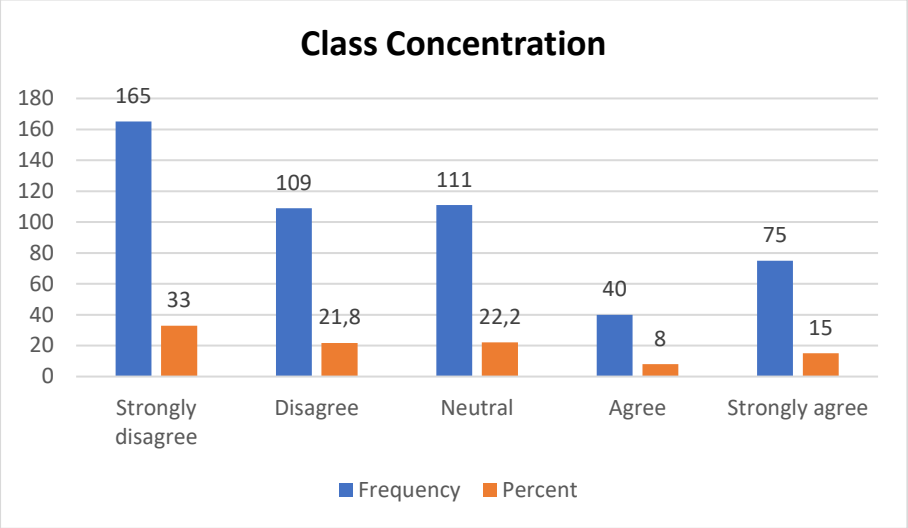


Figure 4.45 reveals that the majority of respondents 318 (63.6 percent) disagreed or strongly disagreed that being in large classes does not stop them from engaging in class activities, while 115 (23 percent) nearly a quarter of respondents agreed or strongly agreed, and 67 (13.4 percent) respondents remained neutral. These results prove that the majority of the students in large classes find it difficult to engage in class activities.

Figure 4.46 Regardless of being in large class I do not loose concentration while the lecture is in progress



The results in figure 4.46 indicate that 274 (54.8 percent) or the majority of respondents, disagreed or strongly disagreed that regardless of large classes they do not lose concentration while the lecture is in progress, while nearly a quarter of respondents 115 (23 percent) agreed or strongly agreed, and 40 (8 percent) respondents remained neutral. This shows that most students believe that they lose concentration in lectures with large class numbers.

Figure 4.47 Academic support is provided by support service centres to students in large classes (TLDC)

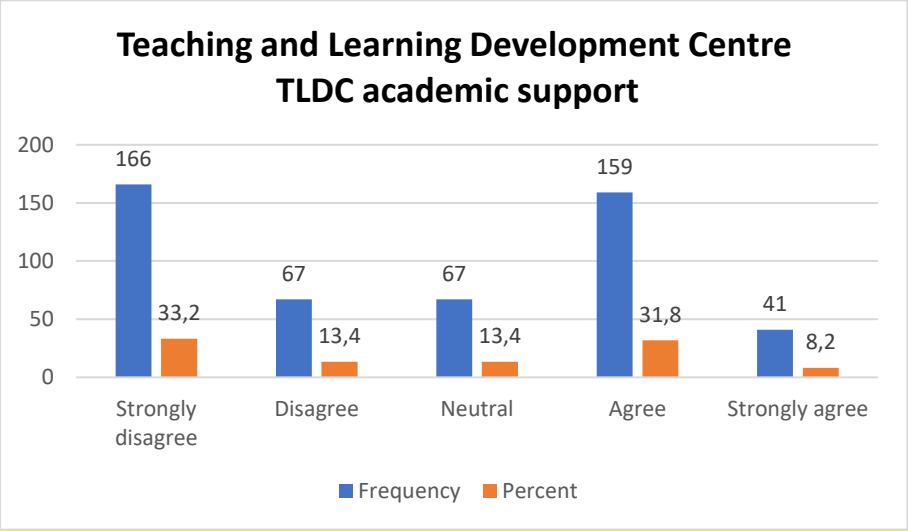
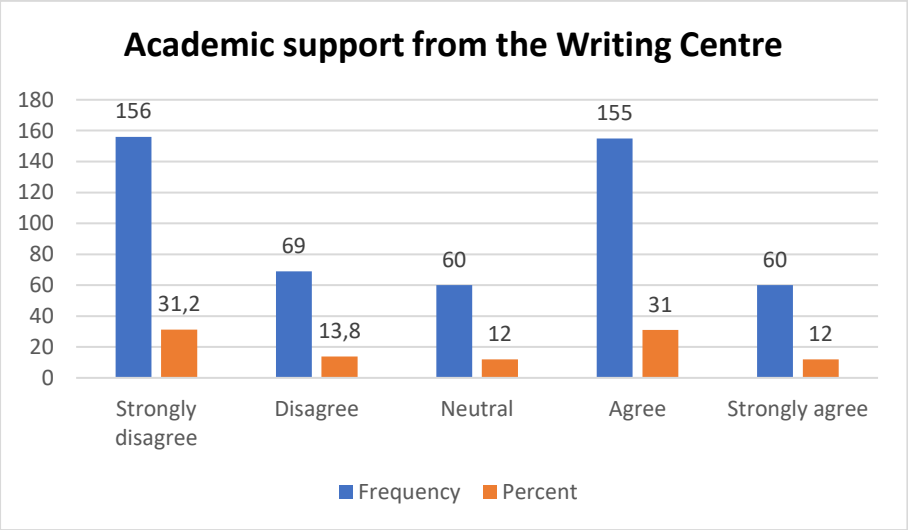


Figure 4.47 demonstrates that 233 (46.6 percent) respondents disagreed or strongly disagreed with academic support provided by TLDC support service center to students

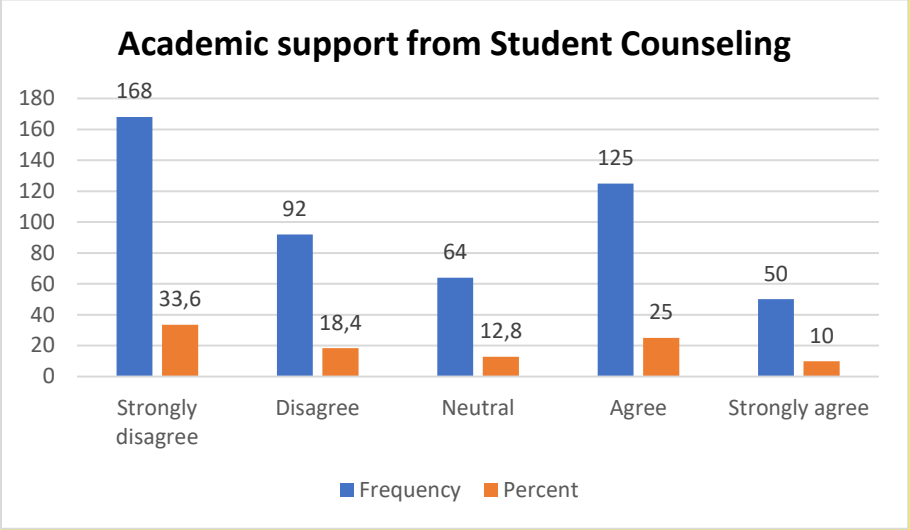
in large classes, however 200 (40 percent) respondents agreed or strongly agreed, while 67 (13.4 percent) respondents remained neutral. These findings indicate that nearly half of students are not pleased with the services provided by TLDC. TLDC provides services related to tutorials, mentorship. This reflects that not all students received services from TLDC related to their learning processes.

Figure 4.48 Academic support is provided by support service centres to students in large classes (Writing Centre)



The findings in figure 4.48 indicate that 225 (45 percent) respondents disagreed or strongly disagreed with academic support provided by writing service centre to students in large classes, however 215 (44 percent) respondents agreed or strongly agreed, and 60 (12 percent) respondents remained neutral. Writing centre renders services related to academic writing (assignments, referencing, reading and presentations). This clearly indicates that many students are not satisfied with the services they receive from writing centre. Therefore, students believed that the writing center could be more useful to them if it could be incorporated into their timetables for them to access centre services, as well as if the writing center could bring up more awareness to students of the services they offer, as evidenced by their qualitative responses.

Figure 4.49 Services provided by student counseling to students in large classes



These results in figure 4.48 show that 260 (52 percent) more than half of respondents disagreed or strongly disagreed about services they receive from the student counseling center for students in large classes, however 175 (35 percent) respondents agreed or strongly agreed, and 64 (12.8 percent) respondents remained neutral. This clearly implies that the majority of students believed that the services they received from student counseling are inadequate. However, while it was noted on the qualitative responses that student counselling should initiate more compulsory activities for students to engage with them, there are also some very favourable comments regarding this service

4.3.3. List the support services that the above centres (TLDC, Writing Centre, Student counseling) have provided to you, and which you find useful in helping students in large classes

Responses to the question of listing the support services that the above centres (TLDC, Writing Centre, Student counseling) have provided to students, and which they find useful in helping students in large classes, are given below in content analysis of qualitative findings. (Note that these have been grouped by the researcher within three (3) specific categories of response: *TLDC, Writing Centre, Student Counseling*).

4.3.3.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Support services provided to students by TLDC, Writing Centre, and Student Counseling that they find useful in assisting students in large classes

Teaching and Learning Development Centre (TLDC)

Students' responses revealed that they had received outstanding learning support from TLDC, and that they had found TLDC "*support services helpful and beneficial*" in assisting them as students in a large class. According to their responses, TLDC has provided students with report writing trainings on "*Work Intergrated Learning WIL*" and "*Project Based Learning PBL from conception to implementation*." Other students revealed that TLDC assisted them in writing assignments using proper referencing techniques - "*Harvard Method*," as well as processing assignments through "*Turnitin.*" Responses further indicates that TLDC has also conducted several trainings to students on "*how to use Blackboard and Microsoft Teams*", which contributed towards their academic activities. These positive reports reflect that TLDC had played a significant role towards students' academic performance. It was also noted that TLDC provided student mentorship "*focusing on adapting to social and academic environment*," as well as "*academic improvement."*

Writing Centre

Responses indicated that the Writing Center has assisted students with their day-to-day academic writing activities, such as "*guiding them and checking their assignments and projects, especially grammar and English language usage before submissions*," and "*assisting students on how to answer questions on various assessments in a good manner*." While other students stated that the writing center helped them enhance their academic writing skills, by providing trainings on "*report writing*," "*writing a proper CV*," "assignment writing and good structure essays using proper referencing methods," "*email etiquette*," and "*planning and preparation of successful presentations*." Responses indicate that students experienced some delays when accessing services at this center, including "*waiting for booking time slots*," "*long queues*," and "*time consuming*" so that they end up not meeting their academic deadlines.

Student Counselling Centre

Responses indicated that student counselling centre has played an important role in providing students with counselling services for "*stress and anxiety*", "*borderline personality disorder*", "*gender-based violence*", "*sexual and drug abuse*", "*depression*" related to "*academic activities*". One respondent indicated that student counseling provided a "*substantial personal counseling after losing both parents during Covid 19*". Other students expressed that students Counseling Centre also provided counselling support related to day-to-day academic-related activities such as "*providing guidance on how to manage my time, balancing personal issues and school time*" and also "*provided counseling services related to stress and anxiety challenges caused by academic pressure*". Responses also indicated that this centre provided some "*group counseling sessions*" to keep them motivated and to perform well academically.

The above content analysis shows that students who used the Counselling services were very positive about them and how helpful they were. 182 (36.4 percent) of students claimed to have received services from these centers, while 38 (7.6 percent) claimed that they had not received any services from these centers. It therefore appeared that 56% had nothing to say about Student Counselling so that there may be a need to raise student awareness in this regard.

4.3.4 List other support services related to large classes that you would like to see provided by these support centers in the near future

Responses to the question of listing other support services related to large classes that students would like to see provided by these support centers in the near future, are given below in the content analysis of qualitative findings. (Note that these have been grouped by the researcher within three (3) specific categories of response: *TLDC, Writing Centre, Student Counselling*).

4.3.4.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Other support services related to large classes that students would like to see provided by these support centers in the near future

Teaching and Development Centre – TLDC

Students' responses indicate that the "*TLDC should introduce a number of programs to provide students with support and guidance*" in their academic activities, and it is emphasized that "*those programs should be prioritized by this center*." More tutors must be provided as a teaching and learning resource, and as more students enrol, more tutors are required for those large classes. It was also indicated that TLDC "*provide a variety of school devices and computers*" to assist students with their work. Even though these demands necessitate a stable budget, universities should try to provide effective support by allocating funds for items such as "*laptops, tablets and data*" that will improve students' learning and increase throughput rate. Students recommend for TLDC to "*provide services such as career exhibitions or advanced career insights*" for them to gain networking opportunities with potential employers. Other students expressed concern that current tutorial system is inefficient in accommodating both full-time (day) and full -time (evening) courses, stating that "*full-time evening groups should be assigned tutorials in the same way that day groups are*."

Writing Centre

Students' responses indicate that the Writing Centre should provide more services, such as "*career development programs*." It was also suggested that this center "*engage with students daily rather than just on a scheduled basis*," introduce "*online services*," and "*develop their website*" to raise student awareness of the center and the services it provides. Responses also indicated that their services should be "*introduced from undergrad to postgrad level of study*." Students suggested that access to this center should be "*incorporated into their timetables*" because they attend classes most of the time during the week. Students strongly indicated that "*more staff for the writing center is required*" so that the writing center is always available to assist students outside of the booking schedule. It was also suggested that the Writing Center provide "*more time throughout the week rather than just at*

specific times," as well as "*flexible hours of operation*" in order to assist more students with their day-to-day academic activities.

Student Counselling Centre

Students' responses indicate that more social workers are required because the existing ones are insufficient. Students suggested that the "*university appoint more social workers*" for the student counselling center because it is impossible to receive assistance from that center due to the large number of students and the limited number of social workers available for consultations. Students further suggested that the use of the student counselling center should be integrated into their timetables because many students require their services. Responses strongly indicate that, "*student counselling should initiate more compulsory activities for students to participate in.*" Responses also indicated that student counseling center "*should do follow-up after students have used their services*." Responses indicated that "*student counselling centre should host more promotions of their services*" to raise student awareness. "*Support for students with disabilities*" was deemed insufficient and it was indicated that "*should be prioritised by this centre*".

The content analysis above shows that 112 (22.4 percent) of students responded by listing the services that they would like these support structures (TLDC, Writing Centre and Student councelling) to offer in the future. These findings reflect that most students projected future services that are related to teaching and learning while the small group of students did not express any future projections towards student counseling centre. It was also noted by respondents that there is a need for support for students living with disabilities should be prioritized with these centers. The findings above provided a list of support services to be introduced by service centers (TLDC, Writing Centre, Student Counselling) in the near future to meet students' academic needs and psychological well-being.

4.3.5 State any other particular personal experiences from being in a large class

Responses to the question of stating any other personal experiences students had from being in a large class, are given below in the content analysis of qualitative

findings. (Note that these have been grouped by the researcher within five (5) themes of response: *Disruptions, Assessments, Participation, Resource Implications, and Benefits*).

4.3.5.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Other particular personal experiences from being in a large class

Disruptions

Many students reported disruptions in their large classes, which resulted in "*lack of concentration due to high levels of noise*" and other barriers associated with large class sizes. Students' responses indicated that students tend to "*lose focus*" in large classes because there are so many distractions, such as "*lecturer voice projections*," which can sometimes make it difficult to understand what is being said if the lecturer speaks softly. It was also stated that these disruptions had a negative impact on "*completing module chapters on time*" due to large class barriers. Students "*disrupt lecturers by asking questions*" while lecturers are teaching, resulting in lost time to finish target chapters for the day. As a result, students must attend on weekends in order for us to complete the syllabus.

Assessments

Students' responses revealed that "*assessment feedback was typically delayed*" due to large class sizes, the delay in assessments such as written assignments and tests as well as other forms of assessments, as lecturers took longer to complete their marking. Responses also indicated that "*lecturers make mistakes*" when they are marking for large classes. It was noted that some forms of assessment, such as individual oral presentations, "*take longer to complete*" due to large class sizes. Their responses indicated that difficulties arise when doing "*oral presentations*"; they take longer because of large groups. Responses strongly indicated that "*lab assessments took a long time*" and were conducted in group sessions due to limited resources, "*compromising quality*". It was stated that when writing exams, due to "*labs shortage*," they normally write their exams in sessions and that "*students can 'cheat' easily*," according to one respondent.

Participation

Students' responses indicated that they were unable to participate in large courses due to a variety of factors such as difficulty hearing a lecturer while teaching due to "*noise levels*" particularly "*if you are seated in the back of the lecture hall*", "*feeling unrecognized*", "*shyness in asking questions*" in front of a large group of students during lectures, and difficulty hearing what the lecturer and their peers were saying during lectures. Responses indicated that students have "*less interaction*" with their lecturers and classmates, as well as "*no individual attention*" from lecturers in large classes. Their responses revealed that being in a large class makes them "*feel lazy*" to do their work, "*participate in group activities*," and "*attend classes*" because they can blend in with other students. Students' responses also revealed that "l*ecturers fail to identify their strengths and weaknesses*" in large classes. Students suggested that universities prioritize teaching and learning in order to address such challenges.

Resource Implications

According to student responses, the most important concern for most students seemed to be resource implications. Their concerns were health-related, such as "*fear of disease transmission*," "*scarcity of facilities and services*," and "*lack of computers*." Their responses indicated that computer labs are too small to accommodate the large number of students "*difficulty fitting into a single class*." Some lecture venues, according to their responses, were also inaccessible to "*students with disabilities*." Their responses indicated that their "*wheelchairs do not fit*" perfectly on the computer lab desks. It was suggested that "*labs be expanded*" to accommodate more students, and that "*more computer labs be built" for self-study purposes*".

Benefits

Students' responses indicated that, aside from the disruptions caused by noise and other obstacles associated with large class sizes, being in large classes provided them with several benefits. Responses reveal that students in a large class can help in "*gaining a lot of understanding*" because there will be a "*lot of ideas and views*" from a wide range of peers as compared with small class. Responses revealed that being in a large class is beneficial because even if you don't understand something that the majority of other students do, you can "*benefit from consulting them*". Responses also revealed that in large classes there are "*more opinions and insights from different*

students", and a privilege because they can get help from a "*variety of many peers*" on any aspect of the module they don't understand. It was noted that many of the students stated that being in large classes gave them "*self-confidence*" and the "*ability to present themselves without fear*" in front of a large number of students.

4.3.6 What strategies do you use to overcome difficulties which you experience from being within a large class?

Responses to the question concerning the strategies that students use to overcome difficulties which they experience from being within a large class, are given below in the content analysis of qualitative findings. (Note that these have been grouped by the researcher within five (5) specific categories of learning strategies – (*Peer-To-Peer, Consultation-Based, Lecture-Based, Tutorial-Based, and Individual-Based*).

4.3.6.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Strategies students used to overcome difficulties which they have experienced from being within a large class

Peer-To-Peer Learning Strategy

Responses revealed that several students used peer-to-peer learning strategy also known as collaborating learning (Co-Learning Approach) to overcome difficulties of being large classes. It was noted that students used this approach through working in groups, library peer meetings, teamwork, "*peer communication using WhatsApp*", and "*brainstorm with peers*". Responses strongly indicated that most students benefited from learning from one another through "asking each other to understand what was learnt, even though some students may feel inferior when being taught by certain peers. Some students dislike discussing concept test questions or taught subjects with their peers, they may be embarrassed by their classmates if they respond incorrectly to a concept test question, so peer instruction may not reach the desired levels.

Lecture - Based Learning Strategy

According to students' responses, several students benefited from a lecture-based learning technique, where they observed lecturers delivering classes using a typical

teaching model (online or contact). Students demonstrated this approach by "*routinely attending lectures*", "*ask more questions to have lecturer's attention*" (lecture interaction), "*listening attentively during lectures*", and "*actively participating in class activities at all times*". However, students' attention begins to fade after fifteen to twenty-five minutes. When students are passive, they quickly forget information "*Memory loss occurs when lectures are too long, particularly after 30 minutes*." while lecturers assume that all students learn at the same pace and have the same level of understanding. It was indicated that "*sometimes lectures do not hold their attention because students are not all fast learners".*

Tutorial-Based Learning Strategy

Students' responses revealed that students have used tutorial-based learning approach to tackle the issues of large classes. Students used this approach through attending tutorials, for "*lesson, revision and for practical purposes*". Responses clearly indicated that, despite the advantages they gained from this learning strategy, they "*do not receive individual attention*" from their tutors due to large class sizes and a "*shortage of tutoring staff*". It was noted that most comments were again trying to address the issue of large classes and what strategies respondents employed in order to alleviate the difficulties of being in large classes. Suggestion was noted that "*more tutors should be employed*" and "*dividing groups into small groups*" for tutorial for "*students to be given an individual attention*" was made in one case.

Consultation-Based Learning Strategy

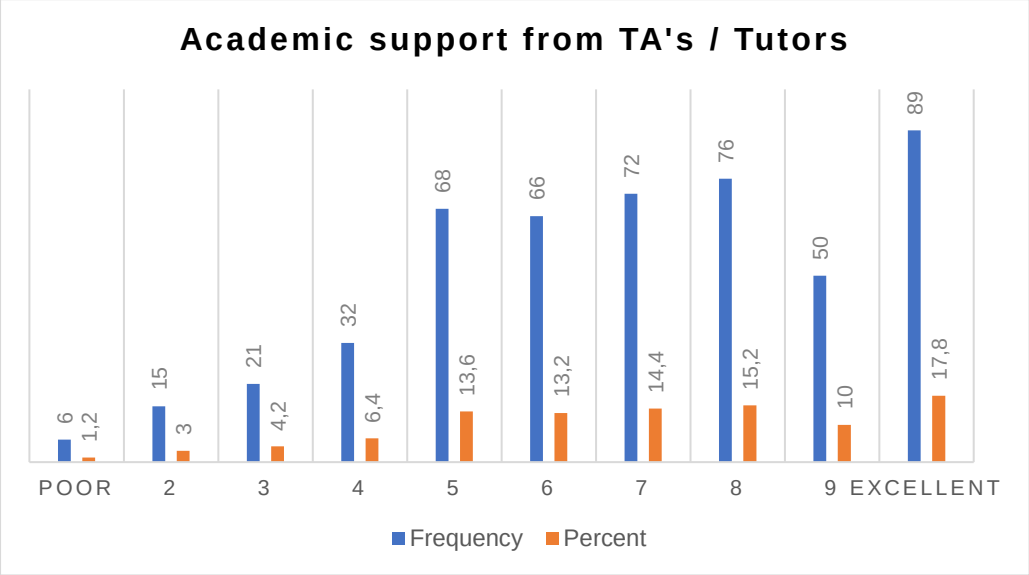
Responses indicated that students used a consultation-based learning strategy, also known as an 'inquiry-based approach', which is a type of active learning that begins with raising questions, issues, or scenarios. Responses indicated that students used this learning method through "*consultation with their lecturers*", "*consultation with tutors*", and "*consultation with classmates*". Responses strongly indicated that through inquiry-based learning has improved students' certain transferable skills "*improved their communication skills*", "*developed their problem-solving skills*", "*improved their teamwork spirit*", many of which relate to initiative and self-direction. According to responses, this learning strategy has benefited students in learning how to "*ask questions*" to ensure that they still capturing what is being taught, "*developed their independent research skills*," "*collaborated with other students in discussions*,"

"*developed their cooperative skills in group activities*," and come to their own conclusions.

Individual-Based Learning Strategy

Responses indicated that several students used an individual-based learning approach, in which learning is based on each learner's strengths and interests (individual). Responses revealed that students used this strategy to overcome difficulties which they experience from being within a large class by "*self-studying in their spare time,*" "*listening to recordings after the lesson, recordings that were recorded during online classes,*" and "*writing notes on what the lecturer is teaching and going through those notes and revising them when studying*", "*revising past assessments", "using the library", "using the internet", "creating a personal study timetable"*, and it developed their time management skills. Responses also indicated that, despite large class sizes, students who used this individual learning approach were more motivated to *"attend classes more frequently*" and "*achieve better academic results."*

Figure 4.49 Rate the academic support you receive from Teaching Assistants TA's (Tutors) for your studies.



These findings in figure 4.49 clearly show the trend in which respondents rated their Teachings Assistant's based on academic support they receive. 89 (17.8 percent) respondents rated with an excellent score of 10, 76 (25.2 percent) respondents rated

8, 72 (14.4 percent) respondents rated 7, 68 (13.2 percent) respondents rated 5, 66 (13.2 percent) respondents rated 6, 50 (10 percent) respondents rated 9, 32 (6.4 percent) respondents rated 4, 21 (4.2 percent) respondents rated 3, 15 (3 percent) respondents rated 2, and 6 (1.2 percent) respondents rated with poor score of 1. These findings clearly indicate that many students are pleased with the tutoring support they receive from their teaching assistants.

4.3.7 Do you have any additional suggestions that you feel will help students in large classes at the university?

Responses to the question concerning any additional suggestions that students feel will help them in large classes at the university, are given below in the content analysis of qualitative findings. (Note that these responses have been grouped by the researcher within five (5) specific themes – *Lectures, Learning Aids, Resources, and Tutorials).*

4.3.7.1 CONTENT ANALYSIS OF QUALITATIVE FINDINGS: Suggestions that students felt will help them in large classes at the university

Lectures

Students' responses provided a wide range of excellent suggestions related to lectures in order to address the challenges that students in large classes confront, such as "*lecturers should use different teaching techniques when teaching*" and "*lecturers should come with their tutors to assist them in monitoring noise levels during lectures*" to enhance students learning process. The need for "*more tutors*", "*more academic staff*" was emphasized, as a shortage of lecturers has an impact on assessments and other teaching and learning related activities. It was also suggested that all online lectures be recorded, uploaded, and made available on e-learning platforms such as "*YouTube," "Microsoft Teams," and "Blackboard*." Responses strongly indicated that "*technology services*" such as "*WIFI connectivity within and outside of residences*" should be improved. It was also indicated that "*at risks students*" should be prioritized by lecturers by providing "*extra classes conducted over weekends*" and "*enough time to prepare for their assessments*."

Learning Aids

Students suggested that several learning aids be provided to "*enhance their learning*" in order to address challenges they experienced from being in large classrooms. Teaching aids are an essential component of any classroom. Students' responses indicated that the installation of the latest technology equipment such as "*smartboards," "data projectors and screens," "interactive whiteboards," "smart tablets," and "microphones and speakers"* in lecture venues is necessary so that every student can participate in large classes whether sitting in the back or front of the lecture halls. Because some of these demands may exceed the university's budget, it was suggested that university authorities should "*raise funds*" to meet these demands. Responses indicated that learning aids provide many benefits which include helping students to "*improve reading comprehension skills*", "*illustrate or reinforce a skill or concept*", "*differentiate instruction and relieve anxiety or boredom*" by presenting information in an innovative and exciting manner. The use of learning aids allows students to use their hearing or seeing abilities "*seeing what is projected on the screen*" "*hear and engage with the lecturer even when sitting at the back*" and actively perform something while learning, which will "*simplify the learning process*" by making it more interesting and "*less time consuming*."

Infrastructure

Students responded with positive suggestions related to infrastructure, including "*building more computer labs and lecture venues*" and "*improvement of the condition existing labs and lecture venues,*" such as "*maintenance of computers*" in the labs, "*air-conditioning system.*" "*strong internet connectivity*" to address problems encountered by students in large classes. Students strongly suggested that "*backup generators*" be provided for load shading purposes. Most students suggested that the university improve its infrastructure by adding more teaching and learning resources, such as "*adding more desks in lecture venues*" to accommodate more students, and "*Create more space between the desks*" for students to move around freely during class activities. It was suggested that universities try to "*limit student intake*" in order to avoid the challenges that lecturers and students currently face due to large class sizes.

Tutorials

Students' responses provided very good suggestions for tutorials that they believed should be implemented, such as "*enforcing tutorial attendance to all students*" and tutorials being offered equally from undergrad to postgrad courses to alleviate the issues that students in large courses experience. According to the responses, it was suggested that "*more tutors should be recruited*" so that each student can receive "*individual attention*" from their tutors "*one-on-one tutorial*". It was suggested that tutors and teaching assistants' hourly rates be revised in order to motivate them. The need for "*more tutorial classes*", and "*tutorial classes for evening courses*" was also highlighted. Another suggestion was that tutorials be offered "*over weekends*" to accommodate post-graduate students, and be offered "*online,*" as some other modules are.

4.4 DATA FROM QUALITATIVE ANALYSIS (INTERVIEWS)

The researcher felt that it would be appropriate to conduct semi-structured interviews with administrative support staff within the departments selected for the study. One faculty officer within the faculty of Management sciences was also included for interviews in order to get their experiences with regards to administering support to departments with large class sizes. The researcher targeted 3 departmental secretaries and one faculty officer within the one faculty. However, due to covid restrictions and other personal reasons stated by respondents, only two (2) academic secretaries agreed to participate in the study and were interviewed. Due to time constraints, the researcher decided to analyse the results available in order to meet the research project deadlines. These responses were also deemed to be enlightening, as they presented a new dimension or point of view not found in responses from other groups.

4.4.1 Do you encounter any challenges regarding administering a large number of students in your department? If so, what are those challenges?

Both respondents agreed that there are several challenges experienced with regards to rendering administrative support to large classes. One respondent stated that

lecturers typically assign work to students and refer them to secretaries for further assistance without informing them. The other respondent said that, prior to Covid, lecturers used to come and request requisitions for students' learning materials and the problem started when they instructed the respondent to take it to the printing department. This respondent added that processing requisitions falls within their scope of work but to follow up on learning material from the printing unit doesn't fall within their job description. This respondent further stated that they once caught in the middle once when the learning material disappeared in the printing unit whereas the lecturer was supposed to follow up themselves. Furthermore, another major challenge is when the lecturers "instruct students to submit their assignment to me through their email", and printing for more than 150 students' assignments remains a huge challenge for them.

4.4.2 How do large classes affect your daily administrative workload?

Both respondents felt that large classes do affect their daily administrative workload. One respondent stated that sometimes they must put on hold their general administrative duties and provide hundreds of students with answers to general enquiries, lead to them not being able to meet their personal deadlines in line with the scope of their duties. This response added that this additional administrative workload also affects their break intervals due to large volume of students' enquiries. The other respondent added that administering hundreds of emails from students with their assignments "it's time consuming which affects my productivity in meeting deadlines" for core functions. This respondent stated that these challenges have been addressed from time to time for respective HoDs to address the matter. Both respondents felt that they are not valued and appreciated enough for their work.

4.4.3 Do you think this institution has a clear workload model that is adhered to within your faculty? Please explain

Both respondents believed that there is no clear workload model that is adhered to within their faculty because they find themselves performing additional functions that are beyond their scope, for example assisting academics with their personal research work. One respondent added that they were given a job description upon their appointment but there was no clear indication of other administrative support duties

and responsibilities expected from them. This respondent also stated that they find themselves doing tasks which are module related, for example: typing of students notes, study guides, ratification reports, and capturing marks for students. This respondent concurs that the workload model is not clear enough and some of the functions they are assigned as academic secretaries are not stated in their job description.

4.4.4 Are there any additional tasks related to teaching and learning in large classes that were assigned to you that previously were purely academic staff functions? If yes, what are those functions?

One respondent said that they are actively involved with the selection of undergraduate and post-graduate students, ratification processes, coordinating and monitoring of students during their Work Integrated Learning, and distribution of learning material to students. This respondent added that they are also involved with their departmental community-based projects in coordinating functions which does not benefit them as per the university's promotion policy. This respondent further stated that they are also involved with typing of assessments and collection of students' assignments, and helping students with their research projects. One respondent believed that being involved with Work Integrated Learning involved her in additional functions, for example, receiving students' portfolios and capturing of WIL portfolio marks on the ITS marksheet which is "beyond the scope of my job description". This respondent added that another challenging task is office demonstration to more than hundred WIL students which she believed "is supposed to be done by WIL coordinator".

4.4.5 Do you get adequate support from lecturing staff in carrying out administrative tasks? Please explain what kind of support you get from academic staff.

One respondent stated that they do not get enough support in carrying out their administrative functions as they are pursuing their studies. This respondent added that they are provided with limited data for providing administrative support while working at home, and no phone call allowance was given to them for administrative purposes. This respondent further stated that there is a lack of motivation from lecturing staff for

administrators' academic personal growth. On the other hand, one respondent believed that some of the academic staff are very supportive – they understand their scope of work, they don't go beyond what is not supposed to be done in their offices, and they ask if they are not sure, before they send any administrative support requests.

4.4.6 When you were appointed, were you provided with a clear indication of the nature of administrative support that you would be asked to provide for academic staff especially, with large classes in your department?

One respondent said that a job description was issued upon their appointment but there was no clear indication of other additional administrative support duties they are expected to provide to academic staff. One respondent added that some of the tasks that have been given to them are not in line with their job description. This respondent also stated that she believed academic staff most frequently are unaware that they are asking for services which a beyond the parameters of their job descriptions. This respondent believed that their job description as academic secretaries should also be accessible to all academic staff.

4.4.7 To how many academic staff in your department do you provide administrative support?

One respondent indicated that she provides administrative support to twelve (12) academic staff members and the other respondent provides assistance to nine (9) academic staff members.

4.4.8 What do you think needs to be done to minimize/address any challenges that may come with administering large classes?

Both respondents suggested the following possible solutions to existing challenges associated with large classes:

- More teaching assistants/ tutors should be appointed to assist lectures with their generic administrative tasks.
- More interns should be appointed to assists academic secretaries especially with general administrative duties to large number of students within the department.

- Proper protocols should be followed by academic staff to send their administrative requests through HoD's office if they request additional administrative assistance from academic secretaries.
- Academic staff should perform their duties as stated in their job descriptions and work within their time frames to meet their deadlines.
- More lecturing staff should be recruited to alleviate the workload of existing lecturing staff members; most departments are understaffed.
- Lecturers should use e-learning platforms when giving assignments to students and students should use e-learning platforms for submitting their work. This will alleviate the burden of heavy administrative workload from academic secretaries.
- The job description of academic secretaries should be communicated to all academic staff, so they know what support service they can expect from academic secretaries.
- Lecturers should indicate in writing if they are asking for special assistance based on their excessive administrative workload, and it should be communicated prior to the commencement of the task.
- Academics must allocate one or two hours each day to perform their administrative duties.
- HoDs should remind their academic staff of the core responsibilities of the academic secretaries from time to time.

4.5 CONCLUSION

The purpose of this chapter was to provide a full presentation, analysis and interpretation of the data that was gathered from academic staff, students, and academic secretaries. The overall findings indicate that indeed academic staff members do believe that they have a heavy burden created by large class sizes and therefore a heavy administrative workload. Academic staff demonstrated all the strategies they have used to address the challenges of large class sizes. They also identified administrative areas that require more assistance in order to reduce their administrative workload, as well as areas that need to be improved in terms of infrastructure and staffing. Academic staff also identified additional teaching and learning support required to address large classes. Students shared their experiences related to teaching and learning, tutorial systems, and resource implications. Students

also expressed their concerns about disruptions in large classes and other challenges related to assessments, participation, and tutorial support, as well as pointing to some benefits they gain from being in large courses. Students also acknowledged the assistance they received from TLDC, the Writing Centre, and Student Counselling. They also suggested additional support initiatives that they would like to see these centres provide in the near future. Students demonstrated the strategies they used to overcome the difficulties they encountered as a result of being in a large class. Students also made suggestions that they believe will benefit students in large university classes. Academic secretaries agreed that large class numbers have an impact on their workload, and that it affects their productivity and can result in not meeting their deadlines. The findings for academic secretaries showed that secretaries do provide a wide range of administrative related support to academics and some indicated that they do not go through their HoDs before making these requests. The next chapter discusses the findings in the light of the literature.

CHAPTER 5: DISCUSSION OF FINDINGS

5.1 INTRODUCTION

This discussion chapter aims to integrate the research findings with existing knowledge and previous studies. The main aim of the case study was to comprehend the various challenges of administering large classes at a South African University of Technology in order to identify effective strategies for coping more effectively with the challenges. The chapter follows a similar structure to the data analyses in Chapter 4 above.

5.2 DISCUSSION OF ACADEMIC STAFF EXPERIENCES IN TEACHING LARGE CLASSES

5.2.1 Administrative workload of academic staff

The findings of this study revealed that nearly all academic staff (94 percent) say that they struggle to manage their workload adequately, due to excessive class sizes, in addition to 55.6 percent (10 of 18) of academic staff having trouble coping with the extra administrative tasks of large classes. These were experienced as detrimentally influencing their research productivity and community participation. There was close consensus among academic staff that these additional administrative workloads had resulted in stress and becoming less motivated towards their work, while also experiencing a decline in support from senior management and administrative support staff. These findings are consistent with Carlson and Gadio (2018: 42) which revealed that lecturing large classes coupled with administrative work affects the various duties of academics negatively. These results are also affirmed by another study conducted by Ayorinde, Haruna, and Ezra (2017:42) which found that academic staff currently often carry a full academic workload while also doing administrative work for the university. Meyers (2019:2) adds that further increase in administrative workload, due to government policy on quality assessment and performance management similarly reduced academics' efficiency levels.

5.2.2 Stress levels

The findings of the present study reflect that 61.1 percent (11 of 18) academic staff indicated that large class sizes expose them to high levels of stress. These findings

are congruent with the study conducted by Derabi *et al.* (2017) which confirmed that heavy workloads, due to increases in class sizes, are identified as another stressor at work as academics feel that they cannot deliver as well as they would like.

5.2.3 Administrative staff support to academic staff

The results reveal most academic staff require more assistance from administrative support staff to alleviate the administrative workload burden associated with large class sizes, indicating a lack by stakeholders – academic and administrative support staff, to support each other sufficiently. These findings concur with Kinman and Wray (2013) who report that receiving support from administrative assistants can reduce academics' stress levels. These findings are also supported by Darabi *et al.* (2017) who affirm that many academics are concerned about poor administration support and what appears to be poor local management, which has exacerbated their stress levels. Less support was experienced from administrative staff upon booking of test venues, printing of test papers and marks capturing, along with filing, as indicated by 55.5 percent (10 of 18) of the surveyed academic staff with large class sizes. Concurrently, administrative support staff indicated a lack of support provided by academic staff to encourage their personal growth and they also complained about finding themselves performing tasks previously performed purely by academic staff. Overall, there appeared to be a need to provide assistance in the form of teaching and tutoring assistance for academics and additional interns for administrators.

The findings concur with Kinman and Wray (2013) who report that receiving support from administrative assistants can reduce academic's stress levels. These findings are also supported by Darabi *et al.* (2017). Academics emphasised in that study that support from colleagues and increasing their time management skills were positive coping strategies.

5.2.4 Disciplining of students

Mustafa, Mahmoud, Assaf, Al-Hamadi and Abdulhamid (2015) reveal that large numbers of students in a classroom setting constitute a barrier to classroom management in general, and to classroom discipline. They established that larger classes are noisier and more prone to pushing, crowding, and hitting. A single lecturer generally cannot handle such issues in the classroom on his or her own. In such cases,

lecturers waste crucial class time since they spend much of the time trying to control students (Mustafa *et al.* (2015:178). In support of the findings Boubabouri and Chadli (2020: 21) state emerging problems are more difficult to control in large groups, while lecturers have difficulty being 'smart' to avoid such class behaviour. This study generally confirmed these findings. While half the academic staff (9 of 18), believed they could control student behaviour in large classes, seven indicated their *inability or uncertainty* regarding their disciplining ability, even though all are well qualified, and most were very experienced.

5.2.5 Lack of resources

A large percentage - 72.3 percent (13 of 18), of academic staff indicated that a lack of resources has an important impact on effective large class teaching, with infrastructure shown to remain a challenge for most academic staff in the selected university. The condition of existing lecture venues was revealed as not conducive to teaching and learning, reflected in the qualitative responses that some facilities are not well-maintained. The study findings further revealed 51.2 percent (256 of 500) of the surveyed students claimed the lack of resources negatively impacts their academic achievement. Interestingly, these findings were consistent with the results from academic staff on the statement that the lack of resources has an impact on student performance, clearly indicating that the university should intervene. These findings concur with the study conducted by Teixeira (2020) which reports that poor building conditions, especially in HEIs creates a negative environment; adversely affects students' learning outcomes. Singh and Kumar (2017:1385) state that students' academic performance is severely affected by such psychological, economic, social, personal, and environmental factors.

The findings of this study also revealed that 51.2 percent (256 of 500) students claimed that the lack of resources has a negative impact on their academic achievement. Interestingly, these findings from students were consistent with the results from academics that the lack of resources has an impact towards student performance. Singh and Kumar (2017) found that good infrastructural and learning facilities have a positive and statistically significant impact on the students' performance, specifically, the attendance and the drop-out rates, as does Teixeira (2020)

5.2.6 Layout of the lecture halls

In the opinion of the academic staff, 66.6 percent (12 of 18) believed the layout of lecture halls is not adaptable to large class sizes, which clearly signifies infrastructure, and its layout, is a major concern for most academic staff. Both academic staff and students expressed the unsuitability of lecture venue layout to students with physical disabilities. However, in the case of physical buildings and other institutional arrangements, lecturers may have less influence on effecting desired changes. The findings concur with Mutanga and Walker (2017:5) who revealed that lecture hall arrangements also negatively affect lecturers in attending to the needs of students with disabilities. Boubabouri and Chadli (2020) concur that seating arrangements play a vital role in making students engage more in class, reasonable seating can promote interaction and influence learning activity success.

5.2.7 Conducting assessments and provision of assessment feedback

The study findings indicated that 72.2 percent (12 of 18) of academic staff believed that assessing large groups of students remains a challenge while 77.8 percent (14 of 18) are struggling to provide assessment feedback timeously to students. The study conducted by Devlin (2021:125) states that online assessment (for example, multiple-choice and/or short answer questions that can be automatically marked can provide students with feedback that would otherwise be impossible), but also online assessment may not necessarily avoid the problems of low-level learning or plagiarism, while group and on-line assessment have much to offer in dealing with the obstacles of assessing large classes, neither is a complete solution for all the concerns that associated with assessing large classes (Devlin 2021:125). On the positive side, another study conducted by Anmpalagan and Smith (2018) suggests that engaging students in peer feedback in big courses, that is, getting them to comment on / grade one another's work, may greatly reduce the lecturer's marking burden. It may motivate students to take more responsibility for their own learning (Anmpalagan and Smith 2018).

5.2.8 Students' academic performance

The study findings indicated all academic staff claimed that large classes impact students' academic performance negatively, and all academics agreed with the statement. Qualitative responses from academic staff members, indicated a poor

student attendance in large courses, which contributes towards poor academic performance, with non-attendance motivated by aspects such as noise and other disruptions associated with large class sizes. Furthermore, students are less motivated to attend class as they feel they are not noticed, and their concerns are not attended to by their respective lecturers. It was noted lecturers do try to use a student-centred teaching approach, in addition to a variety of Learning Management Systems (LMS) to enhance teaching and learning within their courses; this normally impacts students' academic performance positively. However, the following challenges were identified inherent to the use of e-learning. Academic staff indicated use of an e-learning approach resulted in students developing a tendency to lack self-discipline, not feeling motivated to learn, resulting in procrastination. The approach also decreases student confidence levels to interact during online lectures, as opposed to face-to-face teaching in 'free to interact' lectures. Akhter, Javed, Shah and Javaid . (2021:1607) affirms that the use of e-learning approach decreases students' desire to read textbooks thoroughly. Textbooks are a great source of reliable information and expertise. Many students simply take material from the internet without knowing its authenticity because not all information available online is accurate (Akhter *et al.* 2021).

These findings are supported by the study conducted by Ribeiro *et al.* (2019) which affirms that students expected to attend most classes; this is where content is taught and precise instructions regarding the material to study and skills to practice are offered, to achieve high-quality academic outcomes. Blair, Maharaj and Primus (2016) suggest that flipped classrooms, where students are required to study the material themselves in advance of lectures, results in better student performance over the traditional class format, the flipped classroom presents an environment that students prefer and benefits the lecturer in providing time to meet individual student needs.

5.3 DISCUSSION ON STUDENTS' PERCEPTIONS AND EXPERIENCES OF LARGE CLASSES

5.3.1 Individual attention from lecturers

42 percent (211 of 500) of the students claimed they do not receive individual attention from their lecturers in large classes. Academics agreed. These results were also supported by the study conducted by Mutanga and Walker (2017:5) which revealed

that some lecturers do not want to spend much time on one or two students because of pressure and demands from large classes; more than 50 students in classes is challenging for one lecturer - not because they do not want to but more because they find it impossible to do so. Boubabouri and Chadli (2020:22) argue that this is one of the crucial challenges in large size classes – lecturers cannot pay attention to every single student; it would take too much time and effort.

5.3.2 Tutorial System

The findings of the study show 48 percent (242 of 500) or nearly half of the students claimed they were assigned to tutorials, while 18 percent (92 of 500) were 'neutral' concerning whether they are in a small group or tutorial. These findings may indicate that some students are not confident with the tutorial system, and do not want to be counted as having participated in tutorials, possibly because, despite being allocated to a tutorial group, they do not find it valuable and do not frequently attend. These results also revealed the value of tutorials needs to be demonstrated amongst students. Tutors attend training upon their appointment coordinated by the Teaching and Learning Development Centre (TLDC). They are paid at a rate of R50.00 per hour, considered a reduced rate due to large class numbers, as evidenced by lecturers' and students' qualitative responses. Each tutor has a tutorial group of approximately 100 students per module. According to Officer (2019), a tutorial is a class of 5 to 30 students in which students discuss key topics, concepts, and ideas with their tutors. Hlatshwayo (2013) revealed that tutorials promote student learning, enabling active engagement, reducing stress levels, building learning abilities that support the retention of skills and knowledge, and promoting a lasting interest and love for the discipline. Therefore, tutorials play a significant role in promoting student academic success, but do not seem to be adequately provided for in the selected university.

5.3.3 Students' engagement during lectures and class activities

The study findings revealed that 46.6 percent (233 of 500) or nearly half of the students indicated discomfort at asking questions, providing answers to questions posed during lectures, or seeking assistance from classmates or tutors. The study findings also showed that more than half of the students (63.6 percent, 318 of 500) claimed they find it difficult in large classes to engage in class activities. Research findings in support of the current study include a study conducted by Smallhorn (2017:44) which

indicate that, lecturers need to deliver curricula that foster relationships and promote active learning; improve student engagement with the university; for instance, there is clear evidence student engagement increases in the flipped classroom, which may not be easy to institute in large classes. These results were also concurred by Esia-Donkoh and Antwi (2015) who revealed that students' engagement, behaviour, and retention are affected in so many ways by the size of the class.

5.3.4 Students' motivation to attend classes

It was interesting to note that most students remain motivated to attend their classes on a regular basis, despite large class sizes, with the study results indicating 66.6 percent (333 of 500) in agreement. It was noted students remain motivated because they have employed different learning strategies to overcome difficulties experienced being within a large class. These findings are supported by Marais (2016:3).

5.3.5 Academic support provided by support service centres to students in large classes. (TLDC, Writing Centre, Student Counselling)

The study findings indicated that 46.6 percent (233 of 500) or nearly half the students were not entirely satisfied with TLDC services. These results also reflect not all students received services from TLDC related to their learning processes. The findings further revealed that 45 percent (255 of 500) of the students were specifically not satisfied with the services they received from the Writing Centre. Students believed the centre should be more useful to them. In addition, 52 percent (260 of 500) or more than half the students, claimed the services they received from the Student Counselling Centre were inadequate. On the other hand, as evidenced by their qualitative responses, it was noted the TLDC has provided outstanding learning support to some students. The findings are affirmed by Kaur (2016:126), who mentions much evidence to suggest a positive relationship between students' academic performance and effective use of support systems; however, to gain a better understanding of student perceptions and use of support systems is vital to maximise student satisfaction, as well as the effectiveness of these services to enhance students' academic performance. This indicates the systems within the university are not working together optimally and that, for instance, incorporating aspects of the support systems within the academic curriculum, as suggested by some students, would bring about improvements.

5.4 DISCUSSION ON ADMINISTRATIVE SUPPORT STAFF EXPERIENCES ON LARGE CLASSES – (INTERVIEWS)

5.4.1 Administrative support to large numbers of students

Both interviewees believed providing administrative support to large classrooms poses several challenges, such as those related to processing of requisitions, projects, and assignment submissions. It was noted academic staff often assign work to students and refer them to departmental secretaries for further assistance, without informing them. One interviewee indicated assisting with enquiry duties to a large number of students poses a challenge to their core administrative functions, as they must set aside some of their key duties, resulting in failure to meet deadlines. These results were a clear indication that relevant stakeholders (academic and administrative support staff) need to find ways to support each other sufficiently. The result of this study is affirmed by Gupta and Bansal (2020:4677), whose findings indicate the large number of students in universities not only affect teaching but also non-teaching staff.

5.4.2 Administrative workload

It was agreed by both interviewees that large classes affect their daily administrative workload. Therefore, they felt they are not adequately acknowledged and valued. These findings are consistent with results from a study by Meyers (2019:137) which indicates that administrative support staff often do far more than their job descriptions, over and above the “call of duty”. They require recognition for work well done, including non-monetary rewards; they need to feel valued, appreciated and not taken for granted. Both participants indicated that there is no clear workload model followed within their faculty, since they are required to execute additional activities beyond their scope, such as assisting academics with personal research work. One respondent added that they were given a job description upon their appointment, with no clear indication of other administrative support duties and responsibilities expected from them, which would have been specified had a workload model been applied. This corroborates findings by Jung and Shin (2015:881) that show the administrator’s role is widening, from simple office work to a broader scope, including quality assurance, teaching and research support, finance, and facility management, as well as master planning, consequently, the competency of administrative staff is a core factor in organizational effectiveness.

5.4.3 Additional tasks related to teaching and learning

It is noted support staff were executing tasks related to, among others, the coordination and monitoring of students during Work Integrated Learning (WIL), capturing marks, coordination of community-based projects, and assisting students with research projects. These findings correspond with those of Patrick *et al.* (2015) indicating “administrative staff members will have additional duties not always specified within their respective job descriptions, not only for the support of students but also for the organisations they represent; these additional duties include activities such as the coordination of WIL programmes and supervision duties for academics, as well as preparation for departmental advisory meetings”.

5.4.4 Support from academic staff in carrying out administrative tasks

Both interviewees indicated that they have received adequate support from around half of the academic staff in carrying out their tasks, but one interviewee declared that no support was provided to them, as administrators, for their personal growth. These findings are consistent with studies such as McInnis (2018) and Welsh and Metcalf (2016:445-468), with professional staff generally shown to have a negative view of their relationship with academics, while academic staff are often perceived as guilty of undermining or undervaluing administrative skills. In addition, the “disconnect between academic and administrative staff members reduces their opportunities and weakens their ability to work as a team or collectively” Welsh and Metcalf (2016:445-468). This requires strong coordination between academic and administrative support staff, in consultation with HoDs, to address these concerns. These findings indicate the significance of the systems theory underpinning this study.

5.4.5 Nature of support that administrative staff provide for academic staff

Both administrative support staff interviewed revealed that they often receive tasks from academic staff without proper training or guidance. Lecturers are also not aware of the exact duties administrative support staff should provide. Both interviewees expressed that their job description as academic secretaries should also be accessible to all academic staff to bring awareness of the nature of duties expected from administrative support staff. The results assert there should be strong coordination between the relevant stakeholders within the university to address these phenomena.

These results are supported by Lamptey *et al*. (2020:7), who found that the services associated with some administrative functions of university administrative staff, are also associated with the functions of the teaching staff. To generate the desired quality of teaching staff, Lamptey *et al*. (2020:7) state that a better and more strategic student-centred collaboration between teaching and administrative staff is required.

5.5 CONCLUSION

Chapter Five discussed the main findings of the research in relation to the supporting literature. The results were consistent with the theories and findings of the previous studies reviewed in the literature. The results indicated that administration of large classes has more negative effects than positive effects on lectures' experiences, students' perceptions and expectations, and administrative support staff experiences. It was noted that academic staff are not effectively collaborating with administrative support staff and expressed receiving insufficient support from them and vice versa. Academic staff were often uncertain of what level of support they should expect from administrators, while administrative support staff were not always sure what level of support they were expected to provide, and they also felt undervalued and insufficiently supported in their own professional development. It was also noted that students are not effectively engaging with support service centres as some students are not aware of these services. These divisions create tensions between these stakeholders as they are interdependent on each other.

The next chapter concludes the study by providing recommendations, noting the study's limitations, and also making suggestions for future research and the direction that this future research may take.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter presented a discussion of the findings of the research in the context of previous studies. This chapter discusses the achievement of the objectives, draws conclusions, and makes recommendations. Limitations of the study are also discussed, and implications considered. The conclusions and recommendations are based on the analysis of the data collected.

6.2 ACHIEVEMENT OF RESEARCH OBJECTIVES BASED ON KEY FINDINGS

This section will present the conclusions reached in relation to the study's objectives.

6.2.1 OBJECTIVE 1: To identify the experiences of academic staff members with regards to administering large classes

The responses received show that 89 percent (16 of 18) academic staff members believed that due to massification they have a heavy administrative workload, with more than half strongly agreeing. All these respondents were able to identify areas where they felt more assistance was required. The findings indicate that appointment of teaching assistants (TA's) and tutors, invigilation of tests and exams, support for casual and tutorial staff in marking of assessments and capturing of assessment marks were regarded as the areas where the greatest administrative support is required. These findings were consistent with the literature which indicates that large classes are often unattractive for lecturers, because they come with significant administrative burdens, depending on the level of the institutional support and the availability of assistance from the administrative staff (Hornsby, Osman, and De Matos-Ala 2016:115). The findings also revealed that more assistance is required for typing course-related material, monitoring students, preparing course material for students, and student selection. Lecturers' frustrations relate to wanting to be able to do a better job in order to give more to the university by providing even better teaching, giving more support to students, and undertaking more community engagement, scholarship, and research.

Lecturers are clear that administration takes up an unnecessary amount of their time. It is in the interest of universities to address these real concerns of academics as it will help to reduce stress levels and allow academics to devote more of their time to what they see as the core and most rewarding aspects of their role – teaching, research, and community engagement. Therefore, this study recommends that the university should consider appointing more academic staff members if possible, to help relieve the workload related stress associated with teaching large classes. The university should also consider employing more teaching assistants, particularly those with higher degrees, to assist lecturers with administration and during lectures. Employing teaching assistants will be less expensive than hiring academic staff, which will reduce the university's budget constraints. This will allow academics to devote more time to core academic activities other than teaching and learning, such as research and community engagement. Failure to do so, is likely to have a negative effect on academic staff morale and ultimately their wellbeing and the student experience.

Infrastructure Challenges. It was suggested that the university should renovate existing lecture halls and install the latest technology such as smartboards, installed microphones, and speakers, and where possible build more lecture halls and computer labs to accommodate more students. Alternatively, university could employ a platoon system strategy, whereby courses rotate their attendance via online or physical contact, typically weekly or monthly, so that more lecture venues will become available while other courses are online. The university should also invest in generators to help with load shedding. This will help to keep classes from being disrupted.

Fund raising. While these ambitious plans may not be immediately achievable given very restricted government funding, plans for generating funds should be thoroughly investigated. To raise funds for hiring more tutors, interns, teaching assistants, and latest technology equipment, university should consider generating funds through greater collaboration with industry – through research projects; offering short courses; and offering services to communities such as supporting community projects and entrepreneurs. Providing multiple ways to donate would increase the chances of receiving more donations. Attention should be paid to donor stewardship - every donor, regardless of the size of their gift, should be given thanks and recognition,

creating a positive experience for the donor, who is then likely to stay on, give again, and give more. Universities should also showcase impact by clearly demonstrating the effectiveness of their programs and initiatives, as donors today are increasingly interested in knowing where their money goes and seeing the positive impact of their contributions. Universities could also offer corporate training or career enhancement training in collaboration with local businesses to generate additional funds and could consider renting out facilities (halls and students' hostels - during recess), or organising charity events, or sports tournaments. They could also consider offering online shops. Students buy a variety of items when they first start, ranging from living necessities to course and study materials. Universities can earn affiliate commissions for sales they generate for providers by providing an online shop offering the specific items required.

Universities could also generate more funds by creating a YouTube channel with lesson notes, hands-on living and financial advice, local 'things to do' advice, and so on, to earn extra money while engaging with their students on a more personal level.

Staff support and remuneration. This study recommends that the university should consider revising academic staff data allowances for online activities, as findings show that it is currently insufficient for general administrative meetings for faculty, departments, and teaching classes. It was also suggested that tutors should be given data allowances for online tutorials as well as laptop computers for these tutorials. It was emphasized that the university should invest more in the latest technology for teaching and learning, such as installing latest software packages in computer labs, in order to keep up with the latest technological developments. It was also suggested that the Integrated Tertiary Software (ITS) be improved for the process of ratifying marks and applying for graduation. It is recommended that any short courses introduced could focus specifically on generating money to cater for technology innovations.

Teaching strategies. As suggested in the literature and indicated on the findings, academics should adapt their teaching styles where possible in order to meet the challenges of large classes. Some teaching and learning strategies suggest that lecturers could try to 'treat large classes as small classes' wherever possible. Trang

(2018) suggests the use of pair work and group work even in large classes, since they maximize student participation and promote cooperative learning activities, while any unwieldiness generated can be prevented if the interactive moment is properly structured (Hornsby, 2015).

Teaching and administering large classes thus require significant planning, support, and expertise. Therefore, it is critical for lecturers to understand the implications of teaching large classes and the integration of technology (blended learning) with their teaching. Harrell and Bynum (2018:12) affirm that students in universities are generally 'digital natives' and universities now have a responsibility to integrate technology into teaching and learning, especially those with large classes (Harrell and Bynum 2018:12). Technology offers a number of innovative ways to engage students both inside and outside of the classroom so that they become "active, self-paced, and empowered learners" (Sarkar, Ford, and Manzo, 2017). Therefore, this study recommends that collaborative learning, group discussions, blended learning, online assessments and flipped classroom could also be employed as strategies to deal with large classes.

Overall, it appears that a more equitable balance between departments with large student intakes and those with smaller ones is required, as well as consideration of methods and means of providing additional lecturing staff and administrative support in areas where academics have expressed the greatest need such as the invigilation of tests and exams, marking of assessments and capturing of assessment marks.

It was also suggested that there must be a strong coordination between these lecturing and tutorial systems, for instance, for revision of data allowances for online activities, allocation of laptop for tutors for online tutorials. TLDC should play a role in providing academic support services related to teaching and learning. The findings of this study also revealed that there should be a coordination between academic staff (System of Lecturing) and administrative support staff (system of administration) for typing course-related material, monitoring students, preparing course material for students, student selection, marks capturing, marks computation, as evidenced by academic staff responses. Lecturers, TLDC, Human Resources and development HRD, and Senior Management should play a role to implement and facilitate the process of hiring

more teaching assistants, tutors, interns to alleviate administrative burden from both lecturing staff and administrative staff.

Senior management should be more aware of the innovative ideas of the students and it is suggested that a regular forum should be started where they could listen to the ideas of responsible student leaders, also they should come up with best fundraising strategies to generate funds that can be utilised for hiring cost of more staff. Senior Management is not only involved in hiring, but there are other complex ways to raise funds for the university, such as fostering a collaborative culture by providing students, staff, and alumni with ample opportunities to collaborate on projects and campaigns, which will invite more donors to fund those projects. Universities should also encourage students to get involved in volunteering groups and clubs.

6.2.2 OBJECTIVE 2: To determine students' perspectives on their experiences in relation to the administration of large classes and how these affect their learning

Findings revealed that students lose concentration in lectures with large class numbers and lecturers did not give them individual attention which has negatively affected their academic performance. Marais (2016:3) affirms that students cannot pay attention or participate at the required level of intensity because classmates are noisy and restive, with the result that academic achievement is negatively affected. Furthermore, students cannot rely on individual care from lecturers, particularly those who need extra support. Therefore, the study recommends that university should subdivide courses into smaller groups. Moran (2022) states that the physical classroom provides students with natural opportunities to move around, whether they are forming groups or walking up to the board. If the classroom size has been subdivided into small groups, the teacher can cover more material in less time, giving students more confidence in participating in classroom discussions. Lessons become more interactive as more students participate and share their perspectives and ideas. Moran (2022) further suggest that, in the case of virtual classes, students can be divided into groups by sending them to separate "breakout rooms" or "chat rooms" available on your virtual classroom software and bring them together at the end of the

session allow one student to represent each group. Students also believed that having one tutor sometimes for as many as 100 students made it impossible for them to get the individual attention, as evidenced by their responses. Students also suggested that the university provide tutorials for full-time evening courses, which lack them, unlike full-time day courses. Furthermore, students suggested that at least four tutors per 100 students will be beneficial, and tutorial classes should be provided equally between full-time day and full-time evening courses.

The findings of the study revealed that Teaching and Learning Development Centre (TLDC), Writing Centre and Student Counselling centre have provided academic support to students, while some of these centres provide substantial support, several other students were unaware of the services that these centres may provide. Students suggested that the Teaching and Learning Development Centre (TLDC) employ more tutors, student mentors, and host career exhibitions. It was recommended that the university hire more professional social workers for the student counselling centre because students require more counselling services from this centre if the budget permits.

Students suggested that in order to expose all students to the services offered by counselling centre, writing centre and TLDC should be made part of the time tabled curriculum. It was suggested that these service centers run more campaigns to educate students about the services they provide. These findings are supported by Shaheen *et al*, (2020:223) that supporting services at universities provide students with different advice and support in housing, orientation and migration, indigenous student support, financial support, wellness and counselling, health, and other areas of student need. The literature also finds that not all students are aware that these services are available or can be accessed (Shaheen *et al*, 2020:223). It was also suggested that the university provide students with extra periods in their timetables where they could access the services of these service centres. Therefore, this study recommends that these centres' services be introduced from level one of undergraduate study all the way up to postgraduate level of study.

The recommendations above are aligned with systems theory employed in this study. Recommendations revealed that there should a strong coordination between the

departments which coordinate tutorials (system of tutorials) and students (students' lecture system), and lecturers (system of lecturing) to overcome challenges presented by large class. As per students' responses, they suggested that lecturers split classes into smaller groups so that they can be able to receive individual attention from both lecturers and tutors during lectures and tutorial classes. These systems should operate collaboratively to effectively address the challenges of large classes. This study also suggests that there should be a strong coordination between students' lecture system and service departments: student counselling, writing centre, and TLDC so that students can effectively access and benefit from these services. Students suggested that the use of these service centres should be incorporated with their timetables and be introduced at their undergraduate level up to their postgraduate level of their study. The key role players in the coordinating of these systems are: Lecturers, students and TLDC.

6.2.3 OBJECTIVE 3: To understand the administrative support staff experiences with regards to the administration of large classes

Academic secretaries indicated that because there was no clear indication of other additional administrative support duties they are expected to provide to academic staff, they end up doing tasks which they believed are beyond their scope as administrators which were not specified in their job description. Secretaries' responses revealed a very broad range of duties performed. These findings are aligned with the literature, which indicates that the role of administrative staff members in HEIs has become critical for global competitiveness, and their responsibilities have expanded beyond simple office work (Jung and Shin 2015:881-882). One secretary suggested that they should be provided with a clear detailed job description upon their appointment, as well as a clear induction process into the duties they are expected to perform for academics.

This study therefore recommends that clear guidelines regarding the scope of individual secretarial responsibilities be established, that this be widely understood by all staff members, that proper induction of new secretarial staff be undertaken, and that ongoing support and training be provided. A broad consultation with the

secretaries could be established, and they would be given the opportunity to share their perspectives. As a result, this study recommends that secretaries be recognized and included, alongside academic staff, in discussing and implementing any workload policies to ensure equity and transparency within and between staff categories – whether administrative or academic. The findings indicated that there should be a coordination between lecturers (system of lecturing) with administrative staff (system of administration) so that the academic staff should be informed of which services they should expect from administrative staff. The findings of this study also revealed that there should be a consultation between secretaries (system of administration) and lecturers (system of lecturing) alongside with policy development department (Registrar) in the process of implementing workload policies. The Registrar department (Secretariat) will play a significant role in providing guidelines as they are the custodian of formulation of policies within the university.

There was also a suggestion for the university to consider employing more assistants for the faculty office for an example, rolling out internship programs, which will be less expensive than paying a permanent staff to assist with marks capturing, marks computation, and other faculty office services, which will reduce administrative workload for academics with large classes – given that there is only one Faculty Officer for the entire faculty. This will relieve this single faculty officer from the burden of large administrative duties, as he must deal with numerous duties such as students' registrations, mark computations, mark enquiries, for students, and other administrative duties for all departments in the entire faculty.

6.2.4 OBJECTIVE 4: To identify integrated approaches for addressing the challenges experienced

Academic staff findings revealed that lecturers used a variety of approaches to address the challenges experienced associated with administering large classes. Lecturers' responses indicated that they tried to use a student-centered approach when teaching, but that this was difficult in large class situations. These findings are supported by Heick (2022) by providing examples of student-cantered: "being clear about how you will promote, measure, and celebrate understanding; modelling 'how

to think‘ for students; starting class with a story; helping students understand what is worth understanding; diversifying what you accept as evidence of understanding; creating curriculum and instruction around a need to know; collaborating with students to create the rubric or scoring guide” (Heick, 2022). This indicates the need for a close integration between the needs of students and the approaches adopted by lecturers, as does the lecturers’ use of a variety of Learning Management Systems (LMSs) such as Ms Teams, Blackboard, Moodley, and WhatsApp to enhance their teaching and learning within their courses. It was also mentioned that they encouraged peer learning among their students. As a result, this study suggests that to address large class challenges, both online and contact classes should be used. Jawitz (2015:142) further adds that Blackboard can provide significant learning experiences to large numbers of students at the same time. These findings were also consistent with the literature which indicates that to achieve an effective learning environment in the classroom, academics need to implement digital tools Balkaya and Akkucuk (2021:1127). Students’ responses endorsed this.

Students' findings revealed that they also used a variety of approaches to address the challenges associated with large classrooms. Students used the peer-to-peer learning approach, in which they learned from their classmates by forming study groups - which was encouraged by their lecturers and decided by them, the consultation-based learning approach, in which they consulted their lecturers and tutors, the lecture-based learning approach, in which they attended lectures, the tutorial-based approach, in which they attended tutorial classes, and the individual-based approach, in which they applied self-study learning strategies. As a result, this study suggests that courses be divided into small groups, for an example each course should be divided into 3 groups – for every 100 students so that lecturers and tutors can give students individual attention. This finding is consistent with the study which indicates that to teach effectively in large classes requires strategic grouping of students, it is appropriate to divide the class into groups of 15 to 20 (Asodike and Onyeike 2016:31). This study suggests that there should be a strong coordination between lecturers (system of lecturing) and tutors (tutorial system) as well as administrative support staff and student services to address large class challenges associated with tutorials.

The findings for secretaries recommended that more interns should be appointed to assist academic secretaries, particularly with general administrative duties to large number of students within the department. It was also recommended that lecturers use e-learning platforms when assigning assignments to students and that students use e-learning platforms to submit their work. These findings are in accordance with the literature, which asserts that through e-learning platforms, students would be able to access their assessments in the form of assignments, submit assignments, communicate, collaborate, and work with other students all over the world, and evaluate libraries around the world regardless of where they were geographically located (Oduma, Onyema and Akiti 2019). This will alleviate heavy administrative workload from academic secretaries. Therefore, this study recommends that detailed job description should be issued to secretaries and communicated to all academic staff, so that they are aware of the support services that secretaries are expected to provide.

Collaboration and understanding must be increased to resolve tensions between stakeholders. These stakeholders (lecturers and administrators) should convene forums and invite HR representatives to discuss various issues affecting their productivity, as well as raise lecturers' awareness of which duties administrators should provide. These forums will help to address through dialogue what administrative support staff believe they need from lecturers, including opportunities for professional development. Forums could also assist these stakeholders in discussing all their concerns collaboratively and directing them to senior management for intervention. Focus groups could also be formed between lecturers and student representatives to discuss issues affecting students in large classes and to try to address those concerns, or alternatively to channel those concerns to relevant university structures for intervention. Students suggested that lecturers and students should work closely together. Students proposed ideas such as dividing classes into smaller groups; having at least four tutors for every 100 students; providing tutorials equally for full-time day and full-time evening courses; and incorporating service center services (TLDC, Writing Center, Student Counseling Center) into their timetables so that they can use them more effectively and benefit more from them. These ideas expressed by the students indicated their mature insights into the problems and their willingness to consider solutions.

6.3 SUGGESTIONS FOR FUTURE RESEARCH

Administering large classes, and the administrative workload associated with it, continue to be a major issue for all academics and academic secretaries at all levels. Future research could be expanded to include other South African higher education institutions, as this study only focused on one University of Technology. Future research could investigate the challenges of implementing large class management models and academic staff workload models specifically in all six South African Universities of Technology. This would provide a more comprehensive understanding of the practical challenges and solutions that are currently unavailable to the researcher at the selected University of Technology.

6.4 LIMITATIONS OF THE STUDY

The limitations of all case studies include the inability to generalise the findings beyond the selected institution, though lessons from this study are likely to apply to similar institutions in South Africa. The researcher also had difficulty obtaining full cooperation from staff members to participate in the study, particularly from administrative support staff. He also had to personally administer the questionnaires while working full-time at the university. There was a relatively good response to the students' questionnaire, several academic staff were unable to complete the questionnaires and half of administrative support staff were unable to participate in the interviews, resulting in a lower response rate than would have been ideal. The Faculty Officer was also not available for interview.

6.5 CONCLUSION

The overall impression from the lecturers, administrators and students who did participate, was that they were willing to engage with the study and to provide detailed, well-focused responses. Despite the difficulties that they face with large classes, both lecturers and students expressed their determination to succeed. Lecturers were well qualified and experienced, dedicated, and reflective, which is an important key potential for improved systems management despite massification. However, the findings revealed that these different stakeholders themselves were generally not working collaboratively. Thus, the study indicated that the system as a whole was often dysfunctional. The study makes suggestions for improving this situation which will

provide some positive solutions for the future of massification and stakeholder cohesion, as well as more opportunities for the UoT identified for the study, and others in South Africa experiencing similar large class sizes.

This chapter provided a summary of the key findings, suggestions, and recommendations for this study. The recommendations made were based on the data provided by the respondents, the literature reviewed, and the researcher's personal and professional knowledge as an academic staff member at the selected University. It is hoped that the findings of this study will assist the university's management in developing policies on the administration of large classes and the implementation of workload policies, and that the issues raised by academic staff and academic secretaries will assist and allow the university to address many of the specific issues raised. Overall, the findings indicated the value the system theory thinking employed in this study, and recommendations suggested ways to achieve better coordination between different groups of respondents and different operating systems in the university. Industry role players could also play a significant role in supporting specific initiatives and curriculum interventions through industry advisory boards. In conclusion, the study's objectives were largely met.

LIST OF REFERENCES

Abedi-Boafo, W.A.B.E. 2015. Assessing the Functions of Faculty Administrators in the University of Education, Winneba, 140-141.

Adom, D., Adu-Gyamfi, S., Agyekum, K., Ayarkwa, J., Dwumah, P., Abass, K., Kissi, E., Osei-Poku, P. and Obeng-Denteh, W. 2016. Theoretical and conceptual framework: Mandatory ingredients of a quality research. *Journal of Education and Human Development*, *5*(3): 158-172.

Akaranga, S.I. and Makau, B.K., 2016. Ethical considerations and their applications to research: a case of the University of Nairobi.

Akech, P.E. 2017. *The impact of over-crowded classrooms to teachers and students: Interaction in the process of teaching and learning in selected primary schools in Arusha City Council, Tanzania*. GRIN Verlag.

Akhter, S., Javed, M.K., Shah, S.Q. and Javaid, A. 2021. Highlighting the advantages and disadvantages of E-learning. *PSYCHOLOGY AND EDUCATION*, *58*(5): 1607-1614.

Machika, P. Albertyn, R.M., and Troskie-de Bruin, C. 2016. Towards responsible massification: Some pointers for supporting lecturers. *Africa Education Review*, *13*(3-4): 49-64.

Al Hinai, Z. and Bajracharya, A. 2014. A Study on the Factors Affecting Job Satisfaction of Academic Staff in Higher Education Institution. In *Proceedings of International Academic Conferences* (No. 0800160). International Institute of Social and Economic Sciences.

Almalki, S. 2016. Integrating Quantitative and Qualitative Data in Mixed Methods Research--Challenges and Benefits. *Journal of education and learning*, *5*(3): 288-296.

Al-Obaydi, L.H. and AL-Bahadli, K.H. 2017. The Correlation Between EFL College Students 'large Classes and Their Academic Performance. *People: International Journal of Social Sciences*, *3*(1):380-390

Amir, M. 2016. *Designs of Mixed Method Research*. 4th Edition. University Algeria, Information Resources Management Association, 20-21.

Anmpalagan, R. and Smith, R. 2018. *Large Class Teaching Challenges and Possible Responses*. Available: https://warwick.ac.uk/fac/soc/al/research/groups/llta/resources/telc/strategies/ (Accessed 21 August 2022).

Aoumeur, H. 2017. The Impact of Class Size on Teaching and Learning English as a Foreign Language: The Case of the Department of English at Abdelhamid Ibn Badis University. *Arab World English Journal (AWEJ) Volume*, *8*: 349-361

Asodike, J.D. and Onyeike, V.C. 2016. *Managing large classes in developing countries*. *Global Journal of Educational Research*, *15*(1): 31-39.

Ayeni, O.G. and Olowe, M.O. 2016. *The Implication of Large Class Size in the Teaching and Learning of Business Education in Tertiary Institution in Ekiti State*. *Journal of Education and Practice*, *7*(34): 65-69. 1-9.

Ayorinde, M.O., Emmanuel, D., Haruna, I.M. and Ezra, I. 2017. Impact of Administrative Work on Job Efficiency of Agricultural Science Academic Staff in Colleges of Education In North-West, Nigeria. *ATBU Journal of Science, Technology and Education*, *5*(1): 41-47.

Balkaya, S. and Akkucuk, U. 2021. Adoption and use of learning management systems in education: The role of playfulness and self-management. *Sustainability*, *13*(3): 1127.

Basarudin, N.A., Yeon, A.L., Yaacob, N. and Yusof, R. 2016. Faculty workload and employment benefits in public universities. *International Review of Management and Marketing*, *6*(S7): 73-82.

Bettes, S. and Burrell, K. 2014. Findings of, and reflections on, the gender, lifelong learning, and social class (GLAS) project. A UK partnership-based perspective. *Revista Internacional de Organizaciones*, 12:11-26.

Biggs, J. 1999. What the student does: Teaching for enhanced learning. *Higher Education Research & Development,* 18(1):57-75.

Blair, E., Maharaj, C. and Primus, S. 2016. Performance and perception in the flipped classroom. *Education and information Technologies*, *21*(6): 1465-1482.

Boubabouri, A. and Chadli, M.A., 2020. Challenges and Difficulties of Managing Large Size Classes, Master in Didactics. University Ibn Khaldoun-Tiaret. Available: http://dspace.univ-tiaret.dz/handle/123456789/1046 (Accessed 20 June 2021).

Bovill, C. and Felten, P. 2016. Cultivating student–staff partnerships through research and practice. *International Journal for Academic Development*, *21*(1): 1-3.

Bridgen, S. 2017. Using systems theory to understand the identity of academic advising: A case study. *NACADA Journal*, *37*(2): 9-20.

Brown, C. 2020. *The changing roles and responsibilities of administrative and support staff*. Available: https://www.leeds.ac.uk/educol/ncihe/r4_193.htm (Accessed 10 November 2020).

Carlson, S. and Gadio, C. T. (2018). Teacher Professional Development in the use of ICT. In Haddah, W. D. and Draxler, A. (Eds.). Technology for Education (118-131) Washington DC: UNESCO: Academy for Educational Development.

Carter, S., Arshed, N., and Mason, C. 2014. The ineffectiveness of entrepreneurship policy: is policy formulation to blame? *Small Business Economics*, *43*(3): 639-659.

Castillo-Montoya, M. 2016. Preparing for interview research: The interview protocol refinement framework. *The qualitative report*, *21*(5): 811-831.

Caulfield, J. 2019. *How to do thematic analysis*. Available: https://www.scribbr.com/methodology/thematic-analysis/ (Accessed 29 October 2022).

Chetty, F. 2016. The effect of job satisfaction on employee wellbeing among administrative staff at the Durban University of Technology. MTech, Durban University of Technology. Available: https://hdl.handle.net/10321/1743 (Accessed 14 August 2021).

Christopher, D.A. 2003. Interactive large classes: The dynamics of teacher/student interaction. *Journal of Business & Economics Research (JBER)*, *1*(8): 81-98

Clarence, S. 2016. Peer tutors as learning and teaching partners: a cumulative approach to building peer tutoring capacity in higher education. *Critical Studies in Teaching and Learning*, *4*(1): 39-54.

Conway, M. 2012. Using causal layered analysis to explore the relationship between academics and administrators in universities. *Journal of Futures Studies*, *17*(2): 37-58.

Cortes, K.E., Moussa, W.S. and Weinstein, J.M. 2012. *Making the grade: The impact of classroom behaviour on academic achievement*. Paper presented at the APPAM Fall Research Conference, Baltimore, MD, 8-10 November.

Creswell, J.W. and Clark, V.L.P. 2017. *Designing and conducting mixed methods research*. Sage publications.

Da Silva, C.S.R. 2017. Research Design-The New Perspective of Research Methodology. *Journal of Education, Society and Behavioural Science*, 1-12.

Darabi, M., Macaskill, A. and Reidy, L. 2017. A qualitative study of the UK academic role: positive features, negative aspects and associated stressors in a mainly teaching-focused university. *Journal of Further and Higher Education*, *41*(4): 566-580.

Davies, B. 2018. *The role and functions of departmental administrator*. Available: https://career-advice.jobs.ac.uk/professional/university-departmental-administrator/(Accessed 24 October 2020).

Delve, Ho, L. and Limpaecher, A. (2020). How to Do Thematic Analysis*. Essential Guide to Coding Qualitative Data*. Available: https://delvetool.com/blog/thematicanalysis (Accessed 29 October 2022).

De Smet, M., Van Keer, H., De Wever, B. and Valcke, M. 2010. Cross-age peer tutors in asynchronous discussion groups: Exploring the impact of three types of tutor training on patterns in tutor support and on tutor characteristics. *Computers and Education*, 54: 1167–1181.

DeJonckheere, M. and Vaughn, L.M. 2019. Semi structured interviewing in primary care research: a balance of relationship and rigour. *Family medicine and community health*, *7*(2):1-8.

Devlin, M. 2021. Taking responsibility for learning isn't everything: A case for developing tertiary students' conceptions of learning. *Teaching in Higher Education*, *7*(2): 125-138.

Dewi, S.R. 2019. Utilizing WhatsApp Application for Teaching Integrated English (A Case Study at University of Technology Yogyakarta). *Refleksi Edukatika: Jurnal Ilmiah Kependidikan*, *9*(2):164-171

Diette, T.M. and Raghav, M. 2015. Class size matters: Heterogeneous effects of larger classes on college student learning. *Eastern Economic Journal*, *41*(2): 273-283.

Dikko, M. 2016. Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in Takaful (Islamic insurance). *The qualitative report*, *21*(3): 521-529.

Doody, O. and Doody, C.M., 2015. Conducting a pilot study: Case study of a novice researcher. *British Journal of Nursing*, *24*(21): 1074-1078.

Drame, E.R. and Kamphoff, K. 2014. Perceptions of disability and access to inclusive education in West Africa: A comparative case study in Dakar, Senegal. *International Journal of Special Education*, 29(3): 69-81.

Encyclopaedia Dictionary. 2020. Available: https://encyclopedia.thefreedictionary.com/Academic+administration (Accessed 10 November 2020).

Esia-Donkoh, K. and Antwi, T. 2015. Instructional, Psychological and Social Effects of Large Classes on Students of the Department of Education, University of Education, Winneba, Ghana. *European Journal of Research and Reflection in Educational Sciences*, *3*(3): 63-78.

Evans, C. and Lewis, J. 2018. *Analysing semi-structured interviews using thematic analysis: Exploring voluntary civic participation among adults*. 1-6. SAGE Publications Limited.

Exeter, D.J., Ameratunga, S., Ratima, M., Morton, S., Dickson, M., Hsu, D. and Jackson, R. 2010. Student engagement in very large classes: The teachers' perspective. *Studies in Higher Education*, *35*(7): 761-775.

Faroa, B.D. 2017. Considering the role of tutoring in student engagement: Reflections from a South African university. *Journal of Student Affairs in Africa*, *5*(2): 1-15.

Fathurrochman, I., Hariani, D., Hamengkubuwono, H., Arsil, A., Muhammad, A. and Ristianti, D.H. 2020. The development of student academic administration services in

higher education. *International Journal of Psychosocial Rehabilitation*, *24*(8): 4764-4771.

Fink, A. 2014. *Conducting Research Literature Reviews: From the Internet to Paper*. Fourth edition. Thousand Oaks, CA: SAGE. Available: *http://libguides.usc.edu/writingguide/literaturereview* (Accessed 02 December 2020).

Fouka, G. and Mantzorou, M. 2011. What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing? Health science journal, 5(1): 3-14.

Friedman, L.M., Furberg, C.D., DeMets, D.L., Reboussin, D.M. and Granger, C.B. 2015. *Fundamentals of clinical trials*. Springer International Publishing Switzerland 2015, 1-23

Gupta, D. and Bansal, N. 2020. Impact of Demographics on Administrators' Satisfaction on E-Governance Initiatives in Higher Education Institutions: An Indian Perspective, Indira Gandhi University, Meerpur, Rewari, Haryana, India.

Harrell, S. and Bynum, Y. 2018. Factors affecting technology integration in the classroom. *Alabama Journal of Educational Leadership*, *5*: 12-18.

Hart, C. 2018. *Doing a literature review: Releasing the research imagination*. Available: https://warwick.ac.uk/fac/soc/al/research/groups/llta/resources/telc/strategies/ (Accessed 14 September 2022).

Hasan, M.F. 2018. *Effective teaching in large classes*. Available: https://breda-guide.tripod.com/New-5.htm (Accessed 31 July 2022).

Heale, R. and Twycross, A. 2015. Validity and reliability in quantitative studies. *Evidence-based nursing*, *18*(3): 66-67.

Heale, R. and Twycross, A. 2018. What is a case study? *Evidence-based nursing*, *21*(1): 7-8.

Heick, T. 2022. What Are the Best Examples of Student-Cantered Teaching?

Hlatshwayo, A. 2013. Tutorials as a way of enhancing active participation in university classes. *Journal for Language Teaching*, 47(1): 11–27.

Hornsby, D.J. and Matos Ala, J.D. 2016. Reframing Large Classes through Fostering the Citizen Scholar. In *Universities, the Citizen Scholar and the Future of Higher Education*: 119-136. Palgrave Macmillan, London.

Hornsby, D.J., Osman, R. and De Matos-Ala, J. 2016. *Large-class pedagogy: interdisciplinary perspectives for quality higher education*. African Sun Media. Available: https://www.jobs.ac.uk/media/pdf/careers/resources/7-skills-every-senior-lecturer-needs.pdf (Accessed 23 October 2020).

Hornsby, D and Osman, R. (2014). Massification in higher education: Large classes and student learning. Higher Education. 67: 711-719.

Hosain, S. 2016. Teaching workload and performance: An empirical analysis on some selected private universities of Bangladesh. Available: *SSRN 2810640*. https://www.jobs.ac.uk/media/pdf/careers/resources/7-skills-every-senior-lecturer-needs.pdf (Accessed 23 October 2020).

Ibrahim, M. 2015. The art of data analysis. *Journal of Allied Health Sciences Pakistan*, *1*(1): 98-104.

Imtiaz, S. 2014. Exploring strategies for English language teaching of Pakistani students in public sector colleges*. Research Journal of English Language and Literature (RJELAL)*, 2(2): 247-253. Available: http://www.rjelal.com/2.2.14/247-253.pdf (Accessed 14 April 2021).

Imtiaz, S. 2015. *Exploring strategies for English language teaching of Pakistani students in public sector colleges. Research Journal of English Language and Literature* (RJELAL), 2(2): 247-253. Available: http://www.scielo.org.za/pdf/saje/v36n2/05.pdf (Accessed 11 April 2020).

Jawitz, J. 2013. The challenge of teaching large classes in higher education in South Africa: a battle to be waged outside the classroom, Sun Media Metro Publishing.

Jerez, O., Ortiz, C., Rojas, M. and Henriquez, F. 2018. Classroom Management in Large Higher Education Courses: Challenges and Opportunities, *EDULEARN18 Proceedings*, 8766-8771.

Jung, J. and Shin, J.C. 2015. Administrative staff members' job competency and their job satisfaction in a Korean research university. *Studies in Higher Education*, *40*(5): 881-901.

Kabir, S.M.S. 2016. Basic guidelines for research. *An introductory approach for all disciplines*, *4*(2): 168-180.

Kapp, J.M., Simoes, E.J., DeBiasi, A. and Kravet, S.J. 2017. A conceptual framework for a "systems thinking" approach to US population health. *Systems Research and Behavioural Science*, *34*(6): 686-698.

Kaur, S. 2016. Student support services in higher education: A student perspective. *International Journal of Indian Psychology*, *3*(3): 126-132.

Khumalo, B. and Mji, A. 2014. Exploring educators' perceptions of the impact of poor infrastructure on learning and teaching in rural South African schools. *Mediterranean Journal of Social Sciences*, 5(20): 1521-1532.

Kinman, G. and Wray, S. 2013. Higher Stress: A Survey of Stress and Wellbeing among Staff in Higher Education. London: UCU Publication. Levenson, L. 2004.

Kuo, H.M. 2017. Understanding relationships between academic staff and administrators: An organisational culture perspective. *Journal of Higher Education Policy and Management*, *31*(1): 43-54. Available: http://www.tandfonline.com/doi/pdf/10.1080/13600800802559278 (Accessed 14 November 2020).

Lamptey, J.N.L., Umude, I.M. and Atteh, E. 2020. The Role of Administrative Staff in Student Relationship Management (SRM); A Tool for Quality Teacher Education. *Asian Journal of Advanced Research and Reports*, 5-15.

Lee, H.J., Hong, Y. and Choi, H. 2017. Perceptions of tutoring roles and psychological distance among instructors, tutors and students at a Korean university. *Higher Education Research & Development*, *36*(1): 143-157.

Leedy, P.D. and Omrod, J.E. 2014. *Practical Research Planning and Design*. 10th Edition. England: Pearson Education Limited, 50.

Leung, L. 2015. Validity, reliability, and generalizability in qualitative research. *Journal of family medicine and primary care*, *4*(3): 324.

Lloyd-Strovas, J. 2015. Tips for Teaching Large Classes. Teaching, Learning, and Professional Development Center, Texas Tech University: August.

Luhmann, N. and Talcott, P. 2018. *General Systems Theory: Foundations, Development, Applications,* New York: George Braziller, Revised Edition. Available: http://environment-ecology.com/general-systems-theory/137-what-is-systems-theory.html (Accessed 22 November 2020).

Luo, A. 2020. *Methodology: Discourse Analysis.* Available: https://www.scribbr.com/methodology/discourse-analysis/ (Accessed 29 October 2020)

Lynch, R.P. and Pappas, E. 2017. A Model for Teaching Large Classes: Facilitating a" Small Class Feel". *International Journal of Higher Education*, *6*(2): 199-212.

Machika, P., Troskie-de Bruin, C. and Albertyn, R.M. 2015. The student's experience of attending large classes in a South African Higher Education Context. *Mediterranean Journal of Social Sciences*, *5*(16): 375.

Makhbul, Z.M. and Khairuddin, S.M.H. 2014. Measuring the effect of commitment on occupational stressors and individual productivity ties. Journal Pengurusan, 40: 103-113.

Marais, P. 2016. "We can't believe what we see": Overcrowded classrooms through the eyes of student teachers. *South African Journal of Education*, *36*(2): 1-10.

Martínez-Mesa, J., González-Chica, D.A., Duquia, R.P., Bonamigo, R.R. and Bastos, J.L. 2016. *Sampling: how to select participants in my research study*? *Anais brasileiros de dermatologia*, *91*(3): 326-330.

Matoti, S.N. and Lenong, B. 2018. Teaching large classes at an Institution of Higher Learning in South Africa. In *Proceedings of International Academic Conferences* (No. 6509064). International Institute of Social and Economic Science

May, K. 2020. The effects of an overcrowding classes. Available: https://classroom.synonym.com/effects-overcrowded-classroom-7639038.html (Accessed 10 November 2020).

McGrath, C.H., Henham, M.L., Corbett, A., Durazzi, N., Frearson, M. and Janta, B. 2015. Higher *education entrance qualifications and exams in Europe: A comparison*, Policy Department B: Structural and Cohesion Policies, European Parliament's Committee on Culture and Education, European Parliament, Brussels.

McKay, T.M. 2016. Do tutors matter? Assessing the impact of tutors on first year academic performance at a South African university. *Journal of Student Affairs in Africa*, *4*(1): 53-64.

McLeod, N. 2019. What teachers cannot do in large classes (Research Rep. No. 7). *Leeds, UK: Leeds University*.

Meyers, L.A. 2019. *Factors influencing the working relationship between academics and administrative support staff: a case study at Durban University of Technology* (Doctoral dissertation).

Miles, M.B. and Huberman, A.M. 1994. Qualitative Data Analysis: An Expanded Source Book (2nd ed.). Newbury Park, CA: Sage.

Miller, J. 2019. Where does the time go? An academic workload case study at an Australian university. *Journal of Higher Education Policy and Management*, *41*(6): 633-645.

Mohamedbhai, G. 2014. Massification in higher education institutions in Africa: Causes, consequences and responses. *International Journal of African Higher Education*, *1*(1):59-82.

Moodley, P. 2015. Student overload at university: large class teaching challenges: part 1. *South African Journal of Higher Education*, *29*(3): 150-167.

Moran, R. 2022. *10 tips for a successful synchronous session. Tip #1: Consider splitting large classes into two shorter, smaller groups.* (blog). Available: https://edusoftlearning.com/tip-1-consider-splitting-large-classes-two-shorter-smaller-classes/ (Accessed 17 October 2022).

Morillas, N.R. and Garrido, M.F. 2014. The role of tutoring in higher education: Improving the student's academic success and professional goals. *Revista Internacional de Organizaciones*, 12 (06): 89–100.

Mulryan-Kyne, C. 2010. Teaching large classes at college and university level: Challenges and opportunities. *Teaching in Higher Education* 15(2): 175−185.

Mustafa, H.M., Mahmoud, S., Assaf, I.H., Al-Hamadi, A. and Abdulhamid, Z.M. 2015. *Comparative analogy of overcrowded effects in classrooms versus solving 'cocktail party problem'* (neural networks approach). *Ratio*, *5*(10): 20-39.

Mutanga, O. and Walker, M. 2017. Exploration of the academic lives of students with disabilities at South African universities: Lecturers' perspectives. *African Journal of Disability*, *6*(1): 1-9.

Mutia, C.N. 2018. *Administrative factors influencing performance of girls in Kenya Certificate of Secondary Education in mixed day secondary schools in Nzambani sub-county, Kitui county Kenya* (Doctoral dissertation).

Nasir, N.E.M., Ahmad, S., Mohamed, N. and Awang, Y. 2019. Academic and non-academic responsibilities and length of services: descriptive and correlation analyses. *Journal of Academia*, *7*(2): 152-158.

Trang, N.M., 2015. Large classes: Universal teaching and management strategies. *An International Peer-Reviewed Open Access Journal*, Vol *2*(1):76-83.

Nnadozie, Remy. 2015. Model for management of workload of academic staff at a developing university, *Corporate Ownership & Control Journal*, Vol 12(4): 462-466.

Obanya, P., Shabini, J. and Okebukola, P. 2010. *Effective teaching and learning in large classes*. Available: http://breda-guide.tripod.com/New-5.htm (Accessed 15 November 2020).

Oduma, C.A., Onyema, L.N. and Akiti, N. 2019. E-learning platforms in business education for skill acquisition. *Nigerian Journal of Business Education (NIGJBED)*, *6*(2): 104-112.

Officer, P.S. 2019. Prepare or Go: An analysis of enforcing tutorial preparation requirements in an accounting course. Available:

https://www.unisa.edu.au/Global/business/centres/cags/docs/seminars/mcgowanpaper_TutorialPreparationPaperRevised.pdf (Accessed 14 October 2022).

Opoku-Asare, N.A., Agbenatoe, W.G. and DeGraft-Johnson, K.G. 2014. Instructional strategies, institutional support and student achievement in general knowledge in art: Implications for visual arts education in Ghana. PMB University Post Office, Kumasi, Ghana. 121-135.

Patrick, C.j., Peach, D., Pocknee, C., Webb, F., Fletcher, M. and Pretto, G. 2015. *Work- integrated Learning: A national scoping study Retrieved May 28, 2009*. Available: http://www.altc.edu.au/system/files/grants_project_wil_finalreport_jan09.pdf (Accessed 16 November 2020).

Perks, S. 2013. Academic workload: a model approach. *The Guardian*, *15*.

Phillips, A.W. 2017. Proper applications for surveys as a study methodology. *Western Journal of Emergency Medicine*, *18*(1): 8-11.

Pulda, A. 2015. *Three Differences Between Teaching and Administration*. Available: https://www.educationworld.com/a_curr/voice/voice114.shtml (Accessed 22 October 2020).

Qwabe, B.P. 2016. An investigation into administrative workload and support for academic staff at the Durban University of Technology. Masters: AIM, DUT. Available: http://hdl.handle.net/10321/1704 (Accessed 24 January 2021).

Rahman, M. and Avan, Y. R. (2016). Teaching Workload and Performance: An Empirical Analysis on Selected Private Universities of Bangladesh. *European Journal of Social Sciences Studies*, 1(1): 71-83

Ramsden, P. 2003. *Learning to teach in higher education*. London, Routledge. 145-146.

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: 1-13.

Ribeiro, L., Rosário, P., Núñez, J.C., Gaeta, M. and Fuentes, S. 2019. First-year students background and academic achievement: the mediating role of student engagement. *Frontiers in Psychology*, *10:* 2669-2689.

Rosander, M. and Chiriac, E.H. 2016. The purpose of tutorial groups: social influence and the group as means and objective. *Psychology Learning & Teaching*, *15*(2): 155-167.

Rossouw, M. 2018. The perceptions of students and lecturers on the live streaming of lectures as an alternative to attending class. *South African Journal of Higher Education*, *32*(5): 253-269.

Sarkar, N., Ford, W. and Manzo, C. 2017. Engaging digital natives through social learning. *Systemics, Cybernetics and Informatics*, *15*(2): 1-4.

Sekaran, U. and Bougie, R. 2016. *Research methods for business: A skill building approach*. Chichester, West Sussex, United Kingdom, John Wiley & Sons.

Sekaran, U. and Bougie, R. 2019. *Research methods for business: A skill building approach*. Chichester, West Sussex, United Kingdom, John Wiley & Sons.

Schoonenboom, J. and Johnson, R.B. 2017. *How to construct a mixed methods research design*. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *69*(2): 107-131.

Shah, S.D.H., Jaffari, A.R., Aziz, J., Ejaz, W., Ul-Haq, I., and Raza, S.N. 2011. Workload and performance of employees. *Interdisciplinary journal of contemporary*

research in business (online), 3(5): 256. Available: http://journal-archieves8.webs.com/256-267.pdf (Accessed 10 November 2020).

Shaheen, S., Mahmood, Z. and Shah, N.H. 2020. Impact of Student Support Services on Students Development at University Level. *Global Regional Review*, (1): 222-229.

Shantikumar, S. 2018. *Methods of sampling from a population*. Available: https://www.healthknowledge.org.uk/public-health-textbook/research-methods/1a-epidemiology/methods-of-sampling-population (Accessed 29 April 2020).

Shahzad, K., Irshad, A., AJKU, A.K., Shahid, P.Z., Nawaz, M. and Scholar, M.P. 2016. Research Journal of Innovative Ideas and Thoughts, 4 (1): 34-41, 2016 ISSN: 2312-1033. *Research Journal of Innovative Ideas and Thoughts*, *4*(1): 34-41.

Singh, V. and Kumar, R. 2017. A study of the impact of institutions' infrastructural facilities and teaching-learning resources on academic attainments and placements of management students. *International Journal of Development Research*, *7*(11): 17298-17306.

Smallhorn, M. 2017. The flipped classroom: A learning model to increase student engagement not academic achievement. *Student Success*, *8*(2): 43-53.

Smith, C. 2020. Administrative duties of a lecturer. Available: https://jobs.bcu.ac.uk/Upload/vacancies/files/3330/Lecturer.pdf (Accessed 10 November 2020).

South Africa, Department of Higher Education and Training. 2021. *White Paper for National Academic Support Guidelines for Technical and Vocational Education and Training Colleges:* Pretoria, South Africa: Department of Higher Education and Training. Available: https://www.dhet.gov.za/siteassets/academicsupportguidelines2021approvedd(1).pdf (Accessed 5 August 2022).

Stefan, D. 2018. Advantages and Disadvantages of Questionnaires. Retrieved, 3(27). Available: https://surveyanyplace.com/questionnaire-pros-and-cons/ (Accessed 25 April 2020).

Sumer, M. and Yuner, B. 2021. Faculty support in higher education provided by university administration during emergency remote teaching: A case study. *Open Praxis*, *13*(3): 323-334.

Suragee, S. 2020. Lecturer (Lecturer Higher education) Job description. Available: https://targetjobs.co.uk/careers-advice/job-descriptions/280553-lecturer-higher-education-job-description (Accessed 10 November 2020).

Snyder, H. (2019). Literature Review as a Research Methodology: An Overview and Guidelines. Journal of Business Research, 104, 333-339. Available: https://doi.org/10.1016/j.jbusres.2019.07.039 (Accessed 16 September 2021).

Taherdoost, H. 2016. *Validity and reliability of the research instrument*; *how to test the validation of a questionnaire/survey in a research. How to Test the Validation of a Questionnaire/Survey in a Research.* August 10, 2016.

Tatnall, A. 2019. Editorial for EAIT issue 2, 2019. *Education and Information Technologies*, *24*(2): 953-962.

Teferra, D. and Altbach, P.G. 2004. *African higher education: Challenges for the 21st century. Higher education, 47*(1): 21-50. Available: http://download.springer.com/static/pdf/ (Accessed 16 November 2020).

Teixeira, J. 2020. *Having the right infrastructure in higher education matters, Digital Learning Network, 21 June.*
Available:https://digitallearning.eletsonline.com/2020/06/having-the-right-infrastructure-in-higher-education-matters/ (Accessed 21 August 2022).

Tjønneland, E.N. 2017. *Crisis at South Africa's universities*–what are the implications for future cooperation with Norway? *CMI Brief*.

Trang, N.M. 2018. Large classes: Universal teaching and management strategies. *An International Peer-reviewed Open Access Journal*, *2*(1): 76-83.

Umude, I.M., Lamptey, J.N.L., and Atteh, E. 2020. The Role of Administrative Staff in Student Relationship Management (SRM); A Tool for Quality Teacher Education. *Asian Journal of Advanced Research and Reports*, 5-15.

Vincent, L. and Chiwandire, D. 2019. Funding and inclusion in higher education institutions for students with disabilities. *African journal of disability*, *8*(1): 1-12.

Welsh, J.F. and Metcalf, J. 2016. Faculty and administrative support for institutional effectiveness activities: a bridge across the chasm. *The Journal of Higher Education*, *74*(4):445-468. Available at: http://muse.jhu.edu/article/44085 (Accessed 12 November 2020).

Wilsman, A. 2015. *Teaching large classes. Vanderbilt Center for Teaching*. Available: https://cft.vanderbilt.edu/guides-sub-pages/teaching-large-classes/ (Accessed 14 February 2020).

Wood, W. B. 2009. Innovations in teaching undergraduate biology and why we need them. *Annual Review of Cell and Developmental*, *25*: 93-112.

APPENDIXES

Appendix A – Ethical clearance letter

Faculty Research Office
Durban University of Technology
Date 7 April, 2021

Student: Bonginkosi Ernest Shangase
Student Number: 20417053
Degree: Master of Management Sciences: Administration and Information Management
Email: 20417053@dut4life.ac.za
Supervisor: Dr Jane Skinner
Supervisor email: Janes@dut.ac.za

Dear Mr Shangase

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, 'Experiences of administering large classes: a case study of a Faculty of Management Sciences at a University of Technology'.

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 B – IREC letter of information and consent form

LETTER OF INFORMATION

Title of the Research Study: Experiences of administering large classes: a case study of a Faculty of Management Sciences at a University of Technology.

Principal Investigator/s/Researcher: Mr. Bonginkosi Ernest Shangase

Co-Investigator/s/Supervisor/s: Dr JP Skinner, PhD (Supervisor)
Mr BP Qwabe (Co Supervisor)

Brief Introduction and Purpose of the Study: The purpose of this study is to investigate experiences of academics and administrative staff in administering large classes, with a specific reference to three Departments at Mangosuthu University of Technology. Furthermore, the study intends to determine the perceptions of Management Sciences students on experiences they encounter in relation to large classes and how it affects their academic performance. The research objectives of this study are to identify the experiences of academic staff members with regards to administering large classes; To determine students' perspectives on their experiences in relation to the administration of large classes and how these affect their learning. To understand the administrative support staff experiences with regards to the administration of large classes.

Greeting: Good Day, I hope you are doing well.

Introduce yourself to the participant: I am a student at DUT doing research for my degree in Master of Management Sciences in Administration and Information Management.

Invitation to the potential participant: I would like to invite you to participate in the research study I am conducting (see attached questionnaire). The questionnaire will take between 15 and 20 minutes to complete. You are required to participate, and you are welcome to discuss this further with family or friends should you wish. Please ask me any questions that you may have.

Outline of the Procedures: The population of this study consists of academic staff, administrative support staff and students. Data will be collected by means of questionnaires (lecturers, students) and semi-structured interviews (administrative support staff). Questionnaire will be completed by undergraduate students (level 3) and all academic staff in the following departments will be invited to participate: Office Technology, Human Resources Management, Public Management and Economics housed in the Faculty of Management Sciences. Researcher will hand deliver the questionnaire to students and to academic staff during their break intervals to ensure that target sample receives and return questionnaires. The respondents are requested to fully complete the questionnaire as this will allow the researcher to analyse and interpret the responses accurately and incomplete responses may have to be discarded. Follow-up interviews will be conducted with two or three academics who make themselves available to discuss any additional aspects which are not covered within the questionnaire data. Academic staff will be requested to return completed questionnaires to their departmental secretaries. Students should return completed questionnaires to their class representatives. Both secretaries and class representatives have kindly agreed to collect the responses and hand over to me anonymously. Interview sessions with administrative support staff (3 secretaries from three departments identified for the study and 1 faculty officer) will take approximately 20 to 30 minutes. Interviews will be audio recorded with the permission of the participants. We encourage you to answer questions honestly and sincerely. You are not expected to participate if you feel uncomfortable in the process.

Risks or Discomforts to the Participant: There are no risks to respondents.

Benefits: Findings of this study will benefit academic staff by providing insights on large class management strategies and also that they will benefit students and administrative support staff with possible solutions to overcoming the challenges of large classes. Furthermore, the results of the study could support the institutions in developing strategies and policies in management and administration of large class sizes. There will no financial benefits to respondents.

Remuneration: There is no remuneration offered.

Costs of the Study: You will not be asked to cover any cost.

Confidentiality: The gathered data and respondents' responses will be kept confidential, and their names will remain anonymous in the research report nor will names of participants or of the institution be revealed in any subsequent publications.

Results: The dissertation will be available in the DUT library repository.

Research-related Injury: There are no risks or discomforts associated with participation in this research.

Storage of all electronic and hard copies including tape recordings: The raw data will be stored in a locked cabinet on paper for 5 years. After this time, they will be shredded or deleted.

Persons to Contact in the Event of Any Problems or Queries: Dr Jane Skinner (Supervisor) at 083 658 5951, Mr Bongani Qwabe (Co-Supervisor) at 082 512 6532: Mr. Bonginkosi Shangase (Researcher) on 081 018 5701. or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L Linganiso on 031 373 2577 or researchdirector@dut.ac.za.

CONSENT

Full Title of the Study: Experiences of administering large classes: a case study of a Faculty of Management Sciences at a University of Technology.

Name of Researcher: Mr. Bonginkosi Ernest Shangase

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Bonginkosi Ernest Shangase, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance number: **RD1/22/2021**.
- 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 computerised 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.

Full Name of Participant	Date	Time	Signature / Right

I, **Bonginkosi Ernest Shangase** (name of the researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Bonginkosi Shangase

Full Name of Researcher	Date	Signature
Full Name of Witness (if applicable)	Date	Signature
Full Name of Legal Guardian (if applicable)	Date	Signature

Appendix C – Letter of requesting permission to conduct the study

LETTER TO GATEKEEPER

To: Head of Research - Mangosuthu University of Technology

Principal Investigator / Researcher: Bonginkosi Ernest Shangase

Qualification: Master of Management Sciences: Administration and Information Management

Student Number: 20417053

Date: 25 May 2021

Subject: Permission to conduct research

Participants: Academic Staff, Students and Administrative support staff.

Site: Mangosuthu University of Technology (Departments: Office Technology, Human Resources, Public Management and Economics - Faculty of Management Sciences)

Title of the Research Study: Experiences of administering large classes: a case study of a Faculty of Management Sciences at a South African University of Technology

I, Bonginkosi Ernest Shangase, humbly request permission to conduct my research study and to collect data from academic staff (Junior Lecturers, NGap Lecturers, Lecturers, Senior Lecturers and HoD's), students (3rd Years) and administrative support staff (secretaries, faculty officer) in the Departments of Office Technology, Human Resources Management and Public Administration and Economics housed in the Faculty of Management Sciences, MUT. This project will be conducted under the supervision of Dr Jane Skinner who is employed by Durban University of Technology as a Senior Research Supervisor and co-supervision of Mr Bongani Qwabe who is lecturer at Mangosuthu University of Technology.

All data collected will be treated with confidentiality and all respondents will remain anonymous. No name will be required when completing questionnaires and interviews and the name of the institution will not be revealed in any subsequent publications. It is hoped that these findings will benefit academic staff by providing insights on large class management strategies and also that they will benefit students and administrative support staff with possible solutions to overcoming the challenges of large classes. Furthermore, the results of the study could support MUT and other institutions in developing strategies and policies in management and administration of large class sizes.

Findings of this study will be available at DUT Library as an online publication and also as a hard copy. The main findings could also be made available through leaflets if requested by academic staff and administrative support staff. I am currently employed by Mangosuthu University of Technology, Faculty of Management Sciences in the Department of Office Technology as a Junior Lecturer. Should you need any further information, please contact me on 031 907 7547 (office), 0810185701(mobile), shangase@mut.ac.za (email) or my supervisor: Dr Jane Skinner (083 658 5951; janes@dut.ac.za), co-supervisor: Mr. Bongani Penuel Qwabe (082 512 6532; qwabe.bongani@mut.ac.za).

Your support and consideration in this matter will be highly appreciated.

Yours sincerely,

Mr. Bonginkosi Ernest Shangase

Appendix D – Permission letter to conduct study

MUT
MANGOSUTHU
UNIVERSITY OF TECHNOLOGY

04 October 2021

REF: RD1/22/2021

Mr Bonginkosi Ernest Shangase
Mangosuthu University of Technology

Dear Mr Shangase

PROTOCOL: 'Experiences of administering large classes: a case study of a Faculty of Management Sciences at a University of Technology.'

The MUT Research Ethics Committee considered your application at their meeting held on 13 September 2021. It is my pleasure to inform you that permission to conduct the research project above was granted.

The approval is valid for two years from 13 September 2021. Any changes to the project must immediately be brought to the attention of the MUT Research Ethics Committee.

Your acceptance of this approval denotes your compliance with South African National Research Ethics guidelines (2004) and the MUT Research Ethics Policy, Procedures and Guidelines

Good luck with your research.

Yours sincerely

Dr A Mienie
Director: Research

Appendix E – Academic staff questionnaire

QUESTIONNAIRE FOR ACADEMIC STAFF

Do you lecture to large classes (with >100 students)?

Yes	No

If you answered 'YES', continue with the questionnaire.

If you answered 'NO' you do not meet the inclusion criteria. Thank you for your time.

SECTION A: BIOGRAPHICAL INFORMATION

Select the ONE response option that best applies to you. Where applicable, write your response in the space provided.

1. Gender

Male	Female

2. Age (years)

20 - 24	25 - 29	30-34	35-39	40-49	50 and above

3. Academic rank

Professor (Full/Associate)	Senior Lecturer	Lecturer	Junior Lecturer	NGap Lecturer

4. Highest qualification

PhD	Master's Degree	Honors Degree	Bachelor's Degree	Advanced Diploma	Diploma	Certificate	Other (Specify) _____

5. **Department**

Office Technology	Human Resources Management	Public Administration and Economics

6. **Lecturing experience (in years)**

Less than 5	5 - <10	10 - <15	15 - <20	20 - 25	More than 25

7. **Employment status**

Permanent	Contract

SECTION B: TEACHING EXPERIENCES

1. **Indicate your level of agreement with the following statements:**

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.1	I am able to discipline my students effectively in large classes.					
1.2	I am able to monitor my student's attendance in large classes.					
1.3	Lecturing large classes does not expose me to high levels of stress.					
1.4	Conducting assessments in large classes is manageable.					
1.5	In large classes I am able to provide assessment feedback timeously.					
1.6	In large classes I am able to identity at-risk students.					
1.7	In large classes it is possible to monitor my students' learning.					
1.8	In large classes I am able to engage with students during class activities.					
1.9	Despite large class numbers I am able to get to understand my students' strengths and weaknesses.					
1.10	Large class numbers do not have a serious impact on my students' academic performance.					

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.11	Teaching aids are as effective in large classes as they are in small classes.					
1.12	The layout of the lecture halls is adaptable to large class sizes.					
1.13	Teaching large classes online enables me to engage more with my students than when teaching in traditional contact lectures.					
1.14	Conducting lectures to large classes online allows me to give my students more individual attention than when teaching in contact lectures.					
1.15	The administrative workload for large classes is manageable.					
1.16	Administrative staff members provide sufficient administration support to me for my large classes.					
1.17	Despite additional administrative duties with large classes, I am able to perform other core academic activities (research & community engagement).					
1.18	I still find it manageable to teach the small groups formed by subdividing the large classes for lab and tutorial purposes					

2. **Indicate if you need further assistance, in the following areas, in administering large classes: (Tick ALL that apply)**

	Areas of assistance	
2.1	Marking of Assessments	
2.2	Capturing of marks	
2.3	Invigilation of tests and exams	
2.4	Appointment of more Tutors	
2.5	Appointment of teaching assistants (TAs)	
2.6	Other (please state) _____	

3. How many subjects / modules do you teach annually (both Full-Time day & Full-Time Evening)?

_____

4. How many students do you have in each subject you teach (both Full-Time day & Full-Time Evening)? (Tick ONE category for each subject)

Subjects	Number of students					
	<100	100-150	151-200	201-300	301-350	>350
4.1 Subject 1						
4.2 Subject 2						
4.3 Subject 3						
4.4 Subject 4						
4.5 Subject 5						

5. Indicate your agreement that the lack of resources has an impact on the effective teaching of large classes.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5.1 If your response to Q5 was "Agree" or "Strongly agree", please list the resources you think are required in order to address large classroom challenge.

6. Indicate any additional challenges that need to be addressed in order to improve the administration of large classes.

7. What strategies are you currently using to overcome the challenges of large classes?

Thank you for your time.

Appendix F – Student's questionnaire

QUESTIONNAIRE FOR STUDENTS

SECTION A: BIOGRAPHICAL INFORMATION

Select the ONE response option that best applies to you. Where applicable, write your response in the space provided. Please put a cross (X) in the appropriate box and furnish a brief response where applicable.

1. Gender

Male	Female

2. Race

Black African	Coloured	Indian / Asian	White

3. Age

Under 20 Years	20 - 25 Years	26 - 30 Years	31 - 35 Years	Over 35 Years

4. **The program you are registered for**

Diploma in Office Management and Technology	Diploma in Human Resources Management	Diploma in Public Management and Economics

SECTION B: STUDENTS' PERCEPTIONS & EXPERIENCES

OBJECTIVE: To determine students' perceptions of their experiences in relation to the administration of large classes and how these affect their learning.

1. Indicate your level of agreement with the following statements:

	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.1	Despite the large classes, I feel that I am noticed, and my concerns are attended to.					
1.2	In large classes I still get individual attention from my lecturers.					
1.3	In large classes I still feel motivated to attend my classes frequently.					
1.4	Feedback from lecturers is as timeous in large classes as it is in small classes					
1.5	Lack of resources in large classes does not affect my academic performance.					
1.6	As part of a large class, I am in a small group tutorial.					
1.7	Besides being in a crowded classroom (when COVID laws permit), I still find it easy to read what is being projected on the screen by my lecturer.					
1.8	The layout of the lecture halls is adequate to accommodate us in large class numbers.					
1.9	In large classes (either contact face to face classes or online classes) I still feel at ease to ask questions, to approach my lecturer, or others for help.					
1.10	Being in large classes does not stop me from engaging in class activities.					
1.11	Regardless of being in large class I do not loose concentration while the lecture is in progress.					

2. Indicate your agreement that the following support service center(s) are helpful in providing support to students in large classrooms.

Support service Centre	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2.1 Teaching and Learning Development Centre (TLDC)					
2.2 Writing Centre					
2.3 Student Counseling					

3. List the support services that the above centres (TLDC, Writing Centre, Student counseling) have provided to you, and which you find useful in helping students in large classes.

4. List other support services related to large classes that you would like to see provided by these support centers in the near future.

5. State any other particular personal experiences from being in a large class?

6. What strategies do you use to overcome difficulties which you experience from being within a large class?

7. Rate the academic support you receive from Teaching Assistants TA's (Tutors) for your studies.

Linear Scale:	0 = Not Applicable N/A (if your classes have no teaching assistants). 1 = Poor to 10 = Excellent									
N/A	Poor									Excellent
0	1	2	3	4	5	6	7	8	9	10

8. Do you have any additional suggestions that you feel will help students in large classes at the university?

Thank you for your time.

Appendix G – Academic secretaries interview schedule

INTERVIEW QUESTIONS - ADMINISTRATIVE SUPPORT STAFF

These questions are to be used for interviews with **Faculty Officer** and **Departmental Secretaries** from the following 3 departments: **Office Technology, Human Resources Management, Public Management and Economics** housed within the Faculty of Management Sciences. Interviews will take approximately 20 – 30 minutes. All interviews will be recorded with audio recorder, with the permission from the participants.

OBJECTIVE: To understand the administrative support staff experiences with regards to the administration of large classes.

1. Do you encounter any challenges with regard to administering a large number of students in your department? If so, what are those challenges?

2. How do large classes affect your daily administrative workload?

3. To how many academic staff in your department / faculty do you provide administrative support.

4. Are there any additional tasks related to teaching and learning in large classes that were assigned to you that previously were purely academic staff functions? If yes, what are those functions?

5. Do you get adequate support from lecturing staff in carrying out administrative tasks? Please explain what kind of support you get from academic staff.

6. When you were appointed, were you provided with a clear indication of the nature of administrative support that you would be asked to provide for academic staff especially with large classes in your department/faculty?

7. Do you think this institution has a clear workload model that is adhered to within your faculty? Please explain.

8. What do you think needs to be done in order to minimize/address any challenges that may come with administering large classes?

Appendix H – Proof of Editing

126 Sandown Village
27 Harvey Road
Pinetown
3610

4th December 2022

Proof of Editing

This is to confirm that the dissertation **'**Experiences of Administering Large Classes: A Case Study of a Faculty of Management Sciences at a University of Technology' by **Bonginkosi Ernest Shangase**, has been professionally edited by Dr Jane Skinner, who is a qualified teacher of English and who has extensive experience in editing academic theses and dissertations.

Dr Jane Skinner
(083 658 5951)