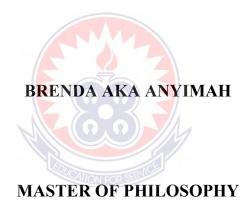
UNIVERSITY OF EDUCATION, WINNEBA

COPING WITH ACADEMIC WORK AND NURSING MOTHERHOOD IN AKENTEN APPIAH MENKAH UNIVERSITY OF SKILLS, TRAINING AND ENTREPRENEURIAL DEVELOPMENT (AAMUSTED), KUMASI



UNIVERSITY OF EDUCATION, WINNEBA

COPING WITH ACADEMIC WORK AND NURSING MOTHERHOOD: THE CASE OF AKENTEN APPIAH MINKAH UNIVERSITY OF SKILLS, TRAINING AND ENTREPRENEURIAL DEVELOPMENT (AAMUSTED), KUMASI



A thesis in the Department of Basic Education, Faculty of Educational Studies, submitted to the school of Graduate Studies in partial fulfilment of the requirements for the award of the degree of Master of Philosophy (Basic Education) in the University of Education, Winneba

DECLARATION

Student's Declaration

I, Brenda Aka Anyimah, declare that this thesis, with the exception of quotation and references contained in published works which have all been identified and duly acknowledged, is entirely my original work and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature:

Date:

Supervisor's Declaration

We hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Name: PROF. CHARLES ANNOBIL (Principal Supervisor)

Signature:

Date:

Name: PROF. ROBERT GHANNEY (Co-Supervisor)

Signature:

Date:

DEDICATION

To my son Joseph Kwadwo Oppong Poku and his siblings.



ACKNOWLEDGEMENTS

My first thanks go to almighty God for His unfailing love shown to me throughout this my MPhil programme. I say may His name be praised.

I also appreciate the support and encouragement given by my supervisors, Prof. Charles Annobil and Prof. Robert Ghanney of the Department of Basic Education of University of Education, Winneba during this thesis writing.

I am very grateful to Prof. Ebenezer Owusu Sekyere (Director of Distance Education and Associate Prof. for Geography, UDS Tamale) and Mr. Solomon Sarfo (Vice Principal St. Louis College of Education) for their advice given to me to excel in my education. I am particularly grateful to my husband Mr. Kwabena Poku for his support and understanding, I left my kids to His care for further studies. May God bless him.

Again, I want to thank my parents, especially my mother for their support and prayers for me throughout my programme. She always availed herself to support my husband to take care of my kids whenever I was in school. I cannot leave out the support my siblings have always given me. Thank you all for what you have done in diverse ways to see me through my programme.

I thank my Head teacher Mr. Jacob Amike of St. Hubert R/C Basic School for his support given to me throughout my programme. Finally, I say thanks to everyone who supported me in diverse ways to see my dream come through, especially family, friends and loved ones. God bless you all for your care.

TABLE OF CONTENTS

Cont	Page	
DECI	iii	
DED	iv	
AKN	v	
TABLE OF CONTENTS		vi
LIST	OF TABLES	ix
LIST OF FIGURES		х
ABST	FRACT	xi
СНА	PTER ONE: INTRODUCTION	1
1.1	Background to the Study	1
1.2	Statement of the Problem	6
1.3	Purpose of the Study	8
1.4	Objectives of the Study	8
1.5	Research Questions	8
1.6	Significance of the Study	9
1.7	Delimitation of the Study	9
1.8	Limitation of the Study	9
1.9	Definition of Terms	10
1.10	Organization of the Study	10
CHAPTER TWO: LITERATURE REVIEW		11
2.0	Overview	11
2.1	Theoretical Framework	12
2.1.1	Role conflict theory (Talcott Parson, 1971)	12
2.2.2	Consequences of role conflict	14
2.2.3	Coping behaviour for dealing with inter-role conflict	15

2.2.4	Criticism of role conflict theory	17
2.2.5	Self-determination theory (Deci & Ryan, 1991)	20
2.2.6	Challenges of self-determination theory	22
2.2	Conceptual Framework	23
2.3	Empirical Review	25
2.3.1	The challenges student nursing mothers face in their pursuit with	
	academic work	25
2.3.2	The influence of child-related roles on the academic performance of	
	student nursing mothers	31
2.3.3	The strategies student nursing mothers adopt to cope with academic work	34
2.3.4	The educational and institutional policies guiding nursing mothers	
	educational progress in Ghana	38
2.3.5	Observation of breastfeeding mothers	41
CHAPTER THREE: METHODOLOGY		
3.0	Overview	56
3.1	Research Paradigm	56
3.2	Research Approach	57
3.3	Research Design	58
3.4	Setting	61
3.5	Population	62
3.6	Sample Size	62
3.7	Sampling Technique	63
3.8	Research Instruments	65
3.10	Data Collection Procedure	70
3.11	Data Analysis Procedure	71
3.12	Ethical Consideration	72
3.12	Chapter Summary	73

CHAPTER FOUR: RESULTS AND DISCUSSIONS			
4.0	Overview		
4.1	Demographic Information of Respondents (Students)	75	
4.2	Research Question One: What are the challenges facing student nursing mothers in pursing their academic work?	77	
4.3	Research Question Two: What influence do child-related roles have on the academic performance of student nursing mothers at AAMUSTED?	88	
4.4	Research Question Three: What strategies do student nursing mothers adopt to cope with their academic work at AAMUSTED?		
4.5	Research Question Four: What are the educational and institutional policies guiding student nursing mothers' educational progress in Ghana?	104	
4.6	Chapter Summary	108	
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS 11			
5.0	Overview	110	
5.1	Summary	110	
5.2	Summary of Keys Findings	110	
5.3	Conclusion	114	
5.4	Recommendations	115	
5.5	Suggestion for Further Research	115	
REF	ERENCES	116	
APPI	ENDICES	136	
APPENDIX A: Letter of Introduction		136	
APPENDIX B: Interview Guide for Student Nursing Mother			
APPENDIX C: Observation Guide			

LIST OF TABLES

Table		Page	
1:	Demographic Information of Student Nursing Mothers (Respondents)	75	



LIST OF FIGURES

Figure		Page
1:	Conceputal Framework	24



ABSTRACT

The purpose of the study was to explore how student nursing mothers cope with academic work at AAMUSTED. A qualitative research approach, interpretive philosophical paradigm and an exploratory case study design were used to guide the study to collect and analyse data for the research objective. Besides, the study made a detailed observation of the nursing students using an observation guide. Role conflict theory and self-determination theory were used to underpin the study. The data collected from the interview was analysed using an inductive analysis approach while the observation was analysed using content analysis. The results revealed that student nursing mothers face numerous challenges in their pursuit of academic achievement but they adopt several ways to cope with them. Combining childcare, post-maternity complications and family demands makes it very difficult for student nursing mothers to focus on their academic work. To deal with these challenges, students nursing mothers relied on their husbands, hiring a babysitter, participation in group discussion, developing a good relationship with lecturers and using other psychological tactics to enhance learning. Also, most students, breastfeeding were interrupted by "lecture calls" and had to run back to lectures to avoid missing out. The universities should consider instituting policies that can offer student nursing mothers' academic leverage and infrastructure support. Women must also be encouraged to have stable sources of income before pursing further studies to help them financially. Husbands are encouraged to support their wives and partners to further their education and provide them with necessary support they need at early stages of childcare.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Two of the greatest gifts given by nature are procreation and progeny (Yang, Burns, Salamonson & Schmied, 2019). Traditionally, some people believe that procreation ensures creating a bloodline and allows parents to pass down their knowledge, beliefs, customs, and tradition to the future generation (Yang et al., 2019). Such thoughts form the foundation of any community and eventually nations besides the human race's evolution (Spatz, 2019). Though the ability to procreate requires both parental effort and contribution, the initiation of conception to delivery puts women in a life-threatening situation that transcends any father's efforts in a child's growth (Freitas, Macedo & Teixeira, 2019). Though fathers have a significant role to play, psychologists and medical experts (Langford, Gowan & Haj, 2021) alike argued that the woman's part is essential for the child's survival.

Besides the numerous discrimination women face for being women, nursing a baby also takes a hefty toll on a woman's health and disrupts her career (Segovia-Pérez & Sánchez, 2020). According to the World Health Organization (WHO), 90% of nursing mothers either must put their job on hold or abandon it entirely during breastfeeding (Bull, Al-Ansari & Willumsen, 2020). Further, most of these women find it challenging to get their career back on track, while most cannot diversify into an alternative career plan. Also, sustainable development goal 2 noted that though most organizations provide nursing mothers, most nursing mothers still face numerous challenges in their health, education, career development and poverty (Fanzo, 2019).

With the global economy becoming knowledge-based, access to quality education has become necessary than ever before and a prerequisite for a meaningful career (Pemo, Phillips & Hutchinson, 2020). For these reasons, Tomori, Gribble and Gross (2020) contend that nursing mothers who intend to pursue their education or blending it with their ongoing education are at a significant disadvantage. Performing the roles of a student and a mother is characterized by several academic, childcare, and economic or financial challenges. Further, Bull, Al-Ansari and Willumsen (2020) observed that nursing mothers face challenges such as maternal-related illness, fatigue, lateness to lectures, inability to meet assignment deadlines, nonparticipation in examinations, uncompromising attitudes of lecturers and fellow students, as well as stigmatization (or unfavourable comments).

Similarly, Doherty, Horwood and Engebretsen (2020) noted that schooling and nursing a baby concurrently results to inadequate access to spouse, family, friends, lecturers, church members and leisure. For most women in developing countries, Bhattacharjee, Schaeffer, Albright and Hay (2019) found economic challenges such as inadequate funds for academic, accommodation fees, feeding, and other logistics drugs are some of the challenges nursing mothers faces while schooling. The challenges as mentioned above are underpinned in role conflict, arguing that role conflict people experience incompatible occurs when work demands (Dukuzumuremyi, Acheampong, Abesig & Luo, 2020). According to the theory, each person has a unique work role with special rights and responsibilities. Therefore, when people simultaneously occupy multiple positions, both within and outside the organization, it results in to conflicts.

Concerning nursing mothers and schooling, the theory posits that nursing mothers who attend school while working (officially or home duties) often experience workschool conflict (Valentine, Secular & Lynch, 2020). This occurs when a mother's nursing work and school responsibilities conflict with each other. In such circumstances, Evi, Rachmawati, and Budiarti (2020) noted that nursing mothers might spend time attending to their nursing and motherly duties instead of studying for an exam. On the other hand, Hosseinabadi and Mirzayee-Sharifi (2020) argued that such conflicting roles might result in a situation where work responsibilities interfere with school responsibilities or school responsibilities interfering with work responsibilities.

Linda, Phetlhu and Klopper (2020) contend that workload and the number of hours worked are likely to be positively associated with work-school conflict, impacting school performance. Irrespective of these conflicts' outcome, Closson, Hatcher and Gibbs (2020) observed that some nursing mothers voluntarily withdraw from school only to re-join after weaning their babies, while others interrupt their studies bridges the college policies. Echoing these observations, Cohen and Venter (2020) noted that these challenges negatively impact student nursing mothers, consequently affecting their academic work and eventually stalling progress toward achieving their set goals.

Though these challenges are generally found around the world, Dankyi, Dankyi and Minadzi (2019) noted that the situation is precarious for developing countries like Ghana. According to Budu, Abalo and Peprah (2019), most student nursing mothers in Ghana have reported feeling weak, exhausted and lacking consideration in classes leading to failure. Similarly, Gbogbo (2020) observed that most working nursing mothers in Ghana could not spend adequate time with their children, families, friends

and study or complete assignments. Unfortunately, a woman's instincts to remain resolute and dedicated to her children and conscious ability to adjust to academic demands have devastating effects on their relationship with their children (Dankyi, Minadzi & Senyametor, 2019).

Ghana's tertiary education system's culture assumes that all students have time to attend classes without other responsibilities and treat their education as their primary responsibility (Abodey, Vanderpuye, Mensah & Badu, 2020). For these reasons, Anibijuwon and Esimai (2020) noted that taking on motherhood and childcare alongside educational pursuits is not considered normal in several universities across Ghana. However, no laws or policies are prohibiting it. This is akin to the SDG2 (2019) report that nursing mothers experience unpleasant emotional pressures across Africa and receive negative feedback from the academic environment, implying that education must be their priority.

Gender activists perceive such experiences as unsupportive for women and very provocative, arguing that it implies nursing mothers do not have the obligatory interest and enthusiasm toward their education (Andrade, 2020; Pluckrose & Lindsay, 2020). Some advocates for gender equality (Keddie, 2020; Khan, 2020) akin to the typical Ghanaian traditional society. Men are regarded as the head of the family and breadwinner and need to be educated for better employment and higher income. Amoabea, Abigail, Adei and Yaa (2020) argued that such sentiment has further impeded nursing mothers' ability to pursue higher educational achievement besides the Ghanaian culture and brand women as keepers of the home must be trained at the kitchen.

With the rise in enrolment across both public and private tertiary institutions in Ghana, Atakro, Armah, Ahenkora, Addo and Gross (2019) noted that more women had been encouraged to pursue tertiary education. Besides, Bain, Buning and Becquet (2020) observed that tertiary institutions are becoming more tolerant of nursing mothers and encouraging them to enrol in many programs. Adamba (2020) also found that the number of nursing mothers currently pursuing tertiary education has more than triple over the past decade in Ghana. To this, empirical evidence has shown that University of Education at any point in time has a significantly higher number of nursing mothers than all the other public universities (Ministry of Education, 2019). Also, Ogunji, Nwajiuba and Uwakwe (2020) attribute this to the fact that most of the university's programs are related to education. The majority of teachers and stakeholders in education prefer University of Education to the other universities.

For these reasons, this study examines the challenges student nursing mothers face and their coping strategies with academic work using Akenten Appiah-Menkah University of Skills, Training and Entrepreneurial Development (AAMUSTED), Kumasi as a case study. Further, there is a paucity of research on student nursing mothers in Ghana and their challenges (Amoabea, Abigail, Adei & Yaa, 2020). However, among the few studies available, some of the findings suggested that extended family members and universities could support student nursing mothers (Henaku, 2020). This includes providing breastfeeding rooms and counselling services to manage better the challenges resulting from their productive, reproductive and community service roles. On the other hand, Alabi, Adejoh, Atinge and Umahi (2020) noted that marriage, housekeeping and unsupportive husbands limited women's role and their chances to pursue higher education. Most scholars (Kansas, 2020; Kline, 2020) consent to abolishing the notion that the African woman's place is the home; hers is to cook and bring up children. Muhunzi, Ngocho, and Mahande (2020) also noted in Ghana that women are not as free as men and tend to become economically limited because men provided money for running the home. Finally, Muhunzi, Ngocho and Mahande (2020) noted that the role of the 21st-century woman often requires her to be a wife, mother, nurse, teacher and co-breadwinner concurrently. However, it is the changing role of women in a society that has made it necessary for nursing mothers to combine childcare, home care, career and studies.

1.2 Statement of the Problem

Women's changing role in society and economic hardship have made it necessary for nursing mothers to combine childcare, homecare, career and studies (Atta-Asiedu, 2020). This means that even though a nursing mother may be in school, she still has specific responsibilities to fulfil at home. In the studies of Dankyi, Dankyi, and Minadzi (2019) and Amos and Manieson (2015), it was concluded that the role conflict experienced by nursing mothers and married women affect their academic performance in school and appreciable performance at home. The struggles they go through include the inability to attend face-to-face lessons regularly, and inadequate preparation for examinations. All these challenges affect their learning and level of achievements at the pre-tertiary institutions.

Nyarko (2020) further observed the dilemma facing the Ghanaian woman is that women should abandon their families to seek knowledge and enlightenment or should they stick to old tradition and stay home uneducated as homemakers. In response to this, Krumbiegel, Maertens and Wollni (2020) indicated that modernization coupled with economic challenges dictates that women have to contribute financially to keeping the home.

The number of females enrolling in higher institutions is increasing, mostly of mothers resuming school or enrolling into university late (Ekeleme, Iwuoha & Ejikem, 2020: Shehu & Shehu, 2019). Available evidence (Ahinkorah, Hagan Jr & Budu, 2020; Abekah-Nkrumah, Antwi, Nkrumah & Gbagbo, 2020) indicating an increasing number of nursing mother among these female students who either gave birth before deciding to school or during their program. Vilar-Compte, Teruel and Perez-Escamilla (2020) also found that most student nursing mothers leave their babies in the care of other people to pursue higher education. The problem with this is that for Ghanaian women, performing the roles of a student and a nursing mother is characterized by several stressful challenges from the home and the school.

At AAMUSTED, I observed increase in maternal-related illness, fatigue, lateness to lectures, inability to meet assignment deadlines, non-participation in examinations, uncompromising lecturers' attitudes and stigma that militate against nursing mothers coping with academic work.

On the state of student nursing mothers in Ghanaian universities and the little information available give conflicting information on how they can cope with academic work and strategies they adopt (Aryeetey et al., 2020). Duodu, Duah, Dzomeku and Agbadi (2020) observed that women are forced to pursue higher academic qualifications for better job opportunities concurrently with maternal duties.

1.3 Purpose of the Study

The study was to explore how student nursing mothers cope with academic work at AAMUSTED.

1.4 Objectives of the Study

Specifically, the study sought to:

- 1. Explore the challenges student nursing mothers face in pursuit of their academic work.
- 2. Establish influence of child-related roles on the academic performance of student nursing mothers.
- 3. Determine strategies student nursing mothers adopt in order to cope with academic work.
- 4. Examine educational and institutional policies guiding student nursing mothers' educational progress in Ghana.

1.5 Research Questions

The following research questions were posed to guide the study:

- 1. What are the challenges facing student nursing mothers at AAMUSTED in pursuit of their academic work?
- 2. What influence do child-related roles have on the academic performance of student nursing mothers at AAMUSTED?
- 3. What strategies do student nursing mothers adopt to cope with their academic work at AAMUSTED?
- 4. What are the educational and institutional policies guiding student nursing mothers' educational progress in Ghana?

1.6 Significance of the Study

Women's role is continuously changing and economic challenges mean that women have to contribute to the family's upkeep. This underscores the need for women to be educated to be able to seek better job opportunities. Therefore, this study's findings would serve as a source of information for gender advocates to better understand the situation of students nursing mothers. This would enable them to push for better conditions for nursing mothers and women in general. Further, the educational institution would also become aware of the challenges student nursing mothers are currently facing and make the necessary adjustment to ease their plight. This study's findings would help clarify conflicting information on the challenges students nursing mothers have to acquire higher academic qualifications.

1.7 Delimitation of the Study

The study focused only on student nursing mothers at AAMUSTED; any information not directly related to the study were ignored. Also, none student nursing mothers were excluded from the study.

1.8 Limitation of the Study

The study is purely qualitative and subjective to the student nursing mothers' opinion. As such, there is no way of verifying any claim. Also, collecting data from only AAMUSTED meant that the study's findings cannot be generalized. Nursing mothers go through life-threatening stress. There was a tendency for the respondents to exaggerate or relate their challenges to other issues that do not necessarily concern the problem under study. These were likely to affect the validity of the data collected.

1.9 Definition of Terms

Nursing Mother: A mother who breastfeeds her baby.

Student: a person who is studying at a university or other place of higher education

Pregnancy: the period in which a foetus develops inside a woman's womb or uterus.

Higher education: education at universities or similar educational establishments, especially to degree level.

1.10 Organization of the Study

This study consists of five main chapters. The first chapter deals with the introduction to the study. It comprises the background to the study, statement of the problem, research objectives, research questions, the significance of the Study as well as limitation/delimitation of the study. Chapter Two of the study comprises the review of literature on student nursing mothers including the theoretical framework. Chapter three focused on methodology and profile. The Chapter Four consists of data presentation, analysis and discussion of findings. The Chapter Five, concludes the study by summarizing the main findings and their broad theoretical and policy ramifications for implementation.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

The study evaluated the available literature on student nursing mothers and how they cope with their academic work. The essence is to show that the researcher has an indepth grasp of current issues relating to challenges student nursing mothers face with their academic pursuit and how it fits into the study and adds to an existing body of agreed knowledge. This was done by critically analysing the information gathered and identifying gaps in current knowledge by showing limitations of theories and points of view. The literature review is critical as it provides the foundation of knowledge on the strategies student nursing mothers adopt to handle academic work. Besides, it will identify areas of prior scholarship to prevent duplication and give credit to other researchers.

Finally, the literature identifies inconstancies, gaps in research, conflicts in previous studies and open questions from other researches. For this study, the literature review was divided into four segments. The first is the theoretical framework which consists of the role theory and self-determination theory. Second is the conceptual framework, which was drawn to guide the study. The third section is the empirical review, which focused on other researchers' research method to achieve their research findings. Final section presented the lessons learnt from the literature review, the gaps and inconsistencies of further research work.

2.1 Theoretical Framework

This section presents the structure that supports a theory of the research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists.

2.1.1 Role conflict theory (Talcott Parson, 1971)

Despite the increasing role of women as homemakers and keepers, as mothers, in society's activities and contribution to the national labour force, very little is known about what they go through as student nursing mothers and the measures they adopt to succeed (Nambisan & Baron, 2019). The study aims to address this research gap by using the role conflict theory to explain how women double as nursing mothers and students simultaneously. Generally, the term role conflict describes a contending situation where two or more of a person's roles require attending to at the same time or incompatible features within the same role (Zou, Guo & Li, 2019). Further, Cho, Kim, Chin and Ahmad (2020) noted that incompatibilities always consist of differing expectations, requirements, beliefs and attitudes.

Concerning student nursing mothers, the conflicts of their roles is because they are nursing a baby who is fragile and absolutely dependent on a mother who happens to be a student and must fulfil specific academic requirements. Liao, Lau and Kong (2019) have the opinion that the educational environment expects her to dedicate her full time to the teaching and learning process while the babe or nursing motherhood also demands undivided attention from the mother. Similarly, Maloni, Gligor and Boyd (2019) argued that another side to this situation is that the student nursing mother faces two dilemmas; the first is the intra-role conflict in which she struggles with the conflict of taking care of the baby and the rest of the family (the home). Proponents of the theory refer to this situation as an incompatible requirement within the same role (Hirschi, Shockley & Zacher, 2019; O'Lynn, O'Connor & Kellett, 2020).

On the other hand, the second dilemma is the inter-role conflict which has to do with nursing demands and academic demands. In this instance, she has to fulfil the requests of nursing the baby and the intellectual needs of learning and writing examinations. Proponents of the theory refer to this situation as clashing expectations from separate roles within the same person (Aboobaker & Edward, 2020; Taylor, Huml & Dixon, 2019). Based on the tenets of the theory, inter-role conflict can arise in two ways. First, student nursing mothers may sometimes have inconsistent conceptions concerning the requirements and expectations of either their maternal roles or academic needs. Asbari, Pramono and MiyvFayzhall (2020) opined that this form of inter-role conflict is easier to resolve if the correct information is available from the conflicting roles.

The second form of inter-role conflict is when the requirements and expectations of one role interfere or conflict with those of another role. This means that a student's role as a mother is likely to conflict occasionally with her role as a student, as an example. According to the author of the theory, it is essential to note that there must be roles and statuses for a society to function effectively. Each class came of a position that must be fulfilled unconditionally. This creates a situation of shared expectation based on the status one occupies in society. According to Talcot Parsons (1971), the rules of society, its norms of proper conduct, become the expectations of its members. This makes people's interrelationships work because the parties know what to expect of one another.

2.2.2 Consequences of role conflict

The consequences of role conflict can either be negative or positive (Taylor, Teijlingen & Alexander, 2019). However, research has drawn attention to the problems associated with multiple roles (Gabriel, Volpone & Moran, 2020). According to the theory, numerous roles come in two primary forms, role overload and role conflict and these are the two central tenets of role conflict theory (Sihota, Oliffe, Kelly & McCuaig, 2019). Parsons (1971) argued that role overload relates to the experience of lacking the resources, including time and energy, needed to meet the demands of all roles. However, Talbert, Jones and Mwangome (2020) noted that when either role overload or role conflict occurs, it results in meeting role expectations, known as role strain.

When role strain occurs, the stress and trauma that student nursing mothers go through make them feel psychological, emotional and physical ill-disposed towards the programme (Matare, Craig & Dickin, 2019). This has led to some student nursing mothers dropping out of the program or contend with nursing their newborn babies alongside their studies. According to Wagg, Callanan and Hassett (2019), this further increases their burden and has made some fail their exams while some have even abandoned their examinations. Some come late for lectures because of their marital demands or even stay away from classes for a reasonable period due to home pressure and demands. All these affect their learning and level of achievement.

Boix-Amorós, Collado and Munblit (2019), argued that such demands in conflict roles strain the nursing mothers' financial capacity. Available evidence shows that nursing students had their studies negatively affected by financial problems (Ackerman-Barger, Boatright & Latimore, 2020: Grant-Smith& de Zwaan, 2019).

Echoing these observations, Stuebe, Meltzer-Brody and Grewen (2019) noted that when financial resources become insufficient for sustenance, some student nursing mothers temporarily withdraw from educational activities, lectures source funds and or other essential materials. Similarly, Hubert, Jeannin and Vidy (2020) described the challenges facing nursing mothers as a triple role in a conflict, including productive, reproductive and community service. These roles exert a lot of stress, anxiety and sometimes may lead to diseases.

For student nursing mothers, Ayton, Tesch and Hansen (2019), argued that support services such as counselling must be provided to student mothers to manage better the struggles brought about by the challenges they face. According to Karlsson, Brantsæter and Sengpiel (2019), such support is essential because there is evidence to confirm that if student nursing mothers can succeed at different roles, they experience less strain and lower rates of depression and higher self-esteem and innovation. Similarly, Ranch, Jämtén and Ekström-Bergström (2019) argued that it is the sense of success at multiple roles that student nursing mothers be able to express their individuality and act autonomously by normative expectations. From a medical perspective, Emmott, Page and Myers (2020), argued that women who hold multiple roles of mother, wife and the paid worker have better health than women holding none or only some of these roles.

2.2.3 Coping behaviour for dealing with inter-role conflict

Coping behaviour regarding student nursing mothers involve adaptive behaviours that enable them to cope with nursing and schooling's conflicting challenges. According to Hundera (2019), such adjustments allow student nursing mothers to get along in their environment with tremendous success and most minor conflict with others. Within the

context of inter-role conflict, student nursing mothers are likely to adopt any of the three coping behaviours. The first is to make a structural role redefinition; this involves an active attempt to deal directly with the roles' source and lessen the conflict by mutual agreement on a new set of expectations. According to Akkoç, Okun and Türe (2020), one-way student nursing mothers can change structural demands is to relocate and share their role tasks such as cleaning, washing and child care.

The second is the personal role redefinition. This involves the student nursing mother changing her concept of role demands received from others. It entails changing the expectations themselves. Finally, the third is the reactive role behaviour when the student nursing mother attempts to improve the quality of role performance with no attempt to change the structural or personal definition of one's roles. Irrespective of which behaviour the nursing mother adopt to cope with her dual challenges, available evidence shows that most nursing mothers either take their children with them to school, use paid domestic workers who follow them around to help with the baby, leave children with neighbours, relatives, older siblings, or take them to daycare centres.

Similarly, Rahim (2019) noted that the most common coping strategy is support from the family, especially husbands, grandparents and other relatives. Also, Ambunya (2020) argued that emotional support from husband and peers and time management strategies were used by 93.3% of student nursing mothers. Similarly, Carrim, Nel and Schoeman (2020) noted that first-time nursing mothers relied heavily on emotional and physical support from their husbands and parents and time management strategies. Similarly, Pandey and Singh (2019) observed that student nursing mothers might redefine their roles as mothers or their expectations of themselves as students or re-negotiate their support from family and friends. Similarly, Abbasi and Bordia (2019) noted that some nursing mothers might redefine how they see the university system and its role.

2.2.4 Criticism of role conflict theory

Contemporary criticisms of role conflict theory question its accuracy in depicting human behaviour (Hirschi, Shockley & Zacher, 2019; Maloni, MGligor & Boyd, 2019). Five main criticisms of the theory have been identified. The first is that role theory reifies ideologies into concrete entities, rendering a sense of universality. To this, critics (O'Lynn, O'Connor & Kellett, 2020; Aboobaker & Edward, 2020) argued that roles that imply a neutral set of behaviours and expectations associated with a social position are based on conservative social ideologies and that these images are far from being a universal phenomenon. According to Taylor, Huml and Dixon (2019), by assuming one concrete reality, the diversity among individual lifestyles based on physical ability, sexual orientation, gender, ethnicity, or age are rendered invisible as acceptable ways of being.

Secondly, role conflict theory places greater emphasis on social conformity than questioning social policies. Asbari, Pramono, and MiyvFayzhall (2020) argued that the role conflict theory supports a conservative political ideology that attempted to maintain social cohesiveness and restrict resistance to the established social norms defined by those in power. Hunter, Clark and Carlson (2019) also posit that the theory promotes social conformity by endorsing a normative analysis of human behaviour that attempts to redefine the proper way to live. Thus, those individuals who engage in

behaviours outside these norms are labelled deviants, and their maladaptive behaviours are explained in role conflict.

According to Galletta, Portuguese and Campagna (2019), when using role conflict to analyse deviant behaviour, role theorists rely on explanations of insufficient socialization or a mismatch between one's personality and behavioural expectations as the primary reasons the individual does not engage in proper behaviour. Thus, the problems of role performance and deviance are represented ultimately as an individual problem. Dierckx, Mortelmans and Motmans (2019) argued that this type of explanation is not only simplistic but conveniently places the responsibility for overcoming maladaptation on the individual.

Thirdly, the socialization process, as depicted by role theory. lacks comprehensiveness. Geisler, Berthelsen and Muhonen (2019), social agencies such as families, churches and schools are responsible for providing the individual's model behaviour, which role theorists refer to as role acquisition role learning. Junker, Baumeister, and Greenhaus (2020) argued that socialization in this sense is based on the notion that through modelling other people's behaviours, psychological mechanisms are developed to represent the accepted social norms internally. Therefore, once internalized, the individual carries out the normative expectations. In a simplistic sense, Soelton, Lestari, Arief and Putra (2020) argued that this explanation appears to reflect a natural process because some children grow to emulate their parents; some students model their mentors. Eynde, Claessens and Mortelmans (2020) opined that sometimes, this process could be a smooth, positive experience and result from the internalization of parents' and mentors' attitudes and behaviours.

Fourthly, human agency is not sufficiently addressed in role theory to this, Zu, Wu Song and Zhang (2020) noted that role conflict theory fails to provide an authentic account of human agency, more specifically, the subjective experience of an individual's engagement in occupation, the resistive efforts by some individuals to change existing social practices, and the creative methods employed by some people to adapt to their situations. Also, Thakur and Chewning (2020) argued that role conflict theory does not adequately account for human agency, obscuring that some individuals actively resist social oppression. Similarly, Zou, Guo and Li (2019) noted that opposition to social norms is not addressed in terms of resistance on the individual to power inequalities but rather in deviance. This interpretation ignores both the resistive efforts of individuals and the social transformations that stem from such opposition.

Fifth, role theory promotes the notion of segmented rather than enfolded occupations. Some critics argued that the theory fosters a static and segmented description of human activity (Rafsanjani, Ghofur, Fitrayati and Dewi, 2020). According to the theory, an individual may assume various roles such as worker, friend, or volunteer, with each part prescribing a set repertoire of behaviours and attitudes. According to Davis, Bendickson, Muldoon and McDowell (2021), putting occupation into various roles provide the illusion that life is partitioned into isolated segments that can be dealt with independently. For instance, the image of a traditional man going off to work to enact his worker role from 8 to 5, returning home to a family to pass his husband role, and spending the weekend camping to enact his leisure role exemplifies this notion of role segmentation. Gökçen (2019), argues that this image contrasts to the conflicting demands of traditional women's work which requires multifaceted, overlapping occupations as women attempt to accomplish child/parent care, household work and part-time or full-time outside-the-home work. These depictions suggest that role theory is more consistent with the traditional male's work or single linear career life than the enfolded activities that women address daily or children's largely undefined role experiences.

2.2.5 Self-determination theory (Deci & Ryan, 1991)

Self-determination theory (SDT) is a personality theory that includes behavioural factors. It focuses on the motivation behind the choices that individuals make. The theory was inspired by research into intrinsic motivation, which is the idea of engaging in an activity because it is exciting and satisfying rather than being motivated to achieve a goal or receive an external reward such as money (Ryan & Deci, 2019). With intrinsic motivation, Gilal, Zhang and Gilal (2019) noted that a nursing mother seeks out challenges such as acquiring higher education qualifications that allow for growth. With intrinsic motivation, a nursing mother flourishes if her efforts are linked with a sense of security and understanding (Ryan & Deci, 2019).

The need for competence, autonomy, and understanding motivate self-initiated behaviour described in role conflict theory allow for optimal function and growth of nursing mothers (Ryan & Deci, 2019). These needs are not learned but instead are innate and transcend gender and culture. A student nursing mother's competence has to do with effectively dealing with the environment and producing behavioural outcomes. The most crucial issue is that negative feedback decreases intrinsic motivation, while positive feedback increases inherent motivation. On the other hand,

understanding involves the desire to interact with, be connected to and care for others. With these attributes, a student nursing can seek assistance for her conflicting roles by establishing satisfying relationships with others and society at large (Vasconcellos, Parker & Lonsdale, 2020).

Autonomy is the urge of a student nursing mother to have agency, initiate action, and regulate her behaviours. According to Gillison, Rouse and Ryan (2019), it is undermined by offering external/extrinsic rewards and establishing deadlines, but increasing choices increases autonomy. From an education perspective, those in educational authority need to consider the student nursing mother's perspective on health-related matters to satisfy the nursing mother's need for understanding and increases her sense of belonging when policymakers in academia offer a meaningful and relevant rationale for behavioural change, the student nursing mother's sense of competence increases.

According to Roth, Vansteenkiste, and Ryan (2019), neutral language such as may and could instead should and must increase the student nursing mother's autonomy. Hence, nursing mothers who operate autonomously choose to adopt a suggested behaviour because they see that behaviour as essential and meaningful to their academic accomplishment and growth (Huang, Backman & Moore, 2019). Also, the theory indicates that people orient themselves to the environment and regulate their behaviour either by autonomous, controlled, and impersonal. According to Deci (1971), independent orientations result from satisfaction of basic needs whilst controlled exposures result from satisfaction of competence and affiliation needs, but not autonomy needs such as rigid functioning and diminished well-being. Also, Deci (1971) noted that impersonal orientations result from a lack of fulfilling all three needs. Poor functioning and ill-health result when a person has or experiences an impersonal orientation. Further, self-determination theory posits that life goals also motivate people towards accomplishment. This is because life goals include intrinsic aspirations and goals like affiliation, generativity and personal development. Conversely, Deci (1971) explained that extrinsic aspirations include destinations such as wealth, fame, and attractiveness. Research has shown intrinsic goals are associated with enhanced health and well-being.

Deci (1971) identified humans desire to master their drives and emotions; humans have an inherent tendency toward growth, development and integrated functioning. Optimal development actions are inherent but do not happen automatically as the three essential elements of self-determination theory. This means that people like nursing mothers need nurturing from their social environment, especially in healthcare and career professionals, to actualize their potential (Aelterman, Vansteenkiste & Haerens, 2019).

2.2.6 Challenges of self-determination theory

Self-determination theory has been confirmed in several correlational studies, but few experimental studies have examined the theory concerning health-promoting behaviours (Chatzisarantis & Hagger, 2009). For these reasons, critics (Roth, Vansteenkiste & Ryan, 2019; Guertin, Barbeau & Pelletier, 2020) argued that additional experimental research on the theory is needed. An empirical study was conducted by Chatzisarantis and Hagger (2009) with 215 pupils as part of a randomized school-based intervention to change physical activity intentions and self-reported leisure-time physical activity behaviour. Teachers in the intervention group

provided positive feedback, gave the rationale for becoming active, and acknowledged how hard it is to exercise. The pupils' sense of choice was enhanced by using neutral language such as physical education may be fun.

Chatzisarantis and Hagger found that pupils who autonomy-supportive teachers taught reported stronger intentions to exercise and thus participated more often in leisure-time physical activities than those in the control group. In a similar experiment, Sheldon and Prentice (2019) concluded that Self-determination theory is a macro theory of human motivation and personality that concerns people's inherent growth tendencies and innate psychological needs. It is concerned with the rationale behind choices people make 2.2without external influence and interference.

2.2 Conceptual Framework

When student nursing mothers decide to pursue higher academic qualifications, they face the dilemma of managing their motherly duties to avoid interfering with or impeding their academic demands. Student nursing mothers must adopt different strategies to cope with these conflicting demands to achieve this. Most mothers seek support from their spouse, family or friends and others try to develop problem-solving skills, physical recreation, adjust their expectations or self-determination. Further, role conflict theory posits that these coping strategies must enable nursing mothers to balance their time, attention, finance, physical presence, performance, expectations for their academic demands, and duties as mothers. The ability to overcome these conflicting demands also depends on the nursing mothers' personal decisions, choices, management of their life, self-control, psychological health and well-being. However, the proper institutional policy support in terms of professional support, academic wavers, and available resources can help the student nursing mothers create the

balance they need and make informed choices on pursuing higher academic qualifications.

Evidence from the literature review indicates that nursing mothers adopt different strategies to cope with the conflicting demands of academic requirements and maternal responsibilities. The difficulty in handling these issues is underpinned by role conflict theory. It requires nursing mothers to adjust and be productive in the two conflicting areas. The nursing mothers' self-determined characteristics play a crucial role in their ability to overcome these conflicts. However, institutional policies are usually beyond the nursing mothers' ability to control academic requirements.

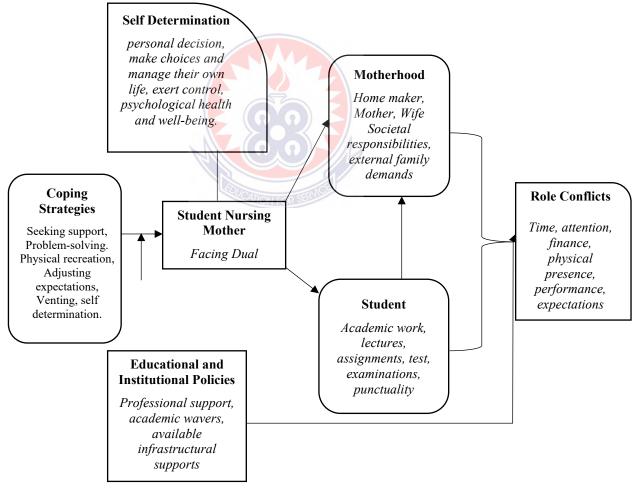


Figure 1: Conceputal Framework

Source: Author's construct, 2021

2.3 Empirical Review

In this section, the review is based on observed and measured phenomena and derives knowledge from experience rather than theory or belief. This includes specific research questions to be answered, the definition of the population, behaviour, or phenomena being studied.

2.3.1 The challenges student nursing mothers face in their pursuit with academic work

The challenges student nursing mothers face in their pursuit with academic work are:

2.3.1.1 Academic activities

Moghadam, Khiaban, Esmaeili and Salsali (2017) conducted a qualitative study on motherhood challenges and well-being and the studentship role among Iranian women. The study aimed to explore and describe the experiences of Iranian female students with the role of motherhood. They used purposeful sampling to select 20 student mothers aged 24–50 studying at a state or non-state university in an urban area in northwest Iran. Data was collected through individual semi-structured interviews and analysed using a qualitative content analysis approach. Three main themes were developed during data analysis: "simultaneous management", "facilities" and "barriers".

This study aimed to explore and describe the experiences of Iranian student mothers with the role of motherhood. The results indicate that simultaneously being a student and a mother was challenging, yet manageable, requiring planning in various fields. Moreau and Kerner (2013) stated that the nature of parenting and academic tasks required careful planning to combine these activities (Moreau & Kerner, 2013). According to Adofo (2013) to appropriately perform multiple roles, student mothers

in Ghana applied simultaneous management strategies and organization approaches to adapt to contradictions resulting from concurrent tasks (Adofo, 2013). Similarly, Forster and Offei Ansah (2012) conducted a study entitled Domestic affairs and coping strategies of female students in Ghana. In their study, students used a variety of strategies, such as delegating domestic roles, prioritizing, planning, and organizing activities to ensure that their family life did not suffer while they were at university (Forster & Offei-Ansah, 2012).

In this study, one of the most important aspects of planning for motherhood roles was the selection of an alternative method for childcare. Berg and Mamhute (2013) quoted from Mendes and stated that without proper childcare, taking on the student role becomes very difficult for young mothers (Berg & Mamhute, 2013). In a study entitled The challenges and adaptive mechanisms of nurse student mothers, Adofo (2013) suggested that the use of measures such as recruiting and hiring workers to do housework and childcare or leaving children at a kindergarten or with grandparents were helpful (Adofo, 2013).

2.3.1.2 Non-academic roles

Female students' management of maternal and family affairs in universities where motherhood is not supported is challenging. The significance of mother-student roles must be emphasised, support and education provided for women to gain skills helpful in playing these roles. Policymakers should devise strategies for bringing change to the traditional perspective that motherhood and educational responsibilities cannot be met at the same time by one person. Amos, Amoako, Antwi and Amoah (2017), examined motherhood and higher education in Ghana, focusing on the experiences of student-nursing mothers. The study's rationale was that education is vital to everyone, but it is significant for girls and women. The importance of education is true not only because education is an entry point to other opportunities but also because the educational achievements of women can have ripple effects within the families and across generations. However, the inadequate support system in the university and home for academic performance, childcare and other domestic chores cannot be overemphasised.

Therefore, the purpose of this study was to investigate the challenges encountered in school and the home, and explore the perceived coping strategies adopted by student nursing mothers in a tertiary institution in Ghana. A qualitative approach using the descriptive phenomenological design was adopted. Eighteen participants were drawn from an accessible population of 30 student nursing mothers using a purposive and snowballing sampling method. The study employed a thematic approach to analyse student nursing mothers' responses to interviews conducted. The study revealed a lack of concentration, lack of time to study and an unfriendly lecture schedule as some challenging experiences for the mothers.

2.3.1.3 Home challenges

Student nursing mothers experienced a decline in marital happiness and inadequate care for older kids. Based on these findings, it may be deduced that the programme structure of the university programmes is not student mother-friendly and that student nursing mothers may have problems with grades and psychological well-being. Again, the institution may lack lactating resources, which student mothers may have

utilised to ease the pressure of nursing their babies. Recommendations were therefore given in light of the study.

Taylor, MacNamara, Groskin and Petras (2013) conducted a study titled medical student-mothers. The study argued that medical training is challenging and parenting is a full-time responsibility. Balancing a family with the significant demands of medical school is a daunting endeavour. However, little research is available to guide students, faculty or administrators. Using one U.S. medical school as a case study, this article provides a comprehensive overview of the common personal and professional challenges that medical students who are also mothers face during their undergraduate medical education and practical strategies and resources helpful in navigating such challenges.

The study served as a resource guide for the faculty and administrators who teach, advise and mentor medical-student parents. For leaders in medical education, the article concludes with suggestions to support better the health and educational experience of medical student-parents: 1) a systematic network of career advisors, 2) scheduling flexibility, 3) formal breastfeeding policies and workplace support, 4) institutionally supported childcare, and 5) how student-parents may foster the educational health mission of medical schools.

Albrecht, Wang and Spatz (2017) assessed a call to action to address barriers to breastfeeding and lactation faced by student mothers. The study argued that many new mothers returning to school after childbirth face barriers within their academic settings to meeting their goals for exclusive breastfeeding. Potential barriers to breastfeeding faced by student-mothers include lack of legal protection, lack of breastfeeding-friendly university policies, inadequate availability of breastfeeding

facilities, and insufficient awareness of breastfeeding among mothers, health care providers, and university administrators and faculty. Here we advocate for six action steps to help remove barriers to breastfeeding faced by student mothers.

Ojo, Aina, Ani and Onianwa (2020) examined the challenges and coping strategies of exclusive breastfeeding practices among student mothers at a Nigerian University. The authors argued that successful breastfeeding is crucial to combat infant malnutrition and is also paramount for the health of the new-born and the mother. However, student mothers face diverse challenges to exclusive breastfeeding. Therefore, this study aimed to identify exclusive breastfeeding practices' challenges and coping strategies among student mothers at a Nigerian university. The study adopted a cross-sectional design with a total of 82 student mothers were recruited. Data were collected through a self-administered semi-structured questionnaire containing questions on the breastfeeding practices and intentions of the mothers and the challenges encountered and coping strategies used.

These data were analysed using the Statistical Package for Social Sciences, version 20. The data were analysed using Chi-square tests at a 0.05 level of significance. The majority of mothers (93.9%) reported that they gave supplements other than breast milk to their babies, ranging from rarely too often. Academic pressure was the respondents most frequently identified challenge of exclusive breastfeeding (72%). In comparison, 89% of the respondents received support from their husbands as an effective coping strategy. In conclusion, the study noted that policies should be made to support and provide enabling environments for students who are also mothers. In addition, nurses and decision-makers in the university setting should consider ways to improve the exclusive breastfeeding practice of students.

From personal view in critics of the study by Ojo et al. (2020), the adoption of crosssectional design to select participants had significant impacts on the findings of the study. For example, a particular University cannot be assessed to identify the challenges and coping strategies that student mothers face during breastfeeding. Further, instead of adopting Chi-square tests as the data analysis, the study could have used interviews in line with thematic approach so that participants can describe their feelings of the challenges they face and the coping strategies they adopt to address such difficulties.

Langford, Gowan and Haj (2021) investigated the breastfeeding experiences of baccalaureate nursing students. The study argued that breastfeeding students returning to school face unique challenges. There is limited literature on breastfeeding University students. Several researchers have studied breastfeeding employees in the workplace. Institutions of higher education closely mimic the employment environment. Breastfeeding college students who express their milk while at school share similar challenges to employed mothers. A baccalaureate nursing program is rigorous, and little is known about the challenges facing breastfeeding student nurses returning to classes.

The study was a cross-sectional descriptive qualitative design. Purposive sampling was used to enrol participants (N = 12). In-depth, semi-structured interviews were conducted. Qualitative thematic analysis was used to analyse the data manually and using Dedoose QDA software. An overarching theme of pervasive conflict between the role of the breastfeeding mother and the role of the student nurse surfaced. Three interrelated organising themes also emerged; challenging, vulnerability, and resilience. The challenges were time constraints, self-care versus role demands, and

structural accommodations. Only one participant indicated knowledge of her breastfeeding rights.

All participants expressed gratitude for faculty and community support, regardless of conflicts. The study concluded that Breastfeeding participants were both vulnerable and resilient. Faculty may improve experiences by providing specific areas of support. A breastfeeding support policy outlining student rights and faculty responsibilities is needed to educate, guide, and enforce protections. Health care providers may enhance breastfeeding students' experiences through anticipatory guidance, education, and continued support.

2.3.2 The influence of child-related roles on the academic performance of student nursing mothers

2.3.2.1 Childcare

Neuhaus, McCormick and O'Connor (2020), examined the mediating role of childteacher dependency in the association between early mother-child attachment and behaviour problems in middle childhood. Data included direct assessments of attachment security and styles, teacher reports of child-teacher dependency, and maternal reports of behaviour problems from the NICHD SECCYD (N = 769 children). Children with more secure attachments at 24 months were less likely to exhibit child-teacher dependency at 54 months.

Children with ambivalent, controlling or insecured attachments at 36 months had higher child-teacher dependency levels at 54 months. Multi-level models showed that child-teacher dependence at 54 months was associated with higher internalising levels, but not externalizing, behaviour problems across middle childhood. Childteacher dependency partially mediated the association between insecure/other mother-

child attachment and internalizing behaviours in middle childhood. Supporting preschool teachers in reducing child-teacher dependence may help ameliorate the risk of internalizing behaviours posed by unsure/other attachment.

Peñacoba and Catala (2019) examined the associations between breastfeeding and Mother-Infant relationships using a systematic review. The study's rationale was that breastfeeding had been associated with an improved mother-child bond, although this link lacks sufficient empirical support. For these reasons, the study aimed to carry out a systematic review to clarify the association between breastfeeding and mother-infant relationships. Regarding the research method, a search was conducted using PsycINFO, MEDLINE and CINAHL (2008–2018), using both free text words and subject headings. Additional hand-searching was performed. The Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) framework guided the study selection and data extraction.

Eligible articles were subsequently selected by title, abstract, and full-text review. Data extraction: Data regarding study setting, participants, breastfeeding, motherinfant relationships and outcome measures were extracted systematically. 13 articles were included, with 46.15% conducted in Europe and 92.3% of non-experimental studies. Eight studies were longitudinal, using between two and five assessment time points. The instruments used to assess the bond between mother and child showed significant variability. From the studies, about 61.5% were employed self-report measures, and four assessed maternal perceptions.

Other researchers used open-ended questions regarding the maternal lactation process or about the mother's activity while breastfeeding. Other measures used were maternal perception of her baby and personality variables associated with breastfeeding. Five articles studied the bond using external observations of the interactions between mother-child. The quality of the studies (Medical Education Research Studies Quality Instrument [MERSQI]) was overall fair to good.

In conclusion, Peñacoba and Catala (2019) indicated that it is complicated to extract generalizable results because of the conceptual and instrumental variability of the mother-child relationship. This association is complex, and how breastfeeding is carried out would appear to be a decisive factor, influenced in turn by additional variables that should also be considered. The relationship indicators most frequently associated with breastfeeding as maternal sensitivity and secure attachment.

2.3.2.2 Stress management

Gonzales (2020) conducted a study on breastfeeding and self-efficacy of early postpartum mothers in an urban municipality in the Philippines. According to Gonzales, studies on women have identified breastfeeding confidence as an essential variable in influencing breastfeeding outcomes. The mother's breastfeeding selfefficacy in the early postpartum period was a strong predictor of the duration of breastfeeding. Thus, the rationale for the study was to assess the breastfeeding selfefficacy of postpartum mothers in urban barangays of San Jose Occidental Mindoro.

The study respondents were 200 early postpartum mothers distributed equally chosen from four purposively selected urban barangays. The data collection technique was through a survey interview using 14-item Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) and a demographic questionnaire. Descriptive and inferential statistics were used to analyse the data. The study revealed that postpartum mothers who responded in the survey were confident and has self-efficacy in breastfeeding their child as measured through technique and intrapersonal thought in breastfeeding. Moreover, the number of prenatal check-ups was positively correlated with breastfeeding self-efficacy. The result of the study can be used as a baseline assessment tool in the hospital at delivery to assist in identifying women who are at risk for early weaning.

2.3.3 The strategies student nursing mothers adopt to cope with academic work

2.3.3.1 Relying on family and friends

Dankyi, Dankyi and Minadzi (2019) looked into student mothers' struggles and coping strategies at the University of Cape Coast Distance Education. The aim was to investigate combining motherhood with academic life, concentrating on the struggles of student mothers. The study adopted the mixed method design affirming the qualitative data with quantitative data. The purposive and convenient sampling procedures selected the sample from the University of Cape Coast Distance Education, Oyoko Study Center.

The study found that most respondents go through academic struggles such as the inability to attend face-to-face lectures regularly because of tiredness, sickness of a child, taking the baby to a child welfare clinic and lack of lactating rooms for breastfeeding babies. Respondents relied on paid house help to cope with the struggles, keeping children at day-care centres, raising loans and relying on husbands and friends for support. Therefore, the study recommended providing lactating rooms, day-care centres and counselling services for student-mothers in all College of Distance Education centres.

The study by Dankyi et al. (2019) provided significant bearing strategies student nursing mothers adopt to cope with academic work. From the study findings, student nursing mothers walk through several challenges in pursuit of their academic work in the University. The study provided and identified these challenges and possible recommendations that University of Cape Coast Distance Education authorities should adopt to ameliorate the perils student mothers face in their academic work.

2.3.3.2 Coping with economic or financial challenges

Kisanga and Matiba (2021) investigated student mothers' coping strategies in pursuing higher education studies in Tanzania. This study explored the coping mechanisms employed by student-mothers pursuing higher education studies in Tanzania. The study involved 16 student-mothers with children aged two years and below. It used semi-structured interviews to collect data, subjected to thematic analysis. The study found problem-focused coping strategies more than emotionfocused coping strategies. The problem-focused coping employed includes engaging in part-time jobs and small businesses to manage financial challenges, hiring part-time babysitters and using friends/relatives to take care of the child while in class, engaging in private studies during the daytime and interacting with hardworking students severing links with lazy friends.

Social support networks, especially support from partners and relatives, were found vital in coping with multiple roles student-mothers perform in higher education institutions. Some coping strategies, such as part-time jobs and small businesses, created additional time management challenges for student mothers. Thus, universities should establish strategies to improve the retention of student mothers in higher education institutions. These strategies include establishing unique hostels for student-mothers to stay with their children and baby assistants while pursuing their studies or establishing daycare centres with professional caregivers to assist student-mothers in caring for their children while studying. There is also a need to empower

student-mothers with life skills to balance time for studying and parenting. Finally, university authorities should treat student-mothers as students with unique needs that differ from those of male students and other women students without children.

Anibijuwon and Esimai (2020) examined student nursing mothers' challenges and coping strategies at the University of Ibadan, Oyo State, Nigeria. The study argued that the rigour of combining motherhood with education poses a significant challenge to student nursing mothers (SNMP). This study identified the challenges experienced by the SNMP. It determined the factors associated with the challenges experienced at the University of Ibadan, Ibadan Oyo State, Nigeria. This study utilised a nonprobability sampling technique of snowballing. Responses were elicited from 250 consenting SNMs using the pretested semi-structured questionnaire. The SNM challenges were measured on a 15-point scale.

Challenges scores were classified as moderate (≤ 9) and severe (≥ 10). The mean age of the SNMP was 29.5 ± 2.8 years. The majority of the respondents (70.0%) reported facing severe challenges, including economic, childcare, and academic challenges (43.2%, 37.2%, and 24.8%, respectively). $\chi 2$ test showed significant associations between ages, course of study, and level of study of the SNMP ($\chi 2 = 10.520$, p = .005; $\chi 2 = 14.934$, p = .002; and $\chi 2 = 9.523$, p = .002, respectively) and the overall challenges experienced. Research findings reveal that childhood health problems occurred mostly among SNMs having problems breastfeeding their babies.

2.3.3.3 Self confidence

To gain additional insight into the student experience, we also sought the perspectives of mothers, nursing staff, and teachers about nursing students' role in supporting breastfeeding mothers. A qualitative descriptive approach guided the study. Also, focus groups and small group interviews were conducted with four participant groups in southern Taiwan. Ethical approval was obtained before data collection. The consolidated criteria for reporting qualitative research checklists were used. Three main themes emerged from the data that captured the nursing students' experiences during clinical practice: high expectations; the reality is different and improves students' confidence.

The study found that students lacked confidence in supporting breastfeeding in the clinical setting. Also, students were expected to help women to achieve their breastfeeding goals under supervision. The students highlighted the importance of establishing a trust to support mothers effectively and for the students to feel confident to provide breastfeeding information. Yang et al. (2019) concluded that students did not feel adequately prepared to support breastfeeding women during their clinical placement despite structured theoretical breastfeeding education before clinical placement.

The findings demonstrated the need for further support in developing practical communication skills and building confidence before clinical placement. Also, concerning policy implications, Yang et al. (2019) argued that enhancing the content of theoretical and simulated breastfeeding education to incorporate women's breastfeeding experience combined with realistic clinical student allocation could improve students' confidence in supporting breastfeeding.

This study has indicated that the role of conflict has got a negative and significant effect on organizational commitment. It has also called a negative and significant impact on job satisfaction. Furthermore, job satisfaction has brought a positive and significant impact on organizational commitment.

2.3.4 The educational and institutional policies guiding nursing mothers

educational progress in Ghana

Policies and institutional factors are measures that are put in place by an institution to ensure that students are happy and they can enjoy their stay in school or academic work. Policies and institutional factors that are to guide student nursing mothers' educational progress in public tertiary institutions in Ghana are lactating rooms, where they can use as rest room to take care of their babies while lectures are ongoing. Academic assistance is also one factor that student nursing mothers are denied of while this becomes a challenge for them in their academic work.

Chuisano and Anderson (2020) conducted a study on assessing application-based breastfeeding education for physicians and nurses using a scoping review. According to the study, physicians and nurses are expected to support breastfeeding mothers. However, there is a lack of standardized lactation education throughout training programs and hospitals. As a result, providers lack the necessary confidence and skills to guide mothers throughout the breastfeeding experience. The hands-on nature of breastfeeding management demands applying application-based learning tools to improve skills retention and patient breastfeeding outcomes.

The study aimed to critically assess the types of application-based breastfeeding management learning tools reported within medical and nursing professions and the evaluation methods of learner and patient outcomes. The authors searched the literature to identify peer-reviewed articles published between 2000 and 2018 with medical or nursing students, residents, or professionals as the target learner group in an application-based educational intervention. Both authors independently assessed

the content in the resulting articles, focusing on teaching methods, curricular development, and the learning outcomes reported within each study.

Ten articles matched the inclusion criteria and were included in the final review, including five studies from the medical field and five from nursing. The use of actual patients was a standard method for application-based skills training, followed by roleplaying and the use of standardized patients. Teaching and evaluation methods varied widely across the studies. The results align with existing literature in finding a shortage of high-quality studies assessing breastfeeding education among physicians and nurses. The variability in teaching and evaluation methods indicates a lack of standardization in breastfeeding education between institutions.

All participants expressed gratitude for faculty and community support, regardless of conflicts. The study concluded that Breastfeeding participants were both vulnerable and resilient. Faculty may improve experiences by providing specific areas of support. A breastfeeding support policy outlining student rights and faculty responsibilities is needed to educate, guide, and enforce protections. Health care providers may enhance breastfeeding students' experiences through anticipatory guidance, education, and continued support.

Wagner, Kersuzan, Gojard, Tichit, Nicklaus, Thierry and de Lauzon-Guillain (2019) conducted a study on breastfeeding initiation and duration in France: The focus of the research was the importance of intergenerational and previous maternal breastfeeding experiences based on results from the nationwide. The study's objective was to assess the role of the mother's mother and mothers' previous personal experiences with breastfeeding and childcare in breastfeeding practices. The study revealed that

previous breastfeeding experience (whether mothers had breastfed their previous children) was positively associated with breastfeeding initiation and duration.

Mothers who had been breastfed themselves as infants were more likely to initiate and continue breastfeeding than non-breastfed mothers. Conversely, non-breastfed mothers who had received care advice from their mothers were less likely to start and maintain breastfeeding. The effect of breastfeeding in infancy was significant for primiparous mothers and, to a lesser extent, multiparous mothers with no previous breastfeeding experience. Also, formal experience in childcare was associated with breastfeeding initiation but not duration in a professional context. For policy implications, Wagner et al. (2019) argued that Mother's mother and mother's previous breastfeeding experience strongly influenced breastfeeding practices. Breastfeeding interventions should be tailored to the mother's level of experience and provide extra support for multiparous mothers with no breastfeeding earlier experience.

Cheyney, Henning, Horan, Bovbjerg and Ferguson (2019) conducted a study on women's experiences of breastfeeding-friendly worksites from policy to practice. The rationale for the study was that breastfeeding-friendly worksites are associated with longer breastfeeding duration. Yet, currently, there is a shortage of research exploring women's experiences of workplace-based wellness programs designed to support continued lactation. By using semi-structured interviews with a voluntary sample of participants from one rural New England town (N = 18), Ferguson (2019) examined women's experiences of returning to work at worksites with the Centres for Disease Control and Prevention (CDC)'s Worksite Health Scorecard (HSC) "breastfeeding-friendly" designation.

Five key themes emerged from participants' narratives; three policy and workplace climate-related themes are described. For policy recommendations, Ferguson (2019) noted that collectively, areas where HSC lactation-support questions might be modified to more precisely identify the psychosocial, structural and sociocultural needs of breastfeeding employees.

2.3.5 Observation of breastfeeding mothers

Freire et al. (2020) used a pooled analysis to examine breastfeeding practices and complementary feeding in Ecuador. The rationale for the study was that the best practices in breastfeeding are often not followed despite appropriate levels of knowledge and positive attitudes regarding the benefits of human milk. For many reasons, some women do not initiate breastfeeding, suspend breastfeeding early, or initiate complementary feeding earlier than recommended. Usual measurement methods use extensive sample surveys at a national scale, which are not well suited for monitoring sub-national differences.

A good understanding of how local infant feeding practices could influence policy and promotion practices, the study applies data pooling methodology to analyse breastfeeding patterns in different Ecuadorian settings: Cumbayá parish, located near Quito, the Ecuadorian capital; the city of Macau and rural surroundings in the Amazon basin province of Morona Santiago; and the province of Galapagos. Surveys were conducted independently between August 2017 and August 2018; while they are representative of each setting, sampling designs and survey methods differ, but the same demographic information and data based on standard breastfeeding indicators established by the World Health Organization (WHO) were collected.

To account for differences in the different settings, the design effect of each survey was considered in the analysis. The study found significant differences in breastfeeding practices between the sub-urban Cumbayá parish near Quito and Galapagos on the one hand, and urban and rural parts of Morona Santiago, on the other. Early breastfeeding initiation and age-appropriate breastfeeding rates are significantly higher in urban and rural Morona Santiago than in Cumbayá or Galapagos. In contrast, exclusive breastfeeding is highest in rural parts of Morona Santiago. No significant differences were found in complementary feeding practices between Cumbayá and Galapagos but there are with urban and rural Morona Santiago.

For example, in the first hour after birth, breastfeeding initiation occurs in only 36.2% of cases in Cumbayá but 75.4% of cases in urban Morona. The study concluded that differences among regions reflect specific opportunities and barriers to practices related to promoting optimal infant health and nutrition. Consequently, regional or local conditions that often are not apparent in national-level data should orient policies and promotion activities in specific populations.

Lassi, Rind, Irfan, Hadi, Das and Bhutta (2020) assessed the impact of infant and young child feeding (IYCF) nutrition interventions on breastfeeding practices, growth and mortality in low-and middle-income countries. According to Lassi et al. (2020), under nutrition is associated with 45% of total infant deaths, totalling 2.7 million globally per year. The vast majority of the burden is felt in low- and middle-income countries (LMICs). This review aims to assess the effectiveness of infant and young child feeding (IYCF) interventions. The study searched multiple databases, including Cochrane Controlled Trials Register (CENTRAL), MEDLINE, EMBASE.

Title/abstract screening and full-text screening and data extraction filtered 77 studies for inclusion.

Breastfeeding education interventions (n = 38) showed a 20% increase in rates of early initiation of breastfeeding, a 102% increase in exclusive breastfeeding (EBF) at three months and a 53% increase in EBF at six months and 24% decreases in diarrheal diseases. Complementary feeding education intervention (n=12) showed a 0.41 standard deviation (SD) increase in WAZ and 0.25 SD in HAZ in a food-secure setting. Complimentary food provision with or without education (n=17) showed a 0.14 SD increase in HAZ and a 36% decrease in stunting. Supplementary food interventions (n=12) showed a significant 0.15 SD increase in WHZ. Subgroup analyses showed that healthcare professional-led interventions were more effective, especially breastfeeding outcomes.

Lassi et al., (2020) believe this is a comprehensive review of the existing literature on IYCF studies in LMICs. Though breastfeeding education is well supported in its effect on breastfeeding practices, limited evidence exists for growth outcomes. Supplementation interventions seem to have better effects on improving growth. However, more research is required to reach more substantial conclusions.

Koya, Babu, Iyer, Yamuna, Lobo, Kinra and Murthy (2020) examined the determinants of breastfeeding practices and their association with infant anthropometry. Despite national efforts for promoting exclusive breastfeeding (EBF) during the first six months of the infants' life, Koya et al. noted that breastfeeding rates are low in India. Evidence on the interference of supplementary food on optimal nourishment and growth of the infant has also been well-established. The study was

undertaken to assess the effect of breastfeeding practices on infant anthropometry and determine the various factors affecting breastfeeding practices.

A prospective cohort study - Maternal antecedents of adiposity and studying the transgenerational role of hyperglycemia and insulin (MARATHI) was conducted at a tertiary care public hospital in Bengaluru, South India. From the consenting women, data such as obstetric history, infant feeding practices, anthropometry of mother and child, and the psychosocial status of the women using the Edinburgh Postnatal Depression Scale (EPDS) was collected at baseline and subsequent follow-up: post-delivery and 14 weeks after birth. This study analysed data from April 2016 to April 2018, with descriptive statistics presented in mean and standard deviation and logistic regression adjusting for confounders.

The results show that among the 240 women enrolled in the study, 33% (n= 80) were using supplementary food for their infants at 14 weeks of infants' age. Infants who received supplementary feeding at age 14 had nearly 2.5 times higher odds of being wasted (OR: 2.449, p-value: 0.002) than exclusively breastfed infants. The study concluded that Infants between 14 to 16 weeks of age who received supplementary feeding were at risk of wasting compared to exclusively breastfed infants. Despite strong evidence supporting the benefits of exclusive breastfeeding, awareness of urban women in India is low. Increased focus on promoting exclusive breastfeeding is necessary to ensure proper nutritional intake and healthy growth of infants.

Mya and Witvorapong (2020) examined the determinants of breastfeeding practices in Myanmar. The rationale for the study was that optimal breastfeeding practices could ensure healthy growth and development of infants, which can impact the country's economic development in the long term. Nevertheless, Myanmar has yet to achieve the WHO's target of 70% for early breastfeeding initiation and the country's target of 90% for exclusive breastfeeding. The purpose of this study was to assess the associations between early initiation of breastfeeding and exclusive breastfeeding and bio-demographic, socio-economic and behavioural factors in Myanmar using the 2015–2016 Myanmar.

Demographic and Health Survey, the analysis of early breastfeeding initiation was based on a sample of 1,506 under-2 children. The analysis of exclusive breastfeeding was based on a sample of 376 children aged 0–5 months. Multiple logistic modelling with heteroskedasticity-adjusted standard errors was used. The prevalence rates of early initiation of breastfeeding and exclusive breastfeeding in the study were 67.9% and 52.2%, respectively. Having a vaginal delivery (AOR = 2.5; 95% CI = 1.7–3.7) and having frequent (\geq 4) antenatal visits (AOR = 2.4; 95% CI = 1.5–3.8) were associated with higher odds of early initiation of breastfeeding.

Having a postnatal checkup (AOR = 0.5; 95% CI = 0.3-0.9) and having an infant that was perceived to be small at birth (AOR = 2.5; 95% CI = 1.1-5.7, for infants perceived to be significant at birth) were significantly associated with decreased odds of exclusive breastfeeding. The study suggested that delivery and health services during pregnancy be strengthened in Myanmar to promote optimal breastfeeding practices.

Anibijuwon and Esimai (2020) examined the challenges and Coping Strategies of Student Nursing Mothers at the University of Ibadan. The rigour of combining motherhood with education poses a tremendous challenge to student nursing mothers (SNMP). This study identified the challenges experienced by the SNMP. Furthermore, it determined the factors associated with the challenges experienced in the University of Ibadan, Ibadan Oyo State, Nigeria. This study utilised a nonprobability sampling technique of snowballing. Responses were elicited from 250 consenting SNMs using the pretested semi-structured questionnaire.

The SNM challenges were measured on a 15-point scale. Challenges scores were classified as moderate (\leq 9) and severe (\geq 10). The mean age of the SNMP was 29.5 ± 2.8 years. The majority of the respondents (70.0%) reported facing severe challenges, including economic, childcare, and academic challenges (43.2%, 37.2%, and 24.8%, respectively). χ 2 test showed significant associations between ages, course of study, and level of study of the SNMs (χ 2 = 10.520, p = .005; χ 2 = 14.934, p = .002; and χ 2 = 9.523, p = .002, respectively) and the overall challenges experienced. Research findings reveal that childhood health problems occurred mostly among SNMs having problems breastfeeding their babies

Cervera-Gasch, Andreu-Pejó, González-Chordá, Lopez-Peña, Valero-Chilleron, Roman and Mena-Tudela (2021) investigated breastfeeding knowledge in university nursing students. According to the study, exclusive breastfeeding is one of the leading health and infant survival elements. Health professionals must receive culturally sensitive evidence-based breastfeeding training to offer future mothers the required information and support to start and maintain breastfeeding. In contrast, studying for a nursing degree, acquiring the necessary knowledge and skills to perform this work successfully. The study adopted an observational, descriptive, cross-sectional multicenter study.

Participants were the students registered for the four nursing degree years at the three participating universities (N = 1540). They were asked about their breastfeeding knowledge with the self-administered AprendeLact Questionnaire; breastfeeding-

related socio-demographic variables were included. The overall mean score of the 684 returned questionnaires was 4.659 (±2.377) out of 10. The year-4 students from the Castellón University obtained significantly higher mean scores and had been on practical in maternity or neonatology units, belonged to breastfeeding associations and were artificially fed as infants. University belonged to, current academic year and placements in maternity or neonatology units were relevant factors for acquiring breastfeeding knowledge. Based on progressive transversal learning and participating in natural maternity-related health settings, Syllabi could be facilitating strategies to acquire a suitable level of breastfeeding knowledge.

In a study titled world breastfeeding week observation Verma, Kaushik and Kharb (2020) examined the opportunities for assessing awareness regarding breastfeeding practices. The study argued that breastfeeding promotion alone contributes to an 11.6% reduction in infant mortality rate according to the Lancet series of 2008. Various studies reported that health care providers are the essential source of dispersal of information about breastfeeding to the mothers. Nursing trainee students who will serve the community shortly would motivate the mothers to adopt healthy practices regarding breastfeeding.

A cross-sectional descriptive study was conducted utilising the opportunity of World breastfeeding week observation in Gajraj Nursing Institute. One hundred sixty trainee students were assessed by using pretested, self-administered questionnaire as a study tool. Data was analysed done using SPSS version 22.0. Results: The majority of trainee students were females (91%). The mean age was 20.6 + 2.7 yrs. None of the trainee students was aware of the theme of World breastfeeding week 2016. However, knowledge regarding breastfeeding initiation in expected vaginal delivery and

caesarean section was found correct among 46 (29%) participants and 88 (55%), respectively.

Perception regarding the breastfeeding technique and causes of lousy attachment to the breast was found correct among 51 (32%) and 5 (3%) trainee students, respectively. The study concluded a particular knowledge gap about breastfeeding among trainee students. There is a need to emphasise modular teaching. Public health day's observation should be utilised for assessing, refreshing and updating their knowledge to promote and support breastfeeding in the community.

Guzmán-Mercado, Vásquez-Garibay, Sánchez Ramírez, Muñoz-Esparza, Larrosa-Haro and Arreola (2021) examined how full breastfeeding modifies anthropometric and body composition indicators in nursing mothers. According to the study, breastfeeding mobilises the deposits of fat that accumulate during pregnancy and promotes weight loss through energy expenditure. The purpose of this study was to demonstrate that full breastfeeding (FBF) reduces anthropometric and body composition indicators in women between the 8th and the 16th week postpartum.

In a nonrandomly cohort study, 170 mothers at the Hospital Civil de Guadalajara, Guadalajara, México, were enrolled: FBF 74, partial breastfeeding (PBF) 57, and human milk substitutes (HMS) 39. Anthropometric indicators and body composition were measured at the 8th and 16th weeks postpartum. In addition, we performed an analysis of variance to compare body composition according to the type of feeding and paired student's t-test to compare the changes from the 8th to 16th week postpartum. The study found that FBF mothers had a trend to lower arm fat area and triceps skinfold than PBF and HMS mothers at 8 and 16 weeks postpartum.

In addition, the study observed a decrease in weight (p=0.004), weight/age index (p=0.003), body mass index (p=0.003), hip circumference (p=0.037), and lean mass (p=0.003) from 8 to 16 weeks postpartum in mothers who offered FBF. Furthermore, the three feeding groups increased the mid-upper arm circumference, the total arm area, and z-score. In conclusion, the results show that FBF mothers had lower adiposity from 8 to 16 weeks postpartum than PBF mothers and those who utilised HMS.

Chrzan-Dętkoś, Walczak-Kozłowska, Pietkiewicz and Żołnowska (2021) conducted an observational study on improvement of the breastfeeding self-efficacy and postpartum mental health after lactation consultations. Maternal self-efficacy in breastfeeding may be undermined by common mental health difficulties in the postpartum, leading to an early breastfeeding cessation. However, the relationship may also be the opposite: problems with effective breastfeeding and breastfeeding cessation may increase the postpartum mental health difficulties. The purpose of this study was the assessment of the effectiveness of lactation consultations in strengthening breastfeeding self-efficacy and maternal postpartum mental health.

The study used 160 Polish women (90 consultation participants and 70 controls) who completed a structured interview, the General Health Questionnaire, and the Breastfeeding Self-Efficacy Scale twice: before lactation consultation and one month later. The study revealed that women seeking lactation support exhibited more significant mental health difficulties while breastfeeding self-efficacy was similar to the control group. Initial breastfeeding self-efficacy was negatively correlated with the severity of the postpartum mental health problems. One month after lactation consultations, a significant increase in breastfeeding self-efficacy and significantly reduced symptoms of mental health difficulties (somatic symptoms, functional disorders, and anxiety and insomnia) were observed among mothers.

The study concluded that women willing to benefit from the lactation consultations might exhibit symptoms of mental health difficulties associated with difficulties in breastfeeding. Strengthening breastfeeding confidence during lactation consultations may improve the woman's mental health. Also, Midwives and lactation consultants can make a difference in mental health promotion by offering breastfeeding interventions that address the emotional needs of a mother.

Safayi, Assimamaw and Kassie (2021) studied the breastfeeding technique and associated factors among lactating mothers visiting Gondar town health facilities in Northwest Ethiopia. Breastfeeding techniques are positioning, attachment, and suckling. Ineffective breastfeeding technique is one of the factors leading to premature discontinuation of breastfeeding and malnutrition. However, there is a limited study on the assessments of BFT and associated factors among lactating mothers in the study area. Therefore, the study aimed to assess breastfeeding techniques and the associated factors among lactating mothers visiting Gondar town health facilities, Northwest Ethiopia.

Ruzafa-Martinez, Harillo-Acevedo and Ramos-Morcillo (2021) investigated the monitoring of the implementation of a breastfeeding guideline for six years. The study aimed to evaluate the longitudinal impact of a CPG implementation program that promotes breastfeeding, its associated quantitative and qualitative indicators, and direct costs. Therefore, a mixed-methods design with a longitudinal approach was utilised, with an interrupted time series design and the analysis of reports from the implementation program as the qualitative approach.

The study setting was maternity and paediatric units of a health area in the Spanish health system. The implementation of a CPG for the promotion of breastfeeding was evaluated, which included a pre-implementation year (2011), three years of implementation (2012–2014), and two years of post-implementation (2015–2016). The sample was composed of mother-infant dyads. A segmented logistic regression analysis was utilised to evaluate the changes in the essential breastfeeding indicators. In addition, a deductive thematic content analysis was performed, starting with quality indicators and descriptive economic analysis.

Aboh, Vowotor and Druye (2020) examined quantitative epithermal neutron activation analysis of seven microelements in the breast milk of lactating mothers from the Central region of Ghana. This study employed quantitative experimental research where 27 lactating mothers voluntarily participated in the study from two health facilities in the Cape Coast Metropolitan area. Data was collected over four weeks. A three millimetres (3mm) thick flexible boron was used to cut off thermal neutrons to assess epithermal neutrons. This was done to create activation energy that examines the amount of the seven micronutrients in the breast milk.

The standard reference materials used were the International Atomic Energy Agency (IAEA)-336; IAEA-407, IAEA-350 and National Institute of Standard and Technology (NIST) USA SRM 1577b. In addition, the Relative standardisation method was used to quantify the elements. The study achieved about 94.7% accuracy. The estimated health risk calculated showed that the concentrations of chlorine (Cl) and iodine (I) were high in the order I > Cl with all very far above the maximum Upper Limit (UL) of the daily Recommended Dietary Allowance (RDA) for all life stages except for children below eight years.

Nsiah-Asamoah, Doku and Galotti (2020) examined Mothers' and Grandmothers' misconceptions and socio-cultural factors as barriers to exclusive breastfeeding. Education on exclusive breastfeeding (EBF) practices is usually given in health talks by health workers (HWs). The need for HWs to be well-informed about cultural practices and misconceptions that act as barriers to EBF has been documented in the literature. This information can guide HWs in developing interventions such as health talks that are culturally sensitive. However, this has not been explored from the perspectives of HWs in Ghana. The study reported that mothers' and grandmothers' misconceptions and cultural practices are barriers to EBF in two rural districts in Ghana from Community Health Workers and Community Health Volunteers.

The study used qualitative data collected in the Kwahu Afram Plains South and North Districts of Ghana through nine focus group discussions (FGDs) among HWs and followed the data saturation principle. All FGDs were audio-taped, transcribed verbatim and translated from local dialects to English. The emerging themes were used in writing a narrative account, guided by the principles of the thematic analysis. The main findings included mothers' and grandmothers' perceptions that HWs do not practice EBF. In addition, mothers believed that grandmothers did not practice EBF. However, their children grew well, and the gestures of babies suggested their readiness to start eating.

Misconceptions revealed included beliefs that breastmilk is watery and does not satisfy infants. Another misconception was that babies gain weight faster when not exclusively breastfed but fed on infant formulas. To welcome newborns, a custom of giving cornflour mixed with water or light porridge was also reported during the first few days after birth. The reports of the HWs revealed that several socio-cultural factors and misconceptions of mothers and grandmothers negatively influence the EBF practices of mothers. Findings from this study highlight the need for HWs to provide culturally appropriate counselling services on breastfeeding to mothers and grandmothers, and fathers to promote EBF and reap its benefits.

Amos, Amoako, Antwi and Amoah (2020) Motherhood and higher education in Ghana. Education is vital to everyone, but it is significant for girls and women. The importance of education is true not only because education is an entry point to other opportunities but also because the educational achievements of women can have ripple effects within the families and across generations. However, the effect of the inadequate support system in the University and home on academic performance, childcare and other domestic chores cannot be overemphasised. Therefore, the purpose of this study was to investigate the challenges encountered in school and the home and explore the perceived coping strategies adopted by student nursing mothers in a tertiary institution in Ghana.

A qualitative approach using the descriptive phenomenological design was adopted. Eighteen participants were drawn from an accessible population of 30 student nursing mothers using a purposive and snowballing sampling method. The study employed a thematic approach to analyse student nursing mothers' responses to interviews conducted. The study revealed a lack of concentration, lack of time to study and unfriendly lecture schedule as some challenging experiences of the mothers. Furthermore, student nursing mothers experienced a decline in marital happiness and inadequate care of older kids on home challenges.

Based on these findings, it may be deduced that the programme structure of the university programmes is not student mother-friendly and that student nursing mothers may have problems with grades and psychological wellbeing. Again, the institution may lack lactating resources, which students' mothers may have utilised to ease the pressure in nursing their babies. Recommendations were therefore given in light of the study.

2.3.5.1 Lessons learnt

The empirical review indicated that the issues of nursing mothers and challenges they face in society had gained international attention, and much research has been done on it in a different environment and different perspectives. Similarly, it was observed that women have been encouraged to attain higher education and should not let wife duties, maternal duties, and social responsibilities hinder their acquest in education. For these reasons, there has been numerous researches on pregnant and breastfeeding mothers and how they cope with education demands. In addition, roles conflict theory has been used extensively to highlight the conflict between maternal duties and academic requirements. Similarly, self-determination theory has been used to emphasize the need for nursing women to master courage and fulfil their motherly obligations alongside their academic responsibilities.

Most of the studies used a mixed-method and quantitative approach regarding research methods. This enables most researchers to review relevant documents for the information of student nursing mothers for further analysis. Additionally, most of the studies were conducted in a wider geographical area or an environment where the respondents were too many for interviews. However, many researchers also adopted a qualitative approach. They used semi-structured interviews, interview guides, and other data collection methods for qualitative research. However, unlike this research, most of the studies were not case studies as such covered a wider geographical area. Also, this study made detailed observations of the nursing mothers are they breastfeed their babies based on the World Health Organization CDD programme for the UNICEF training course on breastfeeding counselling.



CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter deals with the research methodology adopted for the study. This includes the research paradigm, the research approach, study design, the population, the sample and sampling method, the data collection instrument, data collection and the data processing and analysis procedures. Also, statistical tools for collecting data and the techniques for analysis have been subjected to each research question requirement.

3.1 Research Paradigm

The study was grounded in an interpretive position concerned with how the phenomena of interest are interpreted, understood, experienced, produced, or constituted (FitzPatrick, 2019). Interpretivists argue that the research methods must be flexible and sensitive to social context and consider the complexity, detail, and context (Alharahsheh & Pius, 2020). Most researchers agree that the qualitative research approach is entrenched in interpretive philosophy. It offers a broad term for investigative methodologies such as ethnographic, naturalistic, anthropological, field, or participant observer research (Bonache, 2021; Kankam, 2019). This differs from quantitative analysis, which attempts to gather data by objective methods to provide information about relations, comparisons and predictions and attempts to remove the investigator from the investigation (Radic, 2019).

This study fits into the interpretivist paradigm because I interacted with the student nursing mothers chosen for the study through interview. I gathered all the information that I needed from the student nursing mothers and later transcribed them by interpreting what those respondents told me during the interview and observation I made.

3.2 Research Approach

To effectively examine student nursing mothers cope with academic work at AAMUSTED, the study adopted a qualitative research approach. I used a systematic scientific inquiry to seek and build a holistic narrative description to gain an in-depth understanding of a social or cultural phenomenon (Haven & Van Grootel, 2019). A qualitative approach, I used the thematic approach to organize data into categories and identify relationships between academic work requirements, influence of child related roles, the strategies they adopt to cope with academic work and the educational and institutional policies.

This strategy, information on the student nursing mothers' coping with academic work would emerge organically from the research context (Mozersky, Walsh & DuBois, 2020). To achieve this result, most researchers (Davidson, Edwards & Weller, 2019; Kiger & Varpio, 2020) argue that qualitative research allows a researcher to use a combination of observations, interviews and document reviews in the data gathering process. Using these varied approaches to collect data, most researchers agree that the qualitative approach exposed the student nursing mothers coping with academic work in the natural setting in which they are found (Buetow, 2019; Crick, 2020).

Peterson (2019) opined that using thematic approach is plausible because the interaction between critical key variables is identified. According to Bergen and Labonté (2020), this is partly because detailed data are gathered through open-ended questions that provide direct quotations and allow the interviewer to be an integral part of the investigation. Qualitative research is an umbrella term for a broad range of

approaches and methods, which vary considerably in focus, assumptions about the nature of knowledge and the researcher's role (Johnson, Adkins & Chauvin, 2020). This includes phenomenology, ethnography, grounded theory and case study.

The significant assumptions of qualitative research include the following:

- 1. Multiple realities are considered in the study, including views of the researcher, participants of the study and even the reader or the audience interpreting the results.
- 2. A researcher interacts with the participants in a way that reduces the physical distance between him and the participants.
- 3. A researcher recognizes that the research is not value-free and that his values and beliefs can influence it.
- 4. Qualitative research is context-bound.
- 5. Categories of interest emerge from the research participants rather than set by the researcher before conducting the study. An inductive form of logic is followed.
- 6. The research objective is to come up with patterns or theories that will explain the phenomenon being studied.

3.3 Research Design

The researcher adopted an exploratory case study design that enabled her took a holistic view of the challenges of student nursing mothers and how they cope with their academic work. An exploratory case study is a qualitative research design that involves in-depth investigation of a specific case or phenomenon to gain insights and generate hypothesis (Meriam & Tsidel, 2016). It aims to understand the complexities of a case, often without prior hypothesis. Cresswell (2018) noted that this approach is

particularly useful when researchers aim to explore complex and less understood topics. It typically involves collecting and analysing various types of data, such as interviews, observations, documents and artefacts to develop a comprehensive understanding of the case in its real-life context.

Verleye (2019) posits that a case study enables the analyses of persons, events, decisions, periods, projects, policies, institutions or other systems studied holistically by one or more methods. Similarly, Alpi and Evans (2019) noted that the case study could be done in social and life sciences using a descriptive or explanatory technique. Another dynamic attribute of a case study is that it can be treated as a qualitative or quantitative study (Krehl & Weck, 2020). Thus, a case study can describe an entity that forms a single unit, such as a person, an organization or an institution.

Kurilovas and Kubilinskiene (2020) contend that analysing results for a case study tends to be more opinion based than statistical methods. The usual idea is to collate the data into a manageable form and construct a narrative around it. Some researchers (Laitila, Vall, Penttonen & Seikkula 2019; Walker & Baxter, 2019) recommend using examples in the description whilst keeping things concise and exciting. Franco and Pinho (2019) cautioned that though it is helpful to show some numerical data, it is essential to remember that the study is only trying to judge trends and not analyse every last piece of data. In such instances, Sturm, Ben-Tal, Monaghan, and Pachet (2019) noted that it is necessary to refer back to bulleted points to avoid losing focus constantly. Similarly, Yi, Zhang and Liu (2020) noted that it is essential to keep in mind that the reader may not possess much knowledge of the subject, so try to write accordingly.

The advantages of case study design include providing detailed information, providing further research and permitting investigation of otherwise impractical (or unethical) situations (Yousefinaghani & Sharif, 2019). Other researchers commend case study because it allows a researcher to investigate a topic in far more detail than might be possible if they were trying to deal with many research participants (nomothetic approach) to average. For example, in the Feng, Zhang and Lau (2019) option, because of their in-depth, multi-sided approach, case studies often shed light on aspects of human thinking and behaviour that would be unethical or impractical to study in other ways.

Kardos, Gabor and Cristache (2019) also argued that in contrast to research that only looks into the measurable aspects of human behaviour, case study design gives insights into the subjective dimension of the experience, which is essential to psychoanalytic and humanistic psychology. Bhuiyan, Sakib and Mamun (2020) indicated that a case study is used in exploratory research to generate new ideas that other methods might test. In addition, most researchers regard case studies as an important way of illustrating theories. They argue that it can help show how different aspects of a person's life are related (Shi, Jiang & Yao, 2018; Yousefinaghani & Sharif, 2019).

On the other hand, some of the limitations of a case study are that:

- i. It lacks scientific rigour and provides little basis for generalising results to the broader population.
- ii. Researchers' subjective feelings may influence the case study (researcher bias).
- iii. It is difficult to replicate.

- iv. It is time-consuming and expensive.
- v. The volume of data and the time restrictions impacted the depth of analysis possible within the available resources.

3.4 Setting

The study area is Akenten Appiah-Minkah University of Skills Training and Entrepreneurial Development (AAMUSTED) that is situated in Kumasi. AAMUSTED was formally called University of Education, Kumasi Campus but it gained autonomy in AAMUSTED Act 2020, (Act 1026) to operate on its own or an independent institution. The main aim of the university is to train teachers for the education system of Ghana, for this reason most of the student population are matured students who have graduated from Colleges of Education for further studies. Most of these students are married and for that matter the female students get pregnant while they are still in school. AAMUSTED is situated in Tanoso-Kumasi in Ashanti Region of Ghana. The choice of AAMUSTED is based on the fact that it has a relatively large student nursing population unlike the other public universities in Kumasi who are mostly students who graduated from Senior High Schools.

Unofficial investigation indicates that AAMUSTED has many student nursing mothers and pregnant women compared to the other campuses and similar institutions. Although no verifiable reasons have been given, evidence of these observations can be found in the works of (Amoabea, Abigail, Adei & Yaa, 2020; Amos et al., 2019). Further, with the rise in advocacy for gender equality, more researchers present conflicting evidence of how student nursing mothers can cope with their academic requirements. For these reasons, I have chosen to examine how

the student nursing mothers manage the conflicting demands of work and motherhood.

3.5 Population

The total population of the study was all student nursing mothers enrolled in post graduate studies for 2021/22 academic at AAMUSTED. This was made up of 22 student nursing mothers at the University. The population covered below Department at AAMUSTED. Research population refers to the entire group of individuals or objects that the researcher wants to study (Babbie, 2016). It represents the larger target group from which the sample was drawn (Creswell, 2013).

Name of Dept.	No of Students (F)
Accounting Education	4
Catering and Hospitality	3
Business Education	5
Fashion Design and Textiles Education	4
Early Grade Education	6
Total COLON FOR SERVICE	22

3.6 Sample Size

This refers to the number of participants included in the study (Creswell, 2013; Hulley et al., 2013; Babbie, 2016). The sample size involved in the study was 15 student nursing mothers. This was because of the difficulty of identifying student nursing mothers at AAMUSTED. At the time of data collection, only 15 student nursing mothers were readily available.

Name of Dept.	No of Students (F)
Accounting Education	3
Catering and Hospitality	2
Business Education	4
Fashion Design and Textiles Education	2
Early Grade Education	4
Total	15

3.7 Sampling Technique

Due to the difficulty in identifying student nursing mothers, a combination of sample techniques such as purposive and snowball sampling techniques were used to locate and collect the necessary data from student nursing mothers. Since it is a systematic data collection approach, the researcher examined female students in natural settings or naturally occurring situations on campus. It involved prolonged engagement in a location or social interaction to identify students nursing mothers, which spanned a number of days until the first student nursing mother was determined. The researcher purposively selected them for the study.

The main goal of purposive sampling is to focus on particular characteristics of a population of interest, which enabled the researcher to answer the research questions (Covernton, Pearce, Gurney-Smith & Dudas, 2019). As a non-probability sampling technique, the purposive sampling involves judgmental, selective or subjective sampling. Therefore, the study relied on the researcher's judgment to select the student nursing mothers and to collect data for the research. Usually, the sample being investigated is relatively small, with student nursing mothers.

Noushini, Park, Jamie and Taylor (2020) noted that the goal of purposive sampling is not to randomly select units from a population to create a sample to make generalisations or statistical inferences from that sample to the population of interest. The sample being studied is not representative of the population. Still, researchers pursuing qualitative or mixed methods research designs Yang, Guo, and Cheng (2019) argued that this is not considered a weakness because it depends on the purposive sampling technique. For this study, homogeneous sampling will be used because the student nursing mothers are assumed to have characteristics of interest to the researcher.

After successfully interacting with her first student nursing mother, the research inquired if she knew another nursing mother (s). Suppose she cannot lead the researcher to other student nursing mothers. In that case, the process repeatedly starts, from observation to purposive sampling. However, a snowball sampling approach is initiated if she can lead the researcher to other nursing mothers. According to Parker, Scott and Geddes (2019), snowball sampling is where research participants recruit other participants for a study. Also, compared to the total population of students on the Kumasi campus, a student nursing mother may be very hard to find.

The primary assumption of snowball sampling is that once the first nursing mother can lead the researcher to other student nursing mothers, it sets the process rolling until the required number of participants are recruited. For this study, not less than 50 nursing mothers were targeted. More data would be collected if more students and nursing mothers are in the research. The study would not exceed 100 student nursing mothers. The advantages of snowball sampling are that it allows for studies; otherwise, it might be impossible to conduct because of a lack of participants. Further, Snowball sampling helps the researcher to discover hidden characteristics about a population. On the contrary, with snowball sampling, it is usually impossible to determine the sampling error or make inferences about people based on the obtained sample.

3.8 Research Instruments

Two research instruments were used in this work in collection of data from the participants. These are interview and observation.

3.8.1 Interview

Semi-structured interview was used to collect data for the study. Interview was used for the study because it has the ability to yield in-depth information and give interviewees the opportunity to express themselves from their own experience and perspectives without any influences from the researcher (Mantey, 2014).

Creswell (2014) and Miles et al. (2014) added that interview allows for elaboration of feelings, thoughts, and experiences pertaining to the research questions. Additionally, the basis for which semi-structured interview was used was because "it is flexible, accessible and intelligible and, more importantly, capable of disclosing important and often hidden facets of human and organizational behaviour" (Qu & Demay, 2011, p. 246). Kvale and Brinkmann (as cited in Qu and Demay, 2011) added that semi-structured interview is often the most constructive and suitable means of gathering information.

An interview guide was designed to enable the researcher to collect in-depth information on student nursing mothers coping with their academic work. The interview guide was simply a list of the high-level topics on each research objective.

The interview guide covered the high-level questions for the student nursing mothers in the interview. For efficiency, the guide was limited to one page so that it was easy to refer to and ensure that the researcher was not getting too low level. According to Verhoeven, Tsakitzidis and Van Royen (2020), the process of creating such a guide can help to focus and organize the researcher's line of thinking and therefore questioning.

The content of the interview guide was that it had a section that gave brief introduction of what it would be used for. There was also a section which sought the demographic information of student nursing mothers selected for the study. Again, the last section or part was where the objectives of the study were used as questions in the interview to seek the student nursing mothers' opinions.

Similarly, Aughterson, McKinlay, Fancourt and Burton (2021) noted that when conducting the interview, the researcher must always bring a fresh copy of the guide to cross off questions or topics as they are covered efficiently. The benefit of this is that some questions are answered during the conversation with the interviewee without even asking. For similar reasons, Warri and George (2020) opined that using the guide, and the researcher can check off the question on the guide to avoid asking it explicitly later. It is important to remember that the interview guide is only a guide.

Conversely, Warri and George (2020) argued that the researcher does not follow the exact ordering. There is nothing wrong with going off-script at times if a particular line of questioning that was not anticipated seems worthwhile. The researcher also decided an entire line of questioning if it is not appropriate for a particular respondent.

Finally, to ensure that each data gathered from the nursing mothers can be referred to in case of uncertainty, the entire interview was recorded, and critical issues were written down. The researcher sought the permission of the respondents to either make a video or audio recording of the interview. It served as a reference for the researcher to cross-check any information gathered.

3.8.2 Observation

According to Ciesielska and Jemielniak, (2018), observation is one of the most important research methods in social sciences and at the same time one of the most diverse. Observation may be regarded as the basis of everyday social life for most people; you can diligently observe behaviours and material surrounding.

Information on the student nursing mothers' coping with academic work would emerge organically from the research context (Mozersky, Walsh & DuBois, 2020). To achieve this result, most researchers (Davidson, Edwards & Weller, 2019; Kiger & Varpio, 2020) argue that qualitative research allows a researcher to use a combination of observations, interviews, and document reviews in the data gathering process. Using these varied approaches to collect data, most researchers agree that the qualitative approach exposed the challenges of students nursing mothers in the natural setting in which they are found (Buetow, 2019; Crick, 2020).

The researcher adopted the naturalistic observation to observe student nursing mothers in their natural environment. Naturalistic observation is a research method where subjects are observed in their natural environment without any interferences or manipulation by the researcher (Smith & Jones, 2018). The goal of this type of observation was to understand and describe the behaviour of participants naturally as it occurs.

3.9 Measures to Ensure Trustworthiness

Trustworthiness in qualitative research refers to the degree to which the findings, interpretations and conclusions of a study are reliable, credible and valid (Morse, 2014). They are, credibility, confirmability, dependability, transferability, and authenticity.

3.9.1 Credibility

Credibility is a replacement to internal validity that is used in quantitative studies. Credibility in qualitative studies implies to the truthfulness of the findings. It is how the researcher represented the truths of the research participants as precise as possible. Several methods have been used to ensure credibility of the qualitative research study; some of which includes data, methods and theory triangulation, control of biases through reflexivity, peer review, member checking etc. (Ary, Jacobs & Sorensen, 2010).

To increase the probability that credible findings were produced, the researcher used prolonged engagement, and triangulation, member checking, control of bias through flexibility (Ary et al, 2010). For prolonged engagement, the researcher ensured that adequate time was allocated for each interviewee so that data could be collected until there is no more to be given. More so, in ensuring credibility, the researcher used member checking as a strategy. This was used to ascertain whether what was recorded matched with what the participants said or did, during interview and observation sessions respectively (Ary et al. 2010). Lastly, the researcher gave her personal details, which included her full name, qualifications, residential address, and phone numbers so that interviewees could have trust and confidence in him (Mulaudzi & Ngunyulu, 2009).

3.9.2 Confirmability

Confirmability is a substitute term to the concept objectivity used in quantitative research studies. This denotes the degree to which the research is free of bias in the procedures, and in the interpretation of the results (Ary et al). De Vos et al. (2007) added that confirmability refers to objectivity, with consistency between two or more independent people about the accuracy of data, its interpretation and relevance. Several approaches can be used to address this issue and ensure confirmability of the study. The researcher used audit trial, peer review, reflexivity etc. (Ary, et al, 2010; Johnson & Christensen, 2012). To ensure confirmability in the study, the researcher played tape-recordings of interviews to interviewees for them to confirm their submissions, made corrections and clarification in order to reach agreement that the information on the tape-recordings are theirs and not an alteration. Lastly, the researcher ensured that the findings reflect the interviewees' exact information given, and not the researcher's own perspective (Polit & Beck, 2008).

3.9.3 Dependability

Polit and Beck (2006) define dependability as one of the criteria that are used to establish trustworthiness by having peer researchers perform an audit of the study. Pilot and Beck (as cited in Ngunyulu, 2012) added that dependability refers to the solidity of data over time, over conditions and over occasions. In order to achieve dependability, the researcher submitted the collected data to a peer researcher to examine and then compare the results to validate its correctness (Stommel & Celia, 2004).

3.9.4 Transferability

Transferability refers to the extent to which the data collected and findings can be generalised or transferred to a different setting (De Vos et al., 2007; Polit & Beck, 2006). To ensure transferability, the researcher recorded adequate information from interviews. Also, the researcher provided an extensive description of the interviewees which included their experiences (Stommel & Celia, 2004). In order to achieve transferability, the researcher gathered, identified, described, and reported the data adequately in a way that could facilitate easier understanding for readers to evaluate the applicability of the data and findings to other settings (Polit & Beck, 2008).

3.10 Data Collection Procedure

I wrote to seek for an introductory letter from Basic Education Department head. The letter was taken to the area of study and I was granted permission to seek for the necessary information from the participants. Student nursing mothers are most likely to be found during lecture hours; hence the researcher examined the timetables for various departments to commence the data collection process. I used two weeks in this process to attain my population for this study.

The researcher did thorough observations of the female students to identify any nursing mother. When the first student nursing mother was identified, the data collection process commenced, and the methods unrolled as stated in the sampling technique. However, when it became difficult to find any nursing mother, the researcher enquires from any student or staff if they know any nursing mother in the school. The strategies proved very effective in identifying as many students nursing mothers as require for the study. The researcher interviewed fifteen (15) student nursing mothers offering Post Graduate Studies out of the twenty-two (22) student nursing mothers which was the target population. After the interview there was an observation checklist to monitor the activities that student nursing mothers go through in their quest to pursuit their higher education. This was done in a natural way to gather pertinent information needed from student nursing mothers in pursuit of their academic work.

3.11 Data Analysis Procedure

The data gathered from the interviews and observations was analysed using thematic analysis and content observation analysis respectively. Numerous authors have suggested different procedures or phases for analysing qualitative data (Scott & Usher, 2011; Best & Khan, 2006; Watling & James, 2012; Creswell, 2009; Braun & Clarke, 2006; Pilot & Beck, 2008). By putting data together, making the invisible clear, connecting and assigning effects to antecedents, conjecture and verification, correction and modification, and suggestion and defence, Polit and Beck created qualitative data analysis. The study used the thematic analysis by Braun and Clarke (2013). The researcher made this choice since he can successfully adapt it to his research (Vanderpuye, 2013). Thematic analysis, according to Braun and Clarke, is a technique for locating, examining, and summarising themes in qualitative data. Braun and Clarke further noted that thematic analysis only thoroughly examines qualitative material. They decided that thematic analyses should be broken down into six stages: data transcription, initial code generation, theme search, theme review, theme definition and naming, and report production (Braun & Clarke, 2013). In order to identify possible themes from the data collected, the data collected from the interviews were analysed and subjected to critical scrutiny. For example, the transcribed data from interviews were read several times to identify possible themes for analysis and discussions. The advantage of using the thematic approach of analysing data was to give room for the development of major themes, minor themes for discussion in the study (Braun & Clarke, 2013).

3.12 Ethical Consideration

The researcher first sought the consent of management of the school and gave a full detail of what the study was about. Upon identifying a student nursing mother, all COVID 19 protocols were strictly observed to ensure that the safety of the mothers, the babies and the researcher. Issues regarding pregnancy, nursing babies, family issues, academic issues and personal financial capacity can be seen as very intruding if not asked or handled with professionalism (Arifin, 2018; Suri, 2020). Evidence in literature suggest that most respondents may withhold some information from the researchers if they deem it too sensitive and exposing. Others may withhold information if the researcher fail to present the study in a relevant context or assure the respondents of absolute confidentiality (Connelly, 2014; Broesch, Crittenden & Mulder, 2020).

Irrespective of how the researcher presents the study or make genuine assurances, it is always up to the respondents to decide how honest their responses will be. For these reasons, the research followed all established protocols for conducting research and collecting data as stated in the university's research guidebook for postgraduates. Further, the research took cues from the basic strategies on how to approach and present the research issues to the students nursing mothers. For instance, the researcher adhered to the system of moral values that are concerned with the degree to which the research procedures conform to legal, social and professional obligations of the study of the participants as show in Saunders et al. (2012).

Again, informed consent of all respondents was obtained before the study commenced. Respondents were assured of strict anonymity and confidentiality of their responses given since their names were not included so their responses could not be traced back to them.

3.12 Chapter Summary

The study as under pinned by an interpretivist philosophy paradigm. A qualitative approach was used to find the challenges student nursing mothers in AAMUSTED go through in their academic work and a case study research design was adopted in this study.

The study area was AAMUSTED which is located at Tanoso – Kumasi in the Ashanti Region. A purposive and snow balling sampling techniques were used in this study to get the student nursing mothers who formed the population for the study. The research instruments that were used for interview and observation. An interview guide and an observation form were used.

The researcher wrote a letter to seek for introductory letter from the department of Basic Education, University of Education Winneba, this was used to seek for permission to be granted to use AAMUSTED as the study area. Fifteen (15) student nursing mothers were selected for the study out of 22 target population used. Thematic approach and content observation analysis was used to analyse and interpret the data collected from interviewing the student nursing mothers.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Overview

This chapter analyses and discusses challenges, policies and institutional factors and coping strategies of student nursing mothers with their academic requirements. Thematic approach was used to analyse the interview results with the student nursing mothers and the data from the observation was analysed using content analysis. Details of the results are presented under each research objective.



4.1 Demographic Information of Respondents (Students)

The results are presented in Table 1

Variables	Frequency	Percentage (%)
Age group	-	
30-35	8	53.5%
36-40	4	26.5%
40 and above	3	20%
Marital Status		
Married	10	67%
Single	2	13.5%
Widowed	1	6.5%
Divorced	1	6.5%
Separated	1	6.5%
Religious status		
Christianity	10	67%
Islamic	3	20%
Traditional		6.5%
Others		6.5%
Employment Status		
Employed	0 9	60%
Unemployed	3	20%
Self-employed	3	20%
Programme of Study	CATION FOR SERVI	
Accounting Education	3	20%
Catering and Hospitality	2	13.5%
Business Management	4	26.5%
Fashion Design and Textiles	2	13.5%
Early Grade Education	4	26.5%
Mode of Sponsorship		
My self	3	20%
My Husband	2	13.5%
My Self and My Husband	5	33%
Scholarship	2	13.5%
Support from Family	2	13.5%
Support From friends	1	6.5%
Total	15	100%

Table 1: Demographic Information of Student Nursing Mothers (Respondents)

Source: Field Data (2021)

The table above describes the demographic results of participants for the study. From the table, 8 representing 53% of student nursing mothers were aged between 30-35 years, then 4 representing 26.5% were aged between 36-40 years and 3 representing 20% were 40 years and above. This implies that all student nursing mothers had experiences on child birth were old enough to provide credible information for the study.

On the table again, the marital status of student nursing mothers was analysed. Out of the 15 student nursing mothers selected for the study, ten (10) representing 67% were successfully married, two (2) representing 13.5% were single, one (1) representing 6.5% had been divorced and only one (1) student nursing mother had been separated. This shows that majority of the student nursing mothers had their husbands available to render assistance physically and emotionally since they lived or stayed with their husbands.

Religious status of student nursing mothers was also assessed. From the table, majority of the student nursing mothers were Christians with a total number of ten (10) and 67%, then three (3) which was 20% were Muslims and then one (1) was a traditionalist and one (1) fall as others.

The employment status of student nursing mothers was also analysed. From the table, nine (9) representing 60% were employed, three (3) representing 20% were also self-employed and three (3) representing 20% were unemployed. This implies that majority of the student nursing mothers aside their pursuit for education, were employed in their own businesses or rendering services to the government or private institutions.

From the table again, it was observed that the programme of study was also analysed. Three student nursing mothers from the Accounting Education with a total of 20%. Then two (2) students from Catering and Hospitality with a percentage of 13.5% and four (4) students from Business Education representing 26.5%, then two (2) students from Fashion Design and Textiles Education and finally, four (4) students were selected from Early Grade Education representing 26.5%.

Finally, from the table, the mode of sponsorship for student nursing mothers were analysed. It was revealed that, three (3) students sponsored their education themselves, two (2) students revealed they were sponsored by their husband, five (5) students revealed the combination of themselves and the husband as both pulled resources together to sponsor the education. Then two students had scholarship benefit while two other students had support from the family as their mode of sponsorship and finally a student had support from friends to embark on her education process.

4.2 Research Question One: What are the challenges facing student nursing

mothers in pursing their academic work?

The above research question examines the difficulties student nursing mothers face in pursuit of their academic work at AAMUSTED. After interview and observation with post graduate student nursing mothers, the following themes emerged as; health complications during and after pregnancy, difficulty in time management, conflicting demands of family duties, difficulty meeting academic requirements (missing lectures, backlog of assignments) and financial challenges. These difficulties militated against student nursing mothers in the quest of their academic work on campus.

Health Complications during and after Pregnancy

Health issues in relation to pregnancy has a lot of implications for pregnant women. During this stages, pregnant women are at risk of facing a lot of disease such as German measles, postpartum depression and endometriosis disorders that might affect fertility and increase the risk of complications during pregnancy. Such complications put student nursing mothers in difficult task ahead of their academic work. Below were some the comments of student nursing mothers after interview session.

A Student Nursing Mother revealed:

Nursing mothers face many challenges when they decide to pursue higher education; these challenges are usually related to postpregnancy issues, breastfeeding and family. I have not developed any complications during pregnancy and as I am breastfeeding. However, I can tell you that some of my close friends are going through many health challenges after giving birth. These challenges were developed during or after birth and in most cases, the babies also developed complications. The difficulty I face is that combining childcare and other family duties results in frequent disruptions to my studies. This has affected my academic performance, and I believed I could have done much better if these challenges were not there. (An expression from a student mother).

Another student mother commented:

I have experienced a lot of health complications after giving birth to my third child when I enrolled in this programme. As I speak to you now am battling gestational diabetes. I visit the hospital twice every month because of this disease. I am unable to concentrate on my academic work very well because of this condition and even depression, anxiety and others. (An expression from a student mother).

Student nursing mothers revealed a lot of difficulties they go through especially health complications in their pursuit of academic work. Nursing mothers noted that health complications before and after pregnancy poses serious challenges in their education process as it was revealed that combining childcare and other family issues militated against their academic work. This implies that, a lot of complications arise on the health status of the mother, child which makes it very difficult for student nursing mothers to concentrate on their academic work.

Again, student nursing mother disclosed that after birth, they face complications such as postpartum depression, anxiety and others that negatively affects their academic work in school. The above means that student nursing mothers are unable to concentrate in their education as expected because of the health problems they face and their children.

The observation check list conducted further confirmed that indeed student nursing mothers face health complications. It was observed from student nursing mothers that, usually they visit the University clinic before attending lectures, sometimes they take their children to the clinic on emergency situations as well.

Difficulty in Time Management (

Difficulty in time management was identified as one of the themes that emerged. Balancing demands of being a student and a nursing mother is challenging especially when it comes to managing time effectively. Juggling coursework, attending clinics and childcare responsibilities places difficulty in time management. Below are comments from student nursing mothers;

A Student Nursing Mother noted:

I mostly go for lectures late not because I like doing that but I have to breast feed my child before going for lectures to prevent him from crying (An expression from a student).

Another student mother reacted:

My childcare responsibilities make it difficult to manage time very well. I am unable to meet a lot of deadlines because of the responsibilities ahead of me and other family issues (An expression from a student mother)

Student nursing mothers revealed difficulty in time management as one of the challenges they face in pursuit of their academic work. It was identified that students fail to meet a lot of deadlines and other academic task because of the childcare responsibilities. Not only deadlines, they also attend lectures late and sometimes not at all. This means that student nursing mothers go through a herculean task in terms of time management in their education.

The ability to manage time very well makes one an academic discipline in any academic intuition. For this reason, time management serves as one of the key prerequisites of a successful student. It is therefore essential for student nursing mothers to manage their time very well to meet all academic requirements so as to increase their performances in education.

The analysis of the observation checklist revealed a similar challenge. It was observed that about 70% of student nursing mothers attend lectures late because they have to breastfeed their babies well before getting into the classroom. In some cases, student nursing mothers are forced to send their children on the entrance of lecture halls in order to listen to what is been taught in lectures.

Conflicting Demands of Family Duties

Student nursing mothers face challenges of balancing family duties and their education. The demands of childcare and breastfeeding usually clash with study schedules, making it challenging to manage both effectively. This can lead to stress and affect academic performances. Student nursing mothers revealed the following comments;

A student mother said:

Taking care of this baby and handling family issues disrupts my ability to concentrate; there are many disruptions. I am unable to learn at places like the library and reading room. Whenever the baby starts crying it causes disruptions to the other students studying there. Also, there are no convenient places for me to lay the baby down when she sleeps. Further, due to the library rules, I cannot bring in a third person to take care of the baby while I study. Generally, the university does not have specialised places for nursing mothers as they do for other people with disabilities." (An expression from a student nursing mother)

A student nursing mother further revealed:

My family gives me a lot of pressure. Sometimes when am at lectures, I receive calls from the home on issues which create double attention while at lectures. How do I concentrate on what is been taught? It is really sad because I go through a lot of stress and I am highly depressed with the current situation at hand (An expression from a student mother).

A student mother said:

Immediately I go for lectures, I begin to think about family duties unmet, my child I left with nanny and other duties as well (An expression from a student nursing mother)

Blending education and family duties poses serious challenges on student nursing mothers during their education. Family duties and education are two major components that needs a lot of time and attention to manage by student nursing mothers. Students revealed that, they go through a lot of difficulties with family duties and education. Student nursing mothers noted that, family duties take away their attention and ability to concentrate and focus on their academics. For example, most of the student nursing mothers revealed that while at lectures, they will be thinking about their child with nannies, husband at home, food to eat or prepare and other family duties in mind. This implies that student nursing mothers go through a lot of stress in pursuit of their education.

Difficulty Meeting Academic Requirements

Student nursing mothers walk through challenging task in order to meet all academic requirements. Such challenges affect the academic performances of students because they are unable to meet deadlines, submit assignments and other important documents on time.

A student mother reacted as:

Meeting deadlines has been my problem always, sometimes I have to hire people and pay them to complete my assignments for me. I know this is actually not helping me in my academic but because of my childcare responsibilities, I have to do that to complete my education process successfully (An expression from a student nursing mother).

Another expression from a student mother:

Sometimes because of my child I have to miss lectures and take him to hospital for treatment. One of the semesters, I missed three weeks lectures because mu child was admitted at the hospital (An expression from a student mother).

Every institution has its own rules, regulations and requirements. Meeting all academic requirements requires self-discipline and dedication. Student nursing mothers mostly lack these characters because of their childcare responsibilities. Student nursing mothers miss lectures mostly not because of their personal interest but child care responsibilities they have. It was revealed that student nursing mothers finds it very challenging to meet all academic requirements including deadlines, assignments and lectures. Some students noted that they pay others to write their assignments and other academic work in order to meet requirements. Such challenges as a result of childcare responsibilities have affected their academic performances in their pursuit for education. Attesting to the above challenges with the observation checklist, student nursing mother usually miss lectures as a result of their childcare responsibilities. It was observed from majority of student nursing mothers when their child was sick and admitted at the hospital. At least a student nursing mother missed lectures once in every week count. Again, it was observed that majority of student nursing mothers requested for support from third parties to write their assignments and other academic documents for them to meet all necessary requirements. This confirmed to the challenges that student nursing mothers face in pursuit of their education.

Financial Challenges

Financial constrains remained one of the difficult tasks that student nursing mothers face in their academic work. The following comments were revealed by students after data collection.

A student nursing mother noted:

Due to financial challenges, I cannot hire experienced babysitters, and my husband is a very busy person. So, I have to spend more time with the three children and take care of other home duties. Because of this, I regularly miss lectures and when I attend lectures, I am always late and require extra time to catch up with what was taught. I also fall asleep often during lectures and also leave class during lectures to attend to the baby. All these make it very difficult for me to study. (An expression from a student nursing mother)

Financial constrains has made a lot of student nursing mothers education process a challenging one. With the cost of education and child care responsibilities requires a lot of finance. One must be financially sound to hire nannies to care for their babies while at lectures. This implies that, students' needs sponsors from family, friends and other institutions responsible for maternal welfare.

Again, the observation process also recorded financial constrains as one of the difficulties student nursing mothers faces. It was observed that student nursing mothers are unable to hire babysitters and they resort to family members and friends to care for their babies while at lectures. Since such people are mostly inexperienced, they are unable to care very well for their child and nursing mothers are forced to come out from lectures to care for their babies.

4.2.1 Discussion of Findings: Research Question One

The study found out that student nursing mothers experience a lot of challenges in pursuit of their education at AAMUSTED. Some of the challenges student nursing mothers' faces were health complications during and after pregnancy, difficulty in time management, conflicting demands of family duties, difficulty meeting academic requirements (missing lectures, backlog of assignments) and financial challenges. These challenges have militated against student nursing mothers in their education process affecting negatively their academic performances.

In the aspect of health complications during and after pregnancy, the study found that students nursing mothers face the risk of postpartum depression and endometriosis disorders that might affect fertility and increase the risk of complications during pregnancy. Supporting this claim, Forster and Offei-Ansah (2012) conducted a study entitled Domestic affairs and coping strategies of female students in Ghana and found that student nursing mothers used a variety of strategies, such as delegating domestic roles, prioritizing, planning, and organizing activities to ensure that their family life did not suffer while they were at university (Forster & Offei-Ansah, 2012).

Again, the conflicting roles like being mothers and students, such students are because they are nursing a baby who is fragile and absolutely dependant on a mother who happens to be a student and must fulfil specific academic requirements. In the same vein, Liao et al. (2019) argued that the educational environment expects her to dedicate her full time to the teaching and learning process whilst the baby also demands undivided attention from the mother. Similarly, Maloni et al. (2019) also argued that student nursing mothers face the intra-role conflict. She struggles with taking care of the baby and taking care of the rest of the family at home. Proponents of role-conflict theory refer to this situation as an incompatible requirement within the same role (Hirschi, Shockley & Zacher 2019; O'Lynn, O'Cannor & Kellet 2020).

In this study, one of the most important aspects of planning for motherhood roles was the selection of an alternative method for childcare. Berg and Mamhute (2013) quoted from Mendes and stated that without proper childcare, taking on the student role becomes very difficult for young mothers (Berg & Mamhute, 2013). In a study entitled The challenges and adaptive mechanisms of nurse student mothers, Adofo (2013) suggested that the use of measures such as recruiting and hiring workers to do housework and childcare or leaving children at a kindergarten or with grandparents were helpful (Adofo, 2013).

These challenges are akin to the findings of Liao et al. (2019) and Maloni et al. (2019) and underpinned by role conflict theory as argued by Hirschi et al. (2019) and O'Lynn et al., (2020). Though these challenges are common among nursing mothers worldwide, Dankyi, Minadzi & Senyametor (2019) noted that the situation is precarious for student nursing mothers in developing countries like Ghana. According to Abab & Peprah, (2019), most student nursing mothers in Ghana have reported

feeling weak, exhausted, and lacking consideration in classes leading to failure. Similarly, Gbogbo (2020) observed that most working nursing mothers in Ghana could not spend adequate time with their children, families, friends and study or complete assignments. Unfortunately, a woman's instincts to remain resolute and dedicated to her children and conscious ability to adjust to academic demands have devastating effects on their relationship with their children.

Dankyi et al. (2019) also found that student nursing mothers relied on paid house helps to cope with the struggle, keeping children at day-care centres, raising loans, and depending on husbands and friends for support. Therefore, Dankyi recommended providing lactating rooms, day-care centres, and counselling services for studentmothers in all College of Distance Education centres. Similarly, Yang et al. (2019) argued that enhancing theoretical and simulated breastfeeding education content to incorporate women's breastfeeding experience combined with realistic clinical student allocation could improve students' confidence in supporting breastfeeding.

This is akin to the term role conflict theory, which describes a contending situation where two or more of a person's roles require attending to at the same time or incompatible features within the same role. A similar description was given by Zou, Guo and Li, (2019). In the same vein, Cho, Kim, Chin and Ahmad, (2020) noted that incompatibilities always consist of differing expectations, requirements, beliefs, and attitudes.

Generally, it can be observed that most of the student nursing mothers face many challenges that adversely affect their ability to learn and perform well in their academic requirements. Most of these challenges are due to the undivided attention requirement of babies. In addition, the interviews also noted that most of the nursing mothers face health-related challenges, usually from the babies and the post-natal illness the mothers go through. Similarly, Bull, Al-Ansari and Willumsen, (2020) observed that nursing mothers face challenges such as maternal-related illness, fatigue, lateness to lectures, inability to meet assignment deadlines, nonparticipation in examinations, uncompromising attitudes of lecturers and fellow students, stigma (or unfavourable comments).

On the other hand, it was observed that most of the student nursing mothers had to deal with extra demands from home, particularly their older children, husbands, and the external society. Handling all these demands and the delicate and unpredictable requirements of a new baby results in server stress when they add on academic requirements. Moreover, the financial implications make the situation precarious from the student's point of view. Due to the intensive cost of handling these challenges, most student nursing mothers cannot hire maids or house help.

As such, they are forced to address these challenges along; while some are lucky to get support from their husbands, others are not so fortunate, especially those either separated, widowed, or divorced (Chrzan-Detkos et al., (2021). Similarly, Doherty, Horwood and Engbretsen (2020) noted that schooling and nursing a baby concurrently results in a lack of inadequate access to spouse, family, friends, lecturers, church members, and leisure. For most women in developing countries, Bhattacharjee, Schaeffer, Albright and Hay, (2019) found that economic challenges such as inadequate funds for academics, accommodation fees, feeding, and other logistics drugs are some of the challenges nursing mothers faces while schooling. These challenges are underpinned in role conflict, arguing that role conflict occurs

when people experience incompatible work demands (Dukuzumuremyi, Acheampong, Abesig, & Luo, 2020).

4.3 Research Question Two: What influence do child-related roles have on the

academic performance of student nursing mothers at AAMUSTED?

When asked to indicate how nursing a baby affects their academic performance, most of the mothers lamented the cost of keeping nannies and expressed preferences for onsite crèche, which is more cost-effective and safer than using nannies. However, the mothers noted that this option is only beneficial to students with accommodation on campus and those who can afford it. The consistent concern expressed by the nursing mothers comprised divided attention, conflicting responsibility, and stress. The mothers indicated that demands from babies and academic activities are stressful.

Divided attention

Unable to pay attention at lectures was one of the common impacts of child-related roles that militated against the academic performance of student nursing mothers at AAMUSTED. The following comments were revealed by student nursing mothers after interview.

A student nursing mother said;

".... when my nanny calls and reports of my baby's cry, I suddenly lose focus in class and leave whiles lectures are going on to care for my baby......" (An expression from a student mother).

Another student nursing mother noted:

"...my prayers are that the baby should not fall sick. The last time it happened, I could barely do anything else. I spent weeks away from my book and lectures. It impeded my academic performance." (An expression from a student nursing mother)

The above comments point out that student nursing mothers experience divided attention as one of the influence child-related roles have on the academic performance of student nursing mothers. As a result of their childcare responsibilities, they are always having double mind-set whiles in class. Paying attention to lecture activities is always distracted because of their child. According to nursing mothers, immediately they hear a cry from outside or a call from their nannies, they have no option than to attend to their child and provide the needed care expected.

It was also observed from the observation checklist that student nursing mothers have divided attention as well. During the observation process, the researcher sat in the lecture hall with student nursing mothers to observe their attention span at lectures and how often they go out to attend to their babies. It was recorded that in a single lecture at least three (3) student nursing mothers leave the lecture hall to attend to their children before the lecture ends. This means that student nursing mothers indeed experience divided attention because they spend more than twenty (20) to twenty-five minutes outside before they resume lectures again. This has negative impacts on their academic performances because important information necessary for academic performances are always lost because of their childcare responsibilities.

Conflicting Responsibilities

Another influence of child-related roles that affects the academic performance of student nursing mothers at AAMUSTED was conflicting responsibilities. Student nursing mothers experience troubles with conflicting responsibilities and roles during their quest for education. Below were some of the comments revealed from students after interviews.

A student mother reacted:

I always choose the responsibilities of my child over my education. I know education is very essentials but I have to choose the needs of my child first before anything else. I remember when my child was three months old, I had to seek permission from the invigilator when I was writing semester exams to breastfeed my child. It really affected my performance in the exams but I had to do that (An expression from a student nursing mother).

Another student nursing mother responded:

My child used to cry a lot so I mostly have to leave lectures at least once or twice to attend to him before the lecture ends (An expression from a student nursing mother)

From the above comments student nursing mothers always experience conflicting child-related roles in their education. It was revealed that because of their child, students are always experiencing dual responsibilities at lectures. For example, it was revealed that students always leave lecture halls to attend to their children needs before they go back to lectures. Such responsibilities have conflicting demands on student nursing mothers makes them participate little at lectures because they are always on the go to see their child and provide for their needs. As a result of the conflicting responsibilities of student nursing mothers, academic performance is highly affected negatively since they miss important lecture information.

The observation carried out from the study on the conflicting responsibilities also identified that, student nursing mothers are always busy attending to their children while lectures were in progress. It was observed from two lecture halls that, student nursing mothers exhibited a dual role as attending to their children and also getting back to the lecture hall to continue studies.

Stress

Stress was identified as one of the impacts on child-related role that affected student nursing mothers' academic performances. All participants considered the subtheme of "stress" as the most important impact on child-related role for student nursing mothers. "Desperation", "great stress", "nostalgia", "guilt", and "fatigue and physical pressure" were highlighted by participants. The student mothers suffered from fatigue caused by work pressures and multiple roles. Below are comments from students.

A student mother revealed:

I tolerate so much pressure. When I go home at night after classes, I have to do motherly tasks and prepare food. When the work is done and I want to study, I am too tired. Wherever I sit, right there, I go to sleep, and my husband wakes me up to go to bed (An expression from a student mother).

Participants also experienced so much stress and constant worry about their children and their studies. They felt selfish for not looking after their children properly.

A student nursing mother noted:

I had obsessive thoughts for a long time, when I was drowned deep in my studies. I was suddenly wondering what if something happened to my child? I would have to endure a life full of regret. I had a neighbour who was a teacher and she went to the university for higher education. That poor teacher! One day when she was at the university, her son was cycling when a car hit him and he died. Do you think that the mother would ever forgive herself? After that tragedy, is life with everything in it worth it? I became obsessed and I could not concentrate. Right in the middle of work, I was wondering what if something happened to my child? What could I do then? I started praying, 'God I have given my child to you; take care of him and please do not disappoint me.' (An expression from a student mother).

Stress which was one of the themes emerged as an impact of child-related role that affected student nursing mothers had a lot of effects on the performances and the social, emotional and physical wellbeing of student nursing mother. From the above responses of student nursing mothers, they go through a lot of stress such as combining studies, childcare and family responsibilities together. Such roles increased the stress content of students nursing mothers. Stress has bad effects on student nursing mothers' development and academic performance. It affects the mind and the ability to focus and think constructively.

From the observation perspectives of the study, a lot of student nursing mothers were observed to be going through a lot of emotional, physical and social stress while on campus studying. The observation identified that, majority of students are affected since they were unable to pay attention to lectures, and issues related to their academics.

4.3.1 Discussion of Findings: Research Question Two

The study found that divided attention, conflicting responsibilities and stress was identified as the impact of child-related roles that affected the performances of student nursing mothers at AAMUSTED. Child-related roles was a major anchor in the education of student nursing mothers because they have to combine both in order to achieve academic success. This made student nursing mothers to experience divided attention in their entire education process. Supporting the claim, Neuhaus et al. (2020) argued that supporting nursing mothers in reducing child-teacher dependence may help ameliorate the risk of internalising behaviours posed by unsure/other attachment. This gives mothers extra time to focus on other activities, such as their academic demands, which improves their performance. Garawan and Adjei (2020) also observed that child-related role for nursing mothers' increases maternal-related illness, fatigue, lateness to lectures, inability to meet assignment deadlines, nonparticipation in examinations, uncompromising lecturers' attitudes, and stigma.

The study also found that conflicting responsibilities was identified by student nursing mothers as one of the influences on child-related roles that militated against student

nursing mothers' academic performances. Experiencing dual roles of childcare and education on nursing mothers declines their performances since they are able to have limited time together to study and gather adequate information. Moreau and Kerner (2013) stated that the nature of parenting and academic tasks required careful planning to combine these activities (Moreau & Kerner, 2013). According to Adofo (2013) to appropriately perform multiple roles, student mothers in Ghana applied simultaneous management strategies and organization approaches to adapt to contradictions resulting from concurrent tasks (Adofo, 2013). Similarly, Forster and Offei-Ansah (2012) conducted a study entitled Domestic affairs and coping strategies of female students in Ghana. In their study, students used a variety of strategies, such as delegating domestic roles, prioritizing, planning, and organizing activities to ensure that their family life did not suffer while they were at university (Forster & Offei-Ansah, 2012).

Again, stress was further revealed as an impact of child-related roles that militated against student nursing mothers' academic performances. It was identified that nursing students experienced physical and mental strain because of the stress they go through. It was found that the major barrier to the simultaneous management of the roles of mother and student was accompanied by physical and mental strain. The combination of maternal and academic responsibilities is challenging, brings physical and psychological pressures, and affects academic activities (Esia-Donkoh, 2014).

In addition, some mother students were further employed, which could double the overall load of stress resulting from their multiple roles (Kenny et al., 2007). This study suggested that student mothers suffered from fatigue and physical stress. According to Mark's scarcity theory, role competitions reduce individuals' abilities to

pay enough attention to both roles at the same time (Ugwu et al., 2016). Marandet and Wainwright (2010) stated that many British women students were concerned that the creation of a balance between education and family responsibilities led to less rest and fatigue. They believed that an attempt to fit in with college life came at the expense of students' health (Marandet & Wainwright, 2010). The results of Goldrick-Rab et al. (2011) study showed that a lack of rest and relaxation impacted students' health and indirectly affected their academic performance (Goldrick-Rab et al., 2011). In addition to physical strains, other studies on mental pressures affecting student mothers were in line with the findings of this study. According to Lynch (2008), student mothers were involved in a complex identity conflict and constantly managed their behaviours to comply with the images of a good mother and good student; this situation could lead to severe stress (Brooks, 2013; Lynch, 2008). Zhang (2011) believed that being a good mother created pressure for mothers. Therefore, U.S. female students' inability to be good mothers and good students caused feelings of anxiety and hopelessness (Zhang, 2011). Brooks (2014) believed that emotional responses such as anxiety depended on the factors that made individuals feel that they made unusual choices (Brooks, 2014). The psychological pressures towards being a good mother exist not only for those mothers with dependent little children, but also for mothers of teenaged and young children. For example, some researchers believe that many of the high-risk behaviours in adolescence and pre-teen children and their mental and emotional health are dependent upon their living conditions such as time spent with the mother (Dunifon & Gill, 2013; Mendolia, 2014).

Moreover, in this stage, the generation gap raises some communicational problems, making it difficult for mature parents to play the mothering role (Bojczyk et al., 2011). Ozmete and Bayolu (2009) believed that the relationships between parents and

their teenaged or young children are full of conflict, unpleasantness, and parental stress as compared to the same relationship in the child's younger years (Ozmete & Bayolu, 2009). On the other hand, student mothers experienced stress and mental strains regarding academic goals and aspirations. In their study that explored the experiences of female PhD students in England, Brown and Watson (2010) determined that being a mother had a great influence on education at the Ph.D. level. Also, the creation of a balance between domestic and academic life was a source of stress (Brown & Watson, 2010). The feeling of stress in academic situations causes psychological problems in students and may negatively impact their well-being and personal learning (Hjeltnes, Binder, Moltu, & Dundas, 2015).

The above findings were in support of the role conflict theory which generally discusses how women double as nursing mothers and students simultaneously. Concerning student nursing mothers, the conflicts of their roles is because they are nursing a baby who is fragile and absolutely dependent on a mother who happens to be a student and must fulfil specific academic requirements (Liao et al., 2019). Boyd (2019) argued that another side to this situation is that the student nursing mother faces two dilemmas; the first is the intra-role conflict in which she struggles with the conflict of taking care of the baby and the rest of the family (the home). Such dilemmas put student nursing mothers in difficult situations resulting in divided attention, conflicting responsibilities and stress.

The study again found out from the observation process that students nursing mothers experience divided attention, conflicting responsibilities and stress as an impact to the child-related roles which affects their academic performances adversely. The observation revealed that a lot of students experience divided attention, conflicting responsibilities and stress because of the child-related roles. According to Lynch (2008), student mothers were involved in a complex identity conflict and constantly managed their behaviours to comply with the images of a good mother and good student; this situation could lead to severe stress (Brooks, 2013; Lynch, 2008).

4.4 Research Question Three: What strategies do student nursing mothers adopt

to cope with their academic work at AAMUSTED?

The student nursing mothers were questioned on their strategies to study and enhance their academic performance amidst the many challenges they go through combining home responsibilities with educational requirements. In order to cope with the academic work, student nursing mothers developed key strategies that helped them to cope with at the University. The following themes were identified as reliance on husbands and external family and friends to assist students take care of their babies, self-motivation and time management.

Reliance on Husbands and External Family and Friends

With all the challenges that student nursing mothers face in pursuit of their education, students adopted strategies that they employed to cope with their academic work at AAMUSTED. One of such strategies was the reliance on their husbands and family and friends to take care of their babies while they are learning. These people provided physical and emotional assistance for student nursing mothers to cope with their academic work. Below were some of the responses of student nursing mothers.

A student mother revealed:

Though I have some financial challenges, nonetheless, with my husband support, I have hired a babysitter to help take care of the baby at the scheduled period to relieve me of home duties and form of childcare. This has proven very useful as it gives me ample time to study and participate in group discussions as wells give me full concentration during lectures. (An expression from a student mother) Another student mother commented as:

My kid sister used to accompany me for lectures every day. We settle at the corridor of the University library since there are convenient spaces to put our items at for safe keeping. Again, most of my lecture rooms are closer to the University library so immediately I receive a phone call from her, I have to leave the lecture hall and attend to my baby. This strategy helped me so much to cope with my academic work (An expression from a student nursing mother).

A Student explained that;

My husband takes on more responsibilities so that I can have time to study. I also employ a private tutor to take me through my academic requirements, especially during exams. As a result, I can participate in peer-group discussions with my colleagues. As a result, we corroborate to solve past questions and improve owner readiness for exams. In addition, some lecturers use mnemonic learning as an instructional strategy designed to help students improve their memory of important information. This has proven helpful because the technology enables me to connect new learning to prior knowledge through visual and acoustic cues. The mnemonic strategy makes merely on the use of keywords, rhyming words, or acronyms.

A student explained that;

Without external help will be impossible for me to do anything other hand attending to my babies. Even babies have conflicting demands regarding eating, sleep time, interest, and response to people. Dealing with these challenges alone is impossible without help, including adding schools and home demands. Though I currently get much assistance from family and friends, my husband has been amazing-he taking on more responsibilities than I ever imagine. He has hired a made to help me with the twins and follow around, especially when I come to school. This has alleviated much of my burden and given me enough time to focus on my education.

From the above responses, student nursing mothers used the strategy of relying on their husbands and other family and friends to cope perfectly with their academic work in the University. This strategy helped student nursing mothers to improve in their academic performances as it was revealed by students in the interview session. Though this strategy was not the very best for student nursing mothers to cope with their academic work, it helped them in diverse ways such that such individuals were able to manage their children for a longer period more that the introduction of nannies

because they were family members that their faces were familiar with the child. Again, it helped sustain student nursing mothers at lecture halls to gather relevant information for their studies.

From the observation perspectives, it was observed that majority of the student nursing mothers did not employ nannies to care for their babies during the pursuit of their education. This was because some nannies were impatient with the children unlike family members who have relationships with student nursing mothers. It was again observed that a student nursing mother was always on campus with her husband to care for the child anytime she had lectures. There was a significant difference between her and other student nursing mothers because her child hardly cries out unlike other student nursing mothers who did not come with their husbands.

Self-Motivation

Self-motivation was also identified as one of the ways that student nursing mothers used to cope with their academic work. Motivation which propels a person to take specific actions or cultivate a propensity for certain behaviours was highly used by student nursing mothers to cope with their academic work. This was either intrinsic or extrinsic motivation. Intrinsic motivation is the desire to do something because it is enjoyable while extrinsic motivation is the term used to describe activities taken to achieve some instrumental goals, such as receiving a reward or avoiding punishment. Below were comments from participants.

A student mother noted:

Aside all the difficulties I go through, I am always motivated to complete my programme of study. I am not affected by these challenges and childcare roles so as to become a burden to my education (An expression from a student mother).

Another student explained further that:

Naturally, I am self-motivated and focused on my ambitions. Hence, I adopt a time management strategy to ensure that I do not deny my baby the attention she needs and make enough time for my husband and other family duties. (An expression from a student nursing mother)

From the above responses from students nursing mothers, were self-motivated in their situation of life. Irrespective of the numerous perils that they face self-motivation was used as an energiser to battle until they finish their programme of study.

Time Management

Time management was another strategy that was used as a strategy to cope with the academic work of student nursing mothers. The ability to manage time was one of the important ingredients in education especially for student nursing mothers because of their dual responsibilities. The following were some of the comments that was revealed by student nursing mothers after interview.

A student mother noted:

"I have learned to switch between ideas on concepts of a subject while studying. In addition, I have learnt to use specific examples to understand abstract ideas relating to the course. I combine words and visuals during lectures and learning for better understanding."

A student said:

For me time management has really benefited me in my education because, I have been able to meet all deadlines that was assigned to us since the start of this programme. Again, I have benefited from time management because I used to breastfeed my child on time to fell asleep before I go for lectures (An expression from a student).

Students' ability to manage time and work within a specified time frame brings a lot of comfort among student nursing mothers. Time management is highly needed in education to avoid unnecessary fall outs in assignments and other academic requirements. Student nursing mother tried in diverse ways to manage their little time available to support and cope with their academic work in the University.

Again, observations made also reported that, students nursing mothers tried as much as possible to manage their time but this process was sometimes fraught with duties of the child. For instance, it was observed from a student nursing mother that, any time she planned her schedules for her academic work, it was always troubled with activities and duties of the child.

Time management has significant importance on the education of student nursing mothers. For example, as a result of time management, students are able to meet all academic requirements on time to save themselves from punishments and other sanctions.

4.4.1 Discussion of Findings: Research Question Three

The study found out that student nursing mothers adopted the use of husbands, family members and friends to assist them care for their child, the use of self-motivation techniques and time management as strategies to cope with the academic work of student nursing mothers.

On the reliance of husbands, family members and friends, Dankyi et al. (2019) looked into student mothers' struggles and coping strategies at the University of Cape Coast Distance Education. The study found that most respondents go through academic struggles such as the inability to attend face-to-face lectures regularly because of tiredness, sickness of a child, taking the baby to a child welfare clinic and lack of lactating rooms for breastfeeding babies. Respondents relied on paid house help to cope with the struggles, keeping children at day-care centres, raising loans and relying on husbands and friends for support. Therefore, the study recommended providing lactating rooms, day-care centres and counselling services for student-mothers in all College of Distance Education centres.

The study by Dankyi et al. (2019) provided significant bearing strategies student nursing mothers adopt to cope with academic work. From the study findings, student nursing mothers walk through several challenges in pursuit of their academic work in the University. The study provided and identified these challenges and possible recommendations that University of Cape Coast Distance Education authorities should adopt to ameliorate the perils student mothers face in their academic work.

This also agrees with the findings of Alabi et al. (2020), who explained the importance of supportive husbands in reducing the workload on student nursing others. Muhunzi, Ngocho & Mahande, (2020) also noted that the changing role of women in society has made it necessary for nursing mothers to combine childcare, home care, career, and studies.

The study again adopted the self-motivation technique as a key strategy for nursing mothers to cope with their academic work. Kisanga and Matiba (2021) study found problem-focused coping strategies more than emotion-focused coping strategies. The problem-focused coping employed includes engaging in part-time jobs and small businesses to manage financial challenges, hiring part-time babysitters and using friends/relatives to take care of the child while in class, engaging in private studies during the daytime and interacting with hardworking students severing links with lazy friends.

Social support networks, especially support from partners and relatives, were found vital in coping with multiple roles student-mothers perform in higher education institutions. Some coping strategies, such as part-time jobs and small businesses,

created additional time management challenges for student mothers. Thus, universities should establish strategies to improve the retention of student mothers in higher education institutions. These strategies include establishing unique hostels for student-mothers to stay with their children and baby assistants while pursuing their studies or establishing daycare centres with professional caregivers to assist studentmothers in caring for their children while studying. There is also a need to empower student-mothers with life skills to balance time for studying and parenting. Finally, university authorities should treat student-mothers as students with unique needs that differ from those of male students and other women students without children.

The motivation behind the choices that individuals make is underpinned by selfdetermination theory. In this regard, Ryan and Deci (2020) argued that a person engages in an activity because it is exciting and satisfying rather than being motivated to achieve a goal or receive an external reward such as money. The theory further explains that the need for competence, autonomy, and understanding motivates selfinitiated behaviour described in role conflict theory allow for optimal function and growth of nursing mothers.

The common strategies among the students were the reliance on family and friends, help from their husbands and hiring maids to help them cope with their babies and family demands. Also, a significant portion of the women actively participated in group discussions and peered tuition to learn and perform well. Regarding selfdetermination, most women were self-motivated and focused on their life ambitions to attain high education besides their family. The students adopted cognitive learning strategies, corroborations, time management, mnemonic, and abstract learning. Coping behaviour regarding student nursing mothers is an adaptive behaviour that enables them to cope with conflicting challenges in nursing and schooling.

According to Hundera (2019), such adjustments allow student nursing mothers to get along in their environment with tremendous success and most minor conflict with others. Hundera (2019) posits that student nursing mothers are likely to adopt either a structural role redefinition, personal role redefinition or reactive role behaviour within the context of inter-role conflict. Irrespective of which behaviour the nursing mother adopt to cope with her dual challenges, Rahim (2019) argued that most nursing mothers either take their children with them to school, use paid domestic workers who follow them around to help with the baby, leave children with neighbours, relatives, older siblings, or take them to day-care centres.

The observation of the study also found that, students nursing mothers employed their personal methods such as bringing to campus their husbands, family members and other close relatives to care for their children. This approach helped students nursing mothers to cope effectively with their academic work in pursuit of their programme. In the same vein, Dankyi et al. (2019) provided significant bearing strategies student nursing mothers adopt to cope with academic work. From the study findings, student nursing mothers walk through several challenges in pursuit of their academic work in the University. The study provided and identified these challenges and possible recommendations that University of Cape Coast Distance Education authorities should adopt to ameliorate the perils student mothers face in their academic work.

4.5 Research Question Four: What are the educational and institutional policies guiding student nursing mothers' educational progress in Ghana?

This research question discusses policies and institutional factors are measures that are put in place by an institution to ensure that students are happy and they can enjoy their stay in school or academic work. Policies and institutional factors that are to guide student nursing mothers' educational progress in public tertiary institutions in Ghana are lactating rooms, where they can use as rest room to take care of their babies while lectures are ongoing.

In Ghana, there are policies in place to support nursing mothers in their educational pursuits. These policies aim to ensure that women continue their education while balancing the demands of motherhood. The following were some of the educational and institutional policies put in place by AAMUSTED to ensure the progress of student nursing mothers. The following educational and institutional policies were used to guide student nursing mothers educational progress at AAMUSTED. Flexible scheduling, breastfeeding facilities and support services.

Flexible Scheduling

Educational institutions offer flexible class schedules, allowing nursing mothers to attend classes at times that are more convenient for them. Such provisions enhance the educational progress of student nursing mothers and ensures improvement in academic performances. The following were comments from student nursing mothers after interview. A student nursing mother explained:

Ensuring flexibility in our timetable, class attendance by the institution will strongly benefit student nursing mothers. Such provision will make student nursing mothers have time to attend lectures at different intervals. For example, a single course could have at least two slots within the week for student nursing mothers (An expression from a student nursing mothers).

Another student nursing mother reacted:

Flexible schedules to attend class and carry out academic work for nursing mothers will make us feel very convenient (An expression from a student nursing mother)

Educational and institutional policies used to guide student nursing mothers to help them cope with and improve academic performances has significant implications for student nursing mothers in the University. At AAMUSTED, one of the educational policies implemented by the University was flexibility in activities for student nursing mothers. It was revealed that student nursing mothers require flexible schedules such as flexible timetable which will make student nursing mothers to have the opportunity to attend lectures at different times this will benefit student nursing mothers to have adequate time and freedom to care for their child and attend lectures at different intervals.

It was observed from the study that student nursing mothers do not enjoy such provision adequately at the University. There were no proper provisions made for student nursing mothers in case they miss lectures because of the childcare responsibilities.

Breastfeeding Facilities

Institutions can provide breastfeeding facilities on campus, enabling nursing mothers to express milk or nurse their infants comfortably. This was not the case at AAMUSTED. Student nursing mothers had to sit under trees, in front of lecture halls and other places of convenient to breastfeed their children on campus. The following comments were raised by student nursing mothers.

A student nursing mothers noted:

There is no special place or facility assigned for breastfeeding on campus. We have to sit at vantage points to create access for breastfeeding. This has been very bad for us but still nothing has been done about it. (An expression from a student nursing mother).

Breastfeeding facilities on campus for student nursing mothers enables nursing mothers to express milk or nurse their infants comfortably. Such facilities are not available at AAMUSTED for student nursing mothers to sit or relax and breastfeed children. They have to look for places of convenience such as empty lecture halls, corridors and sometimes open spaces for students to breastfeed children. This does not benefit student nursing mothers to have their comfort and attend to their children while on campus.

It was observed that, student nursing mothers are always located at vantage places on campus attending to their children. With a critical observation process, it was identified that student nursing mothers are found at empty lecture halls, in front of offices, the University canteen and other places to breastfeed their children. This implies that the institution has not made any efforts to make adequate provisions for student nursing mothers to experience a little comfort while they are enrolling in different programmes of study.

Support Services

Educational institutions are expected to provide counselling and support services to help nursing mothers manage the challenges of balancing their academic and parenting responsibilities. Universities may consider special accommodations, such as allowing nursing mothers extra time for assignments, exams, or other academic tasks.

The following comments were raised;

A student nursing mother said:

There has been counselling and other support services from the University to benefit student nursing mother. For example, the counselling session opens up for all student nursing mother to speak up their problems for possible solutions (An expression from a student nursing mother).

4.5.1 Discussion of Findings: Research Question Four

The study found that educational and institutional policies that guide the educational progress of student nursing mothers at AAMUSTED was flexible schedules, breastfeeding facilities and support services. These policies though not fully implemented in the University to benefit student nursing mothers, has significant importance on the education of student nursing mothers to improve academic performances. Based on the interaction with the student nursing mothers, the university does not have any formal system or structures in place to support student nursing mothers. Although provisions have been made for breastfeeding under the maternity protection section of the Labour Act (Act, 651) demanding employers create the environment for breastfeeding employees, the university is yet to comply. The student mothers revealed that they sit under trees, use lobbies, any empty classroom, the Common Rooms and any other convenient place as lactating sites which exposes their babies to risk of infection Dukuzumuremyi, Acheampong, Abesig and Luo (2020).

The lack of assistance caused stress, divided attention, and competing obligations between academic work and childcare for student mothers. In support of this, Atta-Asiedu (2020) posits that for up to one year after childbirth, any employee

breastfeeding her child should be provided reasonable break times to express breast milk for her baby. The problem is that such laws mandating organisations to support breastfeeding mothers are limited to employees. For these reasons, Abekah-Nkrumah (2020) observed that universities in Ghana feel reluctant to make such provisions available to student nursing mothers.

The observation report also found out that student nursing mothers are always found sitting under trees, use lobbies, any empty classroom, the Common Rooms and any other convenient places to offer their childcare responsibilities. This implies that the University has no provisions made to help student nursing mothers experience comfort to breastfeed their children. Although provisions have been made for breastfeeding under the maternity protection section of the Labour Act (Act, 651) demanding employers create the environment for breastfeeding employees, the university is yet to comply. It is therefore essential that University will comply with such provisions to have student nursing mothers in order to help improve academic performance.

4.6 Chapter Summary

The study sought to examine the challenges of student nursing mothers at AAMUSTED and their strategies to cope with academic work. A qualitative research design was adopted. The research conducted an in-depth interview with student nursing mothers across the campus. Their responses were recorded and interpreted as defined in the research method. The nursing mothers revealed many challenges they face combining motherhood and academic work. They also adopted different strategies to help them cope with academic work, take care of their babies and other home responsibilities. There was no specific institutional support for student nursing

mothers and the mother indicated that many ways in which child-related roles affect their academic performance. Details of the research findings are presented in chapter five.



CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter summarizes the study, draws conclusions and makes appropriate recommendations based on the findings of the study.

5.1 Summary

The study's primary objective was to examine the challenges of students nursing mothers at AAMUSTED and how they strategize to cope with academic work. Four objectives were set for the study to identify the challenges the student nursing mothers' face, establish impact/ effects of child-related roles on the academic performance of the student nursing mothers, the strategies they adopt to cope with academic work and examine educational and institutional policies on student nursing mothers. A qualitative approach was used to design how data will be collected and analysed for inferences. Details of the research finding are presented per each research question.

5.2 Summary of Keys Findings

The main findings of the study are:

- 1. What are the Challenges Facing Student Nursing Mothers in the Pursuit of their academic work?
 - Health challenges such as complications during and after pregnancy.
 Student nursing mothers mostly have health complications when giving birth and it goes a long way to affect them in their academic.
 - ii. Difficulty in time management. Time management is also a challenge for student nursing mothers because they have to take care of their babies

before they can go for lectures. They tend to spend more time as compared to their colleagues without babies so they are always late for lectures.

- iii. Conflicting demands of family duties and academic requirements. Too many family duties pertaining to motherhood on the side of student nursing mothers is also a challenge that makes them have divided attention in addition to their academic requirements. Excessive needs of the baby are also a demand that becomes a challenge for student nursing mothers.
- iv. Intra-role conflict of tasks in the family that student nursing mothers have to execute in their homes are also a challenge for them. Incompatibility of the same roles in the family and school makes it difficult for student nursing mothers to pursuit their academic work.
- v. Inadequate financial strength to hire baby sitters to help them to take care of their babies while they go for lectures. Academic work is timeconsuming so they cannot do extra work in addition to their work they have been employed to do, to support them financially.
- 2. What is the influence of Child-Related Roles on The Academic Performance of Student Nursing Mothers?
 - i. Prioritizing the baby's needs over any other activities of the student nursing mothers conflict with their academic work hence child related roles influence their academic work.
 - ii. Health challenges of both the mother and the baby disrupt academic work of student nursing mothers. The babies are fragile at this early stage so extra care is given to them for them to grow healthier and strong. The stress that nursing mothers go through, causes ill health and they miss lectures and examinations.

- iii. Motivation and support from family and friends when caring for their babies are beneficial for stress management. This is an influence that child related roles have on student nursing mothers. Supporting nursing mothers in reducing child-mother dependence.
- iv. Time management of student nursing mothers is an influence of child related role on their academic work. Since the mother knows that she has to attend to her baby before coming for lectures, she does her things very fast so that she would not be late in very thing that she has to do.
- 3. What strategies do Student Nursing Mothers Adopt to cope with their Academic Work?
 - i. Most of the student nursing mothers rely on their husbands and some also rely on external family and friends to assist them to take care of their babies.
 - ii. Some student nursing mothers rely on babysitters to help take care of the babies in the absence of their husbands and family members. They sometimes take them to Day care centres or school so that they will get time to attend lectures.
 - iii. Self-motivation is one key factor that has being a strategy that most student nursing mothers use in their quest to pursuit further studies. They go through a lot of challenges but being motivated by themselves help them to put on with their academic progress.
 - iv. Time management is one strategy that student nursing mother use in other to pursuit their academic work. Participation in group discussion is what some student nursing mothers use since it is not easy for them to sit and

learn on their own so the use of this strategy manages their time. Student nursing mothers again space out their study overtime each day.

- v. Use of mnemonic learning to improve memory of important information.
 Use specific examples to understand abstract ideas relating to the course.
 Combining words and visuals for better understanding. This helps them to retain what they learn.
- vi. Establish a good relationship with lecturers. Student nursing mothers relate well with their lecturers so that they will be considered when they submit their work late.
- 4. What are the Educational and Institutional Policies Guiding Student Nursing Mothers Educational Progress in Ghana?
 - i. The university does not have a policy for assisting students nursing mothers. The university does not offer any academic assistance to student nursing mothers since there is no official record of student nursing mothers in the institution. All students are treated the same without favouring some of them.
 - The university has no dedicated places for student nursing mothers to sit and breast feed their babies. They sit in empty lecture halls to attend to their babies
 - iii. The breastfeeding policy under the maternity protection section of the Labour Act (Act, 651) is for employees not students so there is no policy instituted in the university to support student nursing mothers.
 - iv. There is no medical provision for student nursing mothers. The University does not have any medical support for student nursing mothers in the institution.

5.3 Conclusion

Student nursing mothers face numerous challenges in their pursuit of academic achievement. Combining childcare, post-maternity complications and family demands makes it very difficult for student nursing mothers to focus on their academic work. These challenges result in divided attention, conflicting responsibility, and stress. This implies that student nursing mothers face myriad of challenges in their pursuit of academic work. Such challenges affect the academic performances of students and the University and stakeholders should support battle such challenges.

To offset these challenges, the student nursing mothers have adopted various strategies to mitigate its impact on their academic performance. These strategies include reliance on their husbands, hiring a babysitter, participation in group discussion, developing a good relationship with lecturers and using other psychological tactics to enhance learning. It was essential to reduce the challenges that student nursing mothers face to improve their academic performances. In doing that student nursing mothers adopt diverse tactics to help ameliorate the challenges.

Further, there are no institutional policies for providing any form of extra support for nursing mothers. Hence the university does not have any dedicated place for women to breastfeed or any of special academic consideration. This has crippled student nursing mothers to breastfeed their children at empty lecture rooms and other vantage areas at the University campus.

Mothers' role to cater for their babies since they are fragile over dependent on their mothers also becomes very difficult for student nursing mothers. This brings about conflict of roles as mother and student.

5.4 Recommendations

- 1. The University authorities should provide adequate time and different schedules for the education of student nursing mothers and provide them with the necessary support during their education process to reduce the challenges student nursing mothers face.
- 2. Husbands should be encouraged to support their wives or partners to further their education and provide them with the necessary support they need during the early stages of childcare to reduce stress, conflicting responsibilities and divided attention on student nursing mothers.
- 3. Student nursing mothers should adopt achievable strategies such as time management skills, self-motivation techniques to help cope with academic work at AAMUSTED.
- 4. The universities should consider instituting policies that can offer student nursing mothers' academic leverage and infrastructural support. Infrastructural support example lactating rooms, special accommodations and flexible schedules for student nursing mothers must be provided by the universities. This can help student nursing mothers to use it as their resting places to breastfeed their babies.

5.5 Suggestion for Further Research

Issues regarding birth and maternal challenges are significant in this gender-sensitive environment. Therefore, further research into these areas must be encouraged to help alleviate some of the challenges in these areas. For example, future research could consider a quantitative approach to establish causality between challenges of student nursing mothers and academic performance. Other research could focus on using assistive technology to help student nursing mothers cope with academic challenges.

REFERENCES

- Abab, F. & Peprah, S. (2019). Expectations and experiences of nursing students in supporting new mothers to breastfeed: A descriptive qualitative study. *J Clin Nurs.*, 28(11-12), 2340-2350.
- Abbasi, A. A., & Bordia, P. (2019). Thinking, young and old: Cognitive job demands and strain across the lifespan. *Work, Aging and Retirement, 5*(1), 91-113.
- Abekah-Nkrumah, G., Antwi, M. Y., Nkrumah, J., & Gbagbo, F. Y. (2020). Examining working mothers' experience of exclusive breastfeeding in Ghana. *International Breastfeeding Journal, 15*(1), 1-10.
- Abodey, E., Vanderpuye, I., Mensah, I., & Badu, E. (2020). In search of universal health coverage-highlighting the accessibility of health care to students with disabilities in Ghana: A qualitative study. *BMC Health Services Research, 20,* 1-12.
- Aboh, I. K., Vowotor, M. K., & Druye, A. A. (2020). Quantitative epithermal neutron activation analysis of seven micro elements in breast milk of lactating mothers from the Central region of Ghana. *BMC Pregnancy and Childbirth*, *17*, 37-57.
- Aboobaker, N., & Edward, M. (2020). Collective influence of work-family conflict and work-family enrichment on turnover intention: exploring the moderating effects of individual differences. *Global Business Review*, 21(5), 1218-1231.
- Acheampong, A. K., Aziato, L., Marfo, M., & Amevor, P. (2020). Breastfeeding and caring for children: a qualitative exploration of the experiences of mothers with physical impairments in Ghana. BMC Pregnancy and Childbirth, 20, 1-10.
- Ackerman-Barger, K., Boatright, & Latimore, D. (2020). Seeking inclusion excellence: Understanding racial microaggressions as experienced by underrepresented medical and nursing students. *Academic Medicine*, 95(5), 758.
- Adamba, C. (2020). Understanding high school students' university choice: Implications for marketing and management of higher education in Ghana. In *Higher education marketing in Africa* (pp. 47-78). Palgrave Macmillan, Cham.
- Adofo, S. (2013). Challenges and coping strategies of student nursing mothers in tertiary institutions in the greater Accra region of Ghana (Unpublished MPH thesis). University of Ghana, Ghana. Retrieved from http://ugspace.ug.edu.gh/
- Adu-Yeboah, C. (2015). Mature women students' experiences of social and academic support in higher education: A systematic review. *Journal of Education and Training*, 2(2), 145–162. doi:10.5296/jet.v2i2.7511

- Aelterman, N., Vansteenkiste, M., & Haerens, L. (2019). Correlates of students' internalization and defiance of classroom rules: A self-determination theory perspective. *British Journal of Educational Psychology*, *89*(1), 22-40.
- Ahinkorah, B. O., Hagan Jr, & Budu, E. (2020). Female adolescents' reproductive health decision-making capacity and contraceptive use in sub-Saharan Africa: What does the future hold? *PloS One*, *15*(7), e0235601.
- Ain, N., Khan, S., Marwat, & Raza, A. (2019). Frequency, distribution and determinants of hypertension in adult stroke population of DI Khan Division, Pakistan. *Gomal Journal of Medical Sciences*, 17(3), 81-89.
- Akkoç, İ., Okun, O., & Türe, A. (2020). The effect of role-related stressors on nurses' burnout syndrome: The mediating role of work-related stress. *Perspectives in Psychiatric Care*.
- Alabi, T. A., Adejoh, S. O., Atinge, S., & Umahi, E. (2020). Social and bio-medical predictors of exclusive breastfeeding among nursing mothers in Lagos and Taraba States, Nigeria. *Journal of Pediatric Nursing*, 52, e96-e102.
- Alazrai, R., Homoud, R., Alwanni, H., & Daoud, M. I. (2018). EEG-based emotion recognition using quadratic time-frequency distribution. *Sensors*, 18(8), 2739.
- Albrecht, S. A., Wang, J., & Spatz, D. (2017). A call to action to address barriers to breastfeeding and lactation faced by student-mothers. *Nursing for Women's Health*, 21(6), 431-437.
- Alharahsheh, H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43.
- Ali, M. A., Hussin, N., & Abed, I. A. (2020). Dynamic capabilities and intellectual capital: Developing new quantitative research instrument. *Technol. Reports Kansai University*, 62(09).
- Alpi, K. M., & Evans, J. J. (2019). Distinguishing case study as a research method from case reports as a publication type. *Journal of the Medical Library Association: JMLA*, 107(1), 1.
- Ambunya, L. O. (2020). Role conflict, role ambiguity and burnout among head teachers of public primary schools in Kakamega County, Kenya (Doctoral dissertation, MMUST).
- Amoabea, J. E., Abigail, O. Y., Adei, H. V., & Yaa, A. N. N. (2020). Marriage, family and schoolwork: A case of married female undergraduate students at the University of Ghana. *Gender & Behaviour*, 18(2), 15476-15486.

- Amos, P. M., Amoako, B. M., Antwi, T., & Amoah (2019), H. Motherhood and higher education in Ghana: Experiences of student-nursing mothers. *International Journal of Mental Health and Addiction*, 8-8.
- Amos, P. M., Amoako, B. M., Antwi, T., & Amoah, H. (2017) Motherhood and higher education in Ghana: Experiences of student-nursing mothers. *International Journal of Qualitative Studies on Health and Well-Being*, 12(1), 1635131.
- Amos, P. M., Amoako, B. M., Antwi, T., & Amoah, H. (2020). Motherhood and higher education in Ghana: Experiences of student-nursing mothers.
- Andina-Díaz, E., & Siles-González, J. (2020). Cultural care of pregnancy and home birth: An application of the sunrise model. *Research and Theory for Nursing Practice*, 34(4), 358-370.
- Andrade, G. (2020). Cynically sceptical: A review of cynical theories: How activist scholarship made everything about race, gender and identity by Helen Pluckrose and James Lindsay. *Skeptic (Altadena, CA), 25*(4), 57-60.
- Anibijuwon, I., & Esimai, P. (2020). Challenges and coping strategies of student nursing mothers in University of Ibadan, Oyo State, Nigeria. International Quarterly of Community Health Education, 41(1), 55-61.
- Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, 1(2), 30-33.
- Aryeetey, R., Harding, K., Hromi-Fiedler, A., & Pérez-Escamilla, R. (2020). Analysis of stakeholder networks for breastfeeding policies and programs in Ghana. *International Breastfeeding Journal*, 15(1), 1-11.
- Asbari, I. B., Pramono, & MiyvFayzhall, M. (2020). The effect of work-family conflict on job satisfaction and performance: A study of Indonesian female employees. *International Journal of Advanced Science and Technology*, 29(3), 6724-6748.
- Atakro, C. A., Armah, Ahenkora, K., Addo & Gross, J. (2019). Patient participation in nursing care: Views from Ghanaian nurses, nursing students, and patients. SAGE Open Nursing, 5, 2377960819880761.
- Atta-Asiedu, K. A. (2020). The African family in crisis: A brief analysis of the transitions and changing trends in the modern African Family. Available at SSRN 3687354.
- Aughterson, H., McKinlay, A. R., Fancourt, D., & Burton, A. (2021). Psychosocial impact on frontline health and social care professionals in the UK during the COVID-19 pandemic: a qualitative interview study. *BMJ Open*, 11(2), e047353.

- Ayton, J. E., Tesch, L., & Hansen, E. (2019). Women's experiences of ceasing to breastfeed: Australian qualitative study. *BMJ open*, 9(5), e026234.
- Babbie, E. & Mouton, J. (2016). *The Practice of Social Research*. South Africa Oxford University Press, Cape Town.
- Bain, E., de Cock Buning, T., & Becquet, R. (2020). Attitudes towards abortion and decision-making capacity of pregnant adolescents: perspectives of medicine, midwifery and law students in Accra, Ghana. *The European Journal of Contraception & Reproductive Health Care, 25*(2), 151-158.
- Bergen, N., & Labonté, R. (2020). Everything is perfect, and we have no problems": detecting and limiting social desirability bias in qualitative research. *Qualitative Health Research*, 30(5), 783-792.
- Bhattacharjee, N. V., Schaeffer, Albright, J., ... &Hay, S. I. (2019). Mapping exclusive breastfeeding in Africa between 2000 and 2017. *Nature medicine*, 25(8), 1205-1212.
- Bhuiyan, A. I., Sakib, & Mamun, M. A. (2020). COVID-19-related suicides in Bangladesh due to lockdown and economic factors: case study evidence from media reports. *International Journal of Mental Health and Addiction*, 1-6.
- Bojczyk, K. E., Lehan, T. J., McWey, L. M., Melson, G. F., & Kaufman, D. R. (2011). Mothers' and their adult daughters' perceptions of their relationship. *Journal of Family Issues*, 32(4), 452–481. doi:10.1177/0192513X10384073
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative *Research in Psychology, 3*, 77–101. doi:10.1191/1478088706qp063oa
- Braun, V., & Clarke, V. (2013). Successful Qualitative Research: A Practical Guide for Beginners. London: SAGE Publication.
- Brooks, R. M. (2013). Negotiating time and space for study: Student-parents and familial relationships. *Sociology*, 47(3), 443–459.
- Boix-Amorós, A., Collado & Munblit, D. (2019). Reviewing the evidence on breast milk composition and immunological outcomes. *Nutrition Reviews*, 77(8), 541-556.
- Bonache, J. (2021). The challenge of using a 'non-positivist 'paradigm and getting through the peer-review process. *Human Resource Management Journal*, 31(1), 37-48.

- Broesch, T., Crittenden... & Mulder, M. B. (2020). Navigating cross-cultural research: methodological and ethical considerations. *Proceedings of the Royal Society*, 287(1935), 20201245.
- Budu, H. I., Abalo & Peprah, P. (2019). A survey of the genesis of stress and its effect on the academic performance of midwifery students in a college in Ghana. *Midwifery*, 73, 69-77.
- Buetow, S. (2019). Apophenia, unconscious bias and reflexivity in nursing qualitative research. *International Journal of Nursing Studies*, 89, 8-13.
- Bull, F. C., Al-Ansari, S. S., & Willumsen, K. (2020). World Health Organization 2020 guidelines on physical activity and sedentary behaviour. *British Journal* of Sports Medicine, 54(24), 1451-1462.
- Carrim, N. M., Nel, J. A., & Schoeman, R. (2020). The relationship between occupational stress and work locus of control for managers. In *Occupational stress in South African Work Culture* (pp. 59-63). Springer, Singapore.
- Cervera-Gasch, A., Andreu-Pejó, L., González-Chordá, V. M., Lopez-Peña, N., Valero-Chilleron, M. J., Roman, P.... & Mena-Tudela, D. (2021).
 Breastfeeding knowledge in university nursing students. A multicentre study in Spain. Nurse Education Today, 103, 104945.
- Chatzisarantis, N. L., & Hagger, M. S. (2009). Integrating the theory of planned behaviour and self-determination theory in health behaviour: A meta-analysis. *British Journal of Health Psychology*, 14(2), 275-302.
- Cheyney, M., Henning, M., Horan, H., Bovbjerg, M. L., & Ferguson, M. (2019). From policy to practice: Women's experiences of breastfeeding-friendly worksites, part 1. *Clinical Lactation*, 10(3), 104-112.
- Cho, S., Kim, S., Chin, S. W., & Ahmad, U. (2020). Daily effects of continuous ICT demand on work–family conflict: Negative spillover and role conflict. *Stress* and Health, 36(4), 533-545.
- Chrzan-Dętkoś, M., Walczak-Kozłowska, T., Pietkiewicz, A., & Żołnowska, J. (2021). Improvement of the breastfeeding self-efficacy and postpartum mental health after lactation consultations–Observational study. *Midwifery*, 94, 102905.
- Chuisano, S. A., & Anderson, O. S. (2020). Assessing application-based breastfeeding education for physicians and nurses: a scoping review. *Journal of Human Lactation*, *36*(4), 699-709.
- Ciesielska, M., & Jemielniak, D. (2018). Qualitative methodologies in organization studies. In *Qualitative Methodologies in Organization Studies* (Vol. 2, Issue December). https://doi.org/10.1007/978-3-319-65442-3

- Closson, K., Hatcher, & Gibbs, A. (2020). Gender role conflict and sexual health and relationship practices amongst young men living in urban informal settlements in South Africa. *Culture, Health & Sexuality, 22*(1), 31-47.
- Cohen, J., & Venter, W. D. F. (2020). The integration of occupational-and householdbased chronic stress among South African women employed as public hospital nurses. *PloS one, 15*(5), e0231693.
- Connelly, L. M. (2014). Ethical considerations in research studies. *Medsurg Nursing*, 23(1), 54-56.
- Covernton, G. A., Pearce, C. M., Gurney-Smith., & Dudas, S. E. (2019). Size and shape matter: A preliminary analysis of microplastic sampling technique in seawater studies with implications for ecological risk assessment. *Science of the Total Environment, 667,* 124-132.
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five traditions*. Sage publications, Inc.
- Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, USA: Sage publications.
- Creswell, J. W., & Poth, C. N. (2014). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Los Angeles, USA: Sage publications.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, USA: Sage publications.
- Crick, J. M. (2020). Qualitative research in marketing: what can academics do better? *Journal of Strategic Marketing*, 1-40.
- Dankyi, J. K., Dankyi, L. A., & Minadzi, V. M. (2019). Struggles and Coping Strategies of Student Mothers at the University of Cape Coast Distance Education, Ghana. *Creative Education*, 10(11), 2484-2494.
- Dankyi, L. A., Minadzi, V. M., & Senyametor, F. (2019). Causes and management of stress among student teachers: a case of university of cape coast, distance education centres in the central region of Ghana. West East Journal of Social Sciences, 8(2), 154-163.

- Davidson, E., Edwards., & Weller, S. (2019). Big data, qualitative style: A breadthand-depth method for working with large amounts of secondary qualitative data. *Quality & Quantity*, 53(1), 363-376.
- Davis, P. E., Bendickson, J. S., Muldoon, J., & McDowell, W. C. (2021). Agency theory utility and social entrepreneurship: issues of identity and role conflict. *Review of Managerial Science*, 1-20.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115.
- Dierckx, M., Mortelmans, D., & Motmans, J. (2019). Role ambiguity and role conflict among partners of trans people. *Journal of Family Issues*, 40(1), 85-110.
- Doherty, T., Horwood & Engebretsen, I. M. (2020). Breastfeeding advice for reality: Women's perspectives on primary care support in South Africa. *Maternal & Child Nutrition*, 16(1), e12877.
- Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J., & Luo, J. (2020). Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. *International Breastfeeding Journal, 15*(1), 1-17.
- Duodu, P. A., Duah, H. O., Dzomeku, Darkwah, E., & Agbadi, P. (2020). Consistency of the determinants of early initiation of breastfeeding in Ghana: insights from four Demographic and Health Survey datasets. *International Health*, 6(2), 444-460.
- Ekeleme, N. C., Iwuoha & Ejikem, P. I. (2020) Prevalence and factors affecting exclusive breastfeeding practice among nursing mothers accessing Routine Immunization in a Tertiary Hospital.
- Emmott, E. H., Page, A. E., & Myers, S. (2020). Typologies of postnatal support and breastfeeding at two months in the UK. *Social Science & Medicine*, 246, 112791.
- Evi, N., Rachmawati, I., & Budiarti, T. (2020). Levin's conservation model and unpleasant symptoms theory in nursing care of pregnant women with Preeklamsia: A case study. *Journal of Health Sciences*, 13(01), 12-25.
- Eynde, A., Claessens, E., & Mortelmans, D. (2020). The Consequences of Work– Family Enrichment in Families on the Behaviour of Children. *Journal of Family Research*, 32(1), 123–144.
- Fanzo, J. (2019). The SDG of zero hunger 75 years on: Turning full circle on agriculture and nutrition. *Global Food Security*, 21, 52-59.

- Feng, W., Zhang, & Lau, S. S. Y. (2019). A review of net zero energy buildings in hot and humid climates: Experience learned from 34 case study buildings. *Renewable and Sustainable Energy Reviews*, 114, 109303.
- Ferguson, M. (2019). The relationships among family domain variables and workfamily conflict for men and women. *Journal of Vocational Behavior*, 35(3), 288–308.
- FitzPatrick, B. (2019). Validity in qualitative health education research. *Currents in Pharmacy Teaching and Learning*, 11(2), 211-217.
- Fraenkel, J. R., & Wallen, N. E. (2009). How to design and evaluate research in education (5th Ed). New York: McGraw-Hill Publishing Co.
- Franco, M., & Pinho, C. (2019). A case study about cooperation between University Research Centres: Knowledge transfer perspective. *Journal of Innovation & Knowledge*, 4(1), 62-69.
- Freire, W. B., Roman, W. F., Belmont, P., Wilkinson-Salamea, E., Daiz, A., & Bucheli, E. (2020). A cross-sectional study of breastfeeding practices and complementary feeding in Ecuador: implications for localized policy applications and promotion of breastfeeding. *Nutr Health.*, 9, 255-63.
- Freire, W. B., Waters, W. F., Román, D., Belmont, P., Wilkinson-Salamea, E., Diaz, A., ... & Bucheli, E. (2020). Breastfeeding practices and complementary feeding in Ecuador: implications for localized policy applications and promotion of breastfeeding: a pooled analysis. *International Breastfeeding Journal*, 15(1), 1-9.
- Freitas, R. F., Macedo & Teixeira, R. A. (2019). Composition in fatty acids of mature milk of nursing mothers. *Revista Brasileira de Saúde Materno Infantil*, 19(4), 817-825.
- Gabriel, A. S., Volpone, & Moran, C. M. (2020). When work and family blend together: Examining the daily experiences of breastfeeding mothers at work. *Academy of Management Journal*, 63(5), 1337-1369.
- Gall, M. D., Gall, J. P. & Borg, W. R. (2007). Educational research. An introduction (8th ed). Los Angeles: SAGA
- Galletta, M., Portoghese & Campagna, M. (2019). The role of collective affective commitment in the relationship between work-family conflict and emotional exhaustion among nurses: a multilevel modeling approach. *BMC Nursing*, *18*(1), 1-9.

- Gaumer Erickson, A. S., Noonan, P. M., Ault, M., Monroe, K., & Brussow, J. (2020). Observation checklist for high-quality professional development (Version 3)(HQPD Checklist–3) May 2020.
- Gayawan, E., & Adjei, C. N. (2020). Bayesian spatio-temporal analysis of breastfeeding practices in Ghana. *GeoJournal*, 1-13.
- Gbogbo, S. (2020). Early motherhood: voices from female adolescents in the Hohoe Municipality, Ghana: A qualitative study utilizing Schlossberg's Transition Theory. *International Journal of Qualitative Studies on Health and Wellbeing*, 15(1), 1716620.
- Geisler, M., Berthelsen, H., & Muhonen, T. (2019). Retaining social workers: The role of quality of work and psychosocial safety climate for work engagement, job satisfaction, and organizational commitment. *Human Service Organizations: Management, Leadership & Governance, 43*(1), 1-15.
- Gilal, F. G., Zhang & Gilal, N. G. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29-44.
- Gillison, F. B., Rouse, & Ryan, R. M. (2019). A meta-analysis of techniques to promote motivation for health behaviour change from a self-determination theory perspective. *Health Psychology Review*, 13(1), 110-130.
- Gökçen, A. (2019). Explaining stress and depression level of nurses: The effects of role conflict and role ambiguity. *International Journal of Management*, 8(2), 61-66.
- Gonzales Jr, A. M. (2020). Breastfeeding self-efficacy of early postpartum mothers in an urban municipality in the Philippines. *Asian/Pacific Island Nursing Journal*, 4(4), 135.
- Grant-Smith, D., & de Zwaan, L. (2019). Don't spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. *Nurse Education in Practice*, *35*, 1-6.
- Guba, E.G., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Guertin, C., Barbeau, K., & Pelletier, L. (2020). Examining fat talk and selfcompassion as distinct motivational processes in women's eating regulation: A self-determination theory perspective. *Journal of Health Psychology*, 25(12), 1965-1977.

- Guzmán-Mercado, E., Vásquez-Garibay, E. M., Sánchez Ramírez, C. A., Muñoz-Esparza, N. C., Larrosa-Haro, A., & Meza Arreola, P. L. (2021). Full breastfeeding modifies anthropometric and body composition indicators in nursing mothers. *Breastfeeding Medicine*, 16(3), 264-271.
- Hass, R. W., Collins, L., & Sicks, S. (2020). Factor structure and measurement invariance of the Jefferson Teamwork Observation Guide®(JTOG®) individual version. *Journal of Interprofessional Education & Practice, 18*, 100304.
- Haven, L., T., & Van Grootel, D. L. (2019). Preregistering qualitative research. *Accountability in Research*, 26(3), 229-244.
- Henaku, E. A. (2020). COVID-19 online learning experience of college students: The case of Ghana. *International Journal of Multidisciplinary Sciences and Advanced Technology*, 1(2), 54-62.
- Hirschi, A., Shockley, K. M., & Zacher, H. (2019). Achieving work-family balance: An action regulation model. Academy of Management Review, 44(1), 150-171.
- Hosseinabadi, O. & Mirzayee-Sharifi, S. (2020). The role of students with practical nursing diplomas in the process of undergraduate nursing education: A qualitative study. *Iranian Journal of Nursing and Midwifery Research*, 25(1), 76.
- Huang, Y. C., Backman & Moore, D. (2019). An investigation of motivation and experience in virtual learning environments: a self-determination theory. *Education and Information Technologies*, 24(1), 591-611.
- Hubert, M., Jeannin, & Vidy, A. (2020). Evidence that Zika virus is transmitted by breastfeeding to newborn A129 (Ifnar1 knock-out) mice and is able to infect and cross a tight monolayer of human intestinal epithelial cells. *Frontiers in Microbiology*, 11.
- Hundera, M. B. (2019). Role conflict, coping strategies and female entrepreneurial success in sub-Saharan Africa. CentER, Tilburg University.
- Hunter, E. M., Clark, M. A., & Carlson, D. S. (2019). Violating work-family boundaries: Reactions to interruptions at work and home. *Journal of Management*, 45(3), 1284-1308.
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. American Journal of Pharmaceutical Education, 84(1), 120-125.

- Junker, N. M., Baumeister, & Greenhaus, J. H. (2020). When forgetting what happened at work matters: The role of affective rumination, problem-solving pondering, and self-control in work–family conflict and enrichment. *Journal of Applied Psychology*, *6*, 45-55.
- Kakrani, V. A., Rathod, H. K., Mammulwar, M. S., & Bhawalkar, J. S. (2015). Awareness about "Ten Steps for Successful Breastfeeding" among medical and nursing students. *International Journal of Preventive Medicine*, 6.
- Kankam, P. K. (2019). The use of paradigms in information research. Library & *Information Science Research*, 41(2), 85-92.
- Kansas, R. S. (2020). Finding home. African Women and Their Networks of Support: Intervening Connections, 193.
- Kapp, S., & Santamaria, N. (2022). The "self-treatment of wounds for venous leg ulcers checklist" (STOW-V Checklist V1. 0): Part 1—Development, pilot and refinement of the checklist. *International Wound Journal*, 19(3), 705-713.
- Kardos, M., Gabor, M. R., & Cristache, N. (2019). Green marketing's roles in sustainability and ecopreneurship. Case study: green packaging's impact on Romanian young consumers' environmental responsibility. Sustainability, 11(3), 873.
- Karlsson, S., Brantsæter, & Sengpiel, V. (2019). Maternal probiotic milk intake during pregnancy and breastfeeding complications in the Norwegian Mother and Child Cohort Study. *European Journal of Nutrition*, 1-10.
- Katz-Buonincontro, J., & Anderson, R. C. (2020). A review of articles using observation methods to study creativity in education (1980–2018). *The Journal of Creative Behavior*, 54(3), 508-524.
- Keddie, A. (2020). Engaging boys in gender activism: issues of discomfort and emotion. *Gender and Education*, 1-15.
- Khan, J. (2020). *Janaya Future Khan is a storyteller, activist and futurist*. They serve as International Ambassador for Black Lives Matter.
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846-854.
- Kisanga, S. E., & Matiba, F. M. (2021). Coping strategies student-mothers employ in pursuing higher education studies in Tanzania: A qualitative study. *Current Psychology*, 1-12.
- Kline, C. (2020). Finding Peace, Claiming Place: Black South African Women Navigating the Church of Jesus Christ of Latter-day Saints. In *The Palgrave handbook of global Mormonism* (pp. 607-634). Palgrave Macmillan, Cham.

- Kogan, I. (2019). Inductive approach to Cartan's moving frame method with applications to classical invariant theory. arXiv preprint arXiv:1909.02055.
- Koya, S., Babu, G. R., Iyer, V., Yamuna, A., Lobo, E., Kinra, S., & Murthy, G. V. S. (2020). Determinants of breastfeeding practices and its association with infant anthropometry: Results from a prospective cohort study in South India. *Frontiers in Public Health*, 8, 600.
- Krehl, A., & Weck, S. (2020). Doing comparative case study research in urban and regional studies: what can be learnt from practice? *European Planning Studies*, 28(9), 1858-1876.
- Krumbiegel, K., Maertens, M., & Wollni, M. (2020). Can employment empower women? Female workers in the pineapple sector in Ghana. *Journal of Rural Studies*, 80, 76-90.
- Kurilovas, E., & Kubilinskiene, S. (2020). Lithuanian case study on evaluating suitability, acceptance and use of IT tools by students–An example of applying Technology Enhanced Learning Research methods in Higher Education. *Computers in Human Behavior*, 107, 106274.
- Kusi, H. (2012). *Doing qualitative research*: A guide for researcher. Accra Newtown: Emmpong Press.
- Laitila, A., Vall, B., Penttonen, & Seikkula, J. (2019). The added value of studying embodied responses in couple therapy research: A case study. *Family Process*, 58(3), 685-697.
- Langford, C., Gowan, M., & Haj, M. (2021). Breastfeeding experiences of baccalaureate nursing students: A qualitative study. *Journal of Human Lactation*, 37(4), 689-696.
- Larcombe, P. J., & Fennessey, E. J. (2020). a formalised inductive approach to establish the invariance of anti-diagonal ratios with exponentiation for a tridiagonal matrix of fixed dimension. *J. Math*, *9*, 670-672.
- Lassi, Z. S., Rind, F., Irfan, O., Hadi, R., Das, J. K., & Bhutta, Z. A. (2020). Impact of infant and young child feeding (IYCF) nutrition interventions on breastfeeding practices, growth and mortality in low-and middle-income countries: systematic review. *Nutrients*, 12(3), 722.
- Liao, E. Y., Lau, & Kong, K. H. (2019). A resource-based perspective on workfamily conflict: Meta-analytical findings. *Career Development International*.

- Linda, N. S., Phetlhu, D. R., & Klopper, H. C. (2020). Nurse educators' understanding of spirituality and spiritual care in nursing: A South African perspective (Part 1). *International Journal of Africa Nursing Sciences, 12*, 100187.
- Lisbona, A. M., Bernabé, M., & Palací, F. J. (2020). Lactation and work: managers' support for breastfeeding enhance vertical trust and organizational identification. *Frontiers in Psychology*, 11, 18.
- Lopez-Peña, N., Cervera-Gasch, A., Valero-Chilleron, M. J., González-Chordá, V. M., Suarez-Alcazar, M. P., & Mena-Tudela, D. (2020). Nursing student's knowledge about breastfeeding: Design and validation of the AprendeLact questionnaire. *Nurse Education Today*, 93, 104539.
- Maloni, M. J., Gligor & Boyd, E. M. (2019). Supervisor and mentoring effects on work-family conflict in logistics. *International Journal of Physical Distribution & Logistics Management*.
- Mantey, E. E. (2014). *Beginning qualitative research: A philosophic and practical guide* (Vol. 6). London, UK: Falmer Press.
- Matare, C. R., Craig & Dickin, K. L. (2019). Barriers and opportunities for improved exclusive breast-feeding practices in Tanzania: household trials with mothers and fathers. *Food and Nutrition Bulletin*, *40*(3), 308-325.
- McLeod, K., Waller, J., & Wyatt, T. R. (2021). Using videos to teach medical learners how to address common breastfeeding problems. *MedEdPORTAL*, 17, 11136.
- Mesa, V., & Mali, A. (2020). Studying student actions with dynamic textbooks in university settings: The log as research instrument. For the Learning of Mathematics, 40(2), 8-14.
- Merriam, S. B. & Tisdell, E. J. (2016). *Qualitative research : a guide to design and implementation*. Fourth edition. San Francisco, CA: Jossey-Bass, a Wiley Brand.
- Miles, M. B., Huberman, A. & Saldana, M. (2014). *Qualitative data analysis: A methods sourcebook.* London, UK: Sage publications.
- Moghadam, B., Z., Khiaban, O., M., Esmaeili, M., & Salsali, M. (2017). Motherhood challenges and well-being along with the studentship role among Iranian women: A qualitative study. *International Journal of Qualitative Studies on Health and Well-Being*, 12(1), 1335168.
- Mozersky, J., Walsh, & DuBois, J. M. (2020). Are we ready to share qualitative research data? Knowledge and preparedness among qualitative researchers, IRB Members, and data repository curators. *IASSIST Quarterly*, 43(4).

- Muhunzi, S., Ngocho, & Mahande, M. J. (2020). Prevalence, predictors and reasons for home delivery amongst women of childbearing age in Dodoma Municipality in central Tanzania. *African Health Sciences*, 20(4), 1933-42.
- Mya, K. S., & Witvorapong, N. (2020). Determinants of breastfeeding practices in Myanmar: Results from the latest nationally representative survey. *PloS One*, *15*(9), e0239515.
- Myers, M. D. (2018). *Qualitative research in business & management*. Los Angeles: SAGE Publication.
- Nambisan, S., & Baron, R. A. (2019). On the costs of digital entrepreneurship: Role conflict, stress, and venture performance in digital platform-based ecosystems. *Journal of Business Research*, 6, 55-60.
- Neuman, W.L. (2003) Social Research Methods: Qualitative and Quantitative Approaches. Allyn and Bacon, New York.
- Neuhaus, R., McCormick, M., & O'Connor, E. (2020). The mediating role of childteacher dependency in the association between early mother-child attachment and behaviour problems in middle childhood. *Attachment & Human Development*, 1-17.
- Noushini, S., Park, S. J., Jamie & Taylor, P. (2020). Sampling technique biases in the analysis of fruit fly volatiles: a case study of Queensland fruit fly. *Scientific Reports, 10*(1), 1-14.
- Nsiah-Asamoah, C., Doku, D. T., & Agblorti, S. (2020). Mothers' and Grandmothers' misconceptions and socio-cultural factors as barriers to exclusive breastfeeding: A qualitative study involving Health Workers in two rural districts of Ghana. *PloS One*, 15(9), e0239278.
- Nukpezah, R. N., Nuvor, S. V., & Ninnoni, J. (2018). Knowledge and practice of exclusive breastfeeding among mothers in the tamale metropolis of Ghana. Reproductive health, 15(1), 1-9.
- Nyarko, S. H. (2020). Spatial variations and socioeconomic determinants of modern contraceptive use in Ghana: A Bayesian multilevel analysis. *Plos One, 15(3),* e0230139.
- Nyunyulu, J. (2012). First steps in research: Qualitative research methods for the social sciences. Pretoria, South Africa: Van Schaik Publishers.
- Ogunji, C. V., Nwajiuba, C. A., & Uwakwe, R. C. (2020). Student-mothers in higher education: An exploratory study of challenges and support system for inclusion. *Journal of the Nigerian Academy of Education*, 15(2).

- Ojo, I. O., Aina, O. A., Ani, O. B., & Onianwa, P. O. (2020). The challenges and coping strategies of exclusive breastfeeding practices among student mothers at a Nigerian university. *African Journal of Midwifery and Women's Health*, 14(2), 1-9.
- O'Lynn, C. E., O'Connor & Kellett, P. (2020). Men's decision-making to become nurses: gendered influences and fit with gender role conflict theory. *Advances in Nursing Science*, 43(3), 251-265.
- Pandey, J., & Singh, M. (2019). Positive religious coping as a mechanism for enhancing job satisfaction and reducing work-family conflict: a moderated mediation analysis. *Journal of Management, Spirituality & Religion*, 16(3), 314-338.
- Parker, C., Scott, S., & Geddes, A. (2019). *Snowball sampling*. SAGE research methods foundations.
- Patyal, N., Sheoran, P., Sarin, J., Singh, J., Jesika, K., Kumar, J., Banyal, K., Chauhan, K., Tanwar, K., Siani, K., & Kaur, K., et al. (2020). A quality improvement initiative: Improving first-hour breastfeeding initiation rate among healthy newborns. *Pediatr Qual Saf.*, 6(4): e433.
- Patyal, N., Sheoran, P., Sarin, J., Singh, J., Jesika, K., Kumar, J., ... & Kaur, K. (2021). A quality improvement initiative: Improving first-hour breastfeeding initiation rate among healthy newborns. *Pediatric Quality & Safety*, 6(4), e433.
- Pemo, K., Phillips, D., & Hutchinson, A. M. (2020). Midwives' perceptions of barriers to exclusive breastfeeding in Bhutan: A qualitative study. *Women and Birth*, 33(4), e377-e384.
- Peñacoba, C., & Catala, P. (2019). Associations between breastfeeding and Mother– Infant relationships: A systematic review. *Breastfeeding Medicine*, 14(9), 616-629.
- Peterson, J. S. (2019). Presenting a qualitative study: A reviewer's perspective. *Gifted Child Quarterly*, 63(3), 147-158.
- Pluckrose, H., & Lindsay, J. A. (2020). *Cynical theories: How activist scholarship made everything about race, gender, and identity—and why this harms everybody.* Pitchstone Publishing (US&CA).
- Polit, D. F. & Beck, C. T. (2008). Nursing research: Generating and assessing evidence for nursing practice (8th ed.). Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, 796 s.

- Polit, D. F., & Beck, C. T. (2009). International gender bias in nursing research, 2005–2006: A quantitative content analysis. *International Journal of Nursing Studies*, 46(8), 1102–1110.
- Polit, D.F., & Beck, C.T. (2014). Essentials of nursing research: Appraising evidence for nursing practice (8th ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins.
- Polit, D.F. & Beck, C.T. (2008) Nursing Research: Generating and Assessing Evidence for Nursing Practice. 8th Edition, Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia, 796 s.
- Polit, D. F., & Beck, C. T. (2009). International gender bias in nursing research, 2005–2006: A quantitative content analysis. *International Journal of Nursing Studies*, 46(8), 1102–1110. https://doi.org/10.1016/j.ijnurstu.2009.02.002
- Polit, D.F., & Beck, C.T. (2014). Essentials of nursing research: Appraising evidence for nursing practice (8th ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins.
- Qu, S. Q. & Dumay, J. (2011). The qualitative research interview. *Qualitative research in Accounting & Management*, 8(3), 238-264.
- Radic, A. (2019). Towards an understanding of a child's cruise experience. Current Issues in Tourism, 22(2), 237-252.
- Rafsanjani, M. A., Ghofur, M. A., Fitrayati, D., & Dewi, R. M. (2020). Does perceived organizational support mitigate the negative effect of teacherresearcher role conflict among lecturers? (Evidence from Indonesia). *Pedagogika*, 138(2), 25-36.
- Rahim, N. B. (2019). Work-family conflict, coping strategies, and flourishing: Testing for mediation. *Asian Academy of Management Journal*, 24(2).
- Ranch, M. M., Jämtén & Ekström-Bergström, A. C. (2019). First-time mothers have a desire to be offered professional breastfeeding support by pediatric nurses: an evaluation of the mother-perceived-professional support scale. *Nursing Research and Practice*, 2019.
- Roth, G., Vansteenkiste, M., & Ryan, R. M. (2019). Integrative emotion regulation: Process and development from a self-determination theory perspective. *Development and Psychopathology*, 31(3), 945-956.
- Ruzafa-Martinez, M., Harillo-Acevedo, D., & Ramos-Morcillo, A. J. (2021). Monitoring of the implementation of a breastfeeding guideline for 6 years: A mixed-methods study using an interrupted time series approach. *Journal of Nursing Scholarship*, 53(3), 358-368.

- Ryan, E., & Deci, E. (2020). Intrinsic and extrinsic motivation from a selfdetermination theory perspective: definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61.
- Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. In *Advances in motivation science* (Vol. 6, pp. 111-156). Elsevier.
- Safayi, B. L., Assimamaw, N. T., & Kassie, D. G. (2021). Breastfeeding technique and associated factors among lactating mothers visiting Gondar town health facilities, Northwest Ethiopia: observational method. *Italian Journal of Paediatrics*, 47(1), 1-10.
- Saputra, L. A. A., Surati, S., & Saufi, A. (2019). Mediation role of job satisfaction towards effect of conflict roles on organizational commitment: study on private hospitals non-medical employees in Mataram City. *International Journal of Social Sciences and Humanities*, 3(2), 165-175.
- Saunders, M., Lewis, P. and Thornhill, A. (2012). *Research methods for business students*. Harlow: Pearson Education Ltd.
- Segovia-Pérez, & Laguna Sánchez, P. (2020). Being a woman in an ICT job: an analysis of the gender pays gap and discrimination in Spain. New Technology, Work and Employment, 35(1), 20-39.
- Shehu, M., & Shehu, H. (2019). Knowledge, attitude and intending practice on breastfeeding among clinical medical students in Bingham University Teaching Hospital, Jos. *European Journal of Preventive Medicine*, 7(2), 50-56.
- Sheldon, K. M., & Prentice, M. (2019). Self-determination theory as a foundation for personality researchers. *Journal of Personality*, 87(1), 5-14.
- Shi, G., Jiang, N., & Yao, L. (2018). Land use and cover change during the rapid economic growth period from 1990 to 2010: A case study of shanghai. *Sustainability*, 10(2), 426.
- Sihota, H., Oliffe, J., Kelly, M. T., & McCuaig, F. (2019). Fathers' experiences and perspectives of breastfeeding: A scoping review. American journal of men's health, 13(3), 1557988319851616.
- Soelton, M., Lestari, P. A., Arief, H., & Putra, R. L. (2020, February). The effect of role conflict and burnout toward turnover intention at software industries, work stress as moderating variables. In 4th International Conference on Management, Economics and Business (ICMEB 2019) (pp. 185-190). Atlantis Press.

- Spatz, D. L. (2019). A call to action: The needs of breastfeeding mothers on college and university campuses. *MCN: The American Journal of Maternal/Child Nursing*, 44(2), 117.
- Spiegel, M. R., & Stephens, L. J. (2018). *Schaum's outline of statistics*. McGraw-Hill Education.
- Stuebe, A. M., Meltzer-Brody & Grewen, K. (2019). The mood, mother, and infant study: associations between maternal mood in pregnancy and breastfeeding outcome. *Breastfeeding Medicine*, 14(8), 551-559.
- Sturm, B. L., Ben-Tal, O., Monaghan, & Pachet, F. (2019). Machine learning research that matters for music creation: A case study. *Journal of New Music Research*, 48(1), 36-55.
- Suri, H. (2020). Ethical considerations of conducting systematic reviews in educational research. *Systematic reviews in Educational Research*, 41-54.
- Talbert, A., Jones, & Mwangome, M. (2020). Exclusive breastfeeding in first-time mothers in rural Kenya: a longitudinal observational study of feeding patterns in the first six months of life. *International Breastfeeding Journal*, 15(1), 1-9.
- Tamah, S. M., & Lie, A. (2019). Analysis of a research instrument to map English teachers' proficiency. *IJEE (Indonesian Journal of English Education)*, 6(1), 48-64.
- Tampah-Naah, A. M. (2020). Do breastfeeding practices correlate with childhood diarrhoea? Multiple data analyses using national surveys in Ghana.
- Taylor, A. M., Van Teijlingen, & Alexander, J. (2019). Scrutinised, judged and sabotaged': A qualitative video diary study of first-time breastfeeding mothers. *Midwifery*, 75, 16-23.
- Taylor, J. S., MacNamara, M. M., Anna Groskin, M. D., & Petras, L. I. (2013). Medical student-mothers. *Rhode Island Medical Journal*, 96(3), 42.
- Taylor, L., Huml, M., & Dixon, M. A. (2019). From engaged worker to workaholic: a mediated model of athletic department employees. *European Sport Management Quarterly*, 21(4), 1-22.
- Thakur, T., & Chewning, B. (2020). Using role theory to explore pharmacist role conflict in opioid risks communication. *Research in Social and Administrative Pharmacy, 16*(8), 1121-1126.
- Tomori, C., Gribble & Gross, M. S. (2020). When Separation is not the Answer: Breastfeeding Mothers and Infants affected by COVID-19. *Maternal & Child Nutrition*, e13033.

Truman, S. H. (2015). Relevance of interviews. Truman Library Institute. USA.

- Valentine, J. L., Sekula, L. K., & Lynch, V. (2020). Evolution of Forensic Nursing Theory - Introduction of the Constructed Theory of Forensic Nursing Care: A Middle-Range Theory. *Journal of Forensic Nursing*, 16(4), 188.
- Van den Eynde, A., Claessens, E., & Mortelmans, D. (2020). The consequences of work-family conflict in families on the behaviour of the child. *Journal of Family Research*, 32(1), 123-144.
- Vasconcellos, D., Parker & Lonsdale, C. (2020). Self-determination theory applied to physical education: A systematic review and meta-analysis. *Journal of Educational Psychology*, 112(7), 1444.
- Verhoeven, V., Tsakitzidis, & Van Royen, P. (2020). Impact of the COVID-19 pandemic on the core functions of primary care: will the cure be worse than the disease? A qualitative interview study in Flemish GPs. *BMJ Open, 10*(6), e039674.
- Verleye, K. (2019). Designing, writing-up and reviewing case study research: an equifinality perspective. *Journal of Service Management*.
- Verma, R. K., Kaushik, G., & Kharb, M.(2020) World breastfeeding week observation: an opportunity for assessing awareness regarding breastfeeding practices, techniques and advantages among trainees of Private Nursing Institute in Haryana.
- Vilar-Compte, M., Teruel, & Perez-Escamilla, R. (2020). Costs of maternity leave to support breastfeeding; Brazil, Ghana and Mexico. *Bulletin of the World Health Organization*, 98(6), 382.
- Villegas, N., Cianelli, R., Fernandez, M., Henderson, S., Sierra, S., Alfonso, Y., & Jackson, C. (2016). Assessment of breastfeeding clinical skills among nursing students using the Objective Structured Clinical Examination (OSCE). Investigación en educación médica, 5(20), 244-252.
- Vorobev, P., Greenwood, & Turitsyn, K. (2019). Deadbands, droop, and inertia impact on power system frequency distribution. *IEEE Transactions on Power Systems*, 34(4), 3098-3108.
- Wagg, A. J., Callanan, M. M., & Hassett, A. (2019). Online social support group use by breastfeeding mothers: A content analysis. *Heliyon*, 5(3), e01245.
- Wagner, S., Kersuzan, C., Gojard, S., Tichit, C., Nicklaus, S., Thierry, X., ... & de Lauzon-Guillain, B. (2019). Breastfeeding initiation and duration in France: The importance of intergenerational and previous maternal breastfeeding experiences—results from the nationwide ELFE study. *Midwifery*, 69, 67-75.

- Walker, C., & Baxter, J. (2019). Method sequence and dominance in mixed methods research: A case study of the social acceptance of wind energy literature. *International Journal of Qualitative Methods*, 18, 1609406919834379.
- Walter, D., & Ophir, Y. (2019). News frame analysis: An inductive mixed-method computational approach. *Communication Methods and Measures*, 13(4), 248-266.
- Warri, D., & George, A. (2020). Perceptions of pregnant women of reasons for late initiation of antenatal care: a qualitative interview study. *BMC Pregnancy and Childbirth, 20*(1), 1-12
- Xu, L. (2019). Teacher-researcher role conflict and burnout among Chinese university teachers: A job demand-resources model perspective. *Studies in Higher Education*, 44(6), 903-919.
- Yang, L., Guo, Y., & Cheng, J. (2019, July). Manifold distance-based over-sampling technique for class imbalance learning. In *Proceedings of the acai conference* on artificial intelligence (Vol. 33, No. 01, pp. 10071-10072).
- Yang, S. F., Burns, E., Salamonson, Y., & Schmied, V. (2019). Expectations and experiences of nursing students in supporting new mothers to breastfeed: a descriptive qualitative study. *Journal of Clinical Nursing*, 28(11-12), 2340-2350.
- Yi, T., Zhang, C., Lin, T., & Liu, J. (2020). Research on the spatial-temporal distribution of electric vehicle charging load demand: A case study in China. *Journal of Cleaner Production*, 242, 118457.
- Yousefinaghani, & Sharif, S. (2019). The assessment of Twitter's potential for outbreak detection: avian influenza case study. *Scientific reports*, 9(1), 1-17.
- Zou, B., Guo, & Li, Y. (2019). Who am I? The influence of social identification on academic entrepreneurs' role conflict. *International Entrepreneurship and Management Journal*, 15(2), 363-384.
- Zu, X., Wu, Y., Song, Y., & Zhang, Z. (2020). The effect of received neighbouring behaviour on general health: the mediating role of work-family conflict. Asia *Pacific Journal of Public Health*, 32(5), 250-257.

APPENDICES

APPENDIX A

Letter of Introduction



Date February 18, 2021

www.uew.edu.dh

The Provost Appiah Minkah Universaty of Skills Training and Entrepreneurial Development Kumast – ASH/R.

Dear Sir/ Madam,

LETTER OF INTRODUCTION

I write to introduce to you Ms. Brenda Aka Anyimah, a second year M.Phil student of the Department of Hasic Education, University of Education, Winneba, with registration number 200010963,

Ms. Brenda Aka Anyimah is to carry out a research on the Topic "Challenges of Student-Nursing Mothers and Adopted Coping Strategies: the Case of Appiah Minkah University of Skills Training and Entrepreneurial Development".

We would be grateful if permission is granted her to carry out her studies at the University.

Thank you.

Yours faithfully.

MRS. SAKINA ACQUAH (PHD)

(Ag Head of Department)

APPENDIX B

Interview Guide for Student Nursing Mother UNIVERSITY OF EDUCATION FACULTY OF EDUCATIONAL STUDIES DEPARTMENT OF BASIC EDUCATION

This interview is to solicit your responses and opinions on the challenges you face in the pursuit of your academic work. Please your responses will be used for this research purpose only and will remain confidential. I seek your permission to record your responses for later transcription.

Part 1: Respondents' Demographic Characteristics

- 1. Please kindly tell me your age.
- 2. Please kindly tell me your marital status.
- 3. Please humbly tell me the number of children you have.
- 4. Please is this your first time as a student nursing mother?
- 5. If no, please tell me the number of times you have been a student nursing mother.
- 6. Please can you tell me your programme of study?
- 7. Please what is your level of study?
- 8. Please what is your employment status?
- 9. Please what is your income per month?
- 10. Please what is the employment status of your spouse?
- 11. Please what is your educational sponsorship?

Part 2: Exploring challenges facing Student nursing mothers in their pursuit

with academic work

- Please explain the challenges facing student nursing mothers in their pursuit with academic work?
- 2. Briefly describe the various challenges you face as a student nursing mothers since the start of your programme?
- 3. How has these challenges affected your academic performances?

Part 3: Influence of child-related roles have on the academic performance of student nursing mothers

- 1. Please can you explain the influence of child-related roles on your academic work?
- 2. How do these factors affect your academic performances?

Part 4: Strategies the Student Nursing Mothers Adopt to Cope with Academic Work

Please can you describe the strategies student nursing mothers adopt to cope with academic work?

Part 5: The educational and institutional policies guiding student nursing mothers Educational Progress in Ghana

Please can you tell me the policies and institutional factors guiding student nursing mothers' educational progress in your institution and Ghana?

Appendix C

Observation Guide

A Structured Observation Guide Used to Observe Student Nursing Mothers and their Academic Work at AAMUSTED.

1. Challenges Facing Student Nursing Mothers and their Academ	nic
Work	3. Strategies Student Nursing Mothers Adopt to Cope
Health Complications during and after Pregnancy	with Academic Work
• Student nursing mothers usually fall sick []	Reliance on Husbands and External Family and Friends
Student nursing mothers often visit the hospital	• Family members caring for children for mothers to attend
Children usually fall sick	lectures.
Difficulty in Time Management	• Friends assisting children on behave of student nursing
Lateness for lectures	mothers.
Late submission of assignments	Self-Motivation
Breasting children during lecture periods	Ability to manage childcare perils
Conflicting Demands of Family Duties	Time management
Complains about activities from the house	Attending lectures on time
Conflicts with husbands	 Meeting all academic deadlines
Difficulty Meeting Academic Requirements	 Planned schedules for academic work
Unable to meet deadlines	4. Educational and Institutional Policies Guiding
Hiring people to complete assignments	Student Nursing Mothers' Educational
• Missing lectures frequently	Progress
Financial Challenges	Flexible Scheduling
Hiring babysitters	Flexible classroom schedules
Paying school fees	• Break time for student nursing mothers to breastfeed
2. child-related roles on the academic performance of stude	ent children.
nursing mothers	• Flexible timetable
Divided Attention	Breastfeeding facilities
Ability to pay attention at lectures	Students sit under trees to breastfeed children

 Number of times to breastfeed children Number of minutes used to breastfeed children 	• Student nursing mothers found at empty lecture halls to breastfeed children.
Conflicting Responsibilities	• Students found in open spaces to breastfeed children
Childcare responsibilities instead of lectures []	Support services
• Leave lecture halls within 30 mins for the child []	• Allowance of extra time to complete assignments
Stress	Counselling services for student nursing mothers
Physical pressure on academic work []	
Anxiety and depression []	
• Emotional disturbances []	

