

Addis Ababa University
College of Business and Economics
Master of Business Administration Program



Level of Organizational Commitment and its Predictors
Among Nurses Working at Public Hospital Medical
Colleges in Addis Ababa, Ethiopia

By: Yoseph Worku, MD, MPH

A thesis report submitted to the Department of Management, College of Business and Economics, Addis Ababa University, in partial fulfillment of the degree of Master of Business Administration

October 2024

Addis Ababa, Ethiopia

Addis Ababa University
College of Business and Economics
Master of Business Administration Program



Level of Organizational Commitment and its Predictors
Among Nurses Working at Public Hospital Medical
Colleges in Addis Ababa, Ethiopia

By: Yoseph Worku, MD, MPH

Advisor: Jemal Mohammed, PhD

October 2024

Addis Ababa, Ethiopia

Addis Ababa University
College of Business and Economics
Master of Business Administration Program

Approval by Board of Examiners

This thesis, written by **Yoseph Worku** and entitled: “**Level of Organizational Commitment and its Predictors Among Nurses Working at Public Hospital Medical Colleges in Addis Ababa, Ethiopia**” and submitted in partial fulfillment of the requirements for the degree of Master of Business Administration, complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Internal Examiner **Dr. Abera Legesse** Signature  Date **Dec 11, 2024**

External Examiner **Dr. Tenkir Seifu** Signature  Date 

Advisor **Dr. Jemal Mohammed Atula** Signature  Date **Dec 21, 2024**

Acknowledgement

First and foremost, glory to the Almighty God for all His blessings and support in my life!

I would like to express my heartfelt gratitude to my advisor, Dr. Jemal Mohammed, who closely supported me from the inception of this work until the final stage.

I also want to thank the Department of Master of Business Administration for their assistance and guidance throughout the training and this thesis undertaking.

My appreciation and thanks go to the study participants who were willing to be part of the study and administer the questionnaire.

I appreciate the support and facilitation of the three medical colleges/hospitals to accomplish this research works. I am also grateful to the research ethics committees, experts, department heads, and staff of the institutions and Addis Ababa Health Bureau whose facilitation was essential to undertake this study.

My gratitude goes to the data collectors and heads of the departments who facilitated the data collection in the three institutions.

I am also grateful to my family, friends, and colleagues, who are always supportive of my work.

Table of Contents

Declaration.....	I
Approval by Board of Examiners	II
Acknowledgement	III
Table of Contents.....	IV
List of tables.....	VII
List of figures.....	VIII
Abbreviations and acronyms.....	IX
Abstract.....	X
Chapter 1. Introduction.....	1
1.1. Background of the study.....	1
1.2. Statement of the problem.....	3
1.3. Research questions	4
1.4. Objective of the study.....	4
1.4.1. General objective	4
1.4.2. Specific objectives	4
1.5. Significance of the study	4
1.6. Scope and delimitation of the study	5
1.7. Limitations of the study.....	5
1.8. Organization of the paper	5
Chapter 2. Literature review	7
2.1. Introduction	7
2.2. Organizational commitment	7
2.2.1. Affective commitment	8
2.2.2. Continuance commitment	9
2.2.3. Normative commitment	9
2.3. Level of organizational commitment among nurses	10
2.4. Conceptual framework of organizational commitment.....	11
2.5. Predictors of organizational commitment and related job attributes.....	12
2.5.1. Intrinsic characteristic predictors	12
2.5.2. Extrinsic characteristic predictors	13
2.6. Gaps in the existing literature and studies	15
Chapter 3. Methodology	17
3.1. Research approach and design.....	17
3.2. Research area.....	17
3.3. Population and sample.....	17

3.4. Sample size and sampling technique	18
3.4.1. Sample size determination	18
3.4.2. Sampling technique.....	19
3.5. Data collection instruments and procedures.....	20
3.5.1. Data collection instruments.....	20
3.5.2. Data collection procedures.....	20
3.6. Variables and measurement.....	21
3.7. Pilot study.....	22
3.8. Data analysis.....	22
3.9. Reliability and validity of data	23
3.9.1. Reliability of data.....	23
3.9.2. Validity of data.....	23
3.10. Ethical considerations.....	23
3.11. Dissemination plan	24
Chapter 4. Results.....	25
4.1. Introduction	25
4.2. Response rate of participants.....	25
4.3. Reliability test.....	25
4.4. Descriptive statistics.....	26
4.4.1. Demographic and organizational profile of respondents	26
4.4.2. Work environment factors	27
4.4.3. Perceived organizational support level among nurses	28
4.4.4. Job satisfaction level among nurses	29
4.4.5. Organizational commitment level among nurses.....	30
4.5. Inferential statistics.....	32
4.5.1. Bivariate analysis	33
4.5.2. Regression analysis	37
4.5.2.1. Assumptions	37
4.5.2.2. Multiple linear regression analysis.....	39
Chapter 5. Discussion, conclusions, and recommendations	44
5.1. Discussion	44
5.2. Conclusions	47
5.3. Recommendations	48
References.....	50
I. Information sheet (English).....	55
II. Certificate of consent.....	57

III. Questionnaire.....	58
IV. Information sheet (Amharic).....	62
V. የፍቃድ የምስክር ወረቀት	63
VI. መጠይቅ	64

List of tables

Table 1. Reliability test of variables	25
Table 2. Demographic and organizational profile among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024.....	26
Table 3. Self-rating of work-related factors among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024.....	28
Table 4. Perceived organizational support scores of nurses in public medical colleges in Addis Ababa, Ethiopia, 2024.....	29
Table 5. Organizational commitment scale scores among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024.....	31
Table 6. Summaries of the overall score of organizational commitment and its three dimensions	32
Table 7. Overall organizational commitment versus demographic and organizational profile of nurses at public hospital medical colleges in Addis Ababa, Ethiopia, 2024 (n=409).....	33
Table 8. Affective, continuance, and normative commitments versus demographic and organizational profile of nurses at public hospital.....	35
Table 9. Correlation results of overall organizational commitment versus continuous variables	36
Table 10. Correlation results of affective, continuance, and normative commitments versus continuous variables.....	37
Table 11. Model summary	38
Table 12. Test of Normality using the Kolmogorov-Smirnov Test.....	38
Table 13. Collinearity statistics.....	39
Table 14. Multiple linear regression for predictors of affective commitment of nurses.....	41
Table 15. Multiple linear regression for predictors of continuance commitment of nurses.	41
Table 16. Multiple linear regression for predictors of normative commitment of nurses.....	42
Table 17. Multiple linear regression for predictors of overall organizational commitment of nurses..	43

List of figures

Figure 1. Figure 1. Conceptual framework adapted from (Al-Jabari & Ghazzawi, 2019)	12
Figure 2. Schematic display of the proportional allocation of samples	20
Figure 3. Rating of job satisfaction in 1 to 7 scale among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024	30
Figure 4. P-P Plot of Residuals	38
Figure 5. Scatter plot of residuals	39

Abbreviations and acronyms

ACS	Affective Commitment Scale
ANOVA	Analysis of Variance
BSc	Bachelor of Science
CCS	Continuance Commitment Scale
<i>df</i>	Degree of freedom
Dr	Doctor
ICU	Intensive Care Unit
IQR	Interquartile Range
IRB	Institutional Review Board
MBA	Master of Business Administration
MCC	Motivated, Competent, and Compassionate
NCS	Normative Commitment Scale
OB	Organizational Behavior
OC	Organizational Commitment
OCS	Organizational Commitment Scale
PhD	Doctor of Philosophy
POS	Perceived Organizational Support
R ²	Coefficient of determination
SD	Standard Deviation
SPHMMC	St. Paul's Hospital Millennium Medical College
VIF	Variance inflation factor
Y12HMC	Yekatit 12 Hospital Medical College

Abstract

Organizational commitment among nurses working in the healthcare system is a critical job attitude that affects the overall success, effectiveness, and quality of healthcare. There is a dearth of evidence regarding the degree of commitment of nurses and the potential predictors that can affect their organizational commitment. This study assessed the level of organizational commitment and its predictors among nurses working at public hospital medical colleges in Addis Ababa, Ethiopia, in 2024. A cross-sectional study with both descriptive and analytic components was conducted among 411 randomly selected nurses working at public hospital medical colleges in Addis Ababa, Ethiopia. The widely recommended 20-item organizational commitment scale was used in this study. T-test, analysis of variance (ANOVA), and Pearson's correlation analysis were used to investigate the relationships or associations between the individual independent and dependent variables. After checking the statistical assumptions, multiple linear regression was used to fit the final model and identify the predictors. A p-value < 0.05 was used to declare statistical significance. A total of 411 nurses participated in the study. Females comprised 51.8%, and the mean (\pm standard deviation) age was 30.6 (\pm 5.5) years. In this study, the mean global score of the organizational commitment of nurses was 62.9 (standard deviation = 13.6), with a minimum and maximum score of 21 and 99, respectively. Four factors were identified as predictors of the overall organizational commitment scores of nurses: job satisfaction, relationship with colleagues or coworkers, perceived organization support, and age. among nurses working in the hospital medical colleges in Addis Ababa, Ethiopia. Among nurses working in the hospital medical colleges in Addis Ababa, Ethiopia, the overall organizational commitment mean score was inadequate. The key predictors of the organizational commitment of nurses are the nurses' job satisfaction level, relationship with colleagues, level of perceived organizational support, and age. Enhancing the job satisfaction, perceived organizational support, and relationship among the coworkers would be strategies that can improve the organizational commitment of the nurses.

Key words: organizational commitment, medical college, nurse, predictors, Addis Ababa, Ethiopia

Chapter 1. Introduction

1.1. Background of the study

Organizations thrive to be successful and to achieve their goals effectively. In the modern, complex, competitive, and ever-evolving business world, the success of organizations is determined by several factors. In the past, organizations had given more emphasis to the technical skills and expertise of their employees. Recent evidence, however, shows that the behavior of employees (including their interpersonal skills) and their relationship with the organization are the most influential determinants of the effectiveness and success of many organizations. Organizations fail to achieve their goals because of a lack of favorable behaviors and attitudes among their employees. Thus, many organizations invest a lot of resources to improve the attitude of their employees as well as the relationship of the organization with the employees, so that the overall performance of their employees and the organization can improve. (Luthans et al., 2021; Miao et al., 2017; Robbins & Judge, 2017; Vakerue I. Sessa & Nathan A. Bowling, 2021; Woznyj et al., 2022)

Improving the relationship between employees and the organization at the workplace has become the cornerstone for organizational success and effectiveness. This employee-organization relationship can be manifested by various job behaviors and attitudes. Among the various job attitudes, the organizational commitment (OC) plays a crucial role. Organizational commitment refers to the attitude of the employees in relation to their emotional attachment, loyalty, and identification with their organization. (Luthans et al., 2021; Miao et al., 2017; Robbins & Judge, 2017; Vakerue I. Sessa & Nathan A. Bowling, 2021; Woznyj et al., 2022) Studies revealed that organizational commitment is associated with various favorable outcomes in the workplace, including increased job satisfaction, reduced turnover, higher performance, and a greater willingness to go the extra mile for the organization. One of the critical factor that affects the organizational commitment level of employees is perceived organizational support that is defined as the extent to which employees believe their organization appreciates their contribution and cares about their well-being. Research showed that perceived organizational support is linked to positive outcomes in the organization, such as increased job satisfaction, lower turnover, and higher levels of organizational commitment. (Luthans et al., 2021; Robbins & Judge, 2017; Vakerue I. Sessa & Nathan A. Bowling, 2021; Woznyj et al., 2022)

The organizational commitment and perceived organizational support are interconnected job attributes that play a substantial role in fashioning a positive and productive work environment.

The interplay between organizational commitment and perceived organizational support is vital for creating a conducive and thriving workplace. Employees who feel that they are being supported by their organization (i.e., with a high level of perceived organizational support) are likely to foster higher levels of organizational commitment. Recognizing the importance of these concepts and actively promoting them within the organization can lead to more engaged, committed, and productive employees. (Luthans et al., 2021; Robbins & Judge, 2017; Vakerue I. Sessa & Nathan A. Bowling, 2021; Woznyj et al., 2022)

In the service-providing sector, including the health sector, perceived organizational support and organizational commitment play more significant and intertwined roles in creating a collaborative, effective, and patient-centered organizational culture. These factors are critical for ensuring employee well-being, quality service delivery, and patient satisfaction, all of which are essential for success in the sector. Healthcare organizations that prioritize and foster these attributes are better positioned to excel in providing high-quality care and achieving their mission and goal. (Luthans et al., 2021; Miao et al., 2017; Robbins & Judge, 2017; Vakerue I. Sessa & Nathan A. Bowling, 2021; Woznyj et al., 2022)

The Ethiopian Health Sector Transformation Plan envisions a healthy, productive, and prosperous society. Ensuring the well-being of the population is a top priority for the government. According to the transformation plan of the health sector, the health system suffers from several gaps, and some of the top weaknesses of healthcare include sub-optimal quality of the health services, scarcity of some cadres of professionals, low motivation and satisfaction of staff, and high staff turnover. Understanding and enhancing factors that impact the performance, satisfaction, and commitment of the health workforce are essential tools to improve the quality of healthcare and address the other weaknesses. This ultimately contributes to the realization of one of the transformation agendas of the health sector: creating a motivated, competent, and compassionate (MCC) health workforce. (Ethiopian Federal Ministry of Health, 2021)

The healthcare system is comprised of different groups of health professionals. Nurses are among the core cadres of professionals who play a pivotal role in the healthcare system and who serve as the primary caregivers and advocates for patients. The nurses' job satisfaction and commitment to the organization can influence the quality of healthcare delivery. One critical factor influencing these aspects of nurses' job attitudes is perceived organizational support.

1.2. Statement of the problem

Nursing staff are an integral component of healthcare delivery systems worldwide, including those in Ethiopian hospitals. The effectiveness and success of hospitals are affected by the overall performance of nurses, which in turn is determined by several factors. The perceived organizational support and organizational commitment of nurses are quite essential for the overall functioning of hospitals and the quality of patient care. Evidence shows that these job attributes not only affect the hospital's effectiveness and efficiency, but they also show intertwined relationships among themselves.

Several studies have explored these individual constructs separately in various contexts. However, there is a dearth of comprehensive research that examines the interconnectedness of perceived organizational support and organizational commitment, specifically among nurses in the Ethiopian healthcare system. Only few studies are conducted on organizational commitment among nurses in Ethiopia. (Alemayehu et al., 2021; Arage et al., 2022; Fantahun et al., 2023; Israel Bekele et al., 2017) This study can contribute to the knowledgebase by addressing this noticeable gap in the literature.

According to the national and the college's strategic plans, inadequate motivation, low satisfaction, and high turnover of nurses remain key challenges that require due attention. (Ethiopian Federal Ministry of Health, 2021; SPHMMC, 2020) Understanding the interplay between perceived organizational support and organizational commitment among nurses is critical to addressing these challenges effectively. Enhancing organizational commitment among nurses could lead to improved job satisfaction, better retention rates, and ultimately, improved healthcare quality. The Ethiopian healthcare system operates within a unique cultural, economic, and organizational context. What works in other settings may not be directly applicable to Ethiopian hospitals. In Addis Ababa and the rest of Ethiopia, a significant gap exists in the understanding of how nurses perceive the support provided by their hospitals and their commitment to the organization.

The lack of consistent evidence in the previous studies and the gap of local knowledge in Ethiopia, specifically in public medical colleges in Addis Ababa, hinder our ability to develop evidence-based strategies that can enhance the nurses' performance and job satisfaction. Therefore, there is a pressing need to conduct research specifically tailored to the public hospital medical colleges in Ethiopian context to provide context-specific insights into organizational commitment among nurses.

1.3. Research questions

The primary research questions of this study were:

- What is the level of overall organizational commitment among nurses?
- What are the levels of affective, continuance, and normative commitments among nurses?
- What are the predictors of the overall organizational commitment level among nurses?

1.4. Objective of the study

1.4.1. General objective

- The general objective of the study is to assess the level of organizational commitment and its predictors among nurses.

1.4.2. Specific objectives

The specific objectives of the study include:

- To assess the level of overall organizational commitment among nurses.
- To assess the level of affective, continuance, and normative commitments among nurses.
- To determine the predictors of overall organizational commitment among nurses.

1.5. Significance of the study

The study investigates the levels of perceived organizational support and organizational commitment among nurses working at public medical colleges in Addis Ababa and identifies the factors that influence organizational commitment. Hence, it can provide valuable insights on how to improve the nurses' commitment in their workplace, which can potentially lead to improved healthcare services in the hospital as a committed and satisfied nursing workforce is fundamental to delivering high-quality patient care. Moreover, it can contribute to improving the work conditions, job satisfaction, and overall retention rates among nurses. This can ultimately help improve the quality of patient care and patient satisfaction.

The findings of the research can inform the formulation of policies in the colleges/hospitals and beyond. Policymakers can utilize the insights to formulate strategies that promote supportive organizational culture and enhance nurses' commitment to the organizations. Thus, it will be useful in the development of more effective policies that address critical issues in the

healthcare workforce. Other researchers can utilize this research to carry out similar research in other settings or to use it as a comparable reference. In addition, it can be used in the synthesis of results from similar studies and build on the evidence. While this study focuses on nurses at public hospital medical colleges in Addis Ababa, Ethiopia, the insights gained from this research can possibly be useful to similar healthcare systems. Therefore, this study can have broader applicability and can contribute to the discourse on nursing management and organizational behavior.

1.6. Scope and delimitation of the study

This research was focused on nurses working at public hospital medical colleges in Addis Ababa, Ethiopia. The study enrolled eligible and randomly selected nurses from the hospital medical colleges, but did not include any nurses who were absent from the workplace because of any form of leave or who were unwilling to be part of the study. Nurses working in other health facilities in Addis Ababa or out of Addis Ababa were not included in this study, even if the health facility were affiliated with the hospital colleges. Because of the scope and delimitations, the study can be primarily generalized to nurses working at hospital medical colleges in Addis Ababa. Still, the findings can have further broader implications for nurses working in other similar settings in Ethiopia and beyond.

1.7. Limitations of the study

There were a few limitations that may affect the generalizability of the results of this study. One of the limitations of the study was the inability to establish causation for some of the factors because of the cross-sectional nature of the study. The time order of some happenings or dependent and independent variables could not be differentiated. Recall bias might be one limitation if respondents did not accurately recall past events while administering the questionnaire. The self-reported nature of the data might have social-desirability bias. There are potential confounder variables that were not investigated in the current study.

1.8. Organization of the paper

This thesis is organized into three sections (front matter, body matter, and end matter). The front matter includes all the prelims from the cover page until the summary part, and the end matter includes the references and annexes (information sheet, consent certificate, and data collection tools). The body matter includes the six chapters: Chapter 1. Introduction, Chapter 2. Literature Review, Chapter 3. Methodology, Chapter 4. Result, Chapter 5. Discussions,

Conclusions and Recommendations. Under the first chapter (introduction section), there are nine subsections: background, statement of the problem, research questions, objectives of the study, significance of the study, scope and delimitation of the study, limitations of the study, definitions of key terms, and organization of the paper. Under the literature review section, the following subsections are covered: introduction, organizational commitment, organizational commitment among nurses, predictors of organizational commitment, and conceptual framework of organizational commitment. The methodology section is organized into 12 subsections: research approach and design, research setting, population and sample, sample size and sampling technique, data collection instrument and procedures, measurement of variables, pilot study, data analysis, model specification, reliability and validity of data, ethical considerations, and dissemination plan. Under the result section, introduction, response rate of participants, reliability test, descriptive statistics, and inferential statistics were included. Under chapter five, the discussion of the findings of the study was presented with the conclusions and recommendations of the study.

Chapter 2. Literature review

This section summarizes the relevant scholarly literature on organizational commitment and its determinants by providing some background, definitions, and conceptual framework. It also provides more focus and consideration to the specific context of organizational commitment among nurses working in hospitals.

2.1. Introduction

Understanding the behavior of employees and their job attitudes in the workplace is crucial to designing practical strategies for creating a positive and productive work environment. Some of the common job attitudes of employees include job satisfaction, perceived organizational support, organizational citizenship behavior, and organizational commitment. (Luthans et al., 2021; Robbins & Judge, 2017)

The Ethiopian healthcare system has got several challenges regarding nursing staff retention, job satisfaction, and the delivery of high-quality patient care. To address these challenges, an in-depth exploration of the level of organizational commitment and its predictors among nurses is central. By identifying the predictors of organizational commitment, this essential job attitude can be fostered to build a motivated, productive, and loyal workforce.

2.2. Organizational commitment

Organizational commitment (OC) is an employee's emotional connection, sense of identification, and loyalty towards the organization. It can be used as a good indicator for an employee's decision or intent to continue or discontinue as a member of an organization. (Finegan, 2000; Kr Sajid Ali Khan & Shamsul Siddiqui, 2017; Meyer et al., 2002; Meyer & Allen, 1991) In the health sector, decreased organizational commitment was linked with various unfavorable outcomes, like medical errors, repeated hospitalization of patients, and increased in the duration of hospital stay. (Chen et al., 2015) Organizational commitment is one of the job attitudes that has grown in popularity in the study of organizational behavior. Different studies have explored the role of organizational commitment in the overall performance of health settings. For example, a systematic review conducted by Rodriguez-Fernandez et al. in 2024 highlighted that higher organizational commitment among nurses is linked with better organizational performance and patient safety. (Rodríguez-Fernández et al., 2024) Similarly, a mail survey of 487 hospitals in Australia by Baird K. et al. indicated that higher commitment of nurses can enhance hospital performance, patient care, and operational

effectiveness. (Baird et al., 2019) Similarly, a study conducted in South Korea by Lee and Hwang showed that higher organizational commitment was a key factor in enhancing patient safety. (Lee & Hwang, 2024)

Another crucial job attitude that was influenced by the organizational commitment of nurses is the turnover or intent to leave of nurses working in various health sectors with different capacities. Several studies from different parts of the world showed that organizational commitment of nurses is highly linked with lower turnover or intent to leave and higher intent to stay. (Al Balushi et al., 2022; Church et al., 2018; Fukuzaki et al., 2023; Gregory et al., 2007; Wang et al., 2023; Wei et al., 2021)

Despite the influential role of nurses' organizational commitment in the overall organizational performance and employees' satisfaction, some studies noted that only little attention is given to it—more than 85% of the nurses' time being dedicated only to activities that are directly or indirectly related to patient care—(Johnson et al., 2016) or the commitment level of nurses was low. (Arage et al., 2022; Fantahun et al., 2023; Johnson et al., 2016; Rawah & Banakhar, 2022) The studies highlighted that due attention should be paid to the organizational commitment of nurses, and different strategies should be implemented to improve the commitment of nurses.

Through the years, the theories and models of organizational commitment evolved. (Al-Jabari & Ghazzawi, 2019; Cohen, 2014; Luthans et al., 2021; Meyer & Allen, 1991; Robbins & Judge, 2017) The widely used approach to organizational commitment is the tri-dimensional model, which was developed by Meyer and Allen in 1990. The three dimensions of this model are affective, continuance, and normative commitments. The overall commitment level is assessed by the organization commitment scale (OCS), which has twenty-questions, and each question is measured on a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). (Allen & Meyer, 1990)

2.2.1. Affective commitment

The affective commitment implies the positive feelings of identification with and involvement in the works of the organization. Such commitment is described as an attachment to the organization and willingness to exert extra effort for the organization. Employees with a strong affective commitment are believed to continue their employment with the organization because they want to do so. Such employees believe that their personal employment connection aligns with the objectives of the organization. (Allen & Meyer, 1990; Beck & Wilson, 2000;

Mercurio, 2015; Meyer et al., 2002) The affective commitment is measured by the first seven items of the OCS. (Allen & Meyer, 1990)

Though most of the studies on organizational commitment of nurses assessed the overall organizational commitment, a few studies explored the effect of each of the commitment dimensions separately. Studies published by Fukuzaki et al. in 2021 in Japan (Fukuzaki et al., 2023) and by Neves et al. in Portugal (Neves et al., 2022) showed that affective commitment alone was linked with lower turnover of the nurses. Another study conducted in 2021 in Turkiye by Duygu Gul et al. showed the linkage of job satisfaction and affective commitment among nurses. (Gül et al., 2023) A study conducted in South Africa by Kau M et al. showed that a conducive ethical work environment is one of the predictors of a high level of affective commitment. (Kau et al., 2024) The systematic review conducted by Rodriguez-Fernandez et al. in 2024 also indicated that enhancing the affective commitment of nurses improves organizational performance and patient safety. (Rodríguez-Fernández et al., 2024)

2.2.2. Continuance commitment

The continuance commitment indicates the extent to which employees feel committed to their organization by virtue of the costs that they feel are associated with leaving. This commitment type is a calculated strategy whereby the employees assess the pros and cons of staying with the company versus leaving the company. (Beck & Wilson, 2000; Suliman & Iles, 2000) Employees whose primary association with the organization is based on continuance commitment are believed to remain in the organization because they need to do so. The continuance commitment is measured by the seven questions of the OCS. (Allen & Meyer, 1990)

The study conducted in 2021 in Turkiye by Duygu Gul et al. indicated that job satisfaction is a mediating factor for the continuance commitment among nurses, just like the affective commitment. (Gül et al., 2023) According to the study conducted in South Africa by Kau M et al., just like affective commitment, a conducive ethical work environment is an important predictor of a high level of continuance commitment. (Kau et al., 2024)

2.2.3. Normative commitment

The normative commitment illustrates the employee's feelings of obligation to remain with the organization. Such commitments are linked with moral justifications and considerations. (Beck & Wilson, 2000) Employees with a high level of normative commitment are likely to stay in

the organization because they feel that they should remain with the organization. The normative commitment is measured by the last six items of the OCS. (Allen & Meyer, 1990)

According to the studies published by Fukuzaki et al. in 2021 in Japan (Fukuzaki et al., 2023) and by Neves et al. in Portugal (Neves et al., 2022), just like the affective commitment, the normative commitment alone is highly correlated with lower turnover of the nurses. The systematic review conducted by Rodriguez-Fernandez et al. in 2024 indicated that the normative commitments of nurses can enhance organizational performance and patient safety. (Rodríguez-Fernández et al., 2024) According to the study conducted in South Africa by Kau M et al., a conducive ethical work environment is an important predictor of a high level of normative commitment. (Kau et al., 2024)

2.3. Level of organizational commitment among nurses

In the nursing profession, organizational commitment holds significant importance as it influences factors like job retention and the quality of patient care. In Ethiopia, there is limited research that focuses on organizational commitment and its determinants. Several of the studies among nurses assessed their job satisfaction and intention to leave or stay in their workplaces. These studies somewhat assessed some dimensions of organizational commitment, but they were not totally focused on the organizational commitment of the nurses. (Alem Getie, 2015; Ayalew et al., 2015; Bune et al., 2014; Engeda et al., 2014; Eshetu et al., 2021; Gebregziabher et al., 2020; Gizaw et al., 2017; Kelbiso et al., 2018; Nigussie Bolado et al., 2023; Tadesse et al., 2023; Woldekiros et al., 2022; Wubetie et al., 2020) In Ethiopia, only a few studies specifically assessed organizational commitment among nurses or health professionals, and they showed inconsistent findings. A study that was conducted in 2017 among nurses working at Jimma University Teaching Hospital showed that the mean (\pm standard deviation) score of the organizational commitment was 70.45 (\pm 8.22). (Israel Bekele et al., 2017) Similarly, another study conducted in 2021 among health professionals working in public health facilities in Benchsheko Zone, Southwest Ethiopia, also reported a comparable report with that of the Jimma study, with a percentage mean score of organizational commitment of health professionals of 74.6%. (Alemayehu et al., 2021) Another multi-center study was conducted in 2022 to assess the organizational commitment level of health professionals in Addis Ababa and showed that the percent mean score of organizational commitment was 48.4%; (Arage et al., 2022) a comparable percentage of organizational commitment level, 48.8%, was reported by

Fantahun et al. who assessed the commitment level of health professionals working in public hospitals in southwestern Oromia, Ethiopia, in 2021. (Fantahun et al., 2023)

2.4. Conceptual framework of organizational commitment

Through the years, different models and frameworks were proposed to show the theoretical framework of organizational commitment. A study by Al-Jabari and Ghazzawi, who reviewed the conceptual and empirical literature on organizational commitment, is one of the prominent works regarding the framework that shows the summarized categories of the predictors of organizational commitment. (Al-Jabari & Ghazzawi, 2019) This framework classifies the predictors of organizational commitment of employees into two broad categories: intrinsic and extrinsic characteristics.

According to the Al-Jabari and Ghazzawi framework, the intrinsic characteristics are the personal characteristics of the employees. The primary and important personal characteristics are the demographics like age, sex, education, marital status, and so on. The other group of intrinsic characteristics are related to the role of the employee within the organization, with emphasis on the perception of experience, time, and effort put into the organization (i.e., position and years of service). Another key personal characteristic, often challenging to measure, that affects the organizational commitment of employees is the personality of the employee. (Al-Jabari & Ghazzawi, 2019)

Al-Jabari and Ghazzawi identified several extrinsic characteristics of employees that can determine the level of organizational commitment. These factors can be considered as the employee role-related and work experience factors, including salaries, work environment, company policies, relationship with supervisor, relationship with coworkers and peers, and so on. (Al-Jabari & Ghazzawi, 2019)

For this study, the conceptual framework developed by Al-Jabari and Ghazzawi was adapted. Under the intrinsic characteristics, the study included age, gender, educational status, marital status, and service years. The extrinsic characteristics that were included in the model for the current study were salary and benefit package, relationship with colleagues, relationship with supervisors, professional autonomy, opportunities for professional and career development, perceived organizational support, and job satisfaction.

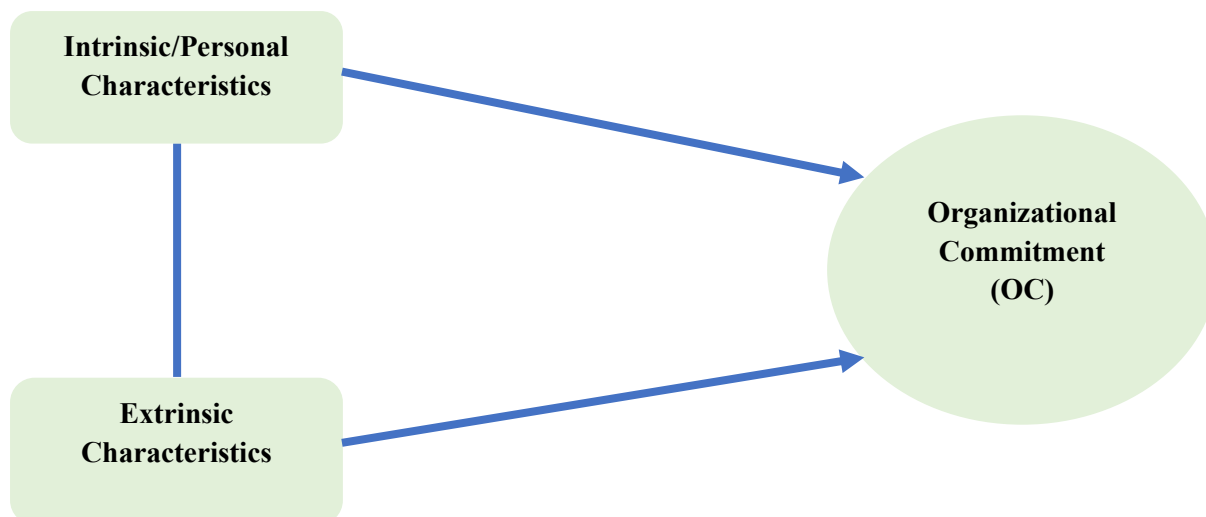


Figure 1. Figure 1. Conceptual framework adapted from (Al-Jabari & Ghazzawi, 2019)
 The rectangles and ovals imply the observed and unobserved (latent) variables, respectively.
 The single-head arrows and solid lines imply the relationships between the variables or constructs are one-sided in the direction of the arrow and not clear, respectively.

2.5. Predictors of organizational commitment and related job attributes

2.5.1. Intrinsic characteristic predictors

Among the intrinsic characteristics, age was identified as a predictor of organizational commitment among nurses by a few studies. The multi-center study conducted in Addis Ababa identified that older age was a significant determinant of higher organizational commitment among health professionals. (Arage et al., 2022) Similarly, two studies conducted among nurses in Oromia Region, Ethiopia, in 2020 (Tadesse et al., 2023) and in Amhara Region, Ethiopia, in 2013 (Engeda et al., 2014) showed that being older and higher organizational commitment of the nurses were predictors of intention to stay in the profession. A Portuguese study published in 2022 by Neves et al. showed that older age was associated with higher organizational commitment and lower intention to leave. (Neves et al., 2022) A study conducted in Turkiye among 723 nurses by Akgerman A and Sonmez B identified that one of the important predictors of organizational commitment among nurses is age—in the study, being over 40 years was associated with higher organizational commitment among nurses. (Akgerman & Sönmez, 2020) However, a study by Israel et al., which was conducted among nurses working in Jimma University Hospital, Oromia Region (Israel Bekele et al., 2017) and a study by Alemayehu et al., which was conducted among health professionals working in Benchsheko Zone, Southwest Ethiopia Region (Alemayehu et al., 2021), did not find any significant association between age and organizational commitment scores.

Another important predictor of organizational commitment is the years of experience of the nurses. A study conducted among 240 nurses in Myanmar in 2021 by Mon EE et al. revealed that there was a high correlation between years of experience and organizational commitment score among nurses. (Mon et al., 2022) Another Ethiopian nation-wide study that was published in 2016 indicated that fewer years of service was associated with higher intention to leave and lower commitment of nurses working in the public sector. (Ayalew et al., 2015)

Regarding educational status and organizational commitment, there were no studies that peculiarly picked the level of education as a predictor of organizational commitment. However, two studies conducted in Oromia Region, Ethiopia, in 2020, by Tadesse et al. (Tadesse et al., 2023) and in Amhara Region, Ethiopia, in 2013, by Engeda et al. (Engeda et al., 2014) showed that degree-holder nurses were more likely to stay in their job than the diploma holders. The intent to stay in the profession or their job was also associated with higher organizational commitment in the same studies.

A study conducted among nurses working in referral hospitals in Amhara Region, Ethiopia, by Engeda et al. reported that married nurses were more likely to stay and to show higher organizational commitment than the unmarried nurses. (Engeda et al., 2014) Otherwise, none of the other studies identified marital status as a significant predictor of organizational commitment.

Regarding the relationship between the position of the nurses and their organizational commitment, a study conducted in Saudi Arabian hospitals in 2021 by Reem N. Al-Dossary showed that nurse managers were more likely to exhibit higher organizational commitment compared to the nurses who did not have managerial roles. (Al-Dossary, 2022)

2.5.2. Extrinsic characteristic predictors

Among the extrinsic characteristics, the primary and most common predictors of nurses' organizational commitment are related to trust, support, and empowerment that the nurses got from their organization or supervisors. The survey conducted by Baird K. et al. among nurses working in 487 hospitals in Australia showed that perceiving to have adequate support from the hospital increased the level of organizational commitment among nurses. (Baird et al., 2019) Likewise, a study by Duygu Gul et al., among 626 nurses working in public and university hospitals in Turkiye (Gül et al., 2023), a study by Wei Yan et al., among 859 nurses in public hospitals in China (Yan et al., 2023); and a study by Gong et al., among 371 nurses in China (Gong et al., 2022) revealed that a positive mentoring relationship, training, and talent

management enhanced the organizational commitment of nurses significantly. A few studies conducted in Canada (Gregory et al., 2007), Turkiye (Akgerman & Sönmez, 2020), and the United States (Loes & Tobin, 2020) showed that trust is an important predictor of organizational commitment among nurses. Similarly, different studies documented that being recognized or empowered resulted in a higher organizational commitment among nurses. (Church et al., 2018; Fantahun et al., 2023; Loes & Tobin, 2020; Rawah & Banakhar, 2022)

Studies showed that the leadership styles of supervisors are also key predictors of the organizational commitment of nurses in different settings. Studies conducted in 2023 by Fantahun et al. among health professionals working in Southwestern Oromia, Ethiopia (Fantahun et al., 2023), in 2021 by Reem N. Al-Dossary among nurses working in Saudi Arabian hospitals (Al-Dossary, 2022), and a systematic review by Rofiqi et al. reported in 2019 (Rofiqi et al., 2019) highlighted that the transformational and transactional leadership styles of supervisors are highly correlated with better organizational commitment scores of nurses.

Studies conducted among nurses by Alem et al. in 2015 in Amhara Region (Alem Getie, 2015), by Woldekirkos et al. in 2022 in Addis Ababa (Woldekiros et al., 2022), and by Bune et al. in 2013 in Oromia (Bune et al., 2014) showed that salary and benefit packages are important predictors of nurses' intention to stay and organizational commitment. Likewise, the systematic review by Rofiqi et al. indicated that compensations paid by the organization are important predictors of commitment among nurses. (Rofiqi et al., 2019)

Several studies revealed that one of the determinants of organizational commitment among nurses is the relationship with their colleagues or coworkers. According to studies conducted by Israel et al. among nurses in Jimma University Teaching Hospital (Israel Bekele et al., 2017), by Arage et al. among health professionals in Addis Ababa (Arage et al., 2022), and by Church et al. among nurse residents in the United States (Church et al., 2018), good cohesion and relationships with coworkers were positively associated with a better score of organizational commitment.

One of the important predictors of nurses' organizational commitment is job satisfaction. Studies that assessed the predictors of organizational commitment from different parts of the globe showed that job satisfaction among nurses is a primary predictor of organizational commitment. (Church et al., 2018; Gregory et al., 2007; Gül et al., 2023) Similarly, several studies conducted in Ethiopia showed that the level of job satisfaction of nurses or health professionals is positively correlated with their level of organizational commitment.

(Alemayehu et al., 2021; Arage et al., 2022; Bune et al., 2014; Engeda et al., 2014; Eshetu et al., 2021; Fantahun et al., 2023; Gizaw et al., 2017; Israel Bekele et al., 2017; Kelbiso et al., 2018; Woldekiros et al., 2022)

According to a few studies conducted in Ethiopia and in China, perceived organizational support score is another key factor that is positively correlated with the organizational commitment level of nurses. i.e., the level of organizational commitment of nurses increases as the score of perceived organizational support increases. (Alemayehu et al., 2021; Arage et al., 2022; Israel Bekele et al., 2017; Mon et al., 2022)

2.6. Gaps in the existing literature and studies

The reviewed literature showed that organizational commitment is an essential job attitude that can influence not only the nurses' other job outcomes but also it can greatly affect the overall performance of hospitals and the health sector as a whole. The summary of the review could also pick important gaps that require immediate attention.

Generally, despite the paramount significance of organizational commitment in the overall success of the health sector, it is one of the least researched topics in Africa and in Ethiopia. In Ethiopia, there is a knowledge gap regarding the level of organizational commitment and its predictors among nurses working in public hospital medical colleges. The published research work on organizational commitment and its predictors among nurses is not from multi-center public hospital medical colleges. There are single-center studies, and the multi-center studies did not enroll in public hospital medical colleges. Unlike most of the hospitals in Ethiopia, the nature, context, and administration of public hospital medical colleges is peculiar because the hospitals own the college, having the double scopes of medical service and teaching. Thus, there is a population gap regarding the organizational commitment. Investigating the level of organizational commitment and the predictors will have important empirical implications.

There is also evidence gap in the level of organizational commitment and the predictors from different settings. Some of the findings are inconsistent and contradictory. Hence, conducting more studies in different contexts could help to fill this gap.

Most of the global studies, including the Ethiopian ones, focused on the overall organizational commitment among nurses. However, as a few studies showed (Gül et al., 2023; Neves et al., 2022), the three dimensions of commitment (i.e., affective commitment, continuance commitment, and normative commitment) could exhibit different levels and be determined by

various predictors. Hence, identifying the predictors of each of the dimensions of commitment will have practical implications.

Therefore, this study will address the above gaps identified from the literature review by assessing the level of organizational commitment among nurses working in public hospital medical colleges. In addition, the study will identify predictors of not only the overall organizational commitment but also the predictors for each of the affective commitment, continuance commitment, and normative commitment dimensions of the essential job attitude—organizational commitment.

Chapter 3. Methodology

3.1. Research approach and design

In this study, a quantitative research approach was employed. The study design was a cross-sectional study with both descriptive and analytic components. Descriptive study methods were applied to summarize and describe the demographic characteristics and magnitude of the job attributes. The analytic study techniques were applied to investigate any form of relationship among the job attributes and other predictor variables by using inferential statistical methods.

3.2. Research area

The study was conducted at public hospital medical colleges in Addis Ababa, Ethiopia. There are three public hospital medical colleges in Addis, Ethiopia, namely St. Paul's Hospital Millennium Medical College (SPHMMC), Yekatit 12 Hospital Medical College (Y12HMC), and Menilik II Referral Hospital/Medical College. All the three public hospital medical colleges were included in the study. The number of active nurses working at the three medical colleges was around 2,100: around 1,000 at St. Paul's Hospital Millennium Medical College, around 600 at Yekatit 12 Hospital Medical College, and around 500 at Menilik II Referral Hospital/Medical College, respectively.

3.3. Population and sample

The source population of the study included all nurses working at the three public hospital medical colleges in Addis Ababa, and the study population included randomly selected nurses who were working in these public hospital medical colleges/hospitals during the data collection period. In the study, nurses who were employed by the colleges/hospitals as permanent staff and who were present in their workplace during the data collection period were enrolled. Those who worked a minimum of six months were enrolled in the study because the new staff who were on their probation period might not continue as permanent staff in the colleges, and they might not have adequate exposure to the colleges' system and might not adequately or correctly respond to some of the questions. Nurses who were permanently working in different health facilities that were affiliated with the colleges were excluded from the study, even if they were working at the colleges/hospitals temporarily.

3.4. Sample size and sampling technique

3.4.1. Sample size determination

The sample size was calculated for the two specific objectives of the study, and the larger of the two was taken. Accordingly, for the first specific objective, the sample size (n) was calculated using the single population mean formula [Equation 1].

$$n = \frac{\left(Z_{\frac{\alpha}{2}}\right)^2 \sigma^2}{d^2}$$

Equation 1. Sample size calculation formula for single population mean

- Where $Z_{\frac{\alpha}{2}}$ is the value for the required significance level, i.e., 1.96 for a two-tailed 95% level of significance.
- Where σ is the estimated standard deviation for the organizational commitment score of health professionals, which is taken from a previous study and was 8.3. (Israel Bekele et al., 2017)
- d is the margin of error or absolute precision, and a score of 2.5 is taken.

Based on the above formula, the estimated sample size was 43. The sample size was adjusted for design effect because of the multi-stage sampling technique (i.e., by multiplying the calculated sample size by 2) and for possible non-responses by adding 30% of the estimated sample size. Hence, the final sample size for the first specific objective of the study is **112**.

For the second specific objective of the study, the sample sizes were estimated using the comparison of two sample means (with an equal sample size) formula [Equation 2].

$$n_1 = n_2 = \frac{(Z_{\alpha} + Z_{\beta})^2 (\sigma_1^2 + \sigma_2^2)}{d^2}$$

Equation 2. Sample size calculation formula for comparison of two sample means

- Where $Z_{\frac{\alpha}{2}}$ is the value for the required significance level, i.e., 1.96 for 2 tailed 95% level of significance.
- Where Z_{β} is the value for the required power of 80%, i.e., $1-\beta$, and the value is 0.842 from the standard normal distribution curve.
- Where σ_1 is the standard deviation of population 1, which is estimated to be 8.3 from a previous study. (Israel Bekele et al., 2017)

- Where σ_2 is the standard deviation of population 2, which is estimated to be 8.3 from a previous study. (Israel Bekele et al., 2017)
- Where d is difference in mean score that is estimated to be detected between two comparison groups (e.g., male and female), which is taken as 2.5 to increase the sample size.

Accordingly, $n_1 = 173$, and the total sample size will be $n_1 + n_2 = \underline{346}$. The sample size was adjusted for possible non-responses by adding 30% of the estimated sample size. The final sample size for the second specific objective of the study was 450.

Hence, the estimated sample size for the second aim was larger, and 450 study participants were enrolled in the study.

3.4.2. Sampling technique

Multi-stage sampling technique was used to recruit the study participants. Based on the total number of eligible nurses working in the three colleges/hospitals, the 450-sample size was proportionally allocated to each college/hospital. In the respective college, the nurses were stratified based on their working departments. Again, the allotted sample size for the specific college was proportionally allocated to each department based on the number of eligible nurses working in the specific departments. From each department, the study participants were selected using a simple random sampling technique from a sampling frame that was prepared based on the official list of active nurses that were on duty during the data collection. Please refer **Figure 2**.

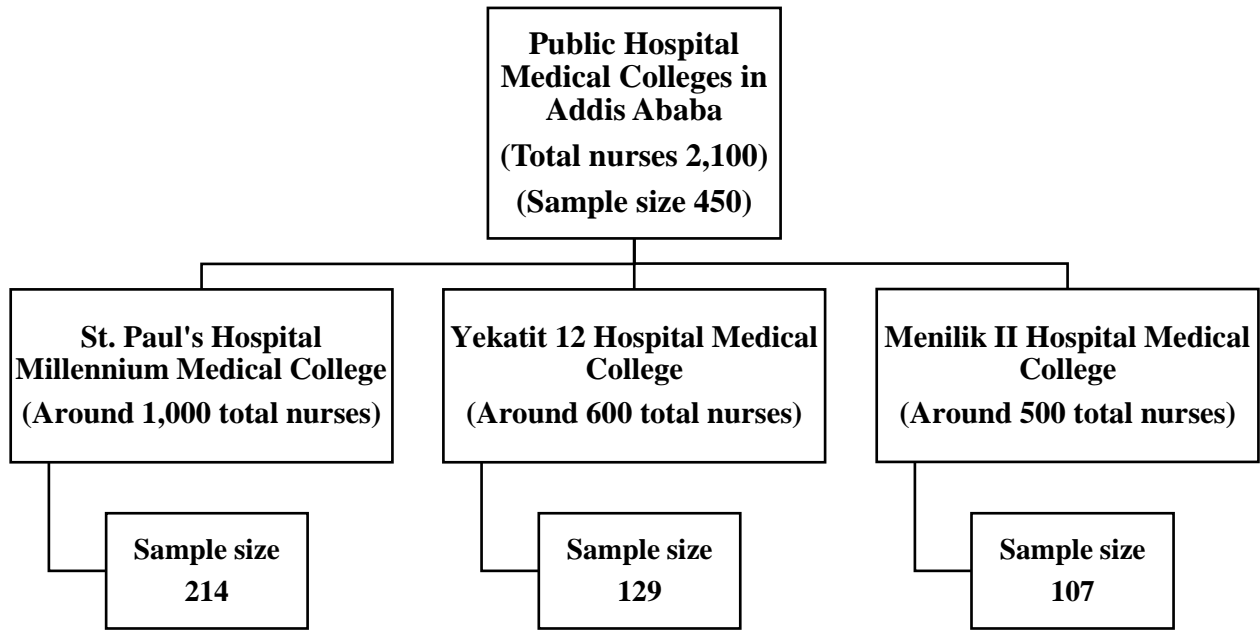


Figure 2. Schematic display of the proportional allocation of samples

3.5. Data collection instruments and procedures

3.5.1. Data collection instruments

In this study, primary data were collected using a self-administered questionnaire that was prepared in the English language. The questionnaire was translated to Amharic and back translated to English by language experts to check the consistency of the translations. The study participants filled out the Amharic version online via Google Form. The questionnaire was pretested at Ras Desta Damtew Memorial Hospital. During the pretesting of the questionnaire, the easy understandability of the questions was assessed, and corrective measures were taken based on the identified gaps. The questionnaire had mainly six sections that assessed the intrinsic (or personal) characteristics, extrinsic (or work-related) characteristics, perceived organizational support, organizational commitment, and job satisfaction of the participants.

3.5.2. Data collection procedures

The questionnaire was filled out electronically using Google Form. To facilitate the data collection, eight nurses with at least a Bachelor of Science (BSc) degree and experience in research undertakings were recruited as data collection facilitators. In addition, three health professionals with a Master's degree and experience in research were recruited as a supervisor. The supervisors monitored the activities of the data collection facilitators. The data collection facilitators invited the eligible nurses to participate in the study using virtual and face-to-face

methods. The data collection facilitators and supervisors received a one-day training on the research objectives, data collection techniques, supervision, and facilitation of the data collection methods. The principal investigator also closely supervised the data collection. The respondents filled out the questionnaires whenever they were off duties, based on their convenience.

3.6. Variables and measurement

The variables of the study were identified based on the theoretical framework and the reviewed literature. (Alemayehu et al., 2021; Al-Jabari & Ghazzawi, 2019; Arage et al., 2022; Fantahun et al., 2023; Israel Bekele et al., 2017; Kelbiso et al., 2018) The dependent variable of the study was the organizational commitment among nurses. The independent variables for the organizational commitment among nurses were intrinsic characteristics or demographic characteristics (age, sex, level of education, marital status, years of service, rank, position, place of work), extrinsic variables or work-related characteristics (salary and benefit package, working environment, professional autonomy, relationship with supervisor and other staff, opportunities for professional and career development), job satisfaction, and perceived organizational support.

Literature has used different types of tools to assess perceived organizational support, organizational commitment, and job satisfaction. The commonly used and highly recommended questionnaires that have good validity and reliability were used.

The perceived organizational support was assessed by the Survey of Perceived Organization Support (8-item Form) developed by Eisenberger et al. in 1997. The form has eight questions that are answered using a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). It is a validated tool with good validity and reliability. (Hutchison, 1997) **[Annex III]**

The organizational commitment was assessed using the most accepted method developed by Alan and Meyer (1990). The questionnaire had different versions, and the 20-question tool was used with three dimensions: the affective commitment scale (ACS), the continuance commitment scale (CCS), and the normative commitment scale (NCS). The self-rating used a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). It is one of the most used and highly recommended tools. (Allen & Meyer, 1990) **[Annex III]**

In this study, the job satisfaction of the participants was assessed using a single-item global measure of overall job satisfaction as recommended by other researchers. (Nagy, 2002) The tool uses just one question: *Do you mostly enjoy your work in this organization?* The participants were expected to rate their response using the seven-point Likert scale 1 to 7 (1 = very strongly disagree and 7 = very strongly agree). [Annex III]

3.7. Pilot study

Before the actual data collection, a pilot study was conducted to ensure the validity, reliability, and suitability of the instruments. First, researchers and scholars who have experience and expertise on the topics reviewed the questionnaire and reflected on the formulation, format, structure, sequence, layout, and design of the questionnaire. The final draft questionnaire was pretested at Ras Desta Damtew Memorial Hospital by interviewing 25 nurses, 5.6% of the sample size. During the piloting, the readability, sensitiveness, and understandability of the questions were assessed. Moreover, the willingness of respondents to answer the questions and the estimated time needed to administer the questionnaire were assessed. Corrective measures were taken according to the reflections by revising ambiguous, unclear, and unnecessary questions. The length of the questionnaire administration was the main concern and reflection by the respondents; hence, some questions were eliminated. The data collected from the pretesting were not used in the final data analysis.

3.8. Data analysis

The collected data were coded, cleaned, and transformed as necessary before the analysis. The completeness and consistency of the data were checked during the data collection and the data cleaning. The data were analyzed using IBM SPSS Statistics Version 26. Descriptive statistics were used to summarize and present the data. The mean, median, standard deviation, and interquartile range were used to show the centrality and dispersion of the quantitative data. Frequency and percentage were used to summarize and describe categorical data. The perceived organizational support and organizational commitment assessments were based on tools that use 5-point Likert scales. The points 1, 2, 3, 4, and 5 corresponded to the strongly disagree, disagree, neutral, agree, and strongly agree responses of the participants, respectively. The sum score of the responses of the organizational commitment and the mean were used as the outcome variable. Hence, for the categorical variables, an independent t-test and analysis of variance (ANOVA) were used to assess the presence of crude associations. For quantitative variables, to investigate the correlation of each independent variable with the dependent

variable, Pearson's correlation was used. To control any form of confounder and identify independent predictors of organizational commitment, multiple linear regression was applied. Independent variables showing a p-value <0.05 in the multiple linear regression analysis were considered to have a significant association with the dependent variable (i.e., organizational commitment).

While running the multiple linear regression, all the desirable statistical assumptions were checked. The goodness of fit of the model was assessed using R^2 (coefficient of determination). The distribution of the outcome variable was assessed for normality using histogram, Q-Q plot, and Kolmogorov-Smirnov tests. The linearity of the distribution of the residuals was assessed using P-P plot. The homoscedasticity was assessed using the graphical method (scatter plot). Autocorrelation of the independent variables and residuals was assessed using the Durbin-Watson. The multicollinearity of the independent variables was assessed using the variance inflation factor (VIF) technique.

3.9. Reliability and validity of data

3.9.1. Reliability of data

Different techniques were applied to minimize the potential sources of random error. Firstly, data collection tools that have been recommended by the literature and scholars on the specific topics were used. In addition, the Cronbach's alpha coefficient of the items that are measuring the respective variables (perceived organizational support and organizational commitment) were assessed. The training of data collectors and supervisors could help minimize inconsistencies during the data collection process. In addition, the questionnaire was pretested, and appropriate corrections were made before using it. Close supervision was conducted during the data collection to ensure the consistency of the responses.

3.9.2. Validity of data

The validity of the data was enhanced by using the best-recommended tools to measure the perceived organizational support and organizational commitment. Regarding the content validity, the questionnaire was reviewed and commented on by experts on the topics.

3.10. Ethical considerations

Before commencing the data collection, ethical clearances and approvals were secured from the Institutional Review Boards (IRBs) of St. Paul's Hospital Millennium Medical College, Addis Ababa City Administration Health Bureau, Yekatit 12 Hospital Medical College, and

Menilik II Referral Hospital/Medical College. Informed consent was obtained from every eligible study participant. During the consenting process, the study participants were informed about the purpose of the study, voluntary participation in the study, observation of their privacy, and confidentiality of the collected data. The participants were also informed about their right to withdraw from the study even after consenting and starting the study. The respondents were paid no fee for their participation in the study, and they were not be penalized for not participating in the study. Only anonymous data were collected. The collected data were stored in secured and password-protected files and computers. In this study, only deidentified data were analyzed and interpreted. The data were used only for research purposes and were not shared with anyone who is not a member of the research team. Upon request, deidentified data could be shared to scholarly journals while submitting a manuscript for publication of the findings of the study.

3.11. Dissemination plan

The final thesis report will be submitted to all the stakeholders that have been involved in the approval and that can use the findings, including Addis Ababa University, College of Business and Economics, St. Paul's Hospital Millennium Medical College, Addis Ababa City Administration Health Bureau, Yekatit 12 Hospital Medical College, and Menilik II Hospital/Medical College. The findings will be shared with other scholars at relevant international and local conferences via oral or poster presentation. The findings of the study will be published in reputable peer-reviewed journals.

Chapter 4. Results

4.1. Introduction

This chapter presents the key findings of the study. The chapter covers the response rate of participants, reliability and validity tests of the findings, the descriptive analysis, and the inferential statistics parts.

4.2. Response rate of participants

For this study, 450 nurses working at St. Paul's Hospital Millennium Medical College, Yekatit 12 Hospital Medical College, and Menilik II Hospital/Medical Health Science College were randomly selected and contacted to administer the online questionnaire. A total of 411 filled-out questionnaires were received that were complete and eligible to be analyzed, making the response rate 91.3%.

4.3. Reliability test

The two job attitudes were computed as composite variable out of multiple items with a five-point Likert scale. These variables are perceived organizational support and overall organizational commitment, using 8-item and 20-item tools, respectively. To check the reliability of the responses for the items, the Cronbach's alpha coefficients were computed as summarized in the table below. The coefficients of the perceived organizational support and the overall organizational commitment variables were > 0.8 , indicating good reliability. The normative commitment dimension had the lowest coefficient among all, 0.641. [Table 1]

Table 1. Reliability test of variables

Item	Number of items	Cronbach's Alpha	Cronbach's Alpha based on standardized items
Perceived organizational support	8	0.828	0.829
Affective commitment	7	0.874	0.876
Continuance commitment	7	0.855	0.855
Normative commitment	6	0.641	0.648
Overall organizational commitment	20	0.891	0.890

4.4. Descriptive statistics

4.4.1. Demographic and organizational profile of respondents

Out of the 411 participants, 213 (51.8%) were females. The mean age was 30.6 years, with a standard deviation of 5.5. Two hundred eleven (51.3%) were under 30 years old, and only 32 (7.8%) of them were over 40 years old. Three-fourths (310, 75.4%) of the participants had a first degree or less, while 101 (24.6%) of them had a Masters or PhD degree. One hundred ninety-three (47.0%) of the participants were married. The median monthly income of the participants was 8,008.50 Ethiopian Birr with an interquartile range (IQR) of 3,000, ranging from 3,500 to 30,000. Forty-six (11.2%) of the participants did not disclose their monthly income.

Around half (212, 51.6%) of the participants were from St. Paul's Hospital Millennium Medical College. The Yekatit 12 Hospital Medical College and the Menilik II Hospital/College comprised 104 (25.3%) and 95 (23.1%), respectively. Regarding their place of assignment, 99 (24.1%), 79 (19.2%), 72 (17.5%), and 47 (11.4%) of the participants were from surgical, pediatrics, internal medicine, and academic or research departments, respectively. Around three-fourths of the participants (302, 73.5%) were staff nurses with no leadership or supervisory role, while 109 (26.5%) of them assumed different supervisory/leadership roles. The minimum and maximum service years of the participants at the college or hospital were 1 and 38 years, respectively. More than half of the nurses (211, 51.3%) served less than 5 years in the hospital/college, while around one tenth (11.9%) of them served more than 10 years.

[Table 2]

Table 2. Demographic and organizational profile among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024

Variable	Category	Frequency (n = 411)	Percentage (%)	Summary
Gender	Male	198	48.2	
	Female	213	51.8	
Age (years)	<25	27	6.6	Mean age = 30.6
	25–29	184	44.8	SD* age = 5.5
	30–34	120	29.2	Minimum age = 22
	35–39	48	11.7	Maximum age = 58
	40+	32	7.8	
Education	First degree or less (Diploma and BSc**)	310	75.4	
	Second degree or more (Masters and PhD***)	101	24.6	
Marital status	Non-married	218	53.0	

Variable	Category	Frequency (n = 411)	Percentage (%)	Summary
	Married	193	47.0	
Monthly income (Ethiopian Birr)	≤5000	24	5.8	Median income = 8,008.5
	5,001–7,500	138	33.6	Interquartile range = 3,000
	7,501–10,000	126	30.7	First quartile = 7,000
	10,001–15,000	58	14.1	Third quartile = 10,000
	>15,000	19	4.6	Minimum income = 3,500
	Unknown	46	11.2	Maximum income = 30,000
Place of work	St. Paul's Hospital Millennium Medical College	212	51.6	
	Yekatit 12 Hospital Medical College	104	25.3	
	Menilik II Hospital/Medical and Health Science College	95	23.1	
Department	Adult emergency	44	10.7	
	Adult ICU [§]	27	6.6	
	Internal medicine	72	17.5	
	Pediatrics	79	19.2	
	Surgery	99	24.1	
	Academic and research	47	11.4	
	Other departments [‡]	43	10.5	
Position	Staff nurse/no leadership or supervisory role	302	73.5	
	Leadership or supervisory role	109	26.5	
Service years at college/hospital (years)	<3	60	14.6	Mean = 6.5
	3–5	151	36.7	SD = 4.9
	6–10	151	36.7	Minimum = 1
	>10	49	11.9	Maximum = 38

*SD: standard deviation; **BSc: Bachelor of Science; ***PhD: Doctor of Philosophy; [§]ICU: Intensive care unit

[‡]Other departments are 12 different departments with small frequencies ranging from 2 to 7.

4.4.2. Work environment factors

The participants rated a few questions related to their work on a five-point Likert scale. The points 1, 2, 3, 4, and 5 corresponded to the “very low,” “low,” “fair,” “good,” and “very good” responses of the participants, respectively. The majority (214, 52.1%) of the participants believed that the salary and other benefit packages they get from the college/hospital were “very low,” followed by “low” (35.8%) and “fair” (7.5%). Only five (1.2%) of them rated their salary and benefit package as “very good.” Regarding their relationship with colleagues/coworkers, 172 (41.8%) participants reported “very good,” while 32.8% and 17.3% of them rated “good” and “fair.” A comparable proportion of nurses rated their relationship

with their supervisor as “very good” (134, 32.6%) and “good” (137, 33.3%), while 30 (7.3%) and 16 (3.9%) of them rated their relationship with their supervisors as “low” and “very low,” respectively. A bit lower than half of the participants (187, 45.5%) believed that their professional autonomy was “good” or “very good,” while 38 (9.2%) and 80 (19.5%) of them rated their professional autonomy as “very low” and “low,” respectively. Regarding their professional and career development opportunities in the college/hospital, 127 (30.9%), 145 (35.3%), and 67 (16.3%) of the nurses rated it as “very low,” “low,” and “fair,” respectively. Only 72 (17.5%) of them rated the opportunities as either “good” or “very good.” [Table 3]

Table 3. Self-rating of work-related factors among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024

Question: How do you rate the following items 1 to 5?	n (%)	Very low (1)	Low (2)	Fair (3)	Good (4)	Very good (5)	Mean	SD
Salary and other benefit package	n	214	147	31	14	5	1.66	0.853
	%	52.1	35.8	7.5	3.4	1.2		
Your relationship with colleagues or co-workers	n	10	23	71	135	172	4.06	1.016
	%	2.4	5.6	17.3	32.8	41.8		
Relationship with your supervisor/s	n	16	30	94	137	134	3.83	1.083
	%	3.9	7.3	22.9	33.3	32.6		
Professional autonomy	n	38	80	106	128	59	3.22	1.187
	%	9.2	19.5	25.8	31.1	14.4		
Opportunities for professional and career development	n	127	145	67	53	19	2.25	1.159
	%	30.9	35.3	16.3	12.9	4.6		

4.4.3. Perceived organizational support level among nurses

The perceived organizational support level was assessed based on the eight-question tool that used the five-point Likert scale. The points 1, 2, 3, 4, and 5 corresponded to the strongly disagree, disagree, neutral, agree, and strongly agree responses of the participants, respectively. The possible minimum and maximum scores for the rating were 8 and 40, respectively. In this study, the mean perceived organizational support score was 20.7 (SD = 6.5), with a minimum and maximum score of 8 and 40, respectively. Half of the participants scored < 21. Having considered the mean score of each of the eight items, the top four favorably-rated items were “the college/hospital shows very little concern for me,” which was scored in reverse order, “if given the opportunity, the college/hospital would take advantage of me,” which was scored in reverse order, “the college/hospital would forgive an honest mistake on my part,” and “help is available from the college/hospital when I have a problem,” respectively, with a mean (SD) of 2.92 (1.228), 2.76 (1.199), 2.63 (1.084), and 2.63 (1.234), respectively. [Table 4]

Table 4. Perceived organizational support scores of nurses in public medical colleges in Addis Ababa, Ethiopia, 2024

Question: How do you rate the following items 1 to 5?	n/%	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Mean	SD	
The college/hospital cares about my opinions.	n	124	108	87	77	15	2.39	1.200	
	%	30.2	26.3	21.2	18.7	3.6			
The college/hospital really cares about my well-being.	n	168	96	71	61	15	2.17	1.216	
	%	40.9	23.4	17.3	14.8	3.6			
The college/hospital strongly considers my goals and values.	n	111	96	94	90	20	2.54	1.234	
	%	27.0	23.4	22.9	21.9	4.9			
Help is available from the college/hospital when I have a problem.	n	98	101	90	100	22	2.63	1.234	
	%	23.8	24.6	21.9	24.3	5.4			
The college/hospital would forgive an honest mistake on my part.	n	81	89	153	76	12	2.63	1.084	
	%	19.7	21.7	37.2	18.5	2.9			
If given the opportunity, the college/hospital would take advantage of me. (R)	n	54	76	120	105	56	2.76	1.199	
	%	13.1	18.5	29.2	25.5	13.6			
The college/hospital shows very little concern for me. (R)	n	26	75	111	116	83	2.92	1.228	
	%	6.3	18.2	27.0	28.2	20.2			
The college/hospital is willing to help me if I need a special favor.	n	77	98	112	96	28	2.62	1.178	
	%	18.7	23.8	27.3	23.4	6.8			
Perceived organizational support scale summaries (8 items) out of maximum score of 40.	Mean	=	20.7					2.58	0.807
	SD	=	6.5						
	Min	=	8						
	Max	=	40						

4.4.4. Job satisfaction level among nurses

Regarding job satisfaction, the participants self-rated their satisfaction on a seven-point scale. The three highest ratings among the participants were 5, 6, and 1 out of seven, with 127 (30.9%), 57 (13.9%), and 55 (13.4%), respectively. More than half (221, 53.8%) of the participants rated their satisfaction above three (either 4, or 5, or 6, or 7 out of the maximum score of seven). [Figure 3]

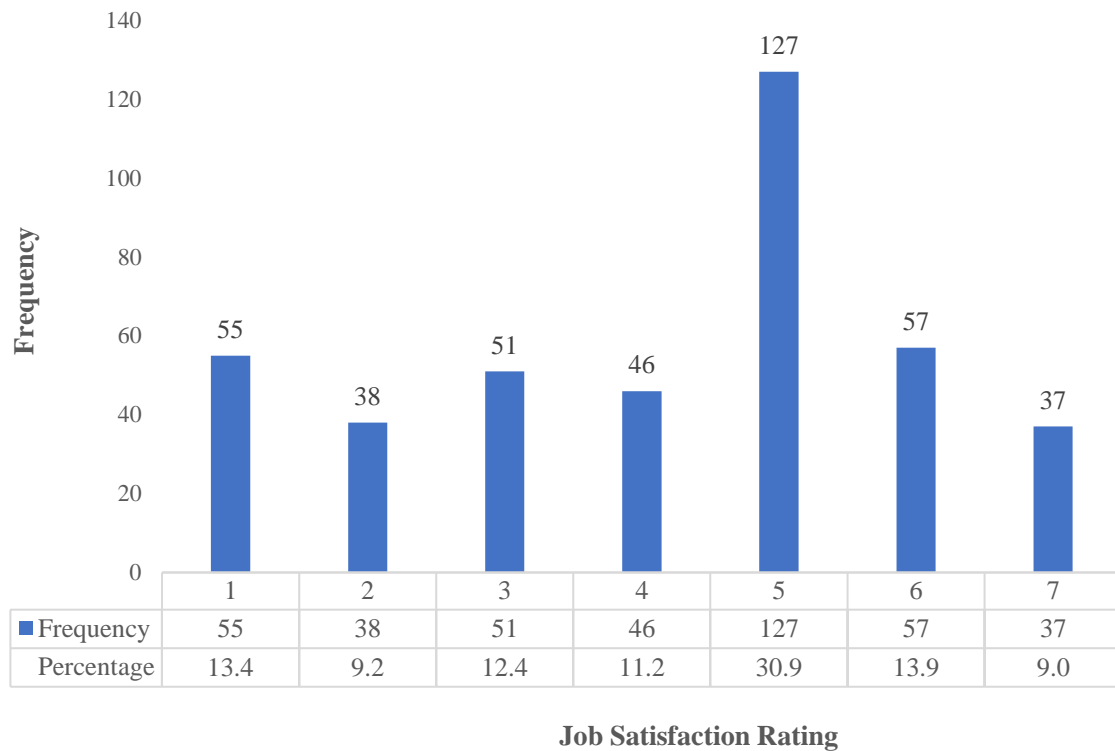


Figure 3. Rating of job satisfaction in 1 to 7 scale among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024

4.4.5. Organizational commitment level among nurses

The organizational commitment was assessed based on a 20-item scale that applied the five-point Likert scale. The 20 questions assessed the three dimensions: the affective (seven items), continuance (seven items), and normative commitment scales (six items). The points 1, 2, 3, 4, and 5 corresponded to the strongly disagree, disagree, neutral, agree, and strongly agree responses of the participants, respectively.

Accordingly, the participants could have a minimum and maximum score of 20 and 100, respectively. The mean global organizational commitment score was 62.9 (SD = 13.6), with a minimum and maximum score of 21 and 99, respectively. i.e., since the total possible score of the organizational commitment scale is 100 (20 questions with 5 points), the percentage mean score of organizational commitment is $\frac{62.9}{100} \times 100\% = 62.9\%$.

Out of the 20 items, the top three highly-rated items were “I do believe that a person must always be loyal to his/her organization,” “I was taught to believe in the value of remaining loyal to one organization,” and “I really feel as if the college/hospital problems are my own,” respectively, with a mean (SD) of 4.21 (1.028), 3.81 (1.142), and 3.70 (1.121), respectively.

[Table 5]

Table 5. Organizational commitment scale scores among nurses in public medical colleges in Addis Ababa, Ethiopia, 2024

Question: How do you rate the following items 1 to 5?	n/%	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Mean	SD
Affective commitment scale								
I would be very happy to spend the rest of my career with in the college/hospital.	n	137	74	80	80	40	2.54	1.376
	%	33.3	18.0	19.5	19.5	9.7		
I enjoy discussing about the college/hospital with people outside.	n	60	61	98	139	53	3.16	1.251
	%	14.6	14.8	23.8	33.8	12.9		
I really feel as if the college/hospital problems are my own.	n	33	28	57	206	87	3.70	1.121
	%	8.0	6.8	13.9	50.1	21.2		
I do feel like “part of the family” at the college/hospital.	n	40	43	81	173	74	3.48	1.186
	%	9.7	10.5	19.7	42.1	18.0		
I do feel “emotionally attached” to the college/hospital.	n	50	75	116	128	42	3.09	1.177
	%	12.2	18.2	28.2	31.1	10.2		
The college/hospital has a great deal of personal meaning for me.	n	46	62	100	150	53	3.25	1.192
	%	11.2	15.1	24.3	36.5	12.9		
I do feel a strong sense of belonging to the college/hospital.	n	27	43	74	174	93	3.64	1.136
	%	6.6	10.5	18.0	42.3	22.6		
Continuance commitment scale								
I am afraid of what might happen if I quit my job without having another one lined up.	n	61	85	94	122	49	3.03	1.256
	%	14.8	20.7	22.9	29.7	11.9		
It would be very hard for me to leave the college/hospital right now, even if I wanted to.	n	64	101	86	118	42	2.93	1.251
	%	15.6	24.6	20.9	28.7	10.2		
Too much in my life would be disrupted if I decided I wanted to leave the college/hospital now.	n	93	128	97	69	24	2.52	1.180
	%	22.6	31.1	23.6	16.8	5.8		
Right now, staying with the college/hospital is a matter of necessity as much as desire.	n	50	72	98	151	40	3.14	1.184
	%	12.2	17.5	23.8	36.7	9.7		
I feel that I have too few options to consider leaving this college/hospital.	n	66	114	91	116	24	2.80	1.183
	%	16.1	27.7	22.1	28.2	5.8		
One of the few serious consequences of leaving the college/hospital would be the scarcity of available alternatives.	n	58	95	78	142	38	3.02	1.231
	%	14.1	23.1	19.0	34.5	9.2		
One of the major reasons I continue to work for the college/hospital is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	n	143	112	77	65	14	2.26	1.188
	%	34.8	27.3	18.7	15.8	3.4		
Normative commitment scale								
I think that people these days move from company to company too often.	n	31	75	105	130	70	3.32	1.175
	%	7.5	18.2	25.5	31.6	17.0		
I do believe that a person must always be loyal to his or her organization.	n	18	16	27	152	198	4.21	1.028
	%	4.4	3.9	6.6	37.0	48.2		
One of the major reasons I continue to work for the college/hospital is that I believe that loyalty is important and I feel a sense of moral obligation to remain.	n	36	81	87	141	66	3.29	1.205
	%	8.8	19.7	21.2	34.3	16.1		
	n	106	105	86	83	31	2.58	1.273

Question: How do you rate the following items 1 to 5?	n/%	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)	Mean	SD
If I got another offer for a better job elsewhere, I would not feel it was right to leave the college/hospital.	%	25.8	25.5	20.9	20.2	7.5		
I was taught to believe in the value of remaining loyal to one organization.	n	25	36	55	170	125	3.81	1.142
	%	6.1	8.8	13.4	41.4	30.4		
Things were better in the days when people stayed with one organization for most of their careers.	n	49	73	129	114	46	3.09	1.173
	%	11.9	17.8	31.4	27.7	11.2		
Organizational commitment scale summaries (20 items) out of maximum score of 100	Mean	=	62.9				3.14	0.682
	SD	=	13.6					
	Min	=	21					
	Max	=	99					

The mean score of the means of each of the items of the three components of organizational commitment were computed. Accordingly, the highest and lowest ratings were for the normative and continuance commitment scales, with mean (SD) of 3.384 (0.699) and 2.815 (0.886), respectively. [Table 6]

Table 6. Summaries of the overall score of organizational commitment and its three dimensions

Measures	Affective commitment scale (Seven items)	Continuance commitment scale (Seven items)	Normative commitment scale (Six items)	Overall organizational commitment scale (Twenty items)
Mean	3.265	2.815	3.384	3.143
SD	0.911	0.886	0.699	0.682
Min	1.000	1.000	1.000	1.050
Max	5.000	5.000	5.000	4.950

4.5. Inferential statistics

Different inferential statistical techniques were applied to investigate the relationship between the explanatory variables and the dependent variable. First, the individual explanatory variable's relationship with the dependent variable was assessed separately, also called bivariate analysis, using different statistical techniques (e.g., t-test, ANOVA, and Pearson's correlation analysis). Finally, the relationship of multiple explanatory variables with the dependent variable at the same time was assessed using the multiple linear regression technique. Based on the multiple linear regression analysis, the effect of potential confounding effects of variables was controlled, and the independent effect of each explanatory variable in the dependent variable (organizational commitment of nurses) was assessed.

4.5.1. Bivariate analysis

For the categorical explanatory variables, a t-test and an ANOVA were used, while for the quantitative explanatory variables, Pearson’s correlation analysis was used to investigate their relationship with the overall organizational commitment, declaring statistical significance at $p < 0.05$.

For qualitative variables, a t-test was used for variables with two outcomes (*degrees of freedom, t statistic, and p value*), and an ANOVA was used for those variables with more than two outcomes (*degrees of freedom, F value, and p value*). Accordingly, among the categorical variables, age ($F(4) = 5.174, p < 0.001$) and service duration in the college/hospital ($F(3) = 2.929, p = 0.034$) showed a statistically significant effect on the organizational commitment score of the nurses. [Table 7]

Though female nurses showed a slightly higher organizational commitment mean score (SD), i.e., 62.9 (13.7), compared with males with a mean (SD) score of 62.8 (13.6), the difference was not statistically significant ($t(409) = 0.127, p = 0.899$). The education level ($t(409) = -0.369, p = 0.712$), marital status ($t(409) = 0.642, p = 0.521$), position ($t(409) = -0.293, p = 0.769$), and department ($F(6) = 0.670, p = 0.674$) did not show a significant effect on the organizational commitment of nurses. [Table 7]

These relationships were considered as crude associations because potential confounders were not controlled. Hence, a multiple linear regression analysis was run that controlled the effect of the potential confounders.

Table 7. Overall organizational commitment versus demographic and organizational profile of nurses at public hospital medical colleges in Addis Ababa, Ethiopia, 2024 (n=409)

Variable	Category	Mean (SD*)	Degrees of freedom	T-test or ANOVA	P value
Gender	Male	62.8 (13.6)	409	$t=0.127$	0.899
	Female	62.9 (13.7)			
Education	First degree or less (Diploma and BSc**)	63.0 (13.7)	409	$t=-0.369$	0.712
	First degree or less (Diploma and BSc**)	62.4 (13.7)			
Marital status	Non-married	62.5 (13.9)	409	$t=0.642$	0.521
	Married	63.3 (12.8)			
Position	Staff nurse/no leadership or supervisory role	63.0 (13.7)	409	$t = -0.293$	0.769
	Leadership or supervisory position	62.5 (13.5)			

Variable	Category	Mean (SD*)	Degrees of freedom	T-test or ANOVA	P value
Age (years)	<25	65.0 (15.1)	4	$F = 5.174$	<0.001
	25–29	60.1 (13.8)			
	30–34	64.7 (12.9)			
	35–39	62.9 (12.1)			
	40+	70.2 (13.3)			
Department	Adult emergency	61.8 (15.5)	6	$F = 0.670$	0.674
	Adult ICU [§]	65.5 (11.1)			
	Internal medicine	61.5 (11.9)			
	Pediatrics	62.0 (12.7)			
	Surgery	63.4 (15.9)			
	Academic and research	62.5 (13.0)			
	Other departments	65.5 (12.9)			
Service years at college/hospital	<3	65.4 (13.3)	3	$F = 2.929$	0.034
	3–5	60.6 (13.3)			
	6–10	63.1 (13.7)			
	>10	65.9 (14.2)			

*SD: standard deviation; **BSc: Bachelor of Science; ***PhD: Doctor of Philosophy; [§]ICU: Intensive care unit

Similarly, for the affective, continuance, and normative commitments, we run a t-test and an ANOVA for the categorical explanatory variables. Accordingly, for the affective commitment, only age ($F(4) = 6.152, p < 0.001$) and service years at the college ($F(3) = 4.418, p = 0.005$) were significant. For the continuance commitment, only age ($F(4) = 3.878, p = 0.004$) was significant. For the normative commitment also, age ($F(4) = 3.584, p = 0.007$) and service years at the college ($F(3) = 3.950, p = 0.009$) were significant. [Table 8]

Table 8. Affective, continuance, and normative commitments versus demographic and organizational profile of nurses at public hospital

Variable	Category	Degrees of freedom	Affective commitment			Continuance commitment			Normative commitment		
			Mean (SD*)	T-test or ANOVA	P value	Mean (SD*)	T-test or ANOVA	P value	Mean (SD*)	T-test or ANOVA	P value
Gender	Male	409	23.0 (6.3)	$t=0.462$	0.644	19.6 (6.0)	$t=-0.186$	0.852	20.1 (4.4)	$t=-0.841$	0.401
	Female		22.7 (6.4)			19.8 (6.4)			20.5 (4.0)		
Education	First degree or less (Diploma and BSc**)	409	22.8 (6.5)	$t=-0.031$	0.975	19.8 (6.6)	$t=.781$	0.435	20.3 (4.2)	$t=0.095$	0.925
	First degree or less (Diploma and BSc**)		22.9 (5.9)			19.3 (6.6)			20.3 (4.2)		
Marital status	Non-married	409	22.5 (6.6)	$t=-1.243$	0.214	19.8 (6.1)	$t=0.433$	0.665	20.1 (4.4)	$t=-0.843$	0.400
	Married		23.3 (6.2)			19.6 (6.3)			20.5 (3.9)		
Position	No leadership or supervisory role	409	23.0 (6.5)	$t=0.719$	0.472	19.8 (6.1)	$t=0.484$	0.628	20.2 (4.2)	$t=-0.855$	0.393
	Leadership or supervisory position		22.5 (6.2)			19.5 (6.5)			20.6 (4.1)		
Age (years)	<25	4	23.4 (6.3)	$F=6.152$	<0.001	21.8 (5.2)	$F=3.878$	0.004	19.8 (5.8)	$F=3.584$	0.007
	25–29		21.3 (6.5)			19.2 (6.3)			19.6 (4.1)		
	30–34		23.9 (5.9)			20.1 (5.9)			20.7 (4.3)		
	35–39		23.8 (6.4)			17.8 (5.9)			21.3 (3.1)		
	40+		26.1 (5.6)			22.3 (6.8)			21.8 (3.8)		
Department	Adult emergency	6	22.6 (7.2)	$F=1.201$	0.305	19.3 (6.0)	$F=0.809$	0.564	19.9 (5.5)	$F=1.306$	0.253
	Adult ICU [§]		23.5 (4.9)			20.8 (6.2)			21.2 (3.4)		
	Internal medicine		22.0 (6.2)			20.1 (5.2)			19.4 (4.2)		
	Pediatrics		22.1 (6.2)			19.8 (5.7)			20.2 (4.0)		
	Surgery		22.8 (7.3)			20.2 (6.6)			20.4 (4.6)		
	Academic and research		23.7 (5.5)			18.1 (7.2)			20.7 (3.1)		
	Other departments		24.7 (6.1)			19.4 (6.6)			21.3 (3.2)		
Service years at college/hospital	<3	3	24.1 (6.2)	$F=4.418$	0.005	20.7 (5.6)	$F=0.595$	0.619	20.7 (4.3)	$F=3.950$	0.009
	3–5		21.6 (6.2)			19.6 (6.1)			19.4 (4.2)		
	6–10		23.0 (6.5)			19.4 (6.0)			20.7 (4.1)		
	>10		24.8 (6.1)			19.7 (7.7)			21.4 (3.8)		

*SD: standard deviation; **BSc: Bachelor of Science; ***PhD: Doctor of Philosophy; [§]ICU: Intensive care unit

The relationship between the individual quantitative explanatory variables and the overall organizational commitment scores of nurses was assessed using Pearson’s correlation analysis (*degrees of freedom, correlation coefficient (r value), and p value*), declaring statistical significance at $p < 0.05$. Accordingly, all the explanatory variables showed a statistically significant correlation with the overall organizational commitment except the service year at the college, i.e., age, salary and other benefit packages, relationship with colleagues or co-workers, relationship with supervisor, professional autonomy, opportunities for professional and career development, perceived organization support, and job satisfaction, with correlation coefficients ranging from 0.089 to 0.480. The job satisfaction ($r(411) = 0.480, p < 0.001$), perceived organizational support ($r(411) = 0.456, p < 0.001$), and professional autonomy ($r(411) = 0.334, p < 0.001$) were the three variables with the highest correlation coefficients. The variable that did not show significant correlation was the service years at the college/hospital, with ($r(411) = 0.089, p = 0.073$). [Table 9]

Table 9. Correlation results of overall organizational commitment versus continuous variables

Variable	Degrees of freedom	Correlation coefficient	P-value
Age	411	0.192	<0.001
Service years at the college/hospital	411	0.089	0.073
Salary and other benefit package	411	0.234	<0.001
Your relationship with colleagues or co-workers	411	0.262	<0.001
Relationship with your supervisor/s	411	0.300	<0.001
Professional autonomy	411	0.334	<0.001
Opportunities for professional and career development	411	0.255	<0.001
Perceived organizational support	411	0.456	<0.001
Job satisfaction	411	0.480	<0.001

Similarly, the relationship between the individual quantitative explanatory variables and the three organizational commitment dimensions (affective, continuance, and normative commitment) of nurses were assessed using Pearson’s correlation analysis (degrees of freedom, correlation coefficient (r value), and p value), declaring statistical significance at $p < 0.05$.

Accordingly, all the nine explanatory variables showed a statistically significant correlation with the affective and normative commitments. For the continuance commitment, only four the explanatory variables showed statistically significant correlation, namely salary and other

benefit packages, professional autonomy, perceived organizational support, and job satisfaction. [Table 10]

Table 10. Correlation results of affective, continuance, and normative commitments versus continuous variables

Variable	Degrees of freedom	Affective commitment		Continuance commitment		Normative commitment	
		Correlation coefficient	P-value	Correlation coefficient	P-value	Correlation coefficient	P-value
Age	411	0.211	<0.001	0.055	0.268	0.221	<0.001
Service years at the college/hospital	411	0.113	0.022	-0.015	0.761	0.139	0.005
Salary and other benefit package	411	0.198	<0.001	0.190	<0.001	0.181	<0.001
Your relationship with colleagues or co-workers	411	0.290	<0.001	0.090	0.070	0.278	<0.001
Relationship with your supervisor/s	411	0.370	<0.001	0.086	0.081	0.285	<0.001
Professional autonomy	411	0.375	<0.001	0.128	0.010	0.328	<0.001
Opportunities for professional and career development	411	0.267	<0.001	0.095	0.055	0.282	<0.001
Perceived organizational support	411	0.470	<0.001	0.262	<0.001	0.380	<0.001
Job satisfaction	411	0.473	<0.001	0.318	<0.001	0.374	<0.001

4.5.2. Regression analysis

4.5.2.1. Assumptions

To generate valid and reliable conclusions about the real statistical population, while running the multiple linear regression analysis, all the desirable statistical features and assumptions were checked.

The goodness of the final regression model fitted with the independent variables was assessed using the coefficient of determination (R^2), which showed a score of 0.358. This implies that 35.8% of the changes in the organizational commitment scores of the nurses were attributed to the combined effects of the four explanatory variables included in the final model. [Table 11] The ANOVA result of the model fitness assessment also showed a significant value ($p < 0.001$).

Table 11. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.599 ^a	.358	.352	10.98375	1.991

The normality of the distribution of the residuals was assessed using a histogram, a P-P plot [Figure 4], and the Kolmogorov-Smirnov test. They demonstrated that the residuals of the organizational commitment score of the participants had a normal distribution, with a $p = 0.200$ in the Kolmogorov-Smirnov test. [Table 12]

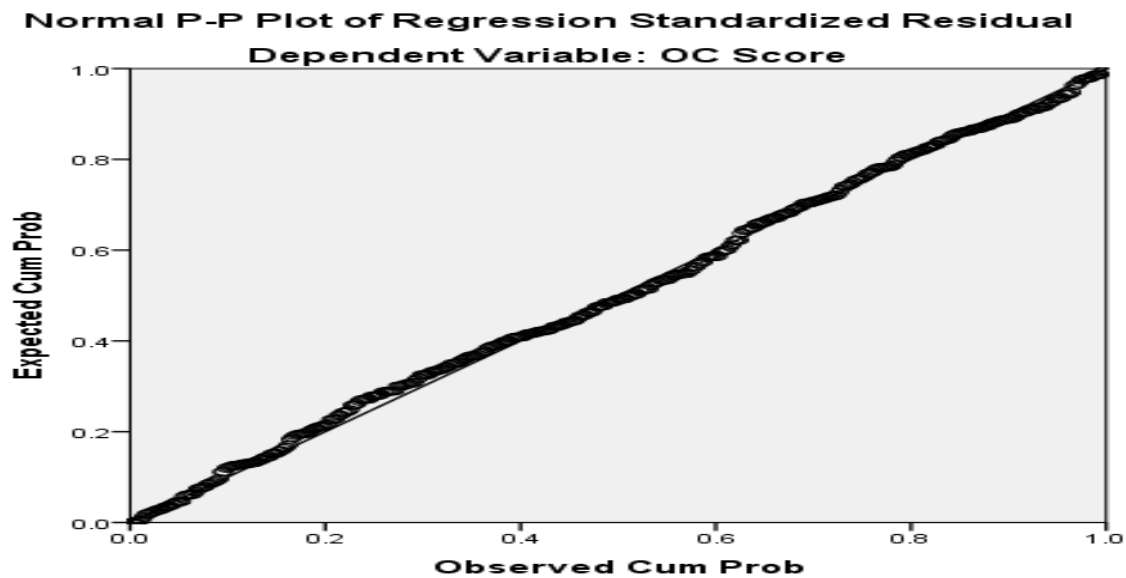


Figure 4. P-P Plot of Residuals

Table 12. Test of Normality using the Kolmogorov-Smirnov Test

	Kolmogorov-Smirnov ^a		
	Statistic	Degree of freedom	P value
Studentized Residual	0.034	411	0.200*

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The homoscedasticity was assessed using the graphical method (scatter plot) by plotting the residuals against the fitted values, and the spots were diffused in the graph, with no clear specific pattern. It shows that there is no heteroscedasticity problem in this regression model. [Figure 5].

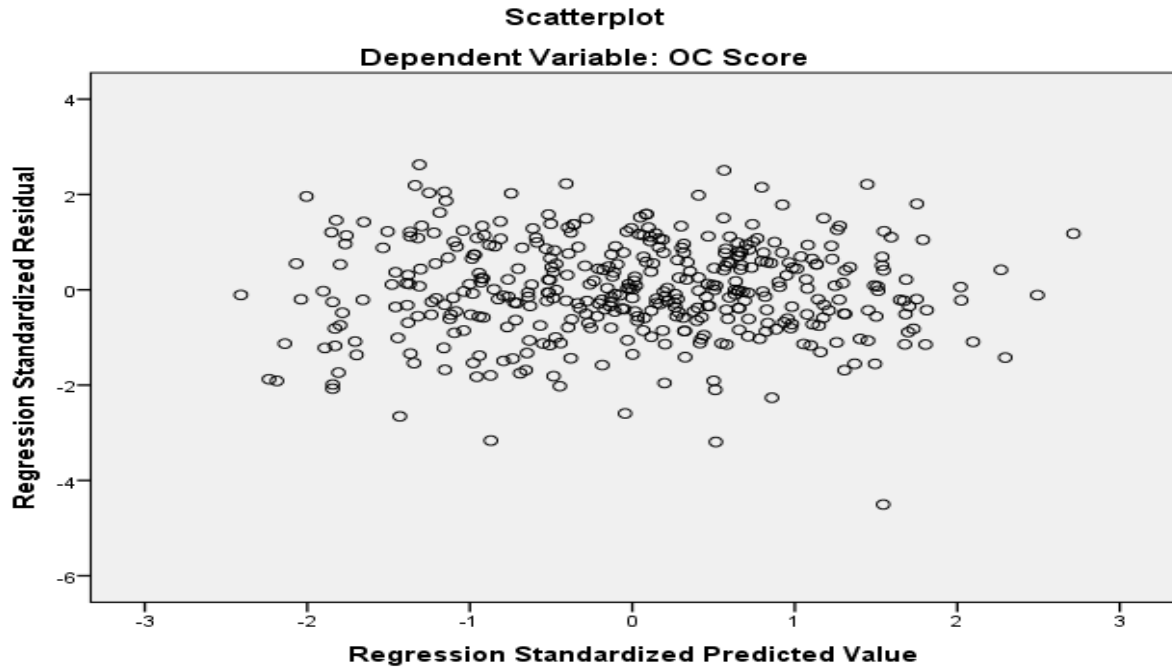


Figure 5. Scatter plot of residuals

Autocorrelation of the errors or residuals of the independent variables was assessed using the Durbin-Watson test that showed a score of 1.991 (i.e., between 1.5 and 2.5), indicating no autocorrelation. [Table 11]

The multicollinearity of the independent variables was assessed using the variance inflation factor (VIF) technique, and all the values were ≤ 1.164 , which shows no high correlation between the independent variables. [Table 13]

Table 13. Collinearity statistics

Variable	Tolerance	VIF
Age (year)	.974	1.027
Relationship with colleagues or co-workers in your department.	.948	1.055
Perceived organizational support	.859	1.164
Job satisfaction	.875	1.143

4.5.2.2. Multiple linear regression analysis

After assessing the assumptions, multiple linear regression model was used to determine the independent predictors of the individual affective commitment, continuance commitment, normative commitment, and overall organizational commitment scores of nurses, with the relative effect of each of the explanatory variables.

Stepwise backward regression technique was used to select the final pertinent variables to be fitted in the model. Initially, the model was fitted with the following explanatory variables: gender, age, educational status, marital status, service duration in the college/hospital, self-rated salary and benefit packages, relationship with colleagues or coworkers, relationship with supervisor, professional autonomy, opportunities for professional or career development, perceived organizational support, and job satisfaction.

4.5.2.2.1. Predictors of affective commitment

The multiple linear regression analysis identified seven variables that were significant predictors for the affective commitment of nurses working in the public hospital medical colleges in Addis Ababa, Ethiopia: age, relationship with supervisor, perceived organizational support, gender, job position, and professional autonomy, and job satisfaction.

The relative contribution of the seven variables to the affective commitment of nurses in decreasing order were job position ($B = -1.211, p = 0.033$), job satisfaction ($B = 1.052, p < 0.001$), gender ($B = -1.020, p = 0.040$), relationship with supervisor ($B = 0.972, p < 0.001$), professional autonomy ($B = 0.557, p = 0.024$), perceived organizational support ($B = 0.278, p < 0.001$), and age ($B = 0.130, p = 0.005$). Holding all other variables constant, the affective commitment score of nurses with leadership positions decreased by 1.211 points (95% CI: -2.323, -0.098) compared to nurses without any leadership positions. Similarly, the affective commitment score of female nurses decreased by 1.020 points (95% CI: -1.992, -0.049) compared to the male nurses. The affective commitment score of nurses increased by 1.052 points (95% CI: 0.765, 1.340) for every additional score in job satisfaction and increased by 0.972 points (95% CI: 0.464, 1.480) for every unit increase in their self-rated relationship with supervisors. Similarly, one-unit additional score of perceived organizational support score was associated with an increase of 0.278 points (95% CI: 0.193, 0.362) in the affective commitment score of nurses. The nurses' affective commitment score increased by 0.557 units (95% CI: 0.075, 1.039) for a one-unit additional score of self-rated professional autonomy. [Table 14]

Table 14. Multiple linear regression for predictors of affective commitment of nurses.

Variable	Unstandardized Coefficients			t	P-value
	B	Std. Error	95% CI for B		
Gender (male is reference)	-1.020	0.494	(-1.992, -0.049)	-2.065	0.040
Age (year)	0.130	0.046	(0.040, 0.219)	2.842	0.005
Job position (having no leadership role is reference)	-1.211	0.566	(-2.323, -0.098)	-2.140	0.033
Relationship with supervisor	0.972	0.258	(0.464, 1.480)	3.763	<0.001
Professional autonomy	0.557	0.245	(0.075, 1.039)	2.272	0.024
Perceived organizational support	0.278	0.043	(0.193, 0.362)	6.448	<0.001
Job satisfaction	1.052	0.146	(0.765, 1.340)	7.204	<0.001

4.5.2.2.2. Predictors of continuance commitment

The multiple linear regression analysis identified only two variables that were significant predictors of the continuance commitment: perceived organizational support and job satisfaction. The magnitude of the effects was ($B = 0.169, p < 0.001$) for the perceived organizational support and was ($B = 0.877, p < 0.001$) for job satisfaction. The continuance commitment score of nurses increased by 0.169 points (95% CI: 0.076, 0.261) for every additional score in perceived organizational support and by 0.877 points (95% CI: 0.551, 1.203) for every additional score in job satisfaction score. [Table 15]

Table 15. Multiple linear regression for predictors of continuance commitment of nurses.

Variable	Unstandardized Coefficients			t	P-value
	B	Std. Error	95% CI for B		
Perceived organizational support	0.169	0.047	(0.076, 0.261)	3.584	<0.001
Job satisfaction	0.877	0.166	(0.551, 1.203)	5.285	<0.001

4.5.2.2.3. Predictors of normative commitment

The multiple linear regression analysis identified four variables that were significant predictors for the normative commitment of nurses in the public hospital medical colleges in Addis Ababa, Ethiopia: age, relationship with colleagues or coworkers, perceived organizational support, and job satisfaction.

The relative effects of the four variables on the normative commitment of nurses working in the public hospital medical colleges in Addis Ababa, Ethiopia, in decreasing order were relationship with colleagues or coworkers ($B = 0.581, p = 0.002$), job satisfaction ($B = 0.536, p < 0.001$), perceived organization support ($B = 0.118, p < 0.001$), and age ($B = 0.107, p = 0.001$).

The normative commitment score of nurses increased by 0.536 points (95% CI: 0.330, 0.742) for every additional score in job satisfaction and increased by 0.581 points (95% CI: 0.207, 0.954) for every unit increase in their self-rated relationship with colleagues or coworkers. Likewise, one-unit additional score of perceived organizational support score was associated with an increase of 0.118 points (95% CI: 0.052, 0.183) in the normative commitment score of nurses. For every additional one year in the age of the nurses, the normative commitment score increased by 0.107 units (95% CI: 0.043, 0.171). [Table 16]

Table 16. Multiple linear regression for predictors of normative commitment of nurses.

Variable	Unstandardized Coefficients			t	P-value
	B	Std. Error	95% CI for B		
Age (year)	0.107	0.033	(0.043, 0.171)	3.287	0.001
Relationship with colleagues or co-workers	0.581	0.190	(0.207, 0.954)	3.055	0.002
Perceived organizational support	0.118	0.033	(0.052, 0.183)	3.530	<0.001
Job satisfaction	0.536	0.105	(0.330, 0.742)	5.119	<0.001
Professional autonomy	0.321	0.176	(-0.026, 0.668)	1.817	0.070
Opportunities for professional and career development	0.304	0.177	(-0.044, 0.652)	1.717	0.087

4.5.2.2.4. Predictors of overall organizational commitment

The stepwise backward regression technique identified only four variables (namely, age, relationship with colleagues or coworkers, perceived organizational support, and job satisfaction) to be fitted in the final model, which had significant association with the organizational commitment score of the nurses.

Hence, having controlled the other factors constant, the relative contribution of the four variables to the overall organizational commitment of nurses working in the public hospital medical colleges in Addis Ababa, Ethiopia, in decreasing order were job satisfaction ($B =$

2.586, $p < 0.001$), relationship with colleagues or coworkers (**$B = 1.836, p = 0.001$**), perceived organization support (**$B = 0.631, p < 0.001$**), and age (**$B = 0.256, p = 0.010$**).

Holding all other variables constant, the organizational commitment score of nurses increased by 2.586 points (95% CI: 1.964, 3.208) for every additional score in job satisfaction and increased by 1.836 points (95% CI: 0.759, 2.914) for every unit increase in their self-rated relationship with colleagues or coworkers. Similarly, one-unit additional score of perceived organizational support score was associated with an increase of 0.631 points (95% CI: 0.453, 0.809) in the organizational commitment score of nurses. The nurses' organizational commitment score increased by 0.256 units (95% CI: 0.061, 0.452) as they got older with 1 more year. [Table 17]

Table 17. Multiple linear regression for predictors of overall organizational commitment of nurses.

Variable	Unstandardized Coefficients			t	P-value
	B	Std. Error	95% CI for B		
Age (year)	0.256	0.100	(0.061, 0.452)	2.573	0.010
Relationship with colleagues or co-workers	1.836	0.548	(0.759, 2.914)	3.350	0.001
Perceived organizational support	0.631	0.091	(0.453, 0.809)	6.961	<0.001
Job satisfaction	2.586	0.316	(1.964, 3.208)	8.172	<0.001

Therefore, according to the regression analysis of the overall organizational commitment and all the three commitment dimensions, the two variables that uniformly predicted the commitment level of nurses working at the public hospital medical colleges in Addis Ababa, Ethiopia, are job satisfaction and perceived organizational support.

Chapter 5. Discussion, conclusions, and recommendations

5.1. Discussion

In this study, one of the key job attributes—organizational commitment—and its determinants among nurses working at public medical colleges in Addis Ababa, Ethiopia, were assessed. The study revealed that the overall organizational commitment level of the nurses was inadequate with a mean score of 62.9, and the predictors of organizational commitment were job satisfaction, relationships with colleagues or coworkers, perceived organizational support, and age.

The mean score of the organizational commitment among the nurses working in the public hospital medical colleges in Addis Ababa was 62.9 (standard deviation = 13.6). i.e., since the total possible score of the organizational commitment scale is 100 (20 questions with 5 points), the percentage mean score of organizational commitment in our study is $\frac{62.9}{100} \times 100\% = 62.9\%$. Furthermore, the mean score of the means of each of the items of the three components of organizational commitment (affective, continuance, and normative commitments) were computed, and the result showed that the commitment levels are different among the three groups. The highest and lowest ratings were for the normative and continuance commitment scales, with mean (standard deviation) of 3.384 (0.699) and 2.815 (0.886), respectively. This implies that the relatively higher contribution for the commitment level of the nurses was moral reason (normative commitment), not the calculated decision between the pros and cons of leaving and staying in the college or hospital (continuance commitment).

The organizational commitment mean or percentage mean score of the current study is lower than the findings from the Jimma University Teaching Hospital study (mean score of 70.45) that was conducted in 2017 among nurses (Israel Bekele et al., 2017) and the Benchsheko Zone, Southwest Ethiopia study (percentage mean score of 74.6%) that was conducted in 2021 among health professionals. (Alemayehu et al., 2021) However, the organizational commitment mean score of the current study was quite higher than the multi-center study that was conducted in 2022 in Addis Ababa among health professionals (percent mean score of 48.6%) (Arage et al., 2022), and a study conducted by Fantahun et al. in 2021 among health professionals working in public hospitals in southwestern Oromia, Ethiopia, which 48.8% organizational commitment level. (Fantahun et al., 2023)

The discrepancies among the above studies might be related to the differences in the study settings, the type of health professionals, and the year of studies. This insufficient level of organizational commitment could be associated with unfavorable outcomes in the workplace (e.g., high staff turnover, decreased job satisfaction, lower performance, and decreased quality healthcare). Hence, the hospitals, the health bureau, and the Ministry of Health should work towards improving the commitment level of the nurses by identifying the specific barriers.

One of the key determinants of organizational commitment in the current study was the level of job satisfaction of the study participants. Job satisfaction of nurses was positively associated with their level of organizational commitment. This finding was in agreement with the other studies conducted in Jimma, Benchsheko Zone in Southwest Ethiopia, Addis Ababa, and Southwestern Oromia that showed a positive relationship between job satisfaction and the organizational commitment of health professionals, including nurses. (Alemayehu et al., 2021; Arage et al., 2022; Fantahun et al., 2023; Israel Bekele et al., 2017) Similarly, other studies conducted in different parts of the world showed that job satisfaction is independent predictor of nurses' organizational commitment. (Church et al., 2018; Gregory et al., 2007; Gül et al., 2023) Nurses who have a higher level of job satisfaction are likely to have a higher level of organizational commitment because of other common possible factors, e.g., having shared and aligned values, a conducive work environment, increased motivation, emotional attachment, and supportive relationships with colleagues. In order to improve the organizational commitment of the nurses, the hospitals and the supervisors should tackle any bottlenecks or factors that are lowering the job satisfaction of the employees.

In the current study, the other independent factor that affected the level of organizational commitment among nurses was their relationship with colleagues or coworkers. Nurses who had better relationships with colleagues or coworkers were more likely to show a higher level of organizational commitment. The same finding was reported by Israel et al. that assessed the determinants of organizational commitment among nurses in Jimma University Teaching Hospital (Israel Bekele et al., 2017) and by Arage et al. that investigated the factors associated with organizational commitment of health professionals in Addis Ababa. (Arage et al., 2022) The positive association between the relationship of the nurses with their colleagues and the level of organizational commitment could be related to a conducive work environment that is created by the trusting and collaborative relationship of the colleagues. Hence, to improve the organizational commitment of the nurses, the hospitals can aim on improving the working relationship of the staff.

The perceived organizational support score was another key factor that was positively associated with the organizational commitment level of nurses. As the score of perceived organizational support was increasing, the level of organizational commitment was also improving. This finding is concordant with other studies that assessed the predictors of organizational commitment in Ethiopia and China. (Alemayehu et al., 2021; Arage et al., 2022; Israel Bekele et al., 2017; Mon et al., 2022) The interplay between the two job attitudes (perceived organizational support and organizational commitment) was also documented in different literature. (Luthans et al., 2021; Robbins & Judge, 2017) This correlation is seen because the nurses who feel that they are being supported by their organization are more likely to be satisfied, emotionally attached, and foster a higher level of commitment to their organization.

Another key determinant of the organizational commitment score of nurses was the age of the participants. In this study, with increasing age, the level of organizational commitment was likely to increase among the nurses. A similar finding was reported from a study by Arage et al. that investigated the predictors of organizational commitment of health professionals in Addis Ababa. (Arage et al., 2022) This might be related to the stability because of experience with their roles, consideration of the long-term duration of career investment, established relationships with other colleagues, alignment of the values of the staff with the organizational values, family commitments, and retirement plans. Hence, to improve the overall organizational commitment among nurses, the hospitals and the managers should provide more attention and work closely with the younger staff, which is also the larger segment of the study participants.

However, the study by Israel et al. (Israel Bekele et al., 2017) and a study by Alemayehu et al. (Alemayehu et al., 2021) reported that age was not a significant determinant factor of the organizational commitment level of the nurses. These inconsistencies might be related to the differences in the study settings and the analysis techniques (i.e., age was analyzed as a continuous variable in the current study, but one of the studies analyzed age by categorization).

In the current study, the leadership/managerial role and working department of the nurses were not significantly associated with the organizational commitment level of the nurses. However, the study by Alemayehu D that was conducted among health professionals in Benchsheko Zone in Southwest Ethiopia showed that the leadership/managerial role of the health professionals was one key determinant of organizational commitment. (Alemayehu et al., 2021) This

inconsistency of the findings could be related to the differences in study settings and levels of health facilities. The health facilities in the Benchsheko Zone were only primary-level health facilities, while the current study was conducted in tertiary-level health facilities.

The study by Israel et al. among the nurses of Jimma University Teaching Hospital showed that the working department of the nurses was one independent factor that affects the organizational commitment of the nurses. (Israel Bekele et al., 2017) The discrepancies between the study findings could be related to the differences in the study settings, number of health facilities, and nature of departments. The Jimma University study was a single facility study, while the current study enrolled three different health facilities. In addition, the number and nature of departments could considerably vary between the hospitals.

5.2. Conclusions

Organizational commitment is one of the crucial job attitudes that has become popular in the study of organizational behavior. Organizational commitment of nurses is linked with the overall performance of the staff and ultimately with the overall success of an organization. In this study, the level of organizational commitment and its predictors among nurses working in the public hospital medical colleges in Addis Ababa, Ethiopia, were assessed.

The study showed that the overall mean score of the organizational commitment level of the nurses was 62.9. This score warrants a need for improvement. Because of the detrimental effects of low organizational commitment levels, the hospitals should work to improve the nurses' level of organizational commitment.

According to the current study, the predictors of organizational commitment among nurses are various, and the prioritized interventions should be tailored to the specific predictors. These important predictors are the nurses' job satisfaction level, relationship with colleagues or coworkers, level of perceived organizational support, and age. i.e., increasing level of job satisfaction is likely to increase the organizational commitment of nurses; better relationships with colleagues or coworkers are likely to increase the organizational commitment of the nurses; increasing level of perceived organizational support is likely to increase the organizational commitment of nurses; and as the nurses get older, their level of organizational commitment is likely to increase.

5.3. Recommendations

In order to address the gaps and specific actions identified by the current study, different stakeholders should play key roles. Accordingly, the recommendations are targeted at the specific parties.

Ministry of Health and Addis Ababa City Administration Health Bureau

- St. Paul's Hospital Millennium Medical College is under the Ministry of Health, and two other hospitals are under the Addis Ababa City Administration Health Bureau. Hence, both parties should work closely with the colleges or hospitals to improve the organizational commitment levels of the nurses. Since the Ministry and the Health Bureau are formulating policies and allocating resources, their role will be crucial to improving the organizational commitment. They can formulate policies and design programs that foster a supportive work environment, improve job satisfaction, improve perceived organizational support, and design mentorship programs.

Hospitals and managers

- The hospitals, managers, and supervisors also should work towards improving the organizational commitment level of nurses by prioritizing the identified predictors. They can work to foster a good working environment that has better working relationships among colleagues. Creating open communication and feedback mechanisms, building trust and respect among the staff, promoting collaboration, timely and effective conflict resolution, encouraging social interactions, leading by example, and creating professional development opportunities are some of the strategies that can improve the relationships among staff.
- The hospitals, managers, and supervisors should also work to improve the levels of job satisfaction and perceived organizational support of the staff. Those with lower levels of job satisfaction and perceived organizational support should be given more attention and focus to address the organizational commitment gaps in the hospitals.
- The hospitals, managers, and supervisors should also provide more focus to younger staff while designing interventions and setting priorities because younger nurses exhibited lower level of organizational commitment.

Researchers

- Organizational commitment is a key job attitude that has huge significance in the overall performance of the health sector, but it is under researched. Different scholars and researchers should investigate this crucial job attribute within the health sector.
- The current study focused on nurses and only public hospital medical colleges. Other researchers could further study other health professionals and involve the private sector in order to have a good comparison and better picture.

References

- Akgerman, A., & Sönmez, B. (2020). The relationship between trust in first-line nurse managers and organizational commitment. *International Nursing Review*, 67(2), 183–190. <https://doi.org/10.1111/inr.12576>
- Al Balushi, A. K., Thumiki, V. R. R., Nawaz, N., Jurcic, A., & Gajenderan, V. (2022). Role of organizational commitment in career growth and turnover intention in public sector of Oman. *PLoS ONE*, 17(5 May). <https://doi.org/10.1371/journal.pone.0265535>
- Al-Dossary, R. N. (2022). Leadership Style, Work Engagement and Organizational Commitment Among Nurses in Saudi Arabian Hospitals. *Journal of Healthcare Leadership*, 14, 71–81. <https://doi.org/10.2147/JHL.S365526>
- Alem Getie, G. (2015). Assessment of Factors Affecting Turnover Intention Among Nurses Working at Governmental Health Care Institutions in East Gojjam, Amhara Region, Ethiopia, 2013. *American Journal of Nursing Science*, 4(3), 107. <https://doi.org/10.11648/j.ajns.20150403.19>
- Alemayehu, D., Ololo, S., & Siraneh, Y. (2021). *Organizational Commitment and Associated Factors Among Health Professionals Working in Public Health Facilities of Benchsheko Zone Southwest Ethiopia*. <https://doi.org/10.21203/rs.3.rs-289827/v1>
- Al-Jabari, B., & Ghazzawi, I. (2019). Organizational Commitment: A Review of the Conceptual and Empirical Literature and a Research Agenda. In *International Leadership Journal "ILJ"* (Vol. 11, Issue 1).
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18. <https://doi.org/10.1111/J.2044-8325.1990.TB00506.X>
- Arage, S. M., Daba, D. B., & Dessalegn, A. Y. (2022). Organizational commitment of health professionals and associated factors in primary healthcare facilities of Addis Ababa, Ethiopia: A multi-center cross-sectional study. *Frontiers in Public Health*, 10.
- Ayalew, F., Kols, A., Kim, Y.-M., Schuster, A., Emerson, M., van Roosmalen, J., Stekelenburg, J., Woldemariam, D., & Gibson, H. (2015). Factors Affecting Turnover Intention among Nurses in Ethiopia. *World Health & Population*, 16(2), 62–74. <https://doi.org/10.12927/whp.2016.24491>
- Baird, K. M., Tung, A., & Yu, Y. (2019). Employee organizational commitment and hospital performance. *Health Care Management Review*, 44(3), 206–215. <https://doi.org/10.1097/HMR.0000000000000181>
- Beck, K., & Wilson, C. (2000). Development of Affective Organizational Commitment: A Cross-Sequential Examination of Change with Tenure. *Journal of Vocational Behavior*, 56(1), 114–136. <https://doi.org/10.1006/JVBE.1999.1712>
- Bune, G. T., Tesfaye, S. H., Ayele, H. T., & Zerfu, T. A. (2014). Work Factors and Commitment of Public Health Care Providers, in Oromiya Region, Ethiopia/2010:

The Case of Equity and Extrinsic Factors. *OALib*, 01(03), 1–16.
<https://doi.org/10.4236/oalib.1100580>

- Chen, S. Y., Wu, W. C., Chang, C. S., Lin, C. T., Kung, J. Y., Weng, H. C., Lin, Y. T., & Lee, S. I. (2015). Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff. *BMC Health Services Research*, 15(1). <https://doi.org/10.1186/s12913-015-1016-8>
- Church, C. D., He, Z., & Yarbrough, S. (2018). Factors influencing organizational commitment and turnover in nurse residents. *Journal of Continuing Education in Nursing*, 49(10), 482–488. <https://doi.org/10.3928/00220124-20180918-09>
- Cohen, A. (2014). *Organisational Commitment Research: Past, Present and Future*. 261–274. https://doi.org/10.1007/978-3-642-54224-4_12
- Engeda, E. H., Birhanu, A. M., & Alene, K. A. (2014). Intent to stay in the nursing profession and associated factors among nurses working in Amhara Regional State Referral Hospitals, Ethiopia. *BMC Nursing*, 13(1). <https://doi.org/10.1186/1472-6955-13-24>
- Eshetu, K., Lankrew, T., Tekalegn, T., Assefa, A., & Demeke, T. (2021). *Intent to Stay in Nursing Profession and Associated Factors Among Nurses Working in Public Hospitals of Harari Regional State and Dire Dawa Administration, Eastern Ethiopia*. <https://doi.org/10.21203/rs.3.rs-538730/v1>
- Ethiopian Federal Ministry of Health. (2021). *Health Sector Transformation Plan II (HSTP II): 2020/21-2024/25*.
- Fantahun, B., Dellie, E., Worku, N., & Debie, A. (2023). Organizational commitment and associated factors among health professionals working in public hospitals of southwestern Oromia, Ethiopia. *BMC Health Services Research*, 23(1). <https://doi.org/10.1186/s12913-023-09167-3>
- Finegan, J. E. (2000). The impact of person and organizational values on organizational commitment. *Journal of Occupational and Organizational Psychology*, 73(2), 149–169. <https://doi.org/10.1348/096317900166958>
- Fukuzaki, T., Takeda, S., Iwata, N., Ooba, S., & Inoue, M. (2023). Commitment profiles among nurses: combinations of organizational commitment forms and work engagement, psychological distress, and turnover intention. *Industrial Health*, 61(3), 232–236. <https://doi.org/10.2486/indhealth.2021-0237>
- Gebregziabher, D., Berhanie, E., Berihu, H., Belstie, A., & Teklay, G. (2020). The relationship between job satisfaction and turnover intention among nurses in Axum comprehensive and specialized hospital Tigray, Ethiopia. *BMC Nursing*, 19(1). <https://doi.org/10.1186/s12912-020-00468-0>
- Gizaw, A. B., Lema, T. B., Debancho, W. W., & Germossa, G. N. (2017). Intention to Stay in Nursing Profession and Its Predictors among Nurses Working in Jimma Zone Public Hospitals, South West Ethiopia. *Journal of Nursing & Care*, 07(01). <https://doi.org/10.4172/2167-1168.1000440>

- Gong, Z., Van Swol, L. M., & Wang, X. (2022). Study on the Relationship between Nurses' Mentoring Relationship and Organizational Commitment. *International Journal of Environmental Research and Public Health*, 19(20). <https://doi.org/10.3390/ijerph192013362>
- Gregory, D. M., Way, C. Y., Lefort, S., Barrett, B. J., & Parfrey, P. S. (2007). Predictors of registered nurses' organizational commitment and intent to stay. *Health Care Manage Rev*, 32(2), 119–127.
- Gül, D., Akkaya, G., & Yildirim, A. (2023). The effect of talent management on the job satisfaction and organizational commitment of nurses. *International Nursing Review*, 70(3), 329–337. <https://doi.org/10.1111/inr.12796>
- Hutchison, S. (1997). Perceived Organizational Support: Further Evidence of Construct Validity. *Educational and Psychological Measurement*, 57(6), 1025–1034. <https://doi.org/10.1177/0013164497057006011>
- Israel Bekele, Kifle W, Tigist D, & Fantahun Walle. (2017). Organizational Commitment and its Predictors among Nurses Working in Jimma University Specialized Teaching Hospital, Southwest Ethiopia. *Primary Health Care Open Access*, 07(01). <https://doi.org/10.4172/2167-1079.1000262>
- Johnson, J., Brennan, M., Musil, C. M., & Fitzpatrick, J. J. (2016). Practice patterns and organizational commitment of inpatient nurse practitioners. *Journal of the American Association of Nurse Practitioners*, 28(7), 370–378. <https://doi.org/10.1002/2327-6924.12318>
- Kau, M. D., Mitonga-Monga, J., Molotsi, T. K., & Molotsi, T. (2024). Work ethics climate in relation to nurses' commitment in a South African hospital. *SA Journal of Human Resource Management*. <https://doi.org/10.4102/sajhrm>
- Kelbiso, L., Belay Gizaw, A., Kebede, B., Hanfore, L. K., & Belachew, Y. B. (2018). Level of Professional Commitment and Associated Factors among Nurses Working In Jimma Zone Public Hospitals; Jimma South West Ethiopia, 2018. *Palliative Medicine & Care*. <https://doi.org/10.15226/2374-8362/5/3/00164>
- Kr Sajid Ali Khan, & Shamsul Siddiqui. (2017). Organizational commitment as predictors of job satisfaction. *Indian Journal of Health and Wellbeing*, 8, 932–935.
- Lee, Y. J., & Hwang, W. J. (2024). The impact of nurse's sense of calling, organizational commitment, job stress, and nursing work environment on patient safety management activities in comprehensive nursing care service units during the covid-19 pandemic. *BMC Nursing*, 23(1). <https://doi.org/10.1186/s12912-024-01929-6>
- Loes, C. N., & Tobin, M. B. (2020). Organizational Trust, Psychological Empowerment, and Organizational Commitment among Licensed Practical Nurses. *Nursing Administration Quarterly*, 44(2), 179–187. <https://doi.org/10.1097/NAQ.0000000000000414>
- Luthans, F., Luthans, B. C., & Luthans, K. W. (2021). *Organizational Behavior: An Evidence-Based Approach* (14th ed.). Information Age Publishing, Incorporated.

- Mercurio, Z. A. (2015). Affective Commitment as a Core Essence of Organizational Commitment: An Integrative Literature Review. *Human Resource Development Review, 14*(4), 389–414. <https://doi.org/10.1177/1534484315603612/FORMAT/EPUB>
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behavior, 61*, 20–52. <https://doi.org/10.1006/jvbe.2001.1842>
- Miao, C., Humphrey, R. H., & Qian, S. (2017). A meta-analysis of emotional intelligence and work attitudes. *Journal of Occupational and Organizational Psychology, 90*(2), 177–202. <https://doi.org/10.1111/joop.12167>
- Mon, E. E., Akkadechanunt, T., & Chitpakdee, B. (2022). Factors predicting organizational commitment of nurses in general hospitals: A descriptive-predictive study. *Nursing and Health Sciences, 24*(3), 610–617. <https://doi.org/10.1111/nhs.12953>
- Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology, 75*(1), 77–86. <https://doi.org/10.1348/096317902167658>
- Neves, T., Parreira, P., Rodrigues, V., & Graveto, J. (2022). Organizational Commitment and Intention to Leave of Nurses in Portuguese Hospitals. *International Journal of Environmental Research and Public Health, 19*(4). <https://doi.org/10.3390/ijerph19042470>
- Nigussie Bolado, G., Ayalew, T. L., Atinafu Ataro, B., & Hussein, A. (2023). The Magnitude of Turnover Intention and Associated Factors Among Nurses Working at Governmental Hospitals in Southern Ethiopia: A Mixed-Method Study. *Nursing: Research and Reviews, Volume 13*, 13–29. <https://doi.org/10.2147/nrr.s404623>
- Rawah, R., & Banakhar, M. (2022). The Relationship between Empowerment and Organizational Commitment from Nurse's Perspective in the Ministry of Health Hospitals. *Healthcare (Switzerland), 10*(4). <https://doi.org/10.3390/healthcare10040664>
- Robbins, S., & Judge, T. (2017). *Organizational Behavior* (17th ed.). Pearson-Education Limited.
- Rodríguez-Fernández, M., Herrera, J., De Las Heras-Rosas, C., & Ciruela-Lorenzo, A. M. (2024). Practical Implications of the Organizational Commitment Model in Healthcare: The Case of Nurses. In *Journal of Nursing Management* (Vol. 2024). Wiley-Hindawi. <https://doi.org/10.1155/2024/6455398>
- Rofiqi, E., Nuritasari, R. T., & Wiliyanarti, P. F. (2019). Factors Affecting the Organizational Commitment of Nurses in Comprehensive Health Services: A

Systematic Review. In *Jurnal Ners* (Vol. 14, Issue 3 Special Issue, pp. 195–198). Faculty of Nursing, Universitas Airlangga.
[https://doi.org/10.20473/jn.v14i3\(si\).17056](https://doi.org/10.20473/jn.v14i3(si).17056)

SPHMMC. (2020). *St. Paul's Hospital Millennium Medical College (SPHMMC) Strategic Plan: 2014-2019 EC*.

Suliman, A., & Iles, P. (2000). Is continuance commitment beneficial to organizations? Commitment-performance relationship: A new look. *Journal of Managerial Psychology*, *15*(5), 407–422.
<https://doi.org/10.1108/02683940010337158/FULL/XML>

Tadesse, B., Dechasa, A., Ayana, M., & Tura, M. R. (2023). Intention to Leave Nursing Profession and Its Associated Factors Among Nurses: A Facility Based Cross-Sectional Study. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, *60*, 1–9. <https://doi.org/10.1177/00469580231200602>

Vakerue I. Sessa, & Nathan A. Bowling. (2021). *Essentials of job attitudes and other workplace psychological constructs*.

Wang, T., Abrantes, A. C. M., & Liu, Y. (2023). Intensive care units nurses' burnout, organizational commitment, turnover intention and hospital workplace violence: A cross-sectional study. *Nursing Open*, *10*(2), 1102–1115.
<https://doi.org/10.1002/nop2.1378>

Wei, W., Gan, M., Liu, Y., Yang, M., & Liu, J. (2021). Mediating effects of nurses' personal and organizational values between organizational commitment and turnover: Cross-sectional study. *PLoS ONE*, *16*(10 October).
<https://doi.org/10.1371/journal.pone.0258387>

Woldekiros, A. N., Getye, E., & Abdo, Z. A. (2022). Magnitude of job satisfaction and intention to leave their present job among nurses in selected federal hospitals in Addis Ababa, Ethiopia. *PLoS ONE*, *17*(6 June).
<https://doi.org/10.1371/journal.pone.0269540>

Woznyj, H. M., Banks, G. C., Whelpley, C. E., Batchelor, J. H., & Bosco, F. A. (2022). Job attitudes: A meta-analytic review and an agenda for future research. *Journal of Organizational Behavior*, *43*(5), 946–964. <https://doi.org/10.1002/job.2598>

Wubetie, A., Taye, B., & Girma, B. (2020). Magnitude of turnover intention and associated factors among nurses working in emergency departments of governmental hospitals in Addis Ababa, Ethiopia: a cross-sectional institutional based study. *BMC Nursing*, *19*(1). <https://doi.org/10.1186/s12912-020-00490-2>

Yan, W., Wu, X., Wang, H., Zhang, Y., Cheng, L., Zhou, X., Chen, H., Song, C., & Ye, J. (2023). Employability, organizational commitment and person–organization fit among nurses in China: A correctional cross-sectional research. *Nursing Open*, *10*(1), 316–327. <https://doi.org/10.1002/nop2.1306>

Annexes

I. Information sheet (English)

Research title: **Level of Organizational Commitment and its Predictors Among Nurses Working at Public Hospital Medical Colleges in Addis Ababa, Ethiopia**

Introduction

For this study, only nurses who are permanent employees of the college/hospital and who have worked for six or more months at the college/hospital are eligible.

Are you a permanent staff of the college/hospital? Yes No

Have you worked for more than 6 months at the college/hospital? Yes No

This research is being conducted by Dr. Yoseph Worku as a partial fulfilment of the Master of Business Administration Program at Addis Ababa University. This is a study on organizational behavior analysis, which is one of the least researched topics in the health sector, and I would like to invite you to participate voluntarily in this study.

Purpose of the research

The performance of nurses and hospitals can be affected by different factors. Evidence shows that the interaction and working relationship between nurses and the hospital are key attributes that affect the overall performance of nurses and hospitals. One of the key attributes that plays a key role in this regard is organizational commitment. In this study, the level of organizational commitment and its determinants among nurses working at public medical colleges in Addis Ababa, will be assessed.

Voluntary participation and reimbursement

Participation in this research is entirely voluntary. If you participate in this study, you will not be paid any compensation, and if you do not participate in the study, you will not be penalized. Even after consenting and enrolling in the study, you can stop participating in it.

Procedures and duration

In this study, a self-administered questionnaire will be used. The questionnaire is adapted from similar studies that used standard questionnaires prepared by experts in the topics. If you have any questions during the administration, you can contact any of the research team members for clarification.

The research might take a maximum of 20–25 minutes to administer the questionnaire annexed below. There will be no follow-up study or administration of questionnaires.

Risks and benefits

By participating in this research, there are no known physical risks. Participants might face minimal inconvenience and discomfort while spending their time answering some questions. The risks, if there are any, are quite minimal, and the potential contribution of the study findings to improving the nurse-hospital relationship will be significant.

Privacy and confidentiality

No one will know whether you are participating in this study or not. For this study, only codes will be used to identify every participant. No name or any identifier will be used during the study. The collected data will be kept confidentially on secured computers, and the data will not be shared with anyone else apart from the research team.

Contact persons

This proposal has been reviewed and approved by the Institutional Review Boards (IRBs) of St. Paul's Hospital Millennium Medical College, Addis Ababa City Administration Health Bureau, Yekatit 12 Hospital Medical College, and Menilik II Hospital Medical College. These committees work to make sure that research participants are protected from any harm. If you wish to learn more about the SPHMMC IRB, contact Dr. Gadissa Bedada, Director of Research Directorate (gadissa.bedada@sphmmc.edu.et or +251 112 732 639).

If you have any more questions regarding the study or this consenting process, you can ask. Do you have any questions?

If you would like to contact the principal investigator, please use the contact details below:

Dr. Yoseph Worku

Mobile No. +251 911 842 800

Email: worku_yoseph@yahoo.com

II. Certificate of consent

I confirm that the person asking for my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation. I have read and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty. I am aware that the findings of this study will be processed into a research report, journal publications, and/or conference proceedings, but that my participation will be kept confidential.

Signature: _____

Date: _____

III. Questionnaire

Code of participant: _____

Code of data collector: _____

Code of supervisor: _____

Instruction: Please try to answer the questions below completely and honestly.

Section 1: Intrinsic (personal) characteristics of participant

No.	Question	Response	Remarks
101	College/Hospital	1. St. Paul's Hospital Millennium Medical College 2. Yekatit 12 Hospital Medical College 3. Menilik II Hospital/Medical College	
102	Assignment Place	1. Hospital 2. College 3. Both hospital and college/school	
103	Sex	4. Female 5. Male	
104	Age	_____	
105	Qualification (Highest level)	1. Diploma 2. BSc 3. Masters 4. PhD 5. Other _____	
106	Marital status	1. Single 2. Married 3. Divorced 4. Separated 5. Widowed	
107	Position	1. Director 2. Deputy Director 3. Dean 4. Vice-dean 5. Matron 6. Supervisor 7. Department head 8. Unit head 9. Program coordinator 10. Case team leader 11. Nurse in charge 12. Staff nurse 13. Other	
108	Department	1. Ault emergency 2. Adult ICU 3. Burn 4. CSSD 5. Dental and maxillofacial 6. Dermatology 7. ENT 8. Family medicine	

No.	Question	Response	Remarks
		9. Forensic medicine 10. Internal medicine 11. Kidney transplant 12. Liaison 13. Nursing Directorate 14. Nursing School 15. Obstetrics and Gynecology 16. Ophthalmology 17. Orthopedics 18. Outpatient 19. Pediatrics 20. Plastic surgery 21. Psychiatry 22. Radiology 23. Surgery 24. Operation room 25. Other	
109	Total years of service after first graduation	_____	
110	Total years of service at college/hospital	_____	
111	Average monthly income	_____	

Section 2: Extrinsic characteristics

No.	Question: Please score your overall rating of the following questions from 1 (very poor or very low) to 5 (very good or very high) regarding your department of the college/hospital.	Very poor/low	Poor/low	Fair enough	Good/high	Very good/high
201	Salary and other benefit package you get from college/hospital.	1	2	3	4	5
202	Your relationship with colleagues or co-workers in your department.	1	2	3	4	5
203	Your relationship with your supervisor/s.	1	2	3	4	5
204	Professional autonomy (having freedom and authority to make professional decision).	1	2	3	4	5
205	Opportunities for professional and career development (e.g., short- and long-term trainings).	1	2	3	4	5

Section 3. Perceived organizational support questions

No.	Question: What is your level of agreement to the following statements?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
301	The college/hospital cares about my opinions.	1	2	3	4	5

No.	Question: What is your level of agreement to the following statements?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
302	The college/hospital really cares about my well-being.	1	2	3	4	5
303	The college/hospital strongly considers my goals and values.	1	2	3	4	5
304	Help is available from the college/hospital when I have a problem.	1	2	3	4	5
305	The college/hospital would forgive an honest mistake on my part.	1	2	3	4	5
306	If given the opportunity, the college/hospital would take advantage of me. (R).	1	2	3	4	5
307	The college/hospital shows very little concern for me. (R).	1	2	3	4	5
308	The college/hospital is willing to help me if I need a special favor.	1	2	3	4	5

Section 4. Organizational commitment questions

No.	Question: What is your level of agreement to the following statements?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I	Affective commitment scale					
501	I would be very happy to spend the rest of my career with in the college/hospital.	1	2	3	4	5
502	I enjoy discussing about the college/hospital with people outside.	1	2	3	4	5
503	I really feel as if the college/hospital problems are my own.	1	2	3	4	5
504	I do feel like “part of the family” at the college/hospital.	1	2	3	4	5
505	I do feel “emotionally attached” to the college/hospital.	1	2	3	4	5
506	The college/hospital has a great deal of personal meaning for me.	1	2	3	4	5
507	I do feel a strong sense of belonging to the college/hospital.	1	2	3	4	5
II	Continuance commitment scale					
508	I am afraid of what might happen if I quit my job without having another one lined up.	1	2	3	4	5
509	It would be very hard for me to leave the college/hospital right now, even if I wanted to.	1	2	3	4	5
510	Too much in my life would be disrupted if I decided I wanted to leave the college/hospital now.	1	2	3	4	5
511	Right now, staying with the college/hospital is a matter of necessity as much as desire.	1	2	3	4	5

No.	Question: What is your level of agreement to the following statements?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
512	I feel that I have too few options to consider leaving this college/hospital.	1	2	3	4	5
513	One of the few serious consequences of leaving the college/hospital would be the scarcity of available alternatives.	1	2	3	4	5
514	One of the major reasons I continue to work for the college/hospital is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	1	2	3	4	5
III	Normative commitment scale					
515	I think that people these days move from company to company too often.	1	2	3	4	5
516	I do believe that a person must always be loyal to his or her organization.	1	2	3	4	5
517	One of the major reasons I continue to work for the college/hospital is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	1	2	3	4	5
518	If I got another offer for a better job elsewhere, I would not feel it was right to leave the college/hospital.	1	2	3	4	5
519	I was taught to believe in the value of remaining loyal to one organization.	1	2	3	4	5
520	Things were better in the days when people stayed with one organization for most of their careers.	1	2	3	4	5

Section 5. Job satisfaction question

No.	Question:	Very strongly disagree	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Very strongly agree
601.	Do you mostly enjoy your work at the college/hospital?	1	2	3	4	5	6	7

Thank you very much for your time and responses!

IV. Information sheet (Amharic)

የምርምር ርዕስ: Level of Organizational Commitment and its Predictors Among Nurses Working at Public Hospital Medical Colleges in Addis Ababa, Ethiopia

መግቢያ

ለዚህ ጥናት ብቁ የሚሆኑት የኮሌጁ/የሆስፒታሉ ቋሚ ሰራተኞች የሆኑ እና በኮሌጁ/የሆስፒታሉ ውስጥ ለስድስት እና ከዚያ በላይ ወራት የሰሩ ነርሶች ብቻ ናቸው ።

እርስዎ በኮሌጁ/የሆስፒታሉ ቋሚ ሰራተኛ ነዎት? አዎ አይ

በኮሌጁ/የሆስፒታሉ ከ6 ወራት በላይ ሰርተዋል? አዎ አይ

ይህ ጥናት በዶ/ር ዮሴፍ ወርቁ የሚካሄድ ሲሆን ፤ በአዲስ አበባ ዩኒቨርሲቲ ለሚከታተለው የቢዝነስ አስተዳደር ማስተርስ ነፍሰ-ም የመመረቂያ ጥናት ነው። ይህ በድርጅታዊ ባህሪ ትንተና ላይ ያጠነጠነ ጥናት ሲሆን ፤ በጤናው ሴክተር ውስጥ በጣም አነስተኛ ምርምር ከተደረገባቸው ርዕስ ጉዳዮች አንዱ ነው። እናም በዚህ ጥናት ውስጥ በፈቃደኝነት እንድትሳተፉ እጋብዛለሁ።

የጥናቱ ዓላማ

የነርሶች እና የሆስፒታሎች የስራ አፈፃፀም በተለያዩ ምክንያቶች ተፅዕኖ ሊያደርግ ይችላል። በነርሶች እና በሆስፒታሉ መካከል ያለው የስራ ግንኙነት የነርሶችን እና የሆስፒታሎችን አጠቃላይ አፈፃፀም ተፅዕኖ የሚያመጡ ቁልፍ ባህሪያት መሆናቸውን ጥናቶች ያሳያሉ። በዚህ ረገድ ቁልፍ ሚና ከሚጫወቱት ዋና ዋና ባህሪያት ሰራተኞች ስለሚሰሩበት ድርጅታቸው ያላቸው ድርጅታዊ ቁርጠኝነት አንዱና ዋነኛው ነው። በዚህ ጥናት ውስጥ፣ በአዲስ አበባ ውስጥ በሚገኙ የመንግስት የሆስፒታል ህክምና ኮሌጆች በሚሰሩ ነርሶች መካከል የድርጅታዊ ቁርጠኝነት መጠንና ተጽዕኖ የሚያመጡ ምክንያቶቻቸውን ማጥናት እንፈልጋለን።

በፈቃደኝነት ተሳትፎ እና ክፍያ

በዚህ ጥናት ውስጥ መሳተፍ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ ነው። በዚህ ጥናት ውስጥ ከተሳተፉ ፣ ምንም እይነት ክፍያ አይሰጥዎትም። በጥናቱ ውስጥ አለመካፈልም ምንም ዓይነት ቅጣት የለውም። በጥናቱ ውስጥ ለመካፈል ከተሰማሙ እና ከተመዘገቡ በኋላ እንኳን ፣ በመሃል መሳተፍዎን ማቆም ይችላሉ።

ሂደቶች እና ቆይታ

በዚህ ጥናት ውስጥ በራስ የሚሞላ ቃለ-መጠይቅ እንጠቀማለን። መጠይቁ በርዕስ ጉዳዮቹ ዙሪያ በባለሙያዎች የተዘጋጁ መጠይቆችን ከተጠቀሙ ተመሳሳይ ጥናቶች የተወሰደ ነው። መጠይቁን በሚሞሉበት ጊዜ ጥያቄዎች ካለዎት ማብራሪያ ለማግኘት ማንኛውንም የምርምር ቡድን አባላት ማነጋገር ይችላሉ።

ጥናቱ ከታች የተመለከተውን መጠይቅ ለመሙላት ቢበዛ ከ20-25 ደቂቃዎች ሊወስድ ይችላል። ይህ ጥናት በተከታይ የሚሞሉ መጠይቆች ወይም የክትትል ጥናቶች አይኖሩትም።

ስጋቶች እና ጥቅሞች

በዚህ ጥናት ውስጥ በመሳተፍ ምንም የሚታወቁ አካላዊ አደጋዎች የሉትም። አንዳንድ ጥያቄዎችን በሚመልሱበት ጊዜያቸውን በሚያሳልፉበት ወቅት ተሳታፊዎች አነስተኛ አለመመቻቸሊገጥማቸው ይችላል። ስጋቶች ካሉም፣ በጣም አናሳ ናቸው። የዚህ ጥናት ግኝቶች ነርስ እና ሆስፒታል ግንኙነትን ለማሻሻል ያለው አስተዋፅኦ ከፍተኛ ይሆናል።

ግላዊነት እና ሚስጥራዊነት

በዚህ ጥናት ውስጥ መሳተፍዎን ወይም አለመሳተፍዎን ማንም አያውቅም። ለዚህ ጥናት እያንዳንዱን ተሳታፊ ለመለየት ኮዶችን ብቻ እንጠቀማለን። በጥናቱ ወቅት ምንም አይነት ስም ወይም ማንኛውም መለያ አንጠቀምም። የተሰበሰበው መረጃ ደህንነቱ በተጠበቁ ኮምፒውተሮች ላይ በሚሰጥር ይቀመጣል፤ እና መረጃው ከተመራማሪው ቡድን ውጪ ለሌላ ለማንም አይጋራም።

የእውቂያ ሰዎች

ይህ የጥናት ፕሮፖዛል በቅ/ጳ/ሆ/ሚ/ሜ/ኮ ፣ በአዲስ አበባ ጤና ቢሮ ፣ በየካቲት 12 ሆስፒታል ሜዲካል ኮሌጅ እና በዳግማዊ ሚኒሊክ ሆስፒታል የህክምና ኮሌጅ የምርምር ስነ-ምግባር ኮሚቴዎች ታይቶ ጸድቋል። ኮሚቴዎቹ የምርምር ተሳታፊዎች ከማንኛውም ጉዳት እንዲጠበቁ ለማድረግ ይሰራሉ። ስለቅ/ጳ/ሆ/ሚ/ሜ/ኮ ኮሚቴ የበለጠ ለማወቅ ከፈለጉ የምርምር ዳይሬክቶሬት ዳይሬክተር የሆኑትን ዶ/ር ጋዲሳ በዳዳን በሚከተሉት አድራሻዎች (gadissa.bedada@sphmmc.edu.et ወይም +251 112 732 639) ያነጋግሩ ።

በጥናቱ ወይም ይህንን የፈቃድ ሂደት በተመለከተ ተጨማሪ ጥያቄዎች ካሉዎት መጠየቅ ይችላሉ። ማንኛውም ጥያቄ ካለዎት ይጠይቁ?

ዋናውን ተመራማሪን ማነጋገር ከፈለጉ፣ አባክዎን ከዚህ በታች ያሉትን የአድራሻ ዝርዝሮች ይጠቀሙ፡-

ዶ/ር ዮሴፍ ወርቁ

የሞባይል ቁጥር +251 911 842 800

ኢሜል: worku_yoseph@yahoo.com

V. የፍቃድ የምስክር ወረቀት

በዚህ ጥናት ላይ ለመሳተፍ የእኔን ፍቃድ የሚጠይቀው ሰው ስለ ጥናቱ ይዘት ፣ አሰራር፣ ስለሚኖረው ጥቅም እና ሊኖሩ ስለሚችሉ ጉዳዮች እንደነገሩኝ አረጋግጣለሁ። በመረጃ ቅፁ ላይ እንደተገለፀው የጥናቱን ዓላማ አንብቤ ተረድቻለሁ። ጥያቄዎችን ለመጠየቅ በቂ እድል አግኝቻለሁ እናም በጥናቱ ለመሳተፍ ዝግጁ ነኝ። የእኔ ተሳትፎ በፈቃደኝነት እንደሆነ እና በማንኛውም ጊዜ ያለ ምንም ቅጣት የመውጣት ነፃነት እንዳለኝ ተረድቻለሁ። የዚህ ጥናት ውጤቶች በምርምር ሪፖርት ፣ ሳይንሳዊ ህትመቶች ወይም ኮንፈረንሶች ሊጋሩ እንደሚችሉ አውቃለሁ፣ ነገር ግን ተሳትፎዬ በሚሰጥር እንደሚጠበቅ አውቃለሁ።

ፊርማ _____

ቀን _____

VI. መጠይቅ

የኮሌጁ/ሆስፒታሉ ኮድ _____

የተሳታፊ ኮድ _____

የመረጃ ሰብሳቢው ኮድ _____

የተቆጣጣሪ ኮድ _____

መመሪያ፡ እባክዎትን ከታች ያሉትን ጥያቄዎች በሙሉ እና በታማኝነት ለመመለስ ይሞክሩ።

ክፍል 1: የተሳታፊዎች የግል ባህሪያት

ተ. ቁ.	ጥያቄ	ምሳሌ	ማስታወሻ
101	የሚሰሩበት ሆስፒታል/ኮሌጅ	1. የቅዱስ ጳውሎስ ሆስፒታል ሚሊኒየም ሜዲካል ኮሌጅ 2. የካቲት 12 ሆስፒታል ሜዲካል ኮሌጅ 3. የዳግማዊ ሚኒሊክ ሆስፒታል/ሜዲካል ኮሌጅ	
102	የስራ ምድብ	1. በሆስፒታል 2. በኮሌጅ/ትምህርት ቤት 3. በሁለቱም በሆስፒታልና ኮሌጅ	
103	ፆታ	1. ሴት 2. ወንድ	
104	ዕድሜ	_____	
105	የትምህርት ደረጃ (ከፍተኛው)	1. ዲፕሎማ 2. ቢ.ኤስ.ሲ 3. ማስተርስ 4. ፒኤችዲ 5. ሌላ _____	
106	የጋብቻ ሁኔታ	1. ያላገባች 2. ያገባች 3. የተፋቱ 4. የተለያዩ 5. የሞተበት/ባት	
107	ኃላፊነት	1. ዳይሬክተር 2. ምክትል ዳይሬክተር 3. ዲን 4. ምክትል ዲን 5. ሜትረን 6. ሱፐርቫይዘር 7. ክፍል ኃላፊ 8. ዩኒቨርሲቲ ኃላፊ 9. ፕሮግራም ኮከርዲኔተር 10. ኬዝ ቲም አስተባባሪ 11. ነርስ ኢን ቻርጅ 12. ስታፍ ነርስ 13. ሌላ _____	
108	ዲፓርትመንት	1. Adult emergency	

		2. Adult ICU 3. Burn 4. CSSD 5. Dental and maxillofacial 6. Dermatology 7. ENT 8. Family medicine 9. Forensic medicine 10. Internal medicine 11. Kidney transplant 12. Liaison 13. Nursing Directorate 14. Nursing School 15. Obstetrics and Gynecology 16. Ophthalmology 17. Orthopedics 18. Outpatient 19. Pediatrics 20. Plastic surgery 21. Psychiatry 22. Radiology 23. Surgery 24. Operation room Other	
109	አጠቃላይ የአገልግሎት ዓመታት (ከመጀመሪያው ምረቃ በኋላ)	_____	
110	በኮሌጁ/ሆስፒታሉ ያሉት አጠቃላይ የአገልግሎት ዓመታት	_____	
111	አማካይ ወርቃዊ ገቢ	_____	

ክፍል 2 : የውጫዊ ባህሪያት

ተ.ቁ.	ጥያቄ: አባላትን የኮሌጁ/ሆስፒታሉ ዲፓርትመንቶችን በተመለከተ ለሚከተሉት ጥያቄዎች አጠቃላይ ደረጃዎን ከ1 (በጣም ደካማ ወይም በጣም ዝቅተኛ) እስከ 5 (በጣም ጥሩ ወይም በጣም ከፍተኛ) ያስመዝግቡ።	በጣም ደካማ / ዝቅተኛ	ኋለኛ/ከፍተኛ	በቂ ነው	ጥሩ/ከፍተኛ	በጣም ጥሩ / ከፍተኛ
201	ከኮሌጁ/ሆስፒታሉ የሚያገኙት የደመወዝ እና ሌሎች ጥቅማ ጥቅሞች።	1	2	3	4	5
202	በእርስዎ ዲፓርትመንት ውስጥ ካሉ የስራ ባልደረቦች ጋር ያለዎት የስራ ግንኙነት።	1	2	3	4	5
203	ከእርስዎ የስራ ኃላፊ/ዎች ጋር ያለዎት የስራ ግንኙነት።	1	2	3	4	5
204	ሙያዊ ነፃነት (የሙያዊ ውሳኔ የማድረግ ነፃነት እና ስልጣን)።	1	2	3	4	5
205	የሙያ እድገት/ማሻሻል እድሎች (ለምሳሌ የአጭር እና የረጅም ጊዜ ስልጠናዎች)።	1	2	3	4	5

ክፍል 3. Perceived Organizational Support

ተ.ቁ.	ጥያቄ: ለሚከተሉት መግለጫዎች ያለዎት ስምምነት ምን ያህል ነው?	በጣም አልሰማም	አልሰማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
301	ኮሌጁ/ሆስፒታሉ እኔ ስለምሰጣቸው አስተያየቶች ይጨነቃል።	1	2	3	4	5
302	ኮሌጁ/ሆስፒታሉ ስለእኔ ጤንነት ይጨነቃል።	1	2	3	4	5
303	ኮሌጁ/ሆስፒታሉ ግቦቹን እና እሴቶቹን በሚገባ ይመለከታል።	1	2	3	4	5
304	ችግር ሲያጋጥመኝ ከኮሌጁ/ሆስፒታሉ ድጋፍ አገኛለሁ።	1	2	3	4	5
305	የኮሌጁ/ሆስፒታሉ በቀናነት የምሰራውን ስህተት ይቅር ይለኛል።	1	2	3	4	5
306	ኮሌጁ/ሆስፒታሉ አጋጣሚው ከተፈጠረ እኔን ይጠቀምብኛል (ለራሱ ጥቅም)።	1	2	3	4	5
307	ኮሌጁ/ሆስፒታሉ ለእኔ የሚጨነቀው በጣም ትንሽ ነው።	1	2	3	4	5
308	ልዩ ዕዝ ካስፈለገኝ ኮሌጁ/ሆስፒታሉ ሊረዳኝ ፈቃደኛ ነው።	1	2	3	4	5

ክፍል 4. Organizational Commitment

ተ.ቁ.	ጥያቄ: ለሚከተሉት መግለጫዎች ያለዎት ስምምነት ምን ያህል ነው?	በጣም አልሰማም	አልሰማም	ገለልተኛ	እስማማለሁ	በጣም እስማማለሁ
I	Affective commitment scale					
501	ቀሪ የስራ ዘመኔን በኮሌጁ/ሆስፒታሉ ውስጥ ባሳልፍ በጣም ደስተኛ ነኝ።	1	2	3	4	5
502	ስለ ኮሌጁ/ሆስፒታሉ ውጪ ካሉ ሰዎች ጋር መወያየቴ ያስደስተኛል።	1	2	3	4	5
503	የኮሌጁ/ሆስፒታሉ ችግሮች የራሴ የሆኑ ያህል ይሰማኛል።	1	2	3	4	5
504	በኮሌጁ/ሆስፒታሉ መኖሪ እንደ “የቤተሰብ አካል” ይሰማኛል።	1	2	3	4	5
505	ከኮሌጁ/ሆስፒታሉ ጋር “በስሜታዊነት የተቆራኘሁ” ይሰማኛል።	1	2	3	4	5
506	ኮሌጁ/ሆስፒታሉ ለእኔ ትልቅ የግል ትርጉም አለው።	1	2	3	4	5
507	በኮሌጁ/ሆስፒታሉ ጠንካራ የባለቤትነት ስሜት ይሰማኛል።	1	2	3	4	5
II	Continuance commitment scale					
508	ሌላ ስራ ሳላገኝ ከኮሌጁ/ሆስፒታሉ ሥራዬን ካቆምኩ ምን ሊፈጠር እንደሚችል ሳስብ አፈራለሁ።	1	2	3	4	5
509	ብሬልግም እንኳን ፣ አሁን ከኮሌጁ/ሆስፒታሉ መውጣት ለእኔ በጣም ከባድ ይሆንብኛል።	1	2	3	4	5

ተ.ቁ.	ጥያቄ፡ ለሚከተሉት መግለጫዎች ያለዎት ስምምነት ምን ያህል ነው?	በጣም አልሰማማም	አልሰማማም	ገለልተኛ	አሰማማለሁ	በጣም አሰማማለሁ
510	አሁን ወስኜ ከኮሌጁ/ሆስፒታሉ ብለኝ በህይወቴ በጣም ብዙ ውጥንቅጥ ይገጥመኛል።	1	2	3	4	5
511	በአሁን ሰዓት በኮሌጁ/ሆስፒታሉ መቆየቴ የግድ አስፈላጊ ነው።	1	2	3	4	5
512	ከኮሌጁ/ሆስፒታሉ ለመልቀቅ ሳስብ በጣም ጥቂት አማራጮች እንዳሉኝ ይሰማኛል።	1	2	3	4	5
513	ከኮሌጁ/ሆስፒታሉ ያለመልቀቁ ምክንያቶች አንዱ ፣ ሌሎች ያሉን አማራጮች ውስን መሆናቸው ነው።	1	2	3	4	5
514	ለኮሌጁ/ሆስፒታሉ መስራቴን ከቀጠልኩባቸው ምክንያቶች አንዱ ፣ ሌላ ድርጅት ብገባ እዚህ ካሉኝ ጥቅሞች ጋር ላይመጣጠን ስለሚችል ነው።	1	2	3	4	5
III Normative commitment scale						
515	በእኔ አስተሳሰብ ፣ በአሁኑ ጊዜ ሰዎች ቶሎ ቶሎ ከስራ ስራ የሚቀያይሩ ይመስለኛል።	1	2	3	4	5
516	አንድ ሰው ሁል ጊዜ ለድርጅቱ ታማኝ መሆን አለበት ብዬ አምናለሁ።	1	2	3	4	5
517	ለኮሌጁ/ሆስፒታሉ መስራቴን ከቀጠልኩባቸው ምክንያቶች አንዱ ታማኝነት አስፈላጊ ነው ብዬ ስለማምን እና እዚህ የመቆየት የሞራል ግዴታ እንዳለብኝ ስለሚሰማኝ ነው።	1	2	3	4	5
518	የተሻለ ሥራ ሌላ ቦታ ባገኝም፣ ከኮሌጁ/ሆስፒታሉ መልቀቅ ትክክል እንደሆነ አይሰማኝም።	1	2	3	4	5
519	ለአንድ ድርጅት ታማኝ መሆን ጥቅም እንዳለው ተምሬያለሁ።	1	2	3	4	5
520	ሰዎች በአንድ ድርጅት/መስሪያ ቤት ለረጅም ጊዜ በቆዩበት ዘመን ነገሮች የተሻሉ ነበሩ።	1	2	3	4	5

ክፍል 5. የሥራ እርካታ ጥያቄ

ተ. ቁ.	ጥያቄ፡- የስራ እርካታዎን በተመለከተ ከ1-7 በመመለስ ስምምነትዎን ያረጋግጡ።	እጅግ በጣም አልሰማማም	በጣም አልሰማማም	አልሰማማም	ገለልተኛ	እጅግ በጣም አሰማማለሁ	እጅግ በጣም አሰማማለሁ	እጅግ በጣም አሰማማለሁ
601.	በኮሌጁ/ሆስፒታሉ የሚሰሩትን ስራ በብዛት በደስታ ያከናውናሉ?	1	2	3	4	5	6	7

ስለ ጊዜዎ እና ምላሾቻዎ እጅግ በጣም እናመሰግናለን!