



ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND LANGUAGE

STUDIES

SCHOOL OF PSYCHOLOGY

**CAREER CONFIDENCE, JOB READINESS, AND SELF-ESTEEM
AMONG MEDICAL INTERNS AT ADDIS ABABA UNIVERSITY, ADDIS
ABABA, ETHIOPIA**

BY: HIKMA NASSIR

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JUNE, 2026

ADDIS ABABA, ETHIOPIA

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A Thesis Submitted To School of Psychology, College of Education and Language Studies,
Addis Ababa University in Partial Fulfilment of the Requirements for the Degree of Master of
Arts in Counselling Psychology.

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DECLARATION

Hikma Nassir ፡ hereby declare that the thesis entitled “**Career confidence, Job readiness, and self-esteem among medical Interns of Addis Ababa University**” is my original work and it has not been presented for any academic purpose in any other university prior to this time and that all source of materials used for thesis have been properly acknowledged.

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The thesis has been submitted for examination with my approval as a university advisor.

Name of advisor: - Abera Getachew

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Date;

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Acronyms and Abbreviations

AAU	Addis Ababa University
APA	American Psychological Association
CI	Confidence Interval
MD.....	Doctor of Medicine
OR	Odds Ratio
P4P	Preparedness for Practice
RSES	Rosenberg Self-Esteem Scale
SCCT	Social Cognitive Career Theory
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences
TASH	Tikur Anbessa Specialized Hospital
TMT	Terror Management Theory

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Abstract

This study was conducted to determine the levels of career confidence, job readiness and self-esteem among medical interns of Addis Ababa University in Addis Ababa, Ethiopia and to identify factors related with them. It was a quantitative cross-sectional research design and a total of 192 medical interns were enrolled using a census method during academic year 2025-2026. Self-administered questionnaire, which consists of socio-demographic data and instruments for measuring career confidence, job readiness and Rosenberg self-esteem scale was used for data collection. Descriptive statistics, independent samples t-test, Pearson correlation and multiple linear regressions analyses were used with the help of SPSS version 27. A significance level was taken at $p < 0.05$. Medical interns' career confidence, job readiness and self-esteem were at moderate levels ($M = 77.96$, $SD=16.04$; $M = 64.12$, $SD =15.22$; and $M=23.90$, $SD=5.24$ respectively). Statistically significant differences existed among sex, education, geographic origin and career plan in relation to career confidence and job readiness of medical interns ($p < 0.05$). However, self-esteem was not significantly different among the various study groups. There were significant positive relationships among the three constructs ($p < 0.01$); correlation between career confidence and job readiness was the strongest ($r=0.444$). Overall, medical interns at Addis Ababa University seem to be moderately ready for practice and there are differences among groups. Strengthening mentorship, career guidance, and internship support may improve both professional confidence and readiness among interns.

Keywords: Career confidence, job readiness, self-esteem, medical interns, Ethiopia

Chapter One: Introduction

1.1 Background

Medical internship is a critical transitional phase in medical education that marks the movement from academic learning to practical clinical application. During this period, medical graduates are expected to translate their theoretical knowledge into clinical competence, communicate effectively with patients and healthcare teams, and assume increasing professional responsibility (Rashid et al., 2025; Wynne et al., 2024). The internship year serves as a bridge between the sheltered environment of medical school and the demanding reality of independent clinical practice.

Interns are medical doctors who have successfully completed the formal Doctor of Medicine curriculum and are required, by national regulatory frameworks, to undergo a mandatory one-year rotating internship before obtaining their full practicing license (Dejene et al., 2024). In Ethiopia, this requirement is overseen by the Ministry of Health and implemented through university-affiliated teaching hospitals. At Addis Ababa University (AAU), approximately 200 medical interns are admitted annually for this rotating internship programme at Tikur Anbessa Specialized Hospital (TASH) and other affiliated sites (AAU College of Health Sciences, 2025).

The internship period is essential because it provides supervised exposure to diverse clinical departments, including internal medicine, surgery, pediatrics, obstetrics and gynecology, and emergency medicine. This exposure is designed to consolidate clinical skills, foster professional identity formation, and build the confidence necessary for independent practice. Without a well-structured internship, the transition from student to practitioner can be fraught with uncertainty, anxiety, and clinical errors (Le Huray et al., 2023; Wynne et al., 2024).

However, the effectiveness of medical internship is influenced by multiple factors. These include the quality of clinical supervision, availability of learning resources, workload and duty hour arrangements, the psychological readiness of the intern, and the support structures in place within the training institution (Alruwaili et al., 2024; Rashid et al., 2025). In resource-limited settings such as Ethiopia, these challenges are amplified. Interns frequently work long hours under high patient volumes with limited supervision, which can undermine both their learning outcomes and psychological well-being (Dejene et al., 2024; Meles et al., 2025).

Among the psychological factors that influence internship effectiveness, three constructs stand out as particularly relevant: career confidence, job readiness, and self-esteem. Career confidence refers to an individual's belief in their ability to make appropriate career decisions and perform professional roles effectively (Gavinski et al., 2021; Li et al., 2026). Job readiness encompasses the knowledge, skills, attitudes, and work behaviors that prepare an individual for successful performance in the workplace (Alruwaili et al., 2024; Wynne et al., 2024). Self-esteem is a person's global sense of their own worth, competence, and value (Egwurugwu et al., 2018). Together, these three constructs are considered key indicators of effective professional capability and contribute to both professional performance and emotional well-being (Dejene et al., 2024; Gidi et al., 2021; Guo et al., 2022).

Recent international research has demonstrated that the transition from medical education to the medical profession is shaped by both individual and contextual variables (Alruwaili et al., 2024; Fris et al., 2025; Gavinski et al., 2021; Jebram & Harendza, 2024). Self-efficacy beliefs, outcome expectations, and social environmental support significantly influence vocational behaviors and professional adaptation. Medical trainees who perceive better support from their supervisors, colleagues, and institution exhibit greater confidence in their careers and higher vocational

commitment. Conversely, lower mentorship, less feedback, and poor learning environments are associated with lower confidence and increased doubt about future career pathways (Gidi et al., 2021). Moreover, research shows that good educational experiences during internship relate to better vocational identity formation and smoother transition into independent clinical practice.

Several previous studies have shown that many medical interns perceive themselves as having insufficient knowledge, skills, and emotional maturity, report low professional confidence, and experience psychosocial difficulties during their internship (Le Huray et al., 2023; Li et al., 2026; Louey et al., 2025; Malau-Aduli et al., 2022; Meine et al., 2025; Sharief et al., 2025). Low self-esteem is a predictor of higher levels of burnout, anxiety, depression, and lower levels of academic or professional performance among healthcare trainees (Croghan & Baker, 2020). There have also been several reports about a gap between training and readiness for the professional world of medical and nursing interns, especially in stressful clinical working environments (Alruwaili et al., 2024; Le Huray et al., 2023; Li et al., 2026; Louey et al., 2025; Malau-Aduli et al., 2022; Monrouxe et al., 2017; Rashid et al., 2025; Sharief et al., 2025; V & Tekulapally, 2021; Wynne et al., 2024).

The relevance of career confidence, job readiness, and self-esteem in maintaining a competent healthcare workforce is increasingly recognized as fundamental to the quality of patient care. Clinical reasoning, teamwork, communication skills, and job satisfaction in newly graduated physicians have been found to be higher among those who report high career readiness and self-esteem. Conversely, the lack of these qualities contributes to increased stress, decreased performance, workforce attrition, and compromised patient care (Guo et al., 2022; Louey et al., 2025; Sharief et al., 2025; V & Tekulapally, 2021; Wynne et al., 2024).

Given the growing importance placed on patient safety and quality of care in healthcare, the readiness of medical interns is gaining significant research and policy attention. Although there has been rapid growth in medical education to meet health workforce demands in Ethiopia, the quality of clinical education facilities, supervision, and psychosocial support has not kept pace with this expansion(Dejene et al., 2024). Medical interns at Ethiopian teaching hospitals have been found to work under stressful conditions, including heavy workloads, excessively long working hours, and low levels of support from experienced physicians, all of which affect their career confidence, job readiness, and mental health (Meles et al., 2025).

Few Ethiopian studies have looked at medical students' stress, burnout, satisfaction, and overall well-being. However, no study has explored career confidence, job readiness, and self-esteem together among medical interns (Assefa et al., 2017; Dejene et al., 2024; Gidi et al., 2021; Haile et al., 2019). In addition, there is limited information on these issues among medical interns at Addis Ababa University (AAU), one of Ethiopia's key institutions for producing physicians. Therefore, this study aims to assess the levels of career confidence, job readiness, and self-esteem among medical interns at AAU and to identify associated socio-demographic factors.

1.2 Statement of the Problem

A successful medical internship experience requires interns to not only be certain about their career choices but also to feel prepared to practice independently and confident about their self-worth. However, no single study among medical interns in Ethiopia has simultaneously examined these three constructs together, leaving educators and policymakers devoid of the baseline data needed to design informed interventions (Assefa et al., 2017; Brinkman, 2018; Dejene et al., 2024; Gidi et al., 2021; Graham et al., 2023; Haile et al., 2019; V & Tekulapally, 2021).

Recent international research has shown that perceived lack of preparedness for professional practice is a common phenomenon among health trainees. In a multi-national systematic review of health professions trainees, significant percentages of new physicians believed they were unprepared to undertake clinical responsibility without supervision, including clinical decision-making, communication, emergency situations and leadership skills (Wynne et al., 2024). Medical and nursing intern studies in Australia, Saudi Arabia, India and the United Kingdom, reported moderate readiness for professional practice and identified lack of confidence, coping at the workplace and building professional identity as barriers to their success as new professionals (Alruwaili et al., 2024; Monrouxe et al., 2017; Sharief et al., 2025; V & Tekulapally, 2021; Wynne et al., 2024). In conclusion, a perception of inadequate professional readiness is prevalent among graduates and appears to exist after medical school completion.

In addition, psychological factors play an important role in health professionals' professional success. Self-esteem and confidence in one's career path, has been linked with resilience, job satisfaction, career adaptability, and psychological well-being and with increased risk of burnout, emotional exhaustion and job dissatisfaction in low levels (Graham et al., 2023; Guo et al., 2022; Wen Li et al., 2026). Nevertheless, the relationship between these variables has mostly been studied independently and seldom in conjunction, specifically within the medical education-workplace transition in resource-limited countries.

The consequences of this gap are grave: interns lacking career confidence may shun primary care or rural practice, exacerbating Ethiopia's doctor shortage in underserved areas, medical errors and unsafe care are more likely when interns feel ill-prepared for their jobs, and chronic low self esteem increases intern burnout and attrition, wasting the country's investment in their medical training. Studies from Ethiopian hospitals have found that interns work very long hours, are

poorly supervised, and spend much of their time on tasks that do not aid their learning, all of which almost certainly undermine their confidence, readiness, and sense of self-worth(Abebe et al., 2024; Assefa et al., 2017; Dejene et al., 2024; Gidi et al., 2021).

Various aspects of this problem have been examined previously, but never all at once in the same population; a study of medical students and interns in Ethiopia examined preferred specialties and sleep quality, stress and mental health have been documented (Assefa et al., 2017; Jarso et al., 2024; Meles et al., 2025), but no study has measured career confidence, job readiness and self-esteem in the same population at the same time, which is important because the three indicators influence each other, with low self-esteem inhibiting career confidence and low job readiness further diminishing self- esteem, a vicious cycle that cannot be adequately interpreted by examining individual indicators in isolation.

In addition, most of the existing studies have been conducted outside of the capital, at universities such as Gondar and Debre Berhan (Abebe et al., 2024; Haile et al., 2019), leaving out Addis Ababa University. Without data from AAU, the policymakers lack a comprehensive understanding of the challenges faced by Ethiopian medical interns, thus there is a glaring need for a study that would paint a complete picture of career confidence, job readiness, and self-esteem among medical interns at AAU, including identification of factors associated with each outcome variable, and the present study answers such a demand by measuring the levels of the three constructs and investigating their relationships with the demographical factors.

1.3 Objectives

1.3.1 General Objective

The general objective of this study is to assess the levels of career confidence, job readiness, and self-esteem, and to identify socio-demographic factors associated with these constructs among medical interns at Addis Ababa University, Addis Ababa, Ethiopia, 2026.

1.3.2 Specific Objectives

- To assess the level of career confidence among medical interns at Addis Ababa University.
- To assess the level of job readiness among medical interns at Addis Ababa University.
- To assess the level of self-esteem among medical interns at Addis Ababa University.
- To examine the interrelationships between career confidence, job readiness, and self-esteem among medical interns.
- To identify socio-demographic factors associated with career confidence, job readiness, and self-esteem.

1.5 Significance of the Study

The paper provides new evidence on career confidence, job readiness, and self-esteem among medical interns at Addis Ababa University (AAU), which is a relatively under-researched area in Ethiopia. Academic researchers will benefit from the data on how these three psychological constructs relate to each other, constituting an important baseline in the country's medical education literature. These findings may help policymakers and hospital administrators develop better support structures such as mentorships and adjusted workloads for groups less confident and prepared, such as female interns, rural interns, and transfer students. Medical educators and

curriculum designers will also find these results helpful as they may use them to modify internship training such as increased simulation-based practice and workshops to ease transition to the clinical role. Medical interns would indirectly benefit as optimal conditions and better mental health support could reduce interns' distress and preparation concerns. Ultimately, patients and the healthcare system benefit too because such confident, ready, and psychologically healthy interns are more likely to operate safely and effectively.

1.6 Scope of the Study

This study was conducted at Tikur Anbessa Specialized Hospital (TASH), the primary clinical training site for medical interns from the College of Health Sciences at Addis Ababa University. The study focused on all medical interns enrolled in the mandatory one-year rotating internship program during the 2025-2026 academic year. The study examined three outcome variables: career confidence, job readiness, and self-esteem, along with selected socio-demographic characteristics including sex, age, marital status, educational background, geographic origin, financial support, living arrangement, and career intention after internship.

The study did not include interns who were on extended leave exceeding two consecutive weeks, those on off-site rotations during the data collection period, or those who had formally dropped from the internship training program. The findings may not be generalizable to medical interns at other Ethiopian institutions, as the study was limited to a single university-affiliated teaching hospital.

1.6 Operational Definitions

Career confidence: Measured by the Confidence and Readiness to Work as a House Officer Questionnaire (Rashid et al., 2025). This instrument measures the intern's self-rated belief in

their ability to carry out clinical tasks, professional responsibilities, and function effectively throughout the internship. Scores range from 24 to 120, with higher scores indicating greater career confidence.

Job readiness: Measured by the Student Work Readiness Scale (Alruwaili et al., 2024). This scale assesses the intern's self-perception of being prepared to enter the workforce, including knowledge, skills, attitudes, and work behaviors associated with successfully transitioning from training to the workplace. Scores range from 20 to 100, with higher scores indicating higher levels of job readiness

Self-esteem: Measured by the Rosenberg Self-Esteem Scale (RSES; Egwurugwu et al., 2018). This 10-item instrument measures the intern's overall feeling of personal worth, self-respect, and satisfaction with themselves. Total scores range from 0 to 30, with higher scores indicating higher self-esteem.

Medical Intern: In this study, Medical Intern refers to a graduate physician from Addis Ababa University who has successfully completed the formal Doctor of Medicine curriculum and is currently enrolled in the mandatory one-year rotating clinical internship under the Faculty of Medicine at AAU during the 2025-2026 academic year.

Chapter Two: Literature Review

2.1 Introduction

Career confidence refers to an individual's belief in their ability to make appropriate career decisions, perform professional responsibilities effectively, and adapt career-related challenges (Gavinski et al., 2021; Li et al., 2026). Career confidence is critical in medical education because medical students and interns have to cope with clinical environments, which are often demanding, and make significant decisions regarding their preferences for particular medical specialties, moving from academic knowledge to practical professional application. Studies indicate that career indecision, stress, uncertainty, and low professional satisfaction characterize trainees in healthcare with low career confidence. On the other hand, career confidence helps students show better professional adjustment, motivation, and persistence in clinical training centers.

Job readiness refers to the level of knowledge, hands-on skills, attitudes, communication skills, and emotional readiness that an individual requires for effective performance at the workplace. In medical education, job readiness includes the lack of preparedness of theories alone but includes preparedness for the responsibility that comes with patient care, teamwork, clinical decision making, problem-solving, and stress management (Alruwaili et al., 2024; Le Huray et al., 2023). Internship training is a critical period during which medical graduates are expected to independently apply their clinical knowledge in real-world healthcare environments. However, various studies conducted in various countries show that many medical interns feel inadequate preparation in emergency management, procedural skills, communication impediments, and emotionally taxing clinical scenarios. Professional performance, patient safety, and psychological well-being may be jeopardized due to poor job readiness.

Self-esteem refers to an individual's overall evaluation of self-worth, competence and value for the self. It is considered a central feature of psychological well-being and an emotional immunity system. For medical students and interns, healthy esteem also contributes positively in confidence, stress management, coping, and professional identity formation (Egwurugwu et al., 2018). Clinical training environments are often characterized by heavy workloads, emotional pressure, academic competition, and frequent exposure to patient suffering and death, all of which have a potential influence on self-esteem. Studies have shown that low self-esteem among healthcare trainees is associated with anxiety, burnout, depression, poor academic performance, and lack of professional confidence (Gidi et al., 2021; Mofatteh, 2020). Therefore, it is needed to study self-esteem among medical interns to improve their psychological well-being and professional functioning.

Career confidence, job readiness, and self-esteem are three conceptually different yet closely interrelated constructs that influence the successful transition into professional medical practice. Existing evidence consistently shows that supportive educational environments, mentorship, supervision quality, and psychosocial support contribute positively to these constructs. However, no single study has simultaneously examined these dimensions among medical interns in Ethiopia, leaving a significant gap in understanding how they function together in this specific context. This chapter therefore reviews the theoretical and empirical literature on career confidence, job readiness, and self-esteem, drawing on both international and Ethiopian studies to establish the conceptual foundation and evidence base for the present investigation

2.2 Theoretical Review

2.2.1 Social Cognitive Career Theory (SCCT)

Social Cognitive Career Theory, developed by Lent, Brown, and Hackett, is a central framework for understanding career related behaviour. SCCT proposes that career development is shaped by the dynamic interaction of three core socio cognitive variables: self-efficacy beliefs, outcome expectations, and personal goals. Self-efficacy refers to judgments about one's capability to organize and execute actions in a specific domain, whereas outcome expectations are beliefs about the likely consequences of performing those actions (Zola et al., 2022). The interaction between these variables is presumed to determine the direction of career interests, educational and occupational options and, finally, career outcomes. Contextual variables like social support, opportunities and barriers are also assumed to have a key role in influencing SCCT components like learning experience, self-efficacy and outcome expectation, which, in turn, direct interests and choices. Meta-analysis and international reviews provide substantial evidence for the role of self efficacy as a key mediator of individual outcome expectations and choice-relevant processes like goals, as well as for the role of career satisfaction (LENT, 2020).

Instruments grounded in SCCT have been developed to measure self efficacy, outcome expectations, and goals for medical specialty and practice location choice and for surgical career intention (Chiu et al., 2023). These studies show that exposure to role models, authentic clinical experiences, and perceived lifestyle or family related outcomes shape efficacy beliefs and outcome expectations, which in turn guide specialty preferences (Chiu et al., 2023). Recent work applying SCCT to biomedical and health science students similarly links intrinsic interest, perceived career prospects, and authentic learning experiences to confidence in career prospects and evolving aspirations (Byram et al., 2022).

Within the context of internships, SCCT provides a useful lens for understanding how interns' confidence in their clinical abilities (a form of domain specific self efficacy) interacts with contextual supports (e.g., supervision, feedback, workload) to influence job readiness, coping with transition, and downstream career decisions (Kusumawati & Wahyuningsih, 2020).

2.2.2 Terror Management Theory (TMT)

Terror Management Theory, introduced by Greenberg, Pyszczynski, and Solomon , explains how awareness of mortality generates potential existential anxiety and how self-esteem functions as a buffer against this anxiety. According to TMT, the awareness of our mortality could cause us existential dread which we are able to buffer by adhering to a system of shared values and standards (like working in a respected profession), so our self -esteem can increase. When we are faced with experiences or situations which threaten our self-esteem, anxiety is perceived to arise and individuals are prompted to act defensively (Rhodes, 2020).

Within the medical field, with frequent exposure to suffering and death, it is natural to feel mortality salience and have potential negative impacts on one's self esteem. In many studies it has been reported that there is a link between poor psychological buffering, self-esteem and burnout, anxiety and disengagement among medical professionals. While individuals with a higher degree of self-esteem and competence have a better psychological adjustment to working conditions. TMT may provide an explanation to the importance of the concept of self-esteem to medical interns in contexts where one may face stress, death and demanding situations (Courtney & Goldenberg, 2025; Rhodes, 2020).

2.2.3 Preparedness for Practice Framework

Preparedness for practice is conceptualized as a construct, which not only encompasses technical competence but also, as pointed out by some researchers in the field of health profession education, is a multidimensional aspect related to an individual's and an organization's capabilities in terms of training (Le Huray et al., 2023; Ottrey et al., 2021). Such qualities that are deemed crucial for readiness for practice include knowledge and clinical skills, self-confidence, reflexivity, resilience, team work and accountability. In a conceptual framework of graduates work readiness it is described how individual attributes (like the aforementioned qualities, plus proactive learning and personal characteristics), together with workplace condition (like supervisor support, feedback, supervision and workload) impact how students' and residents' abilities to respond to new situations will unfold and lead them to be or not feel prepared (Croghan & Baker, 2020; Rana et al., 2023). The idea of readiness for practice as being associated with effective skills, psychological resources and individual strengths and the influence of a good workplace support system on these attributes seems coherent (V & Tekulapally, 2021).

2.2.4 Integrating the Three Constructs

SCCT, TMT, and the P4P framework may help us to comprehend distinct yet intersecting aspects of medical internships on an individual level. SCCT highlights the role of self-efficacy and outcome expectations in understanding how trainees may be influenced by their experiences of learning and working, while TMT emphasizes the positive influence of self-esteem as a buffer to psychological strain which medical trainees may face working in high stakes contexts (Kusumawati & Wahyuningsih, 2020; Le Huray et al., 2023; Rhodes, 2020). In line with TMT, P4P frameworks emphasize self-esteem and resilience as key attributes of readiness for work and

the importance of individual and work context characteristics in determining this sense of readiness (Aggarwal et al., 2023; V & Tekulapally, 2021). Taken together, all these theoretical viewpoints suggest that psychological resources such as career confidence, readiness for work, and self-esteem play an interdependent role and can be positively influenced by educational environment that provides supportive relationships, meaningful work, and positive feedback among medical interns.

2.3 Empirical Review

2.3.1 Level of Career Confidence

Career confidence (sometimes described as career decision self efficacy or overall work readiness confidence) is widely reported as being between low and moderate and highly context dependent (Brinkman, 2018; Graham et al., 2023). An overview of 70 work readiness studies revealed only between 30-80% of final year students/interns in the UK and Europe feel they were adequately prepared and confidence was lowest for emergencies and prescribing (Brinkman, 2018). Career confidence is strongly associated with previous experience in intern level tasks and actual work; there is strong evidence for workplace attachments (e.g. Rural pre internships, the trainee intern year) boosting confidence and self efficacy (Monrouxe et al., 2017). Interns report lower self confidence levels after starting intern level posts as responsibility and work complexity increase (Padley et al., 2021).

Research on career decision-making reveals parallel challenges. A comprehensive scoping review of 93 studies on medical student career indecision identified low levels of career decision self-efficacy (CDSE), insufficient information, and maladaptive beliefs as key contributors to indecision (W. Li et al., 2026). Evidence suggests that structured coaching and guided learning

interventions can effectively address these barriers. Notably, one randomized controlled trial demonstrated that a five-session career coaching program significantly reduced career decision-making stress while simultaneously increasing CDSE and enhancing certainty in career choice (Fris et al., 2025).

2.3.2 Level of Job Readiness

On average, interns across countries report being between moderately and highly prepared for practice, but unevenly across different aspects of practice. One survey found that 87% of 365 Australian graduating medical students felt they were prepared or very well prepared overall, but this confidence level dropped when assessing individual skills including procedural abilities. Similar findings from a Dubai based cross sectional study of 109 medical interns also reported an overall confidence of 81.7% among fully prepared students; large proportions of students still reported feeling inadequately prepared to deal with emergencies, terminal patients and rectal examinations (Sharief et al., 2025).

Systematic and qualitative evidence supports this; many reports show interns feel more confident working in their regular teams and with basic communication tasks and histories/examination than with the most challenging duties of practice, such as dealing with emergencies and using the prescribing skills, or complex multi task situations (Brinkman, 2018; Graham et al., 2023; Monrouxe et al., 2017; Padley et al., 2021). Comparable patterns have been documented in nursing education, where the majority of interns describe their readiness as average. While roughly one-third express feeling adequately prepared, another third highlight barriers such as limited clinical experience, low confidence, or psychological challenges (Alruwaili et al., 2024). Evidence from low- and middle-income countries further underscores that readiness levels remain suboptimal. Importantly, however, self-reported readiness does not always align with

actual performance in essential clinical skills, suggesting a complex interplay between perception and practice (Louey et al., 2025).

2.3.3 Level of Self-esteem

Multiple studies align with the Ethiopian Jimma findings: about one in five medical students have low self esteem. In Jimma, the prevalence of low self esteem was 19.0%, strongly associated with mental distress, poor social support, and poor academic performance (Gidi et al., 2021). Similar prevalence estimates (18–24%) have been reported in Nepal and Saudi Arabia, with female students and those with poorer academic performance at higher risk of low self-esteem (Alghamdi et al., 2023; Shrestha et al., 2021). Low self-esteem is consistently linked to psychological distress, imposter feelings, and academic difficulties (Alghamdi et al., 2023; El-Setouhy et al., 2024; Gidi et al., 2021).

Evidence also supports self-esteem as a modifiable construct. Assertiveness or self-development training and participation in peer study groups are associated with higher self-esteem and may protect against low self-esteem (Alghamdi et al., 2023). Another study involving medical undergraduates and interns reported that 56.7% experienced IP, and only 16.11% had high self-esteem, indicating a pervasive challenge to self-worth during this period (Sawant et al., 2023).

2.3.4 Factors Associated with Career Confidence

Several factors have been identified as correlates of career confidence. Social support is a significant predictor: a Korean study of 268 medical students found that social support influenced career exploration behavior fully mediated by career decision making self-efficacy. Perceived career barriers, conversely, had a negative indirect effect on career exploration through reduced self-efficacy.

Gender differences have been consistently observed. A study from Uk found that male medical students had higher confidence in securing a training post and were more certain about their career choices (OR 1.19) than females (Ferreira et al., 2025). Similarly, a study on confidence and career choice in internal medicine found that high confidence in men was associated with selection of procedural careers, whereas no such association existed for women (Gavinski et al., 2021). A key factor identified influencing career confidence is academic satisfaction. One medical student study reported academic satisfaction was sequentially correlated to increased self-confidence which in turn related to a better coping style and identity. This confirms career confidence is interrelated with the academic environment and the individual's psychology.

2.3.5 Factors Associated with Job Readiness

The factors impacting job readiness were reviewed. Key variables reported included adequate work experience/clinical placement exposure, supportive learning environments, personal traits, curriculum design, and the feedback obtained. Students who reported increased opportunity to repeatedly practice skills and real life learning environments, with supportive staff showed greater job readiness. "Good" intern traits according to supervisors' reports include reliability, self-discipline, enthusiasm (work willingness and drive), organizational skills (prioritization) and social skills (teamwork). Graduates are not necessarily equally equipped in these areas: the influence of the quality of training and of personal characteristics seems to be confirmed. Contextual factors such as high workload due to staffing levels and poor quality of supervision in particular contributed to stress and burnout and likely have an impact on job readiness through limitations on the extent and quality of interns' experiences and support (Malau-Aduli et al., 2022; Monrouxe et al., 2017; Sharief et al., 2025; Wynne et al., 2024).

2.3.6 Factors Associated with Self-esteem

The Ethiopian context had the largest dataset for factors influencing self-esteem: in that population, low social support was the strongest factor predicting low self-esteem; poor academic performance was also a significant factor, with low self-esteem correlating strongly with mental distress. This research shows the critical protective importance of social support and academic achievement (Gidi et al. 2021). Personality factors were important correlates. Neuroticism has been shown to correlate negatively with self-esteem, whereas conscientiousness and openness are positively associated with it. In contrast, demographic variables such as age, gender, marital status, and ethnicity have not demonstrated significant associations, suggesting that personality traits may be stronger predictors of self-esteem than demographic characteristics. Within the Ethiopian context, one study found that nursing students' self-confidence in clinical work was inversely related to anxiety levels. While this evidence does not directly parallel the experience of medical interns, it provides a theoretically relevant insight and highlights an important area for further investigation among Ethiopian medical students (Jarso et al., 2024).

(Jarso et al., 2024).

2.3.7 Interrelationships between Career Confidence, Job Readiness, and Self-esteem

The three variables have often been examined independently, yet theoretical and empirical evidence suggests important interconnections. A central hypothesis is that self-esteem serves as a foundational factor influencing career confidence; individuals who hold positive views of themselves are more likely to believe in their ability to succeed professionally. In turn, job readiness appears closely linked to both confidence and self-esteem, as interns who feel capable and maintain a positive self-perception are generally better prepared to meet the demands of

clinical practice. Career confidence, job readiness and self-esteem in medical interns are tightly interrelated constructs that together will influence a successful transition to practice (Padley et al., 2021). Self-efficacy is correlated positively with reduced burnout and stress levels, and in turn, lowers burnout levels and a positive skill improvement, predict greater motivation to stay in medicine (Meine et al., 2025). It has also been suggested that self-esteem negatively correlates with the impostor phenomenon, and that subsequently predicts confidence and communication skills as reported by oneself (Sawant et al., 2023). Practical skills confidence is correlated to student intern's readiness to work and enhances the readiness to practice (Abdelaliem et al., 2025). The presence of high levels of self-esteem appears to contribute to successful navigation of the complexities of practice, and stress. Self-esteem is therefore positively linked to confidence and job readiness. As the experience of success builds the confidence and sense of readiness, self-esteem can then also grow from this, and vice versa; breaking confidence and positive wellbeing is deeply damaging when accompanied by negative psychological factors such as depression (Meine et al., 2025; Sawant et al., 2023).

2.4 Summary

The literature review integrated evidence from both theoretical and empirical studies pertaining to career confidence, job readiness, and self-esteem among medical students and interns. The major findings include the following (Gidi et al., 2021; Graham et al., 2023; Haile et al., 2019; Hur et al., 2018; Louey et al., 2025).

First, career confidence levels among medical students are low with just about one fourth demonstrating readiness with regards to career progression; this is dependent on sex, education, extracurricular activities and social support (Hur et al., 2018).

Second, the level of job readiness varies considerably, and also varies across domains and settings. Majority of the students found themselves generally ready, however, procedural readiness, dealing with critically ill and emergency response was still a challenge. Readiness has been examined among medical interns in Ethiopia with limited data; however, nursing interns in Ethiopia were found to have poor readiness (Gidi et al., 2021; Haile et al., 2019).

Third, nearly one fifth of the Ethiopian medical students have low self-esteem which is related to mental distress, poor social support and poor performance (Assefa et al., 2017; Jarso et al., 2024; Meles et al., 2025).

Fourth, the three constructs—career confidence, job readiness, and self-esteem—are likely interrelated; however, very few studies have examined them together, and none has focused specifically on medical interns in Ethiopia. This makes Addis Ababa University, the country's flagship medical school, an important yet understudied context for exploring these relationships.

2.5 Conceptual Framework

A conceptual framework has been developed based on the theoretical and empirical evidence reviewed, it is suggested that career confidence, job readiness, and self-esteem are predicted by sociodemographic variable. Additionally, the three outcome variables are hypothesised to be interrelated.

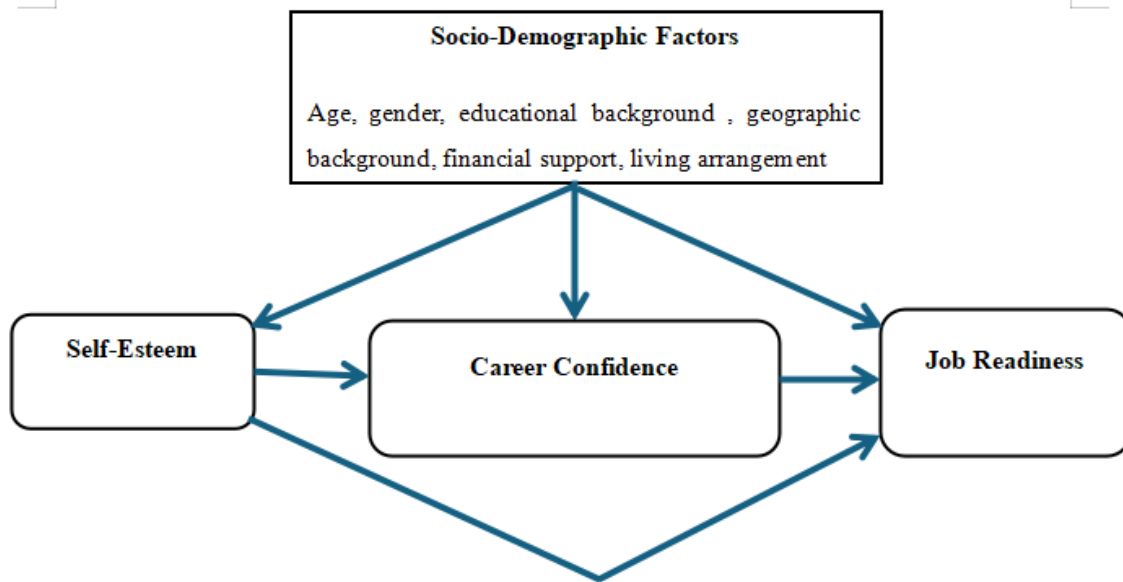


Figure 1: Conceptual framework on ccareer confidence, jjob readiness, and self-esteem among medical Interns of Addis Ababa University.

Chapter Three: Methods

3.1 Research Design

This study adopted a cross-sectional quantitative design. This design is appropriate in that it allows the researcher to determine the status of career confidence, job readiness and self-esteem in medical interns at a particular time, in a particular context, without manipulation of the variables or the environment and describing prevalence and characteristics of a specific phenomenon. It is economical in terms of cost and time and is useful for hypothesis generation in describing relationships among a number of variables. However, it does not enable casual analysis but is a suitable design for exploration of associations which can then be explored through longitudinal and experimental studies.

3.2 Research Approach

This study employed a quantitative research approach. A quantitative research approach was chosen since the study aimed at determining the levels, relationships and associated factors of career confidence, job readiness and self-esteem using numerical data. It focuses on measurement, hypothesis testing and generalizability to the target population.

3.3 Study Site

The study was conducted in Tikur Anbessa Specialized Hospital (TASH), alternatively known as Black Lion Hospital in Addis Ababa, Ethiopia. The hospital was founded in 1964, and it is the largest specialized hospital in the country, as well as a national referral center for complicated medical and surgical conditions. It hosts a range of specialized departments that include internal medicine, surgery, pediatrics, obstetrics and gynecology, orthopedics, psychiatry, radiology and emergency medicine.

It is the primary clinical learning environment for medical interns from the College of Health Sciences of Addis Ababa University. Around 200 medical interns are admitted for mandatory one year rotating internship training each year. Due to its central location, a large patient flow, and role as a training hospital, TASH was the most suitable choice of setting for this study.

3.4 Population and Sampling

3.4.1 Target Population

The target population in this study consisted of all medical doctors who had successfully completed the formal Doctor of Medicine curriculum and were currently enrolled in a mandatory one year internship program under the Faculty of Medicine at Addis Ababa University during the 2025-2026 academic year. All interns registered with the AAU Medical Education Office during that academic year were involved in rotations at the university-affiliated teaching hospitals. From the student records at the AAU College of Health Sciences, the estimated target population was around 200 interns.

3.4.2 Study Population

The study population consisted of the target population who were currently interns working and living within the city limits of Addis Ababa who fulfilled the inclusion criteria and who were physically present and engaged in internship work at TikurAnbessa Specialized Hospital during the period of data collection. Interns who were on extended leave for any reason, for example, medical leave, maternity leave, parental leave or any formal leave which extended for more than two consecutive weeks, were not part of the study population. Interns who were off-site during their rotations, or had taken leave, or formally dropped from the internship training program were not part of the study population.

3.4.3 Sample Size and Sampling Technique

A census (total population) sampling technique was used. Since the study population (medical interns in AAU-affiliated teaching hospitals during that period of rotation in TASH) was small and accessible (estimated around 200 interns), all eligible interns were approached to participate in the study. By so doing the sampling error was minimized and statistical power and internal validity were improved. The application of the census sampling technique: a comprehensive list of all the medical interns undertaking their internship training in the AAU-affiliated teaching hospitals in the 2025-2026 academic year was obtained from the AAU Medical Education Office. All of these individuals were then approached during data collection time and location at TASH to partake in the study if they were willing to participate and met all the inclusion criteria. No random or systematic selection process was conducted since the entire relevant population was to be investigated.

3.5 Data Collection Instruments

Data was collected using a structured self-administered questionnaire comprising of four parts that are shown in appendix III. The questionnaire was written in the English language, since the latter is the language of instruction at Addis Ababa University and all medical interns at the College are proficient English speakers and writers.

Part one of the questionnaire captured the sociodemographic and internship related information of the study participants. This includes the age of the participant, sex, marital status, area of rotation/department, type of schooling (direct entry or transfer) whether receives an allowance or allowance based support and how they live. Whether the study participant will continue working in the medical sector after finishing internship was also considered.

Section two measures career confidence. The Confidence and Readiness to Work as a House Officer Questionnaire was used, originally developed and validated in a Malaysian public university among medical graduates (Rashid et al., 2025). It is comprised of questions regarding generic skills, practical skills and personal skills. A 5-point likert scale (1= not at all confident to 5 = completely confident) is used to score individual items. Higher total score implies higher career confidence. This scale is considered to be internally consistent in previous study (Cronbach's α >0.85) (Sultoni et al., 2022)..

Section three measures job readiness using the Student Work Readiness Scale. The scale covers different aspects of readiness to entering the work force, namely knowledge, skills, attitudes and work behaviors measured using a 5-point Likert Scale (1=strongly disagree, 5=strongly agree). The total score represents job readiness with higher scores indicating higher level of job readiness. This scale has obtained an acceptable level of reliability in past studies (Cronbach's α =0.82-0.88) (Sultoni et al., 2022).

The fourth section measures self-esteem using the Rosenberg Self-Esteem Scale (RSES), which consists of 10 items and is considered a gold standard for assessing self-esteem. The scale is a 4-point Likert type response format ranging from 0 (strongly disagree) to 3 (strongly agree), where five items are reverse-scored. Total scores can range from 0-30, with higher scores indicating higher level of self-esteem. RSES has reported good reliability in Ethiopian medical students (Cronbach's α = 0.82)(Gidi et al., 2021).All three scales used were adopted without any modification.

3.6 Data Collection Procedure

The process of data collection was performed systematically following the steps below. First, ethical approval was obtained from School of Psychology. Approval was also obtained from the Medical Director of TikurAnbessa Specialized Hospital.

Second, two trained data collectors (one with a background in psychology and the other a general practitioner) were oriented about the study protocol, informed consent procedure and questionnaire administration and handling.

Third, the data were collected at TikurAnbessa Specialized Hospital on scheduled break times, lunch hours and post-call sessions where and when study participants would not be attending to duties of patient care or academic learning, so as to not interfere with work or learning process.

Fourth, prospective participants were approached individually, informed about the study through an information sheet that detailed the study objective, procedure, risks, benefits and confidentiality of their response and then written informed consent was obtained after all their questions were addressed appropriately before administering the questionnaire.

Fifth, study participants were requested to fill in the questionnaire in a quiet place with minimal disturbance so as to encourage a sense of privacy. Completion of each questionnaire took approximately 20-25 minutes.

Sixth, upon completion of the questionnaire by the participant, it was sealed by the respondent themselves, put into an envelope which was labeled by a unique code number and later collected by the data collector. Personal identification details were not recorded. The entire data collection process took three weeks during the 2025-2026 academic year.

3.6 Pretest

No formal pretest was administered in this study. Three main reasons support the omission of a pre-test:

First, three data collection instruments used in this study; the Career Confidence Questionnaire, the Work Readiness Scale and the Rosenberg SelfEsteem Scale are established measures with existing validity and psychometric properties. These measures have shown good to excellent internal consistency (Cronbach's α >0.80) on previous research occasions among diverse populations. Second, Rosenberg SelfEsteem Scale is a scale that has been validated and implemented in an Ethiopian medical students' population (Gidi et al., 2021) and therefore considered appropriate and easy to understand for the study sample. Third, study sample are all educated and speak English; therefore they are assumed to have sufficient literacy and experience with questionnaires to understand the questions correctly, minimizing any risk of misinterpretation of the questions or administration errors. A pilot study was therefore not carried out and data were collected using the already existing measures.

3.8 Data Analysis

Data was then entered into an IBM SPSS Statistics version 27 database for analysis. Data from the questionnaires were manually reviewed for completeness and consistency. Any dataset with more than 10% missing responses was excluded from analysis. The remaining valid responses were entered into IBM SPSS Statistics version 27 for statistical analysis. Of the estimated 200 eligible interns, 192 provided sufficiently complete data, yielding a **response rate of 96%**. Eight questionnaires were excluded due to excessive missing responses, resulting in a **non-response rate of 4%**. This high response rate strengthens the reliability of the findings and minimizes the risk of non-response bias.

Descriptive statistics (frequency, percentages, means, standard deviations, minimum and maximum) were used to summarize data. Categorical variables included gender, marital status, department of rotation, educational background, dwelling arrangement, geographical background, sources of income support, career intention after internship were summarized using frequencies and percentages, while continuous variables included age, career confidence score, job readiness score and self-esteem score summarized as means, standard deviations, minimum and maximums. Independent samples t-test was performed to compare means for two groups (e.g., male and female, urban and rural). Pearson correlation was performed to test for correlation between three constructs namely career confidence, job readiness and self-esteem. Multiple linear regressions analysis was performed to identify predictors of each outcome variable; the models included all variables that were statistically significant at $p < 0.25$ in bivariate analyses. Adjusted beta coefficients () with 95% confidence intervals were calculated. P-value < 0.05 was considered statistically significant at any test.

3.9 Ethical Considerations

Ethical clearance was obtained from School of Psychology. Additional permission was sought from the Medical Director of Tikur Anbessa Specialized Hospital. Informed consent was obtained from each participant prior to questionnaire administration. No name or identifying characteristics was noted on the questionnaires. Participants were informed that participation was entirely voluntary, and notified that they could withdraw at any point without penalty.

Chapter Four: Results

4.1 Introduction

Total medical interns included in this census study were 200 in number. Of which 192 interns have completed and returned their questionnaire thus giving a 96.0 % response rate.

4.2 Socio-Demographic Characteristics of Respondents

Table 1 shows balanced distribution of sexes (male: 50.5 %; female: 49.5 %). Majority of the interns were young (23-26 years: 76.6 %). A very high percentage of interns were single (94.8 %). With regard to educational background most interns were direct-entry students from Addis Ababa University (89.1 %). Interestingly a little over half of the interns were from rural areas (54.2 %). With respect to financial support the government stipend was the source of income (57.3 %) followed by parents' income (32.8 %) while other interns had self-support (9.9 %). Most interns resided in university dormitories (55.7%). Notably, an overwhelming majority (93.8%) reported that they intend to continue working in the medical field after internship.

Table 1: Socio-demographic characteristics of medical interns at Addis Ababa university, Ethiopia (n = 192)

Variable	Category	N	%
Sex	Male	97	50.5
	Female	95	49.5
Age Group (years)	23–26	147	76.6
	27–30	45	23.4
Marital Status	Single	182	94.8
	Married	10	5.2
Educational Background	Direct entry (AAU)	171	89.1
	Transferred	21	10.9
Geographic Background	Urban	88	45.8
	Rural	104	54.2
Financial Support	Family support	63	32.8
	Government stipend	110	57.3
	Self-supported	19	9.9
Career Intention After Internship	Yes	180	93.8
	No	12	6.3
Living Arrangement	With family	60	31.3
	Dormitory	107	55.7
	Rented house	25	13.0

4.3 Levels of Career Confidence, Job Readiness, and Self-Esteem

Table 2 shows the mean, standard deviation, minimum, and maximum scores for the three outcome variables. Career confidence had a mean score of 77.96 (SD = 16.04), with scores ranging from 29 to 124. Job readiness showed a mean score of 64.12 (SD = 15.22), with scores ranging from 22 to 101. Self-esteem had a mean score of 23.90 (SD = 5.24), with scores ranging from 12 to 39.

Table 2: Descriptive statistics of career confidence, job readiness, and self-esteem (n = 192)

Variable	N	Minimum	Maximum	Mean	SD
Career Confidence	192	29.00	124.00	77.96	16.04
Job Readiness	192	22.00	101.00	64.12	15.22
Self-Esteem	192	12.00	39.00	23.90	5.24

4.4 Differences in career confidence, job readiness, and self-esteem by selected characteristics

Table 3 compares mean scores for career confidence, job readiness, and self-esteem across sex, educational background, geographic origin, and career intention. Male interns demonstrated significantly higher levels of career confidence ($p = .005$; $d = 0.41$) and job readiness ($p = .001$; $d = 0.49$) compared to female interns, while differences in self-esteem were not significant ($p = .073$). Educational background also showed an effect: direct-entry students reported significantly greater career confidence than transferred students ($p = .002$; $d = 0.73$), though differences in job readiness and self-esteem were not significant. Geographic origin revealed that urban origin interns scored higher on career confidence ($p = .045$; $d = 0.29$) and job readiness ($p < .001$; $d = 0.54$) than rural origin interns, while self-esteem differences were not significant. Career intention demonstrated the strongest effect, with interns intending to continue in medicine reporting markedly higher career confidence ($p = .007$; $d = 0.82$) and job readiness ($p = .010$; $d = 0.78$) compared to those without such intention, whereas self-esteem differences were not significant. over all, these findings indicate that male, direct entry, urban origin, and career intending interns consistently exhibit higher levels of career confidence and job readiness, with the largest effect observed for career intention on career confidence ($d = 0.82$). Self-esteem, however, remained stable across groups and was not significantly influenced by these socio-demographic or educational factors.

Table 3: Independent-samples t-tests for career confidence, job readiness, and self-esteem by selected characteristics (n = 192)

Grouping Variable	Outcome	Group 1, M (SD)	Group 2, M (SD)	t	P	Cohen's d
Sex	Career confidence	Male (n = 97), 81.16 (15.64)	Female (n = 95), 74.69 (15.86)	2.85	.005	0.41
	Job readiness	Male (n = 97), 67.72 (13.89)	Female (n = 95), 60.44 (15.71)	3.40	.001	0.49
	Self-esteem	Male (n = 97), 24.57 (5.33)	Female (n = 95), 23.21 (5.07)	1.81	.073	0.26
Educational background	Career confidence	Direct entry (AAU; n = 171), 79.22 (15.48)	Transferred (n = 21), 67.76 (17.24)	3.16	.002	0.73
	Job readiness	Direct entry (AAU; n = 171), 64.61 (15.15)	Transferred (n = 21), 60.10 (15.55)	1.29	.200	0.30
	Self-esteem	Direct entry (AAU; n = 171), 23.98 (5.23)	Transferred (n = 21), 23.19 (5.40)	0.65	.515	0.15
Geographic background	Career confidence	Urban (n = 88), 80.48 (14.58)	Rural (n = 104), 75.84 (16.96)	2.01	.045	0.29
	Job readiness	Urban (n = 88), 68.44 (13.71)	Rural (n = 104), 60.46 (15.54)	3.74	< .001	0.54
	Self-esteem	Urban (n = 88), 24.30 (5.53)	Rural (n = 104), 23.56 (4.98)	0.97	.332	0.14
Career intention	Career confidence	Yes (n = 180), 78.77 (15.91)	No (n = 12), 65.92 (13.32)	2.73	.007	0.82
	Job readiness	Yes (n = 180), 64.85 (15.12)	No (n = 12), 53.17 (12.78)	2.61	.010	0.78
	Self-esteem	Yes (n = 180), 24.02 (5.23)	No (n = 12), 22.08 (5.30)	1.24	.217	0.37

4.5 Correlation between Career Confidence, Job Readiness, and Self-Esteem

Table 4 shows Pearson correlation coefficients between career confidence, job readiness, and self-esteem. All correlations are positive and statistically significant ($p < .01$). The strongest correlation is between career confidence and job readiness ($r = 0.444$, moderate). Career confidence also correlates moderately with self-esteem ($r = 0.358$). Job readiness has a weaker

but still significant positive correlation with self-esteem ($r = 0.269$). As hypothesized, the three psychological constructs are interrelated. Interns who feel more confident about their careers also feel more ready for work and have higher self-esteem. The moderate strength of these associations highlights that while the constructs are related, they remain conceptually distinct, each contributing uniquely to the professional development of medical interns.

Table 4: Pearson correlation matrix for career confidence, job readiness, and self-esteem (n = 192)

Variable	1	2	3
1. Career Confidence	1		
2. Job Readiness	0.444**	1	
3. Self-Esteem	0.358**	0.269**	1

Note. $p < .01$

4.6 Multiple Linear Regression Analysis

Multiple linear regression analyses were conducted to examine the association between selected socio-demographic and educational factors (sex, educational background, geographic background, and career intention) and three outcome variables: career confidence, job readiness, and self-esteem. All categorical predictors were dummy coded, with the following reference categories: female (sex), transferred (educational background), rural (geographic background), and no intention to continue a medical career. Career intention was the strongest and most consistent predictor across both models. Unlike sex or geographic background which is fixed, career intention can be strengthened through targeted interventions such as mentorship and career counseling. Self-esteem showed no significant differences across any socio-demographic group.

4.6.1 Predictors of Career Confidence

Table 5 presents the regression coefficients for predictors of career confidence. Being male was a significant positive predictor of career confidence ($B = 6.879$, $p = .002$, $\beta = .215$), indicating that, holding other factors constant, male interns scored on average about 6.9 points higher in career confidence than female interns. The standardized coefficient ($\beta = .215$) suggests a small-to-moderate practical effect.

Educational background also showed a significant association with career confidence. Direct-entry interns had significantly higher career confidence than transferred students ($B = 11.409$, $p = .001$, $\beta = .223$). This represents one of the stronger predictors in the model, indicating a meaningful increase of about 11.4 points in career confidence for direct-entry students, with a small-to-moderate standardized effect.

Career intention was another significant predictor. Interns who intended to continue in the medical profession had higher career confidence compared to those who did not ($B = 12.442$, $p = .006$, $\beta = .188$). This suggests that future career commitment is strongly associated with increased professional confidence, with a moderate practical contribution.

Table 5: Multiple linear regression analysis of socio-demographic factors associated with career confidence

Variable	B	SE	β	t	p-value	95% CI
Constant	51.246	5.512	—	9.298	<.001	[40.373, 62.119]
Male (vs Female)	6.879	2.168	.215	3.173	.002	[2.602, 11.155]
Direct Entry (vs Transferred)	11.409	3.516	.223	3.245	.001	[4.473, 18.346]
Urban (vs Rural)	3.092	2.214	.096	1.397	.164	[-1.275, 7.459]
Intends to Continue Medical Career (Yes vs No)	12.442	4.501	.188	2.764	.006	[3.562, 21.322]

4.6.2 Predictors of Job Readiness

Table 6 shows the regression results for job readiness. Sex was a significant predictor of job readiness. Male interns scored significantly higher than female interns ($B = 7.589$, $p < .001$, $\beta = .250$), indicating that being male is associated with an average increase of about 7.6 points in job readiness when other variables are held constant. Geographic origin was another significant predictor; urban originated interns had higher job readiness than the rural originated ones ($B = 7.351$, $p = .001$, $\beta = .241$). A moderate increase of 7.4 points in job readiness was noted among urban originated interns when holding other variables constant.

Career intention also emerged as a significant predictor of job readiness ($B = 10.103$, $p = .018$, $\beta = .161$). Despite the smaller effect size compared to sex and geographic origin, this finding was still statistically significant, suggesting that having future commitment to a medical career can also have an impact on the perception of job readiness among interns.

Table 6: Multiple regression of the socio-demographic factors and career intention on job readiness

Variable	B	SE	β	t	p-value	95% CI
Constant	44.386	5.183	—	8.564	<.001	[34.162, 54.611]
Male (vs Female)	7.589	2.039	.250	3.723	<.001	[3.568, 11.611]
Direct Entry (vs Transferred)	3.434	3.306	.071	1.039	.300	[-3.089, 9.957]
Urban (vs Rural)	7.351	2.082	.241	3.531	.001	[3.244, 11.457]
Intends to Continue Medical Career (Yes vs No)	10.103	4.233	.161	2.387	.018	[1.753, 18.453]

Chapter Five: Discussion

In this study, the levels and relationships of career confidence, job readiness and self-esteem among medical interns, along with the influences of socio-demographic variables were examined. The results revealed moderate levels for all three constructs in interns, career confidence had the highest scores followed by job readiness and then self-esteem, this may suggest that while interns feel adequately equipped to carry out the clinical tasks of being a doctor, their sense of self-worth remains relatively low, similar results are also evident from studies on the experiences of medical students in Ethiopian and across different settings; where trainees often face psychological distress, lack of self-belief, and fluctuating sense of self-worth regardless of having received the necessary academic knowledge (Alghamdi et al., 2023; Gidi et al., 2021), this might be due to the stresses of clinical work where interns must be seen to be competent in all clinical practice situations which often increases their self confidence in performing professional tasks, and self-worth may decrease due to a desire to have an improved professional self-worth in the environment that requires such performance and capability in medical skills. Educational and socio-demographic influences were significant in career confidence and job readiness; males reported higher levels of confidence and job readiness than females; this is consistent with previous research in male and females perceived abilities and confidence in medical profession practice which found differences across genders (Alruwaili et al., 2024; Gavinski et al., 2021; Rashid et al., 2025). These differences may reflect broader influences such as socialization patterns, mentorship access, supervisor expectations, and cultural norms, which together shape confidence and readiness differently across genders. Medical interns from urban areas had higher confidence and readiness than interns from rural areas; This finding can be due to disparity in quality of prior education received and opportunity of access in

clinical areas during the undergraduate training of the doctors; Similar findings are reported from studies carried out in Ethiopian and around the world in relation to education (Dejene et al., 2024). For educational influence, direct entry students were significantly confident than transfer students. This could be due to being on training consecutively with the familiarization in the learning environment or institutional settings. However, the lack of difference in job readiness and self-esteem across educational background does imply that even if the person is well integrated in the institutional settings they may not have been adequately prepared with regard to the professional world of doctor hood nor necessarily be confident in the aspects that require one to feel good about one self and work place and so it may suggest that readiness in doctors must be gained from experiences, actual work and other related fields(Assefa et al., 2017). The results further showed that geographic background and career intention were positively related to career confidence and job readiness; this could be explained by the fact that students who want to work in the field of medicine will be more concerned about having a good job readiness and career confidence to practice medicine (Chiu et al., 2023); the study from literature confirms that providing good guidance and coaching will significantly boost the confidence of trainees and that career intention was a positive factor (Fris et al., 2025). The strong association between self-esteem was not identified as it does not differ with the most socio-demographic variables as it is usually perceived as a relatively stable attribute of personality (Shrestha et al., 2021) but it was important that the moderate score in self-esteem be taken care of. Since low self-esteem is reported as related to low academic achievement, stress and mental health problems in medical student, because job related problems like pressure, inadequate rest and lack of time could lead to increased burnout (Alghamdi et al., 2023; De Hert, 2020; Meles et al., 2025).

In addition to this, career confidence, job readiness and self-esteem were positively and significantly correlated to each other; particularly between career confidence and job readiness which means doctors with higher career confidence had more self-perceived job readiness. This finding is related to studies where career confidence and job readiness are strong variables for each other among doctors (Rashid et al., 2025). This also suggests that confidence in an individual's professional role contributes more strongly to professional self-worth, and the career confidence has a more significant role in shaping an individual's perception of preparedness to carry out a medical task. Generally, from these findings the transition into practicing medicine can be explained by comparing personal and work-based factors such as individual characteristics, educational factors as well as the psychological work factors and the transition to medical practice is determined by these interactions. Although, the scores from career confidence and job readiness are moderate this could be explained by looking at the factors like how doctors must have the know-how as far as their profession is concerned, and not just how good one is in general, as well as looking at the impact of how different categories of individuals are affected differently, such as with regards to gender, location, career intention etc as demonstrated by the factors affecting it, this indicates that more work must be done as far as guiding the career paths and the necessary skill development of doctors in general (Louey et al., 2025). Finally, the results also indicated the need for intervention which addresses both aspects of readiness among doctors, focusing on boosting their sense of self-esteem and overall sense of readiness which will enhance their role in the healthcare sector.

Chapter Six: Conclusion and Recommendations

6.1 Conclusion

The present study assessed the career confidence, job readiness, self-esteem, and determinants of each among medical interns of Addis Ababa University. The key findings are summarized as follows:

- Medical interns at Addis Ababa University expressed moderate levels of career confidence, job readiness, and self-esteem, with considerable variations in career confidence and readiness across subgroups.
- Significant differences in career confidence and job readiness were found based on sex, geographic origin, educational background, and career intention. Males, urban-origin interns, direct-entry students, and those intending to pursue medical careers reported significantly higher levels of both career confidence and job readiness.
- No statistically significant differences existed among subgroups regarding self-esteem, suggesting it is a relatively stable construct not easily influenced by demographic factors.
- A moderate and positive relationship exists among career confidence, job readiness, and self-esteem, implying that if you increase the level of career confidence or job readiness, you improve on self-esteem as well.
- Among all predictor variables, career intention was the strongest predictor of both career confidence and job readiness. The same did not happen for self-esteem.
- Sex, educational background, and career intention predict career confidence, while sex, geographic origin, and career intention predict job readiness in the multivariate model.

To conclude, medical interns are moderately prepared, with variations based on several factors. Increasing access of internship students to mentors, guidance, and internship support might build and maintain appropriate self-esteem and confidence as they enter into their medical careers.

6.2 Recommendations

For medical educators and curriculum designers:

- Strengthen experiential learning, simulation-based training, and practical training for interns, with particular emphasis on emergency management, procedural skills, and clinical decision-making.
- Improve the exposure in terms of structured clinical experiences and skills practice, especially for interns with low career confidence, such as female interns, rural-origin interns, and transferred students.
- Implement mentorship and career counseling programs to help interns formulate career intention and strengthen professional commitment.

For hospital administrators and policy makers:

- Design and introduce particular supports for transferred and rural interns in the form of orientation, training, and guidance by having dedicated mentors for them.
- Reduce the gap in medical education between rural and urban interns by facilitating better access to medical resources and exposure by internship interns.
- Support interns with suitable allowances, working conditions, accommodation, and financial supports for reducing stress during internship and improving job readiness.

For Student support and wellness services:

- Enhance provision of mental health and psychological support services among interns, such as counseling and peer support groups.
- Conduct stress management training and workshops on coping and resilience to maintain interns' self-esteem at a healthy level.

For future researchers:

- Initiate longitudinal studies in order to understand the trends of changes of career confidence, job readiness, and self-esteem during and after the internship years.
- Conduct studies using qualitative methods that explore interns' lived experiences, especially those who lack career confidence, come from rural backgrounds, or do not have clear intentions towards career choices.
- Test the efficacy of intervention-based studies, such as mentorship training and simulation training, on the improvement of confidence and readiness.

References

- Abdelaliem, S. M. F., Alsleem, D. K., Aladdad, S. K., Alqahtani, A. S., Alenazi, R. K., Alotaibi, M. G., Oqailan, H. K., & Almarshad, L. B. (2025). The relationship between practical skills confidence and readiness for transition to practice among nursing internship students: Exploring the mediating role of preceptorship. *Nurse Educ Today*, 147, 106587. <https://doi.org/10.1016/j.nedt.2025.106587>
- Abebe, T. B., Balcha, T. D., Melkam, Y., Andualem, Z., Desyalew, T., Alemayehu, T. T., & Wassie, Y. A. (2024). The prevalence of job satisfaction and its associated factors among medical intern students in University of Gondar comprehensive specialized hospital, Gondar, Ethiopia 2022.
- Aggarwal, A., Kishore, J., & Sardana, S. (2023). Self-esteem and resilience in medical education: A cross-sectional study. *Medical Teacher*, 45(8), 856–863.
- Alghamdi, S. A., Aljaffer, M. A., Alahmari, F. S., Alasiri, A. B., Alkahtani, A. H., Alhodayris, F. S., & Alhusaini, B. A. (2023). The impact of low self-esteem on academic achievement and the behaviors related to it among medical students in Saudi Arabia. *Saudi Med J*, 44(6), 613-620. <https://doi.org/10.15537/smj.2023.44.6.20230055>
- Alruwaili, A. N., Alruwaili, M. M., & Colby, N. (2024). Readiness levels of intern nursing students during the transition to professional practice within the Al Jouf Region in Saudi Arabia. *BMC Nurs*, 23(1), 421. <https://doi.org/10.1186/s12912-024-02106-5>
- Assefa, T., Haile Mariam, D., Mekonnen, W., & Derbew, M. (2017). Medical students' career choices, preference for placement, and attitudes towards the role of medical instruction in Ethiopia. *BMC Medical Education*, 17(1), 96.
- Brinkman, D. (2018). Do final year medical students have sufficient prescribing competencies? A systematic literature review. *British Journal of Clinical Pharmacology*, 84. <https://doi.org/10.1111/bcp.13491>
- Byram, J. N., Robertson, K. A., & Dilly, C. K. (2022). I am an Educator: Investigating Professional Identity Formation using Social Cognitive Career Theory. *Teaching and Learning in Medicine*, 34(4), 392-404. <https://doi.org/10.1080/10401334.2021.1952077>
- Chiu, H.-Y., Chiang, C.-M., Kang, Y.-N., Chen, C.-C., Wu, C.-C., Chiu, Y.-H., Tang, K.-P., Kao, C.-C., & Wei, P.-L. (2023). Development of a social cognitive career theory scale for measuring the intention to select surgery as a career. *Heliyon*, 9(11). <https://doi.org/10.1016/j.heliyon.2023.e21685>
- Courtney, E. P., & Goldenberg, J. L. (2025). Breast Cancer Family History and Behavioral Health Intentions: An Esteem-Relevant Mechanism Informed by the Terror Management Health Model. *Curr Oncol*, 32(10). <https://doi.org/10.3390/curroncol32100544>
- Croghan, S. M., & Baker, T. (2020). The Great Gamble? A Mixed-Methods Study of Factors Influencing Medical Students in Specialty Choice. *J R Coll Physicians Edinb*, 50(4), 422-430. <https://doi.org/10.4997/jrcpe.2020.418>
- De Hert, S. (2020). Burnout in healthcare workers: prevalence, impact and preventative strategies. *Local and regional anaesthesia*, 171-183.
- Dejene, D., Ayalew, F., Yigzaw, T., Woretaw, A., Versluis, M., & Stekelenburg, J. (2024). Assessment of clinical competence of graduating medical students and associated factors in Ethiopia. *BMC Medical Education*, 24(1), 17.
- El-Setouhy, M., Makeen, A. M., Alqassim, A. Y., Jahlan, R. A., Hakami, M. I., Hakami, H. T., Mahzari, I. M., Thubab, H. A. A., Haroobi, K. Y., Alaraj, H. A., & El-Hariri, H. M.

- (2024). Prevalence and correlates of imposter syndrome and self-esteem among medical students at Jazan University, Saudi Arabia: A cross-sectional study. *PLoS One*, 19(5), e0303445. <https://doi.org/10.1371/journal.pone.0303445>
- Ferreira, T., Collins, A. M., Handscomb, A., French, B., Bolton, E., Fortescue, A., Plumb, E., & Feng, O. (2025). Specialty choices among UK medical students: certainty, confidence and key influences-a national survey (FAST Study). *BMJ Open*, 15(8), e103061. <https://doi.org/10.1136/bmjopen-2025-103061>
- Fris, D. A. H., van Vianen, A. E. M., van Hooft, E. A. J., de Hoog, M., & de Pagter, A. P. J. (2025). Career coaching to support medical student career decision-making: a randomized controlled trial. *Advances in Health Sciences Education*, 30(5), 1497-1521. <https://doi.org/10.1007/s10459-025-10409-8>
- Gavinski, K., Cleveland, E., Didwania, A. K., Feinglass, J. M., & Sulistio, M. S. (2021). Relationship Between Confidence, Gender, and Career Choice in Internal Medicine. *J Gen Intern Med*, 36(3), 662-667. <https://doi.org/10.1007/s11606-020-06221-2>
- Gidi, N. W., Horesa, A., Jarso, H., Tesfaye, W., Tucho, G. T., Abera, M., & Abafita, J. (2021). Prevalence of Low Self-esteem and Mental Distress among Undergraduate Medical Students in Jimma University: A Cross-Sectional Study. *Ethiop J Health Sci*, 31(3), 573-580. <https://doi.org/10.4314/ejhs.v31i3.14>
- Graham, P., Padley, J., Williams, S., Gonzalez-Chica, D., Isaac, V., & Walters, L. (2023). Australian rural medical students' perceived readiness for work as a junior doctor: A cross-sectional national survey. *Aust J Rural Health*, 31(5), 999-1007. <https://doi.org/10.1111/ajr.13035>
- Guo, J., Huang, X., Zheng, A., Chen, W., Lei, Z., Tang, C., Chen, H., Ma, H., & Li, X. (2022). The Influence of Self-Esteem and Psychological Flexibility on Medical College Students' Mental Health: A Cross-Sectional Study [Original Research]. *Frontiers in Psychiatry, Volume 13 - 2022*. <https://doi.org/10.3389/fpsy.2022.836956>
- Haile, Y. G., Senkute, A. L., Alemu, B. T., Bedane, D. M., & Kebede, K. B. (2019). Prevalence and associated factors of burnout among Debre Berhan University medical students: a cross-sectional study. *BMC Medical Education*, 19(1), 413.
- Hur, Y., Cho, A. R., Song, E. J., & Kim, S. (2018). Evaluation of a systematic career coaching program for medical students in Korea using the Career Readiness Inventory. *J Educ Eval Health Prof*, 15, 10. <https://doi.org/10.3352/jeehp.2018.15.10>
- Jarso, M. H., Tariku, M., Mamo, A., Tsegaye, T., & Gezimu, W. (2024). Test anxiety and its determinants among health sciences students at Mattu University: a cross-sectional study. *Frontiers in Psychiatry*, 14, 1241940.
- Kusumawati, E., & Wahyuningsih, D. (2020). The effectiveness of social cognitive career theory on career decision making. *KONSELI : Jurnal Bimbingan dan Konseling (E-Journal)*, 7, 107-116. <https://doi.org/10.24042/kons.v7i2.7214>
- LENT, R. W. (2020). Career Development and Counseling: A Social Cognitive Framework. In *Career Development and Counseling* (pp. 129-163). <https://doi.org/https://doi.org/10.1002/9781394258994.ch5>
- Li, W., Gillies, R. M., Sun, H., & Khan, A. (2026). Career indecision among medical students: A scoping review of contributing sources, associated factors, and support strategies. *Medical Teacher*, 48(1), 42-60. <https://doi.org/10.1080/0142159X.2025.2520927>

- Li, W., Gillies, R. M., Sun, H., & Khan, A. (2026). Career indecision among medical students: A scoping review of contributing sources, associated factors, and support strategies. *Med Teach*, 48(1), 42-60. <https://doi.org/10.1080/0142159x.2025.2520927>
- Louey, C. Y. M., Zeng, A., Roberts, S., Harrison, J., Palermo, C., Leech, M., & Kumar, A. (2025). Graduating medical students' perception of preparedness for practice: experiential learning is key. *BMC Med Educ*, 25(1), 1402. <https://doi.org/10.1186/s12909-025-07801-8>
- Malau-Aduli, B. S., Jones, K., Alele, F., Adu, M. D., Drovandi, A., Knott, G., Young, L., & Jo, C. (2022). Readiness to enter the workforce: perceptions of health professions students at a regional Australian university. *BMC Medical Education*, 22(1), 89. <https://doi.org/10.1186/s12909-022-03120-4>
- Meine, L. E., McPherson, E. B. A., Schmutz, J. B., Ruff, C. C., Käser, L., & Kleim, B. (2025). Understanding resilience in medical interns through ecological momentary assessments, predictive modelling, and topic analysis. *Commun Med (Lond)*, 5(1), 440. <https://doi.org/10.1038/s43856-025-01084-2>
- Meles, D. A., Ayele, A. D., Tsegaberhan, H., & Mossie, T. B. (2025). Quality of sleep and associated factors among medical interns in public universities in North Ethiopia. *Frontiers in Psychiatry*, 16, 1448028.
- Monrouxe, L. V., Grundy, L., Mann, M., John, Z., Panagoulas, E., Bullock, A., & Mattick, K. (2017). How prepared are UK medical graduates for practice? A rapid review of the literature 2009-2014. *BMJ Open*, 7(1), e013656. <https://doi.org/10.1136/bmjopen-2016-013656>
- Padley, J., Boyd, S., Jones, A., & Walters, L. (2021). Transitioning from university to postgraduate medical training: A narrative review of work readiness of medical graduates. *Health Sci Rep*, 4(2), e270. <https://doi.org/10.1002/hsr2.270>
- Rashid, A. A., Mohtarrudin, N., Ghazali, S. S., Hafiz Bin Wan Zukiman, W. Z. H., Kamal, F. M., & Nasharuddin, N. A. (2025). Relationship Between Level of Confidence and Readiness to Work Among Medical Graduates: A Cross Sectional Study in a Public University. *Malaysian Journal of Medicine & Health Sciences*, 21(3).
- Rhodes, N. (2020). Terror Management Theory: Mortality Salience. In *The International Encyclopedia of Media Psychology* (pp. 1-9). <https://doi.org/https://doi.org/10.1002/9781119011071.iemp0127>
- Sawant, N. S., Kamath, Y., Bajaj, U., Ajmera, K., & Lalwani, D. (2023). A study on impostor phenomenon, personality, and self-esteem of medical undergraduates and interns. *Ind Psychiatry J*, 32(1), 136-141. https://doi.org/10.4103/ipj.ipj_59_22
- Sharief, W. M., Mahdy, N. H., & Al-Eraky, M. (2025). Perceived Preparedness for the Clinical Practice Among Medical Interns: A Cross-Sectional Study. *Adv Med Educ Pract*, 16, 69-78. <https://doi.org/10.2147/amep.S466627>
- Shrestha, B., Yadav, S., Dhakal, S., Ghimire, P., Shrestha, Y., & Singh Rathau, E. (2021). Status of self-esteem in medical students at a college in Kathmandu: A descriptive cross-sectional study. *F1000Res*, 10, 1031. <https://doi.org/10.12688/f1000research.72824.2>
- Sultoni, S., Gunawan, I., Firawati, A. A., & Cahyaningtyas, A. (2022). Validity and reliability of the student work readiness scale. *JAMP: Jurnal Administrasi dan Manajemen Pendidikan*, 5(2), 176-185.

- V, P., & Tekulapally, K. (2021). Preparedness for Internship: A Survey of New Interns at a Tertiary Care Hospital, Telangana. *PERSPECTIVES IN MEDICAL RESEARCH*, 9, 24-27. <https://doi.org/10.47799/pimr.0902.06>
- Wynne, K., Mwangi, F., Onifade, O., Abimbola, O., Jones, F., Burrows, J., Lynagh, M., Majeed, T., Sharma, D., Bembridge, E., Stubbs, M., Sunner, C., Bergmann, J., Bagade, T., & Malau-Aduli, B. S. (2024). Readiness for professional practice among health professions education graduates: a systematic review [Review]. *Frontiers in Medicine*, Volume 11 - 2024. <https://doi.org/10.3389/fmed.2024.1472834>
- Zola, N., Yusuf, A., & Firman, F. (2022). Konsep social cognitive career theory. *JRTI (Jurnal Riset Tindakan Indonesia)*, 7, 24. <https://doi.org/10.29210/30031454000>

Annexes

Questionnaire

1. Information sheet

My name is -----, I am a data collector in a survey being conducted about assessment Career confidence, Job readiness, and self-esteem among medical Interns of Addis Ababa University in black lion hospitals. The investigator is Hikma, Master of psychology candidate from Addis University. The aim of this study is to assess Career confidence, Job readiness, and self-esteem among medical Interns of Addis Ababa University. The purpose of this study is to generate information about assessment of Career confidence, Job readiness, and self-esteem among medical Interns of Addis Ababa University. The study may help stakeholders, policy makers, responsible body and others to take actions based on the finding. The study comprises various socio-demographic and other parameters. You are chosen to participate in this study. Interview was take not more than 25 minutes.

We assure you that there is no risk or harm in participation of this study. All information was kept confidentially. Name of a participant was not be written or specified. Your privacy was also be protected and no one shall know your response.

You have full right whether or not to participate in this study. You may respond to all questions, you may not answer to the questions you do not want to, or you may quit your participation totally at any time you want. You can ask any questions, which is not clear for you. In case if there was anyone who has any problem related with this topic, you have right to get counseling.

Section A: Socio-demographic information

1. Age of the respondents
2. Gender of the respondents male [☐] female [☐]
3. Marital status 1. Single 2. Married 3.divorce 4.widow
4. Department internal medicine [☐] surgery [☐] pediatrics [☐] gynecology& obstetrics [m] others [☐]
5. Educational background A).Direct entry (from undergraduate medical program at AAU0
B). transferred from another university C) .Other (specify)

6 .Monthly income/Financial support A) supported by family B) scholarship/government stipend

C) Self-supported

7. Living arrangement during internship

A) With family B) Dormitory C) rented house

8. Geographical background 1.Urban 2.Rural ...

9. Do you plan to continue working in the medical field after internships? Yes [] No []

Section B: Career confidence

(Use a 5-point likert scale: 1=strongly disagree, 5=strongly agree)

No	Questions(Generic skills)	1	2	3	4	5
1	Taking a history of new admissions					
2	Performing relevant examination as first assessment of new admissions					
3	Make initial plan of management for new admissions					
4	Recognizing sick patients					
5	Functioning as a team member in assessing and managing sick patients					
6	Prioritizing and managing ward work					
7	Over all					

No	Questions(practical skills)	1	2	3	4	5
1	Starting resuscitation in hospital					

2	Intravenous (IV) line insertion (adult)					
3	Blood taking (adult)					
4	Inserting urinary catheter (male)					
5	Inserting urinary catheter (female)					
6	Do basic suturing and tie					
7	prescribing common medications (format, not dosage)					
8	Requesting radiological investigations like chest X-ray (CXR), and Computed tomography (CT)					
9	Do a comprehensive review on patients during ward rounds					
10	Referring cases to another department					
11	Assisting operations					
12	Prescribing IV fluid (format of writing)					
13	Over all					

<u>No</u>	Questions(personal skills)	1	2	3	4	5
1	Team-working: e.g. sharing ward work, arranging rosters					
2	Finding out the ward routines/protocols on your own					

3	Handling criticisms from your senior colleagues					
4	Coping with additional, unexpected tasks					
5	Managing own time on and off work					
6	Working independently away from home					
7	Referring cases to seniors					
8	Over all					
9	Overall confidence					

Section C: Job readiness

(Use a 5-point likert scale: 1=strongly disagree, 5=strongly agree)

No	Questions	1	2	3	4	5
1	University education was make it easier to find employment					
2	The acquired information and skills was facilitate the completion of the assignment					
3	Consider a candidate's skills while selecting a job					
4	Accepting the views of others as input for personal development					
5	Interested in labor requiring meticulousness and intense concentration					
6	Concentration is necessary for productive work					
7	Happy if someone points out my errors at work					
8	Attempting to be patient in the face of angry coworkers					
9	Recognizing the ability of others to adapt to the new environment					
10	Easily adjust to a new environment's culture and norms					
11	Accountable for the work performed					
12	Correction of work results if errors are made in the work					

13	Be prompt in carrying out your duties					
14	Read books pertinent to the specialty being sought					
15	Utilize diverse media to stay current in your field of expertise					
16	Prepared to work anywhere, both outside and inside the office, with the skills acquired at the university					
17	The knowledge and abilities possessed facilitate adaptation to job settings					
18	In group work, it is important to strive for efficiency					
19	I am delighted to receive training in my area of competence					
20	Enhance knowledge and abilities for best performance					
21	If outside of university, expand knowledge					

Section D: self-esteem (Rosenberg self-esteem scale)

(1 = strongly agree 2 = Agree 3 = Disagree 4 = strongly disagree)

No	Questions	1	2	3	4
1	On the whole, I am satisfied with myself.				
2	At times I think I am no good at all(reverse coded)				
3	I feel that I have a number of good qualities.				
4	I am able to do things as well as most other people.				
5	I feel I do not have much to be proud of.(reverse coded)				
6	I certainly feel useless at times(reverse coded)				
7	I feel that I'm a person of worth.				
8	I wish I could have more respect for myself (reverse coded)				
9	All in all, I am inclined to think that I am a failure (reverse coded)				
10	I take a positive attitude toward myself.				