Faculty of Medicine and Health Sciences

BACHELOR OF NURSING WITH HONOURS

Year 4, Semester 2, 2024/2025

Course	:	**MDJ 4664 Final Year Project II**
Course Coordinator	:	**Miss Feryante Rintika Belansai**
Research title	:	**The Association between Self-Esteem, Different Motivational Factors, and Academic Performance among UNIMAS Undergraduate Nursing Students**
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Date of submission	:	**3/7/2025**

The Association between Self-Esteem, Different Motivational Factors, and Academic Performance among UNIMAS Undergraduate Nursing Students

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This project is submitted to

In partial fulfilment of the requirements for the degree of
Bachelor of Nursing with Honours

Faculty of Medicine and Health Sciences
UNIVERSITI MALAYSIA SARAWAK

2025

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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ACKNOWLEDGEMENT

First and foremost, I would like to express my heartfelt gratitude to those who contributed to the successful development of this research.

Next, I am deeply thankful to my supervisor, Ms Feryante Rintika, for her invaluable guidance, insightful feedback, and unwavering support throughout this process. Her advice and recommendations have been a core element in the development of this research. Her expertise and encouragement have been instrumental, and I am truly grateful to her.

I would also like to acknowledge all the authors, researchers, and practitioners whose work provided the insights and laid out the foundation of knowledge for this study.

Thank you to all my friends, whose encouragement and advice have been a source of my strength and inspiration during this journey.

I also extend my appreciation to my family for their patience and consideration throughout the completion of this study. Thank you all, for without you, this research would not be possible.

Thank you to God for the guidance, strength, and grace that has led me throughout this journey.

Lastly, I would like to thank myself for never giving up despite always wanting to. Through the silent tears and quiet prayers, you have finally made it.

Sincerely,

Aaron Kendall Lu Soon Hua

ABSTRACT

Background: Academic performance in nursing education is influenced by a range of psychological and motivational factors. Understanding how self-esteem and types of motivation affect academic performance can help educators develop more effective learning environments and support systems for nursing students. **Objective:** This study aimed to examine the association between academic performance, self-esteem, and different motivational factors among UNIMAS undergraduate nursing students. **Methods:** A cross-sectional quantitative study was conducted among UNIMAS undergraduate nursing students using validated self-report questionnaires. Academic performance was measured using cumulative grade point average (CGPA), while self-esteem and motivation levels were assessed and categorized. Statistical analyses were performed to explore potential associations between the variables. **Results:** The findings showed a significant association between self-esteem and extrinsic motivation, indicating that students with higher self-esteem were more likely to be driven by external rewards and recognition. However, there was no significant association between academic performance and self-esteem, nor between academic performance and either intrinsic or extrinsic motivation. **Conclusion:** These results suggest that while self-esteem may influence motivational patterns, neither self-esteem nor motivation alone directly predict academic performance among nursing students. The findings highlight the complex intertwinement of psychological and educational factors in academic performance and underscore the importance of fostering internal motivation and emotional well-being in nursing education.

Keywords: Academic performance, self-esteem, intrinsic motivation, extrinsic motivation, nursing students, nursing education.

Perkaitan antara Harga Diri, Pelbagai Faktor Motivasi, dan Prestasi Akademik dalam Kalangan Pelajar Ijazah Sarjana Muda Kejururawatan UNIMAS

ABSTRAK

Latar Belakang: Prestasi akademik dalam pendidikan kejururawatan dipengaruhi oleh pelbagai faktor psikologi dan motivasi. Memahami bagaimana harga diri dan motivasi mempengaruhi prestasi akademik dapat membantu pendidik membina persekitaran pembelajaran dan sistem sokongan yang lebih berkesan untuk pelajar kejururawatan. **Objektif:** Kajian ini bertujuan untuk meneliti hubungan antara prestasi akademik, harga diri, dan pelbagai faktor motivasi dalam kalangan pelajar sarjana muda kejururawatan UNIMAS. **Kaedah:** Satu kajian kuantitatif keratan rentas telah dijalankan dalam kalangan pelajar sarjana muda kejururawatan UNIMAS dengan menggunakan soal selidik lisan kendiri yang telah disahkan. Prestasi akademik diukur berdasarkan Purata Nilai Gred Kumulatif (PNGK), manakala tahap harga diri dan motivasi telah dinilai dan dikategorikan. Analisis statistik telah dijalankan untuk meneroka kemungkinan hubungan antara pemboleh ubah. **Dapatan:** Dapatan menunjukkan terdapat hubungan yang signifikan antara harga diri dan motivasi ekstrinsik, di mana pelajar yang mempunyai harga diri yang tinggi cenderung dipacu oleh ganjaran dan pengiktirafan luaran. Namun begitu, tiada hubungan yang signifikan didapati antara prestasi akademik dengan harga diri, mahupun antara prestasi akademik dengan motivasi intrinsik atau ekstrinsik. **Kesimpulan:** Hasil kajian mencadangkan bahawa walaupun harga diri mungkin mempengaruhi corak motivasi, harga diri dan motivasi secara bersendirian tidak meramalkan prestasi akademik dalam kalangan pelajar kejururawatan. Dapatan ini menekankan kerumitan hubungan antara faktor psikologi dan pendidikan dalam prestasi akademik serta kepentingan memupuk motivasi dalaman dan kesejahteraan emosi dalam pendidikan kejururawatan.

Kata kunci: Prestasi akademik, harga diri, motivasi intrinsik, motivasi ekstrinsik, pelajar kejururawatan, pendidikan kejururawatan.

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UNIMAS	Universiti Malaysia Sarawak
FMHS	Faculty of Medicine and Health Sciences
SPSS	Statistical Package for the Social Sciences
GPA	Grade Point Average
CGPA	Cumulative Grade Point Average
RSES	Rosenberg Self-Esteem Scale
AGO-R	Achievement Goal Orientation - Revised
PIS	Participant Information Sheet

CHAPTER 1: INTRODUCTION

1.0 Introduction

This first part will highlight the context of this study, the statement of problems with regards to the subject, the research questions, the targeted research objectives, the study significance, the definitions of important terms and keywords, and the chapter summary. This study highlights how self-esteem plays an important role in determining students' motivational factor and how different motivational factors impact their academic performance.

1.1 Background of the Study

Self-esteem is widely recognized as a key psychological factor influencing an individual's ability to adapt and thrive, particularly in demanding environments (Orth & Robins, 2022). For nursing students, the demands are multifaceted—not only are they required to attend lectures, complete examinations, and prepare for quizzes and presentations, but they must also undergo clinical attachments in real healthcare settings. These rigorous academic and clinical expectations make nursing one of the most challenging professions, requiring high levels of responsibility, emotional resilience, and academic dedication (Singh et al., 2021).

As a result, nursing students' motivation is consistently tested. Motivation can be classified into two types: intrinsic, which stems from internal satisfaction and interest, and extrinsic, which is driven by external rewards such as recognition or good grades (Sharififard et al., 2020). Both types influence how students approach their studies, manage stress, and strive toward success. In the field of nursing, academic performance is more than just a measure of grades—it is a critical indicator of whether students are ready to deliver safe and compassionate care in the future (Terry & Peck, 2020).

This leads to a crucial question: how does self-esteem influence motivation, and in turn, how do both factors impact academic performance? Previous studies have shown that self-esteem plays a significant role in shaping motivation. For instance, students with high self-esteem are generally more motivated, optimistic, and resilient when facing academic challenges (Orth & Robins, 2022; Artika et al., 2021). They are more likely to exhibit adaptive coping mechanisms and remain engaged, even when faced with setbacks. In contrast, students with low self-esteem often struggle with self-doubt, procrastination, or disengagement—factors that can negatively affect their performance (Huang et al., 2020).

In the context of UNIMAS nursing students, the combination of academic pressure, clinical demands, and emotional stress can place a heavy burden on students' mental health and motivation. Studies have shown that low self-esteem is prevalent among university students, including those in healthcare-related fields (Ketata et al., 2021). High self-esteem, on the other hand, has been linked to better coping abilities, greater motivation, and improved academic outcomes (Karaca et al., 2019; Zabihi et al., 2020).

Furthermore, individuals with high self-esteem tend to experience a positive cycle: their confidence fuels motivation, which enhances performance, further reinforcing their self-worth (Savitsky et al., 2020). Conversely, low self-esteem can trigger a downward spiral, where academic difficulties lead to reduced motivation and further decline in performance.

Given the demanding nature of nursing education and its impact on students' well-being, it is important to explore how psychological factors like self-esteem and motivation relate to academic success. Therefore, this study aims to examine the association between self-esteem, different motivational factors, and academic performance among undergraduate nursing students at Universiti Malaysia Sarawak (UNIMAS).

1.2 Statement of Problem

Academic performance is a vital indicator of success in nursing education, as it reflects students' readiness for clinical decision-making, professional responsibilities, and the quality of care they will eventually provide (Shirazi & Heidari, 2019). However, nursing programs are known for their intensity—combining theoretical coursework with emotionally and physically demanding clinical placements. As a result, many nursing students struggle to meet these expectations, making poor academic performance an ongoing concern. Beyond affecting individual progression, underperformance has broader implications for the healthcare system, as today's students become tomorrow's frontline nurses (Park et al., 2021).

One psychological factor closely tied to academic achievement is self-esteem. Students with high self-esteem are more likely to be confident in their intellectual and clinical abilities, more resilient during stressful academic challenges, and more motivated to succeed (Moyano et al., 2020; Jaaffar et al., 2019). Self-esteem is not only related to academic confidence but also influences interpersonal interactions, emotional regulation, and long-term professional development. Conversely, low self-esteem may lead to self-doubt, amotivation, and ultimately poor academic outcomes (Hayat et al., 2020).

Motivation, another key factor, can be categorized as intrinsic or extrinsic. Intrinsic motivation involves internal drivers such as personal interest or fulfillment, while extrinsic motivation stems from external rewards or pressure (Sharififard et al., 2020). In nursing education, intrinsic motivation has been associated with deeper learning and long-term professional commitment, while extrinsic motivation—though helpful in short-term goal setting—can harm self-worth if expectations are not met (Amit-Aharon et al., 2020; Bayoumy &

Alsayed, 2021). Therefore, a balanced combination of both motivational types is considered ideal for student growth (Nezhad et al., 2022).

In Malaysia, particularly within UNIMAS, nursing students face a demanding curriculum that includes extensive clinical training, academic workload, and emotional pressures related to patient care. Despite this, limited local research explores how self-esteem and motivation influence students' academic performance within this unique context. Most existing literature focuses on Western populations, where educational environments and cultural attitudes toward learning may differ significantly.

Understanding how self-esteem and motivational factors interact to affect academic success is critical for developing tailored interventions that support students' academic and emotional well-being in Malaysia. As nursing education in the country evolves to meet rising healthcare demands, identifying psychological barriers to student success is increasingly necessary.

Therefore, this study aims to examine the association between self-esteem, different motivational factors, and academic performance among undergraduate nursing students at Universiti Malaysia Sarawak (UNIMAS). By doing so, the research hopes to contribute valuable insights into how psychological and motivational elements affect learning outcomes and help educators implement strategies to foster both academic excellence and emotional resilience in future nurses.

1.3 Research Questions

1. What is the level of self-esteem among UNIMAS undergraduate nursing students?
2. What is the level of motivation of factors which affect UNIMAS undergraduate nursing students?
3. What is the academic performance among UNIMAS undergraduate nursing students?

4. Is there any significant association between self-esteem, motivational factors, and academic performance among UNIMAS undergraduate nursing students?

1.4 Research Objectives

1.4.1 Aim of the Study

The goal of this study is to examine if there is any association between self-esteem, different motivational factors, and academic performance among undergraduate nursing students in UNIMAS, with the aim of understanding how students' self-esteem may influence their motivation, which then reflects in their academic performance. By investigating this relationship, the study provides understandings which are able to lead the development of interventions and support systems to improve self-esteem and motivation among nursing students, thus contributing to the academic success of nursing students.

1.4.2 Specific Research Objectives

1. To assess the level of self-esteem among UNIMAS undergraduate nursing students.
2. To evaluate the motivational level of different factors among UNIMAS undergraduate nursing students.
3. To examine the academic performance among UNIMAS undergraduate nursing students.
4. To identify any significant association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing student

1.5 Hypotheses

Null hypothesis: There is no significant association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing students

Alternate hypothesis: There is a significant association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing students

1.6 Significance of the Study

The present study provides important information about the relationship between self-esteem, different motivational factors, and academic performance among undergraduate nursing students in UNIMAS. In terms of contributing to nursing students, this study would allow for the assessment of the self-esteem among the students. This provides information into the students' own perception of their self and their capabilities. Besides that, this study also highlights the relationship between the students' self-esteem with their motivational factors and their academic performance. Looking into motivational factors, this study identifies the level of motivation of different factors which drives the nursing students to perform better academically, which in turn boosts their self-esteem. This can also reveal whether different levels of self-esteem are related to different motivational factors, and whether those motivational factors support the students' academic performance. Furthermore, this study allows for the determining of academic performance among different levels of self-esteem and whether motivational factors contribute to academic success. This study can also raise awareness regarding the effect self-esteem and different motivational factors on academic performance.

In the context of education and policies, this study can act as a guide for the development of evidence-based interventions in nursing education which aims to improve the self-esteem and motivation among nursing students to perform well academically. The findings from this study can also be used for policies to be established revolving around support for the nursing students, to boost the students' overall well-being and improve academic outcomes.

Lastly, there is still limited research on the link between self-esteem, different motivational factors, and academic performance, specifically among nursing students. Thus, this study is able to contribute new data and understandings that can be valuable for nursing educators, policymakers, and future researchers in order to improve the overall well-being of the students. This would add to previous data, addressing literature gaps regarding this topic. The discussions

of this investigation may also lead to suggestions for integrating emotional resilience and self-esteem-building strategies into nursing education to improve motivation and ultimately boosting academic performance.

By addressing psychosocial factors which undoubtedly affect nursing students, nursing programs can create a more supportive learning environment that fosters both personal and professional growth. As future healthcare providers, the well-being and competence of nursing students directly impact the quality of patient care. By promoting personal motivation and improving self-esteem via better support systems, nursing programs are able to guarantee that graduates are academically prepared, and also emotionally resilient, which are essential for providing high-quality patient care.

1.7 Operational Definition of Key Terms

Self-esteem - A personal belief of one's own worth or value (Jordan et al., 2020). In this study, the nursing students' self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965). A score of 0-15 indicates low self-esteem, scores 16-25 indicate normal self-esteem, and scores of 26-30 indicate high self-esteem.

Motivational Factors – The attribute that moves us to do or not to do something (Filgona et al., 2020). In this study, the motivational factors refer to the nursing student's attribute that is influenced by their self-esteem which in turn affects their academic performance. The nursing students' motivational level of different factors was determined by using the Achievement Goal Questionnaire – Revised version (AGO-R) (Elliot & Murayama, 2008).

In this 12-item questionnaire, four domains of either intrinsic or extrinsic motivational factors were examined. The level of motivation of the different factors were categorized as follows:-

a. 1 – 5 = Low
b. 6 – 10 = Average
c. 11 – 15 = High

Academic performance - The evaluation of a student's performance based on their grade point average, results on standardized tests, and goals and accomplishments in school (Rodríguez-Hernández et al., 2019). In this study, the students' academic performance was assessed using their self-reported CGPA, which was presented as ranges and labelled as the following:-

a. Less than 2.00 = Poor
b. 2.01 – 2.50 = Fair
c. 2.51 – 3.00 = Average
d. 3.01 – 3.50 = Good
e. Greater than 3.5 = Excellent

Association - The way in which things are connected or work together (Cambridge Dictionary, 2024). In this study, the association between self-esteem, different motivational factors, and academic performance was assessed using a correlation test run on the Statistical Package for the Social Sciences (SPSS) software, version 27.0. The results were then analysed, and the association between the variables were discussed.

Undergraduate nursing students – Those enrolled in a nursing school and are employed to provide nursing care but are not yet certified as a graduate nurse (Stone et al., 2019). This study refers to undergraduate pre-registration nursing students who are registered in the Bachelor of Nursing with Honours Programme in UNIMAS.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, a literature review will be presented to provide a general overview of the research topic. It gives an outline of the association between self-esteem, motivational factors, and academic performance among nursing students, both globally and locally. Each section of this literature review will reflect their respective research objectives. The research articles obtained for this literature review were obtained from online databases, namely PubMed, Cumulated Index in Nursing and Allied Health Literature (CINAHL), Research Gate and other sources. Keywords used during the search include self-esteem, motivational factors, academic performance, and nursing students. The publications utilized in this literature include articles published within the past 10 years, all of which were written in English.

2.1 Overview of Self – Esteem among Nursing Students

Self-esteem can be understood as a prevalent personal trait that has significant effects on people's lives, and possessing a higher level of self-esteem is essential in ensuring academic proficiency as well as establishing trust in one's own capabilities (Reitz, 2022). With that being said, the levels of self-esteem among nursing students who are tasked with caring for others in their most vulnerable times might differ among different populations.

According to Hong (2020) who performed a cross-sectional quantitative survey on the levels of self-esteem among undergraduate nursing students in Malaysia, 24.2% of nursing students had self-esteem levels which were higher than the majority of the students (74.7%) who had average level of self-esteem. In addition, only 1% of the nursing students had low self-esteem. This study utilised the Rosenberg Self-Esteem Scale (RSES) and comprised of 110 nursing students ranging from Year 1 to Year 4. It was discussed that social support when needing to cope with the rigorous programme contributed to the results of self-esteem levels among the nursing students. This highlights the societal principle of collectivism among the Asian community where

activities and programs such as buddy systems, mentorship programs, and team building exercises that are incorporated into the university's curriculum contributes to the development of their self-esteem (Cao et al., 2018; Chen et al., 2019).

However, in a separate study by Sa et al., (2019), conducted among 6 healthcare programs in the Caribbean identified the nursing students had the highest percentage of students with below average self-esteem (26%) among all the programs. This study included 1st year undergraduate students from six different programs, namely medicine, pharmacy, dentistry, nursing, optometry, and veterinary medicine. 74 nursing students were involvcd and their self-esteem levels were assessed using the RSES. Environmental factors were taken into consideration in discussing the nursing students' self-esteem. Nursing is frequently underappreciated in many countries, which can lead to lowered self-esteem of the nursing students who may feel they are treated unequally as their medical counterparts (Tuomiskoski et al., 2019; Michel et al., 2020). This then leads to increased levels of stress and decreased levels of coping due to the lack of self-esteem among the nursing students.

This was coherent with a similar study by Elnouby et al., (2024) where it was discovered that majority of nursing students in Cairo, Egypt (95%) had below average levels of self-esteem. This descriptive, correlational study which was conducted among the third-year nursing students with a total number of 60 students to assess their levels of self-esteem utilised a questionnaire adopted from Eid (2002) to measure the self –esteem levels of nursing students. The lack of students with increased self-esteem was related to lack of expertise, a fear of making mistakes, challenging patients, uneasiness when being assessed by instructors, humiliation among peers, and a lack of support from present nursing staff. This discussion was also debated in studies by Huang et al., (2020), Onieva-Zafra et al., (2020) and Chaabane et al., (2021).

When comparing to the first study by Hong (2020) which stated that most of Malaysian student nurses had higher levels of self-esteem, whereas majority of Egyptian student nurses had lower levels of self-esteem, this difference in self-esteem levels may be related to the collectivist mindset of the Malaysian population in which the Malaysian nursing students had better social support than those in Egypt. Besides that, the questionnaire that was used in the study by Elnouby et al., (2024) may have also influenced the results during data analysis.

In conclusion, self-esteem among nursing students remains as a crucial element that affects the overall performance and well-being of the students. While global research has established that self-esteem is a significant psychological factor influencing academic performance and motivation, studies specifically examining self-esteem among Malaysian nursing students remain limited and underexplored. Most existing local research in Malaysia tends to focus broadly on university students without isolating nursing students, who face a unique blend of academic, clinical, and emotional stressors. Discrepancies and fluctuations in the levels of self-esteem among the nursing students across different populations may be due to societal norms, personal factors, and support or lack thereof from peers and superiors. Educators, fellow healthcare workers, and policy makers should cooperate with one another to foster an environment in which nursing students can thrive and to boost their levels of self-esteem and ensure their overall well-being.

2.2 Motivational Factors

Motivational factors comprise of intrinsic and external influences which drives students to perform well academically (Filgona et al., 2020). This is because students who are motivated to achieve their learning objectives may engage more deeply into the learning curriculum compared to those who are less motivated in achieving their goals. In a challenging program such as nursing, motivational factors are often disregarded in determining the learning attitudes of future nurses.

In a study by Sharrifah et al., (2020), 264 undergraduate nursing and paramedical students were chosen to be participants in this cross-sectional-analytic study conducted in Iran. It was discovered that majority of the students (33%) were motivated by internal factors, more specifically the students desire to learn more and to hone their professional skills. It was discussed that these students were more self-reliant as demanded by their course as they focused on competence development and task mastery. Thus, they showed better engagement in learning materials than their counterparts. Similarly, studies by Mawang et al., (2018) and Liu (2021) debated that those with intrinsic motivational factors incorporate reflective strategies and self-improvement methods into their learning regime.

However, in a study published by Park & Seo (2021), nursing students faced lack of motivation when not being able to interact physically with their peers or mentors. In this mixed-method research consisting of 245 Korean nursing students answering the survey regarding online learning, 66.1% of the nursing answered that they had difficulty focusing when not being face-to-face with others. It was also discussed that students had difficulty comparing their standards to others, thus leading to the students becoming complacent with their current knowledge and mastery. This supports the fact that majority of the nursing students are motivated extrinsically, wanting to showcase their skills and knowledge in order to obtain recognition or praise from their peers or superiors (Raza et al., 2019; Steinmayr et al., 2019). The differences in motivational factors may be due to social context, where Korean societies may see academic achievements as a priority and students who are not able to achieve these tangible accomplishments may face a lack of motivation than those who are intrinsically motivated.

This supports another study by Romli et al., (2023), which discovered that majority of Malaysian nursing students reported an extrinsic motivational factor (96%). In this cross-sectional survey, 63 nursing students were involved in this study and majority of the students

stated their academic motivation revolved around fear of humiliation or fear of looking worse in front of their peers and educators. This highlights the societal norm of decreased involvement and reluctance to ask for help, due to the fear of judgements. Other studies have also argued that this fear of being judged, though it may improve academic performance in the short-term, it may lead to prolonged levels of stress, harsh self-criticism, and a fear of taking risks, which might be detrimental to the nursing students' personal and professional growth (Usan et al., 2019; Miller et al., 2021; Chamberlin et al., 2023). When comparing the similarities between the extrinsic motivation of the Korean and Malaysian nursing student population, it circles back to the requirement of visible achievements, where lack of noticeable success or tangible recognition is often looked down upon in these societies.

To sum up, although motivation is widely acknowledged as a key driver of academic performance, there remains a limited body of research specifically examining motivational factors among Malaysian nursing students. While international studies have explored how intrinsic and extrinsic motivation affect learning behaviours and outcomes, Malaysian-based studies, particularly within nursing education, are sparse. Much of the existing Malaysian literature on student motivation focuses on general university populations or academic disciplines such as education, engineering, or business. Consequently, there is a lack of nuanced understanding of how motivation operates within the highly demanding context of nursing education, where students juggle academic theory, clinical practice, emotional resilience, and professional ethics. Nursing students' motivational factor should be taken into account if ensuring increased academic performance and the overall well-being of the students is a priority in the nursing curriculum. Differences in motivational factors among the nursing students may be due to self-regulatory influences, cultural contexts, and the need to fulfil certain desires. Nursing curricula should recognise the variations in motivational factors among the nursing students and collaborate to support the different learning needs of their students.

2.3 Academic Performance

Academic performance among nursing students relates to students' success or failure in their curriculum, depending on not only their mastery of the subject matter but also the fostering of their capabilities to think critically, solve problems, as well as their wit to apply this knowledge in the practical field (Double et al., 2019). This is a crucial element in ensuring that these future nurses are ready to care for and treat the ill members of their community.

A study conducted by Terry & Peck (2020) among nursing students in Australia identified that 69.2% of the students reported better academic performance among their peers. This study utilised self-reported perceptions of 434 nursing students regarding their academic performance, where 285 students rated their academic performance as better than others. It was discussed that these results may be influenced by the learning curve, where these results may be interpreted differently depending on the results of the class, where a seemingly higher mark among the class is only perceived as so because of the relatively low marks among their peers (Trigueros et al., 2020; Maia et al., 2023).

In a separate study by Ratanasiripong et al., (2021), which was conducted among 767 nursing students in Thailand however, it was discovered that 33% of nursing students drop out due to poor academic performance. This cross-sectional survey used the self-reported nursing students' overall grade point average (GPA), with 4.00 being the greatest score on a scale of 0.00 to 4.00. It was debated that the academic performance of those who dropped out were affected by factors such as lack of social support from their families and personal factors such as low self-esteem due to fear of being judged by their peers within the nursing program. Consistently, findings from other studies also stated that students who are consistently faced with stressors from external factors may lead to significant impact on their current educational situations and learning outcomes (Alotaibi et al., 2020; Deng et al., 2022).

The results from a study by Rathakrishnan et al., (2021) supported the previous findings. In this cross-sectional survey, 323 Malaysian nursing students participated in the survey which addressed their academic performance using their self-reported cumulative grade point average (CGPA). Upon data analysis, it was shown that 24% of the nursing students had poor academic performances according to their CGPA. In this article, similar to the study by Ratanasiripong et al., (2021), it was discussed how external factors such as peer influences and lack of support had disrupted the nursing students' academic performances.

Interestingly, when comparing the results of the Australian nursing students in the first article with the results from the Malaysian and Thai nursing students, the students' academic performances were widely affected by their peers. In the Western populations, nursing students' academic performance was built upon comparison and wanting to perform better academically than their peers (Leidl et al., 2019; Kochuvilayil et al., 2021). This could be due to the study culture as well as educational strategies utilised in said populations. While in the Asian populations, lack of support and fear of judgment from peers greatly impacted the nursing students' academic performance (Karaca et al., 2019; Shao et al., 2020). This may be due to the collectivist mindset of the Asian population, where lack of support may be a key phenomenon in poor academic performances.

Overall, academic performance among nursing students is a critical point in the nursing curricula. The subjectiveness of better academic performances due to cultural expectations, individual practices, and environmental factors must be taken into consideration. Educators, international policy makers, and social support pillars of the nursing students should identify their common goal to better academic performances of nursing students globally to secure the future of the healthcare sectors and the communities who will benefit from it.

2.4 The Association between Self-Esteem, Motivational Factors, and Academic Performance

Self-esteem plays a role in maintaining a student's motivation to improve their academic performance. As stated in a study by Orth & Robins (2022), self-esteem is associated with increased motivation to achieve personal goals. Regardless of socio-demographic data, be it age, gender, or race and ethnicity, self-esteem plays a similar role in producing motivation across various backgrounds. In their study involving a meta-analysis on the benefits of self-esteem, it was found that a higher self-esteem was associated with adaptive self-regulatory strategies and task engagement, thus promoting motivation. This then led to an increase in successful academic outcomes as students with improved self-esteem showed more determination in achieving their goals as seen by their own initiative in pursuing a higher degree of their education, such as longer self-study sessions and increased resolve in tackling more complex tasks. This can be compared to a study performed in Pakistan by Zaman et al., (2021), where 94.1% of their sample showed that self-esteem was essential when coping with failure and regaining motivation. When encountering a difficult task, it is natural for one to fail on the first attempt. However, re-attempting the task despite multiple failures was linked to increased motivation to solve the problem, whereas giving up and leaving the problem as is was connected to poor self-esteem. This can be attributed a higher sense of self-worth, thus being able to quickly restore one's self-confidence, and contributing to persistence after disappointment to solve the problem and complete the task.

Following a study conducted in Spain by Ferradas et al., (2019), it indicated that students with poor self-esteem (31%) were more susceptible to self-protection methods. In contrast to earlier studies, where high self-esteem led to self-regulatory methods, such as increased motivation and decreased procrastination, low self-esteem produces the opposite effect. This can be seen in decreased motivation or lack or ambition to excel in their academics. This serves as an

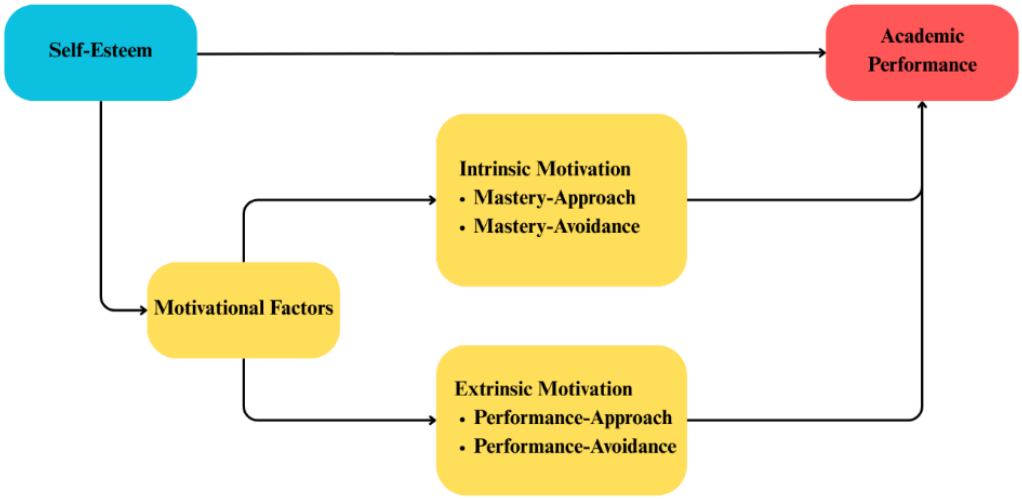
anticipatory process in which the learner sabotages their own chances of success by constructing a mental barrier, that serves as an alibi against a projected failure. This then comes into play when they are forced to meet the consequences of said actions and they realise that they did not achieve the desired academic outcomes, thus blaming the aforementioned self-protection methods.

It was also seen that improved grades and test scores produced a more positive self-image, which in turn boosts self-esteem and thus establishing a cyclical relationship. This can be related to another study conducted by Batool (2020) on Australian undergraduate university students where self-esteem was described as an academic self-regulatory mechanism. In this context, students with higher self-esteem (79%) had higher potential in reducing procrastination and increased self-study sessions, therefore further improving academic outcomes. Thus, this establishes a continuous cycle of obtaining academic achievements and boosting the individual's self-esteem.

Following that, Tanti et al., (2021) conducted a study in which it was found that poor academic performance was related to poor self-confidence. This is because students with low self-esteem often lack trust in their self-knowledge, and thus have less motivation to engage with learning materials This suggests that the cyclical relationship between the two, with one factor affecting the other, can impact the students both positively or negatively. As a student who struggles academically starts to feel discouraged and doubt their abilities, this lowered sense of self-esteem then leads to decreased effort and further poor performance. On the other hand, as students begin to perform well academically, they exhibit signs of increased self-esteem and strive to improve more.

2.5 Conceptual Framework

Figure 2.1 Conceptual Framework



The conceptual framework as shown in Figure 2.1 describes the relationship between the variables and the research hypothesis that this study seeks to predict. This framework shows how self-esteem, motivation, and academic performance are connected. Self-esteem and motivational factors are the independent variables while academic performance is the dependent variable. The framework shows how self-esteem can directly affect a student's academic performance, and it also influences their motivation.

Motivation is divided into two types, intrinsic and extrinsic motivation. Intrinsic motivation includes mastery-approach, which is wanting to truly understand and learn; and mastery-avoidance, which can be understood as trying not to misunderstand or fail. Extrinsic motivation includes performance-approach, where students are aiming to do better than others or get praise. It also included performance-avoidance, which is trying to avoid failing or being judged.

Both types of motivation affect how well students perform academically. So, self-esteem not only has a direct impact on academic performance but also works indirectly by influencing the kind of motivation students have. The purpose of this study is to investigate the association between self-esteem, intrinsic and extrinsic motivational factors, which ultimately affects the nursing students' academic performance.

2.6 Summary

An analysis of nursing students' self-esteem, motivational factors, and academic performance shows clear fluctuations in results upon exploration through different populations. Though self-esteem has been established to affect the academic performance of students, and consequently to be influenced by different motivational factors, existing literature which emphasizes the relationship between these three factors specifically within nursing students is still lacking. As nursing students are faced with a unique curricular situation, bridging literature gaps is essential in forming a raised standard within the domain of nursing education.

These studies highlighted the inconclusive self-esteem levels of the nursing students which intertwines with either the intrinsic or extrinsic motivational factors that affect the nursing students' academic performance. The literature gaps identified has guided to the development of this study. Successful utilisation of learning strategies which take into account the customary practices as well as societal norms of the different populations which effect the nursing students ensures better academic performance, boosted self-esteem levels, and safeguards the overall well-being of the future generation of nurses.

The findings from this study will scrutinize this association among UNIMAS undergraduate nursing students and examine how this relationship links within the nursing curricula, thereby highlighting strategies within the domain to improve the overall standard of nursing care. The results will also help to highlight policies which can address the areas which

significantly impact the self-esteem, different motivational factors, and the academic performances of nursing students worldwide.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter will explain the methodology used to accomplish the research objectives that have been discussed in the previous chapters. This will include the research design, research setting, research population, sampling method, sample size, inclusion & exclusion criteria, research instrument, ethical consideration, pilot study, data collection procedure, data analysis, and the summary of this chapter.

3.1 Research Design

A quantitative design approach was applied for this study. Data collection and conversion of collected data into numerical data followed by analysis of the data were key components for this quantitative research (Mohajan, 2020). This research approach enables one to reach an accurate conclusion due to concrete data and numerical information. It also required less time to analyse because it was based on statistical analyses and it emphasises accurate data instead of opinions, thus making it more concrete and reliable.

A cross-sectional study design was used to carry out this study at Universiti Malaysia Sarawak (UNIMAS). In a cross-sectional study, data is taken and examined from a population at one specific point of time (Wang & Cheng, 2020). According to Spector (2019), it is simple, cheap, and quick to perform. Hence, this cross-sectional study design is the best approach to examine the association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing students.

3.2 Research Setting

This study was conducted at the Faculty of Medicine and Health Sciences (FMHS) of Universiti Malaysia Sarawak (UNIMAS), in Kota Samarahan, Sarawak.

3.3 Population

This study was conducted among undergraduate nursing students currently enrolled in the Bachelor of Nursing with Honours Programme, UNIMAS. The programme currently has 52 Year 1 students, 64 Year 2 students, 57 Year 3 students and 63 Year 4 students. Thus, the total population adds up to 237 nursing students.

3.4 Sampling (Sampling Method, Inclusion & Exclusion Criteria, Sample Size)

3.4.1 Sampling Method

In this study, a simple random sampling method through probability sampling was chosen to recruit the respondents. With this sampling method, randomly chosen individuals from the population were asked to fill the questionnaire and each member of the population has equal probability of being selected as a sample. (Berndt, 2020).

3.4.2 Inclusion Criteria

Inclusion criteria for this study was Year 1 – Year 4 nursing students enrolled in the Bachelor of Nursing with Honours Programme at the Faculty of Medicine and Health Sciences (FMHS), Universiti Malaysia Sarawak (UNIMAS).

3.4.3 Exclusion Criteria

Exclusion criteria for this study were post-registration students. This is because post-registration students have clinical experience as staff nurses in the clinical areas. This experience may differ to that of students who have only been attached in the clinical areas as student nurses

3.4.4 Sample Size

From the total population, which is 237 nursing students, after considering the exclusion criteria, the population size was reduced to 235. By using Taro Yamane's Formula for Selecting Sample Size from a Finite Population (Yamane, 1973), the final sample size needed of nursing students was 148 nursing students. Taking into account a 10% attrition rate, an additional 15 responses were collected. Therefore, the final sample size for this study was a total of 163

respondents. However, the total number of respondents was rounded up to 165 respondents. Below is the sample size calculation from using the formula.

Calculation of sample size using Yamane's Formula:

Total population of nursing students, N = 235

Margin of error (e) = 5%= 0.05

$$Sample\ size, n = \frac{N}{1 + Ne2}$$

$$n = \frac{N}{1 + Ne2}$$

$$n = \frac{235}{1 + 235\ (0.05)^2}$$

$$n = 148$$

10% attrition rate:

n = 148 + 10%

$$n = 148 + \left(\frac{10}{100}\ x\ 148\right)$$

n = 148 + 14.8

n = 162.8

n = 163 (final sample size)

n = 165 (rounded-up final sample size)

3.5 Research Instrument

In this study, data was collected by using a physically distributed structured questionnaire which was distributed to the participants. The questionnaire in this study uses the Rosenberg Self-Esteem Scale (RSES) and the Achievement Goal Orientation Revised version (AGO-R) from a study titled "On the Measurement of Achievement Goals: Critique, Illustration, and Application" by Elliot & Murayama (2008) with permission.

The instrument comprises of 3 sections which are section A, section B, and section C (see Appendix I). Section A collected the respondents' socio-demographic characteristics such as age, gender, year of study and cumulative grade point average (CGPA).

Section B measured the respondent's self-esteem by using the Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1979). This scale uses a 10-item questionnaire with a 4-point Likert scale to measure an individual's self-esteem. This questionnaire has a reliability of $\alpha = 0.86 – 0.88$, which indicates good reliability (Akhter & Ferdous, 2019; Monteiro et al., 2021; Cong & Cheong, 2022). The scoring for this scale was as followed; for items 1, 2, 4, 6, and 7, strongly agree scored as 3, agree scored as 2, disagree scored as 1, and strongly disagree as 0. For items 3, 5, 8, 9, and 10, reverse coding was done. This leads the scoring to be strongly agree as 0, agree as 1, disagree as 2, and strongly disagree as 3. The scores range from 0 to 30. A score of 0-15 indicate low self-esteem, scores 16-25 indicate normal self-esteem, and scores of 26-30 indicate high self-esteem.

Section C determines the student's level of motivation among the different motivational factors. This was measured using the Achievement Goal Orientation - Revised version (AGO-R) (Elliot & Murayama, 2008). In this 12-item questionnaire, four dimensions of motivation were examined, including mastery-approach, mastery-avoidance, performance-approach, and

performance-avoidance. This questionnaire has a reliability of $\alpha = 0.82 – 0.85$, which indicates good reliability (Holden et al., 2021; Taub et al., 2022; Shida, 2024). A 5-point Likert scale was used; strongly disagree score as 1, disagree as 2, neutral as 3, agree as 4 and strongly agree as 5. With a maximum score of 15 for each dimension, the final scores within each dimension were calculated and the level of motivation among each motivational factor was categorised. Categorisation of motivation level followed the following scoring: 1 – 5 indicated low motivation, 6 – 10 indicated average motivation, and 10 - 15 indicated high motivation.

3.6 Ethical Consideration

The ethical approval was obtained from the Research and Ethics Committee, Faculty of Medicine and Health Sciences, UNIMAS (refer appendix II). For participant consent, information regarding the study and contact number to ask questions and to obtain clarification was also provided. Each participant's verbal and written consent was also obtained prior to answering the questionnaire. After they had signed the informed consent prior to their involvement in this study, their right to withdraw from the study at any point without repercussions or penalty was also explained (see appendix III). All the information and data collected throughout the study was kept securely and confidentially by the researcher whilst the study was being carried out. Besides that, no identifying information will be released during reporting of the results. Lastly, the permission to use and adapt the survey instrument, specifically the Achievement Goal Orientation – Revised version, for this study was obtained from the original author (see appendix IV). As the Rosenberg Self-Esteem Scale is an open access instrument, no permission to use the scale is required, however, the developer of the scale will be cited.

3.7 Pilot Study

A pilot study was performed before the main study was carried out. 10% of the sample size, which is 15 participants, were asked to fill the questionnaire for the pilot study. According to Kunselman (2024), the pilot study is essential in testing the validity and reliability of the

questionnaire. The 15 participants of the pilot study were then excluded from the actual sample when real data collection began. The information obtained from the pilot study was entered and analysed by using the SPSS version 27.0 for the validity and reliability checking of the instrument. The data obtained from the pilot study was also be excluded from the actual study. Cronbach's alpha was used to measure the internal consistency and reliability of the questionnaire (Barbera et al., 2020). The reliability coefficient needs to be between 0.65 and above to ensure a valid and reliable study.

It is necessary for a larger reliability coefficient value to ensure a significant and reliable study. A lower coefficient value of 0.5 and below are limitedly applicable and may indicate the study is not reliable (Goforth, 2015). Below is a table reflecting the Cronbach Alpha's coefficient and its reliability level.

Table 3.1 Cronbach's Alpha Reliability Level

No	Coefficient of Cronbach's Alpha	Reliability Level
1.	More than 0.90	Excellent
2.	0.80-0.90	Good
3.	0.70-0.79	Acceptable
4.	0.60-0.69	Questionable
5.	0.50-0.59	Poor
6.	Less than 0.50	Unacceptable

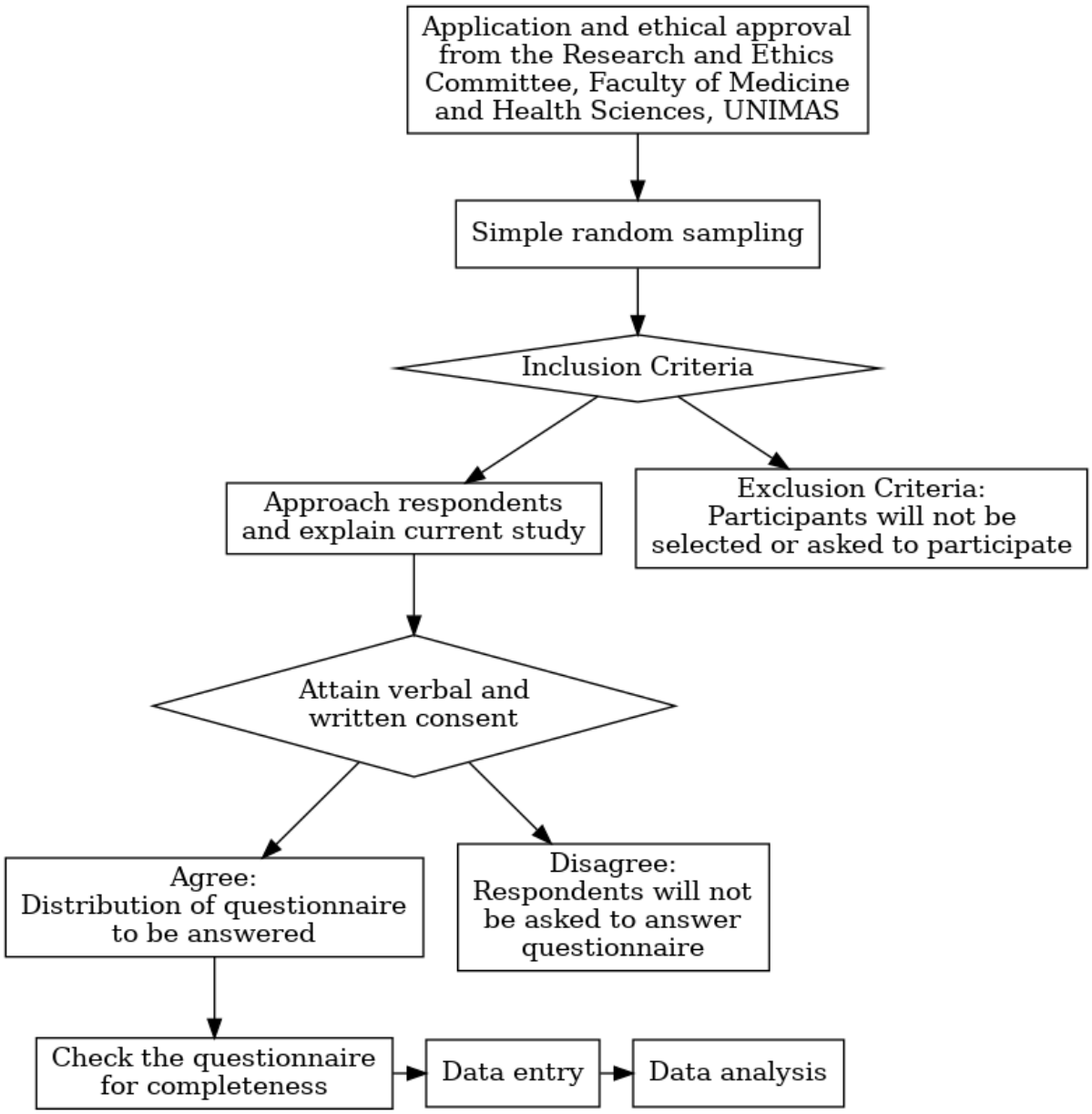
The reliability for Rosenberg Self-Esteem Scale (RSES) in this study was found to be good (10 items, α = .08. While the reliability for the Achievement Goal-Orientation Revised version was found to be excellent (12 items, α = .92). This shows that both sections of the research

instrument demonstrated acceptable internal consistency. Face validity was also assessed through the pilot test to ensure respondents understood the items as intended.

3.8 Data Collection Procedure

The data collection process commenced after getting ethical approval from the Research and Ethics Committee, Faculty of Medicine and Health Sciences, UNIMAS. The actual study was conducted via collection of data through a self-administered set of questionnaires that were distributed physically. Participants that fulfil all the sample criteria underwent simple random sampling. Those that met all inclusion were approached to fill the questionnaires. However, those with exclusion criteria were not selected or asked to participate. Participants were approached and informed of the purpose of the study to gain their cooperation. The participants then needed to give their verbal and written consent before proceeding to answer the actual questionnaire. Upon agreeing to participate in the study and signing the informed consent form, the participants proceeded to answer the questionnaire which took about 10 minutes. If they disagreed however, the respondents were not asked to answer the questionnaire. The questionnaires were then collected once the respondents had completed answering all the questions. After checking the questionnaire for completeness, data was entered into the SPSS software and data analysis followed. Figure 3.1 depicts the overall data collection process. Data collection was conducted from March to April 2025

Figure 3.1: Data Collection Flowchart



3.9 Data Analysis

The data collected from the respondents were entered and analysed using the computer software, Statistical Package for the Social Sciences (SPSS), version 27.0. Prior to analysis, data cleaning was performed to identify any incomplete or missing data. Two methods of analysis were used to analyse this data, namely descriptive and inferential statistics. The information obtained was then processed to assess if there is any association between self-esteem,

motivational factors, and academic performance among the UNIMAS undergraduate nursing students. The descriptive statistical analysis was used to present the data in the form of means, percentages and frequencies. For inferential statistical analysis, a Kolmogorov-Smirnov test was used to test for the normality of the data. Then, to test if there was any association between the variables, a Chi-Square Test for Independence was used. The results were used to determine the significance of the association. A p-value of 0.05 or less would indicate a significant association (Leo & Sardanelli, 2020).

3.10 Conclusion

In conclusion, this research study investigates the association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing students. Through investigation of this relationship, the study aims to uncover whether and how self-esteem influences the nursing students' motivational factors, and how it may relate to their academic performance. This would provide insights that could be valuable for educational strategies and student support services. Understanding these dynamics could help educators, counsellors, and policymakers develop interventions that not only enhance students' academic performance but also promote positive self-esteem as well as motivation among nursing students, contributing to well-rounded personal and clinical development. Ultimately, the study could serve as a foundation for future research and initiatives aimed at promoting both academic excellence and overall well-being among future healthcare workers.

CHAPTER 4: RESULT

4.0 Introduction

This chapter will display the results from the study according to data analysis performed on SPSS version 27.0. The objective of this study is to investigate the association between self-esteem, different motivational factors, and academic performance among UNIMAS undergraduate nursing students. A physical self-administered questionnaire was distributed to 165 UNIMAS undergraduate nursing students comprised of first until fourth year students who were selected via simple random sampling.

4.1 Sociodemographic Data

The sociodemographic data (Section A from questionnaire) was tabulated in table 4.1 (Frequency distribution of sociodemographic data) which consists of age, gender, ethnicity, year of study, and CGPA. Data response rate of 100% was achieved with no missing values or data in the forms.

Table 4.1: Frequency distribution of sociodemographic data (n=165)

Variables	***Frequency (n)***	***Percent (%)***	***Mean (SD)***
Age (years)			*21.92 (1.42)*
Gender			
Male	*26*	*15.8*	
Female	*139*	*84.2*	
Race			
Malay	*66*	*40.0*	
Chinese	*5*	*3.0*	
Others	*94*	*57.0*	

Year of Study		
Year 1	*33*	*20.0*
Year 2	*43*	*26.1*
Year 3	*41*	*24.8*
Year 4	*48*	*29.1*
CGPA		
2.00 – 2.50	*1*	*0.6*
2.51 – 3.00	*16*	*9.7*
3.01 – 3.50	*112*	*67.9*
Greater than 3.5	*36*	*21.8*

4.1.1 Age

There is no outliers or extreme values noted from the box plot for age. A Kolmogorov-Smirnov test showed that age do not follow a normal distribution, $D(165) = .15$, $p < .001$. The median age among the participants is 22.0 years old (*IQR* = 2 years old). The maximum age is 26 years old while the minimum age is 19 years old. The range is 7 years old. The mode age is 23 years old.

4.1.2 Gender

There is no outliers or extreme values from screening the data. Out of the 165 participants, 26 (15.8%) were male and 139 (84.2%) of them were female.

4.1.3 Ethnicity

There is no outliers or extreme values from screening the data. Out of the 165 participants, 66 (40.0%) were Malay, 5 (3.0%) were Chinese, while 94 (57%) were categorised as other ethnicities. Specificially, 3 (1.8%) were Bajau, 12 (7.3%) were Bidayuh, 2 (1.2%) were

Bisaya, 1 (0.6%) was Brunei, 3 (1.8%) were Bugis, 13 (7.9%) were Dusun, 31 (18.8%) were Iban, 1 (0.6%) was Irranun, 1 (0.6%) was Jawa, 5 (3.0%) were Kadazan, 1 (0.6%) was Kadazandusun, 1 (0.6%) was Kayan, 2 (1.2%) were Kedayan, 2 (1.2%) were Kenyah, 1 (0.6%) was Lun Bawang, 10 (6.1%) were Melanau, 1 (0.6%) was Murut, 1 (0.6%) was Pakistan, 1 (0.6%) was Rung us, and 2 (1.2%) were Sungai.

4.1.4 Year of Study

There is no outliers or extreme values from screening data. Out of 165 participants. 33 (20.0 %) participants were Year 1, 43 (26.1%) participants were Year 2, 41 (24.8%) participants were Year 3 and 48 (29.1%) participants were Year 4.

4.1.5 Cumulative Grade Point Average (CGPA) – Academic Performance

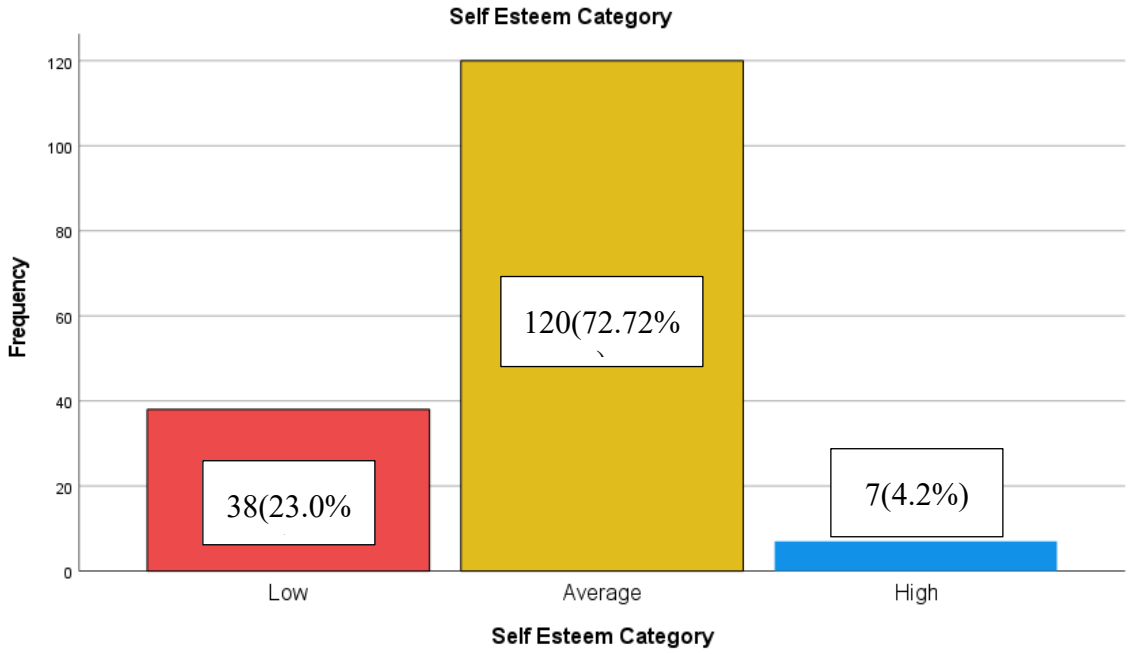
There is no outliers or extreme values from screening data. Out of 165 participants, 1 (0.6 %) participant had CGPA of 2.00 – 2.50 (fair academic performance), 16 (9.7%) participants had CGPA of 2.51 – 3.00 (average academic performance), 112 (67.9%) participants had CGPA of 3.01 – 3.50 (good academic performance), and 36 (21.8%) participants had CGPA of greater than 3.5 (excellent academic performance).

4.2 Self-Esteem Levels

There are outliers noted from the box plot for self-esteem score. A Kolmogorov-Smirnov test showed a non-normal distribution, $D(165) = .11$, $p < .001$. The mean score among the participants is 18.27 ($SD = 4.23$). The maximum score is 30 points while minimum score is 3 points.

Recoding of self-esteem scores into self-esteem levels was done using visual binning in SPSS. Out of the 165 participants, it was shown that 38 (23.0%) of the participants have low self-esteem, 120 (72.7%) participants have average self-esteem, and 7 (4.2%) have high self-esteem.

Figure 4.1: Bar chart showing the self-esteem levels among UNIMAS nursing students



4.3 Motivational Factors

4.3.1 Mastery Approach

There are no outliers noted from the box plot for total mastery approach score. A Kolmogorov-Smirnov test showed a non-normal distribution, $D(165) = .22$, $p < .001$. The mean score among the participants is 12.68 (SD = 1.53). The maximum score is 15 points while minimum score is 7 points.

Recoding of total mastery approach scores into mastery approach motivation levels was done using visual binning in SPSS. Out of the 165 participants, it was shown that 1 (0.6%) of the participants have low mastery approach motivation level, 25 (15.2%) participants have average mastery approach motivation level, and 139 (84.2%) have high mastery approach motivation level.

4.3.2 Mastery Avoidance

There are no outliers noted from the box plot for total mastery avoidance score. A Kolmogorov-Smirnov test showed a non-normal distribution, $D(165) = .18$, $p < .001$. The mean score among the participants is 11.65 (SD = 2.00). The maximum score is 15 points while minimum score is 6 points.

Recoding of total mastery avoidance scores into mastery approach motivation levels was done using visual binning in SPSS. Out of the 165 participants, it was shown that 46 (27.9%) participants have average mastery avoidance motivation level, and 119 (72.1%) have high mastery avoidance motivation level.

4.3.3 Performance Approach

There are no outliers noted from the box plot for total performance approach score. A Kolmogorov-Smirnov test showed a non-normal distribution, $D(165) = .15$, $p < .001$. The mean score among the participants is 11.73 (SD = 1.93). The maximum score is 15 points while minimum score is 3 points.

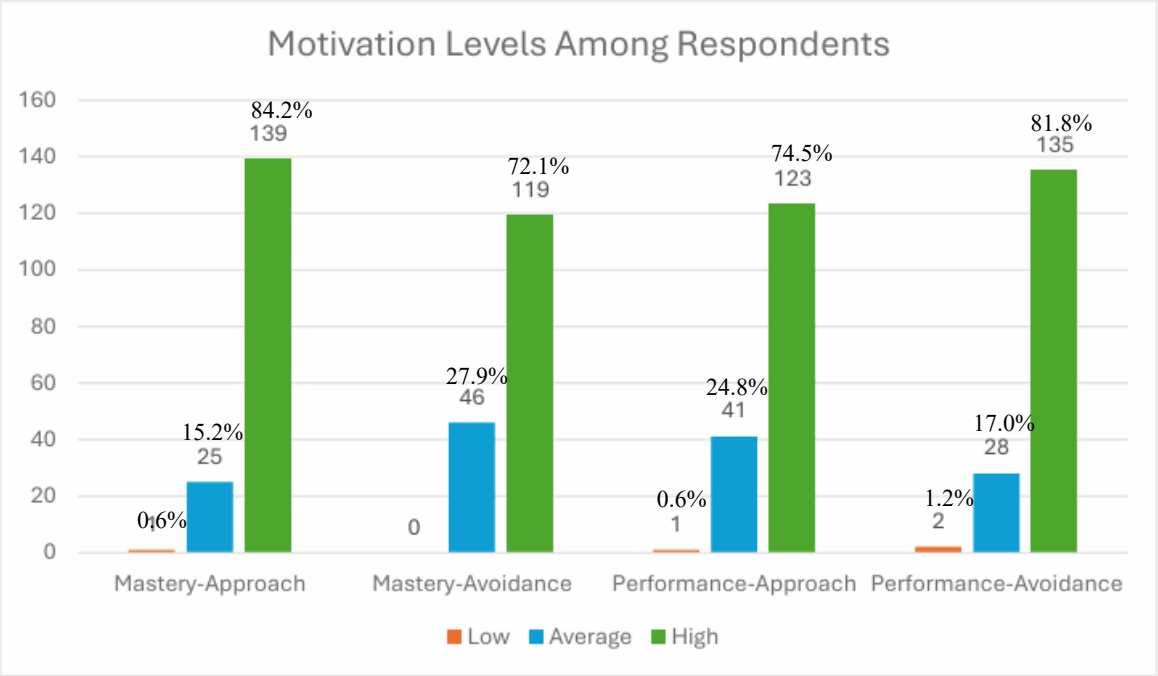
Recoding of total performance approach scores into mastery approach motivation levels was done using visual binning in SPSS. Out of the 165 participants, it was shown that 1 (0.6%) of the participants have low performance approach motivation level, 41 (24.8%) participants have average performance approach motivation level, and 123 (74.5%) have high performance approach motivation level.

4.3.4 Performance Avoidance

There are no outliers noted from the box plot for total performance avoidance score. A Kolmogorov-Smirnov test showed a significant departure from normality, $D(165) = .26$, $p < .001$. The mean score among the participants is 11.99 (SD = 1.98). The maximum score is 15 points while minimum score is 3 points.

Recoding of total mastery approach scores into performance avoidance motivation levels was done using visual binning in SPSS. Out of the 165 participants, it was shown that 2 (1.2%) of the participants have low performance avoidance motivation level, 28 (17.0%) participants have average performance avoidance motivation level, and 135 (81.8%) have high performance avoidance motivation level.

Figure 4.2 Clustered Bar Chart of Motivation Levels of Different Factors among UNIMAS nursing students



4.4 Association between Self-Esteem and Academic Performance

A Chi-Square Test for Independence (with Yates' Continuity Correction) indicate no significant association between self-esteem and academic performance, X^2 (6, 165) = 6.293, p = .391

Table 4.2 Crosstabulation of Self-esteem Levels and Academic Performance

Academic Performance	Level of Self-Esteem			χ^2	df	p-value
	Low	Average	High			
Fair		1		6.293	6	0.391
Average	4	12				

Good	25	84	3
Excellent	9	23	4

4.5 Association between Self-Esteem and Different Motivational Factors

A series of Chi-Square Tests for Independence (with Yates' Continuity Correction) were conducted to examine the association between self-esteem and different motivational orientations. There was no significant association between self-esteem and mastery approach motivation, $\chi^2(4,165) = 3.40$, $p = .493$, or mastery avoidance motivation, $\chi^2(2,165) = 1.01$, $p = .604$. However, there was a significant association between self-esteem and performance approach motivation, $\chi^2(4,165) = 23.40$, $p < .001$, as well as between self-esteem and performance avoidance motivation, $\chi^2(4, 165) = 14.29$, $p = .006$.

Table 4.3 Crosstabulation of Self-esteem Levels and Motivation Levels of Different Factors

Motivational Factor	Motivation Level	**Level of Self-Esteem**			**χ^2**	**df**	**p-value**
		Low	Average	High			
Mastery-Approach	Low	1	6	31	3.40	4	0.493
	Average	0	18	102			
	High	0	1	6			
Mastery-Avoidance	Low	0	13	25	1.01	4	0.604
	Average	0	31	89			
	High	0	2	5			
Performance-Approach	Low	0	8	30	23.40	4	<.001
	Average	0	32	88			
	High	1	1	5			
Performance-Avoidance	Low	0	10	28	14.29	4	.006
	Average	1	18	101			
	High	1	0	6			

4.6 Association between Academic Performance and Different Motivational Factors

Chi-Square Tests for Independence (with Yates' Continuity Correction) were conducted to examine the association between academic performance and different types of motivation. The results indicated no significant association between academic performance and mastery approach motivation, $\chi^2(6, 165) = 4.10$, $p = .663$; mastery avoidance motivation, $\chi^2(6, 165) = 6.51$, $p = .089$; performance approach motivation, $\chi^2(6, 165) = 5.74$, $p = .453$; and performance avoidance motivation, $\chi^2(6, 165) = 4.15$, $p = .656$.

Table 4.4 Crosstabulation of Academic Performance and Motivational Levels of Different Motivational Factors

Motivational Factor	Motivation Level	**Academic Performance**				**χ^2**	**df**	**p-value**
		Fair	Average	Good	Excellent			
Mastery-Approach	Low			1				
	Average		3	20	2	4.10	6	0.663
	High	1	13	91	34			
Mastery-Avoidance	Low							
	Average	1	3	36	6	6.51	6	0.089
	High		13	76	30			
Performance-Approach	Low			1				
	Average		5	32	4	5.74	6	0.453
	High	1	11	79	32			
Performance-Avoidance	Low			2				
	Average		4	21	3	4.15	6	0.656
	High	1	12	89	33			

4.7 Summary

There are 165 participants involved in actual study, most of whom are female. A normality test was performed for the scoring of self-esteem, and motivational factors, namely mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance, using the Kolmogorov-Smirnov test. The results showed a violation of normality for the data distribution. Total scores for self-esteem, and all motivational factors were then categorised in SPSS. Majority

of participants (72.7%) showed average levels of self-esteem, with majority of participants demonstrating high motivation across all four motivational factors. Lastly, Chi-Square Test for Independence was used to test the association between self-esteem, different motivational factors, and academic performance among the participants. It was revealed that only self-esteem and extrinsic motivational factors, which are performance-approach and performance-avoidance showed a significant association. A Chi-Square Test between self-esteem and performance-approach motivation indicates a significant association, X^2 (4, 165) = 23.397, p = .000. A separate Chi-Square Test between self-esteem and performance-avoidance motivation indicates a significant association as well, X^2 (4, 165) = 14.293, p = .006

Chapter 5: Discussion

5.1. Introduction

The findings of this study will be further discussed in this chapter. Discussions of the results are presented in sections based on the research objectives of this study. This chapter contains a brief discussion on the level of self-esteem, the levels of motivation of the different factors, and academic performance among UNIMAS undergraduate nursing students and the association between the variables. The findings will be explained and discussed with support and compared with the findings from previous literature.

5.2 Discussion of the findings

5.2.1 Level of Self-Esteem among UNIMAS Undergraduate Nursing Students

The study results found that majority of UNIMAS undergraduate nursing students, 120 (72.7%) of the students, demonstrated average levels of self-esteem. Out of the remaining 45 participants, 38 (23.0%) of the participants have low self-esteem, while only 7 (4.2%) have high self-esteem. These results are coherent with results in studies conducted in Korea by Kyung & Yoo (2019) and in Turkey by Karaca et al., (2019) where majority of nursing students showed average levels of self-esteem, measuring at 64% and 62% of their sample size respectively and a minority of the students having low self-esteem, measuring at 13% and 21% respectively.

These findings which indicate that most UNIMAS undergraduate nursing students possess an average level of self-esteem could be the result of typical challenges faced by students in rigorous academic programs such as nursing, where pressures related to academic performance, clinical responsibilities, and the physical and mental toll of the nursing curricula itself are common factors which may lower the nursing students' self-esteem, thus decreasing the proportion of students demonstrating high self-esteem (Ketata et al., 2021).

The notable proportion of students (23.0%) with low self-esteem is a cause for concern. Low self-esteem in nursing students may negatively impact their academic engagement, clinical performance, interpersonal relationships, and their future professional identity as they may become more susceptible to negative perceptions towards themselves (Serafin et al., 2022). This is due to the fact that those with low self-esteem have lower confidence in themselves, be it in their knowledge or capabilities while performing different tasks and engaging with others. It may also increase susceptibility to stress, anxiety, or burnout, especially given the demanding nature of the nursing education and clinical practices which they must endure (He et al., 2019). When comparing the results to a study in Kathmandu by Pandey & Chalise (2017), where the majority of respondents had low self-esteem (78%), lower levels of self-esteem was associated with higher academic stress. This can then be related to the previously mentioned study by Ketata et al., (2021) which stated that high expectations and demands of the nursing curriculum may have negative impacts on the students' self-esteem.

On the contrary, the relatively small percentage (4.2%) of students with high self-esteem suggest that only a few students possess strong confidence in their abilities and have high self-perceptions (Varanarasama et al., 2019). This could be attributed to limited opportunities for self-empowerment, especially in clinical areas during their practical attachments, a lack of positive reinforcement in clinical settings, be it from their peers, clinical educators or staff, and even cultural factors that discourage self-promotion such as highlighting one's own achievements in fear of being labelled as arrogant and boastful, which in turn lowers the students' self-esteem levels (Li et al., 2017). This was also discussed in a study by Yeşilyurt & Kendirkiran (2024), where the minority of the respondents (10.6%) who demonstrated high self-esteem often felt supported and received praised from the nursing educators and their peers.

These findings highlight the need for targeted interventions to support students struggling with low self-esteem and to nurture higher self-esteem among all students. Strategies may include mentorship programs, self-care workshops to improve self-perceptions, resilience training among the students, and encouragement of positive feedback during both academic and clinical periods. By fostering stronger self-esteem, nursing programs may help produce more confident, competent, and resilient future nurses (Lee et al., 2017; Brando-Garrido et al., 2020).

5.2.2 Motivational Levels of Different Factors affecting UNIMAS Undergraduate Nursing Students

Mastery-Approach

The findings revealed that the majority of participants (84.2%) exhibited a high level of mastery approach motivation, while 15.2% demonstrated an average level, and only 0.6% showed a low level. This coincides with results from studies in Iran by Sharififard et al., (2020) and Hosseini et al., (2023), where nursing students often reveal high desire to increase their competence and master nursing skills. This in turn positively influences their academic engagement, self-efficacy, and serves as a protective factor against academic burnout (Gonzalez & Kardong-Edgren, 2017).

Students with high mastery approach motivation tend to engage in deep learning strategies, such as critical thinking, analysis, and elaborations when encountering new information and knowledge, show greater persistence when encountering academic challenges, and report higher satisfaction with their educational experiences (Kabeel, et al., 2016). In the context of nursing education specifically, where learning is not only theory-based, but also requiring of high skill competency, such motivation is especially important (Carter & Phillips, 2021). The predominance of high mastery-approach motivation among the sample is

encouraging, as it reflects a learning environment that may be supportive of autonomic learning, competence development, and goal achievement (Darnon et al., 2017).

The small percentage of participants with low mastery approach motivation (0.6%) indicates that only a small proportion of the nursing students may be at risk for disengagement or self-sabotaging behaviours, such as increased procrastination due to lack of drive to achieve goals (Schunk & DiBenedetto, 2021). The high level of mastery-approach motivation observed may also reflect the influence of the academic and institutional culture, which could be promoting internal goals and competence-building (Barrett & Morgan, 2018). Educators should continue to reinforce mastery-oriented learning through formative assessments, constructive feedback, and learning activities that emphasize understanding over sheer memorization without grasping the rationale or theory of what the students are learning about or procedures that are being carried out.

In conclusion, the findings underscore the importance of fostering and maintaining mastery approach motivation among nursing students. Doing so may contribute significantly to the development of competent, self-regulated, and resilient future healthcare professionals.

Mastery-Avoidance

The findings of this study indicated that out of the 165 participants, 72.1% have high mastery avoidance motivation level. Specifically, 119 of the participants have high motivation in this domain, suggesting that most students are also driven by a fear of not mastering a task or failing to meet personal standards of competence (Babenko & Oswald, 2018). This result aligns with previous literature indicating that mastery avoidance motivation is generally prevalent alongside mastery-approach motivation among students in higher education, particularly in health-related fields, such as nursing and medical courses (Gonzalez & Kardong-Edgren, 2017;

Palos, 2020; Bingen et al., 2020). These studies have also noted that while mastery avoidance motivation can coexist with adaptive intentions, such as maintaining high standards of mastery and competence, they are more commonly linked to maladaptive outcomes such as anxiety, perfectionism, reduced academic satisfaction, and increased academic burnout (Chang et al., 2020).

In the context of this study, the dominant presence of mastery-avoidance may reflect the internal pressure some nursing students feel to avoid personal failure or incompetence, especially in a demanding program such as nursing, where they would need to deliver constant care to patients and needing to uphold the set standard of care for continuous weeks. Students with this orientation may set high expectations for themselves, but their motivation is driven through anxiety and fear of not meeting self-imposed standards (Mar et al., 2016). While this drive can occasionally lead to diligent study habits, it often comes at the cost of well-being and can limit creativity, resilience, and academic risk-taking. From a practical standpoint, the prevalence of mastery avoidance motivation with 27.9% of participants having average mastery-avoidance motivation level and the 72.1% having high mastery-avoidance level, has important implications for educational support and mental health interventions to ensure the overall well-being for these future nurses.

One limitation in interpreting mastery avoidance results is the complexity of its dual nature, as it is both an internalized form of motivation and a potential stressor. In this study, it is unclear whether the avoidance tendencies are temporary responses to academic pressure or more stable personality traits such as perfectionism (Clements & Kamau, 2017). Additionally, cultural and institutional factors may play a role in the common occurrence of avoidance-driven motivation. For instance, environments that emphasize performance and evaluation, such as clinical placements for the nursing students, may unintentionally foster fear-based goals even

among well-performing students, as they carry out their roles and responsibilities in the clinical field (Speirs et al., 2015).

In conclusion, the high levels of mastery avoidance motivation among participants should not be undermined. Academic institutions should be mindful of how curriculum demands, assessment styles, and feedback mechanisms might influence students' internal motivation. Supporting students in developing balanced academic expectations and reducing fear of failure could help shift avoidance motivations into more constructive learning goals.

Performance-Approach

The results of this study showed that 1 (0.6%) of the participants have low performance approach motivation level, 41 (24.8%) participants have average performance approach motivation level, and 123 (74.5%) have high performance approach motivation level. This indicates that many students are driven by a desire to demonstrate competence and outperform others in academic settings (Mäenpää et al., 2019). This finding is coherent with previous literature such as ones in Saudi by Bayoumy & Alsayed (2021) and in Morocco by Naciri et al. (2022) which have identified performance approach motivation as a common factor among competitive and achievement-oriented students, particularly in professional programs such as nursing which are demanding both physically and mentally. Unlike mastery-based motivations, which are intrinsic motivations that focus on learning and self-improvement, performance-based motivations are externally oriented and emphasize doing better than peers. Prior studies have shown that performance approach motivation can lead to high academic achievement when paired with strong self-efficacy and cognitive regulation such as planning, monitoring, and evaluation of one’s own learning in comparison with others, although it may also be accompanied by internalised stress and tendencies to compare and measure oneself with others (Saeedi et al., 2019; Bahari et al., 2022).

The implications of performance-approach motivation can positively contribute to academic outcomes by promoting effort, competitiveness, and goal-directed behaviours (Chang et al., 2021). Students who strive to excel and outperform their peers may be more likely to set high academic goals and work persistently towards them. However, reliance on this type of motivation may lead to inadvertent consequences such as increased levels of anxiety, reduced collaboration among peers, or refusing to take risks and explore new opportunities to gain knowledge (Walsh et al., 2020; Ghorbani et al., 2020). In the context of nursing education, where teamwork, empathy, and reflective practice are essential, especially during clinical placements where students are expected to work coherently in their groups, excessive performance orientation could conflict with the development of core professional values and may also affect care rendered to the patient as instead of improving on one's own abilities and competencies, students may be focused on outperforming their peers (Gemuhay et al., 2019). Additionally, the competitive mindset fostered by performance approach motivation may undermine intrinsic motivation over time, especially if students equate performing better than others with academic success.

On the other hand, performance-approach motivation often coexists with other motivational types, such as mastery-based motivational factors (Uslusoy et al., 2024). However, it is difficult to determine whether the drive to outperform others is rooted in healthy competition or fear-based self-comparison. Furthermore, systems that reward ranking and high-stakes assessments may reinforce performance-oriented behaviours, potentially at the expense of deeper learning or student well-being. Educators should therefore consider balancing recognition of academic achievement with practices that promote collaborative learning and intrinsic motivation.

In conclusion, the relatively high levels of performance approach motivation observed in this study suggest that many students are achievement-driven and goal-focused. Though this can be beneficial for improved academic performance, it is important to ensure that such motivation is balanced with supportive learning environments that also nurture self-development, cooperation among peers, and academic resilience. Future interventions should focus on helping students align their performance goals with personal growth and meaningful learning rather than external validation alone.

Performance-Avoidance

The results of this study revealed 2 (1.2%) of the participants have low performance avoidance motivation level, 28 (17.0%) participants have average performance avoidance motivation level, and 135 (81.8%) have high performance avoidance motivation level. The majority of students exhibiting this motivation indicate a characteristic desire to prevent negative judgments and avoid being perceived as less capable than others (Kaplan & Güngörmüş, 2022). However, this form of motivation has been consistently linked with maladaptive academic outcomes, such as increased anxiety, reduced self-confidence, procrastination, and surface-level learning (Custer, 2018). The high presence of performance-avoidance motivation among nursing students may be concerning, as it could hinder academic development and emotional well-being, particularly in the nursing field that demands competence, confidence, and adaptability in every situation.

Compared to previous literature, the findings in this study are inconsistent with those reporting that performance avoidance motivation are less common than performance-approach goals, such as studies by Mar et al., (2016) in Spain and by Kong et al., (2021) in China as the results from this study show a higher percentage of students with this motivational factor than compared to the percentage of students with high performance-approach motivation. In nursing

education, where students are often exposed to high-pressure clinical environments intwined with rigorous academic standards, high performance-avoidance motivation levels may be fuelled by fear of making mistakes or negative evaluation, particularly during assessments or practical examinations. Such motivational patterns can impair learning by causing students to focus more on avoiding embarrassment and harsh judgments, rather than understanding content or developing practical capabilities (Wei et al., 2021) .

These findings highlight the need for educators to recognize the psychological cost of performance-avoidance motivation. Students driven by a fear of failure may be less likely to take academic risks, ask for help, or engage in collaborative learning due to fear of being seen as less competent than others (Howard et al., 2021). Over time, this can affect academic confidence and deepen feelings of inadequacy as they constantly view themselves in comparison with others. However, performance-avoidance motivation may overlap with other motivational constructs such as perfectionism, anxiety, or self-esteem (Huang, 2016). These constructs may have a significant impact on this motivation alongside external pressures such as institutional competition and rankings, or internal fears of the students themselves, such as fear of letting others down or not meeting expectations (Lewis et al., 2020).

In conclusion, with the extreme proportion of students with high performance avoidance motivation, though it may have benefits for the students to achieve short-term goals, its negative impact on academic performance and overall well-being in the long run warrants attention. Interventions that foster a growth mindset, encourage formative feedback, and normalize academic struggles may help reduce avoidance-oriented behaviours. Creating a supportive and non-threatening learning environment is key to helping students shift from fear-based motivation to more constructive, mastery-oriented goals balanced with healthy competition among colleagues and peers alike.

5.2.3 Academic Performance of UNIMAS Undergraduate Nursing Students

This study assessed academic performance using Cumulative Grade Point Average (CGPA), a standardised and widely accepted measure in educational research (Gallego-Gómez et al., 2021). CGPA reflects the average performance of a student across multiple semesters, providing a reliable indicator of overall academic performance. By categorizing CGPA into five levels, namely excellent, good, average, fair, and poor, analysis and interpretation of academic performance against other variables were able to be done.

The results demonstrated that academic performance, as represented by CGPA, varied among participants, with majority of participants (67.9%) having good academic performance, only 0.6% with fair academic performance, 9.7% having average academic performance, and 21.8% with excellent academic performance. This variation is consistent with existing literature done in Pakistan, Australia, and Saudi, where majority of nursing students demonstrate good results with only a handful being able to obtain excellent results (Alshammari et al., 2017; Mthimunye & Daniels, 2019; Fajar et al., 2019). These studies also highlight that academic success in terms of improved academic performance is a multifactorial construct influenced by individual, psychological, social, and institutional factors. Among these, personal attributes such as self-esteem, motivation, time management, and study skills, as well as external factors like peer influence and competition, faculty engagement, and clinical assessments have been shown to significantly impact student performance (Jung, 2018; Ricardo et al., 2019; Merino-Soto et al., 2024).

In addition to personal and psychological variables such as motivational factors, environmental and institutional contexts may also play a critical role (Shirazi & Heidari, 2019). Variations in teaching quality, curriculum design, assessment strategies, and academic support services can all impact CGPA. Students who have access to mentorship or tutoring, either from

academicians or colleagues, and flexible learning resources such as open access to different learning platforms, and various learning strategies suited for the individual students, often perform better academically (Saud & Chen, 2018; Román-Sánchez et al., 2023). Similarly, a positive campus environment and a culture that promotes academic excellence through positive means such as regular feedback systems, peer support groups, and academic autonomy can contribute to higher student performance (Irvine et al., 2021). Studies have also shown that in-campus activities which allow for further student engagement and increased interactions between students show a positive relationship with improved academic success (Chang & Jang, 2018 ;Cornine, 2020). This can be related to parasocial relationships which can boost mood and confidence, and reduce academic stress, especially for nursing students who often feel left out of their university life due to the heavy demands of the nursing curricula (Wang et al., 2019; Azizi et al., 2019). These interactions also benefit these future nurses as they are required to venture into different communities for clinical placements, causing them draw on these past interactions when dealing with patients from diverse backgrounds.

Despite its strengths, CGPA as a measure has limitations. It primarily reflects cognitive outcomes and may not capture other dimensions of learning, especially in nursing, where the curriculum design incorporates multifaceted factors, such as critical thinking, creativity, collaboration, and practical application of theory and skills, particularly during clinical placements (Hasaan et al., 2024). Additionally, differences in academic rigor across programs, and inconsistencies in assessment methods across different courses and constantly changing assessments throughout the years may limit the validity of CGPA comparisons. Furthermore, academic performance is dynamic and unique to each individual, and may fluctuate due to personal life events, mental health challenges, or changes in learning environments, such as during the COVID-19 pandemic (Abdul Sattar et al., 2018; Azizi et al., 2019).

In conclusion, this study confirms that CGPA remains a robust and accessible indicator of academic performance when interpreted within the appropriate context. It can serve not only as a measure of achievement but also as a tool for identifying students at risk of academic underperformance. By understanding the underlying factors associated with CGPA, educators and policymakers can design more targeted interventions aimed at promoting academic success. Future research should aim to integrate approaches to better understand students' experiences and to develop a more holistic understanding of academic performance.

5.2.4 Association between Self-Esteem and Academic Performance

This study explored the association between self-esteem and academic performance among nursing students, with academic performance measured using Cumulative Grade Point Average (CGPA). Contrary to expectations as deduced from existing literature, the findings indicated no statistically significant association between self-esteem levels and academic performance in this population, X^2 (6, 165) = 6.293, p = .391

This result is particularly interesting given that numerous previous studies have identified self-esteem as a factor positively associated with academic performance in general student populations (Noronha et al., 2018; Oducado, 2021). These studies highlighted how students demonstrating higher levels of self-esteem generally had better academic performance compared to their lower counterparts. However, the absence of a significant relationship in this study suggests that, for nursing students, self-esteem alone may not play a critical or direct role in influencing academic outcomes (Khan et al., 2022).

There are several possible explanations for this finding. Firstly, the academic demands of nursing education and the design of the nursing curricula itself is unique and multifaceted, as it not only involves theoretical classes which involves lectures, assignments, groupwork, and

presentations, but also clinical practice, with skills assessments, and demanding tasks and responsibilities (Chan et al., 2018; Calma et al., 2019). It is possible that these factors and academic requirements throughout the different semesters interact with other variables, such as clinical competence, emotional intelligence, coping strategies and resilience, or time management skills, all of which are able to influence academic performance to some degree, thus undermining the effect of self-esteem on academic performance (Hosseini et al., 2016; Zhang et al., 2018). Furthermore, while the study included 165 participants, which may appear sufficient at first glance, it is important to consider whether this sample size was adequate for detecting associations in Chi-Square tests involving multiple categories. The degrees of freedom in some of the analyses were relatively high (e.g., df = 6), meaning that the data were distributed across many cells in the contingency tables. This can result in low expected frequencies in some cells, reducing the power of the Chi-Square test to detect significant associations even if they exist. Additionally, non-significant findings—particularly those with *p*-values close to the conventional threshold (e.g., $p = .089$ for mastery avoidance motivation)—raise the possibility of a Type II error (failing to detect a true effect due to limited power). Therefore, it is plausible that a larger sample size may have revealed clearer patterns or associations, especially for variables with small effect sizes. Future studies with larger, more diverse samples are recommended to validate these findings.In this sense, self-esteem might contribute indirectly to performance but may not be a primary predictor of CGPA.

Besides that, nursing students often face high academic and emotional workloads, especially during clinical placements, which may require specific and personal psychological attributes such as resilience, emotional regulation, or academic self-efficacy, all of which are traits that are more task-specific, rather than self-esteem which plays a general role in their everyday lives (Kim, 2024). Prior studies suggest that academic self-efficacy and time management, rather than self-esteem, has a more direct impact on students' ability to persist and

succeed in obtaining and maintaining excellent academic performance throughout their education periods, especially in demanding programs like nursing, as the students are more prone to experience heavy workloads and are more likely to experience academic burnout (Nam & Lee, 2016).

It is also possible that the sample in this study included students with relatively similar levels of self-esteem, even across different years of study and diverse sociodemographic data, resulting in limited variability that could reduce the likelihood of finding a significant relationship (Howes & Chapman, 2024). Additionally, cultural or educational factors may play a role. In some cultures, especially in Malaysia, or institutional environments, high academic performance may be driven more by external expectations and validations, structured curriculum demands, where success is defined by the end product of learning rather than the process itself, and the focus on others' perception rather than internal self-worth (John & Poddar, 2020). This is especially true for the nursing education where nurses and nursing students must uphold a set standard of care.

Moreover, nursing students often develop their self-esteem in response to professional growth and real-world clinical experience, which may not align temporally with their academic performance, especially in earlier years of training such as those who have not been exposed to the clinical areas (Hwang & Shin, 2018). For example, a student may possess high self-esteem based on interpersonal or caregiving skills, yet still struggle academically, particularly in heavy theoretical subjects like pharmacology or anatomy. Furthermore, the methodological limitations may also explain the non-significant findings. Self-esteem was measured using a self-report scale, which is subject to social desirability bias, meaning students answer what they believe to be the right answer instead of answering truthfully (Larson, 2018). This is especially true for nursing students who are often motivated to present themselves as capable and confident, thus causing them to overestimate their self-worth. Likewise, the cross-sectional nature of this study limits the

ability to observe changes over time, thus limiting the opportunities to observe how self-esteem may progress either positively or negatively throughout the years and its progressive effect on the academic performance of the nursing students (Wang & Cheng, 2020).

Despite the absence of a significant relationship, the findings contribute meaningfully to the literature by challenging the assumption that self-esteem is universally linked to academic success. For nursing educators and administrators, this highlights the importance of addressing a broader range of factors that influence academic performance, such as clinical readiness, resilience, mental well-being, and support systems. Future research should consider including additional psychological and contextual variables such as academic self-efficacy, academic burnout, and perceived clinical competence. It would also be beneficial to explore whether self-esteem becomes more influential at different stages of nursing education (e.g., pre-clinical vs. final year).

In conclusion, while this study found no statistically significant association between self-esteem and academic performance among nursing students, the result is a valuable reminder of the complexity of academic success in healthcare education. It underscores the need for holistic academic support strategies that go beyond boosting self-esteem, focusing instead on equipping nursing students with practical skills, emotional resilience, and academic resources so they may be able to thrive in both academic and clinical settings.

5.2.5 Association between Self-Esteem and Intrinsic Motivation

This study aimed to investigate the association between self-esteem and intrinsic motivation among nursing students. Contrary to initial expectations and previous findings in general student populations, the results revealed no statistically significant association between self-esteem and intrinsic motivation, for both mastery-approach, X^2 (4, 165) = 3.400, p = .493, and mastery-avoidance, X^2 (6, 165) = 6.514, p = .089

These findings challenge the common assumption that higher intrinsic motivation is formed from higher self-esteem, due to the fact that the internal desire to learn, achieve, or grow without reliance on external rewards may stem from a person perceiving themselves in a more positive sense (Saleh et al., 2021). Similarly, the desire to remember and prevent forgetting previously acquired knowledge was also commonly associated with higher levels of self-esteem. While past research has often reported a positive link between these two psychological constructs (Almansour, 2023; Bander Saad Albagawi et al., 2024), the lack of a significant relationship in this study suggests that, among nursing students especially, intrinsic motivation may be derived more strongly by other factors than by self-esteem alone.

Several factors may account for the results found through this study. First and foremost, it is important to consider the nature of the nursing curricula, which is demanding and requires multiple aspects to be taught throughout the duration of the course, combining theoretical learning with practical clinical experiences, to shape and form these future nurses (Tiago & Mitchell, 2024). Students may be intrinsically motivated by the desire to help others and to learn and retain the proper techniques in which to carry out their duties, fulfil a professional calling, or succeed in clinical environments, regardless of how they view themselves personally. This points to the possibility that intrinsic motivation in nursing may be driven more by vocational values, such as the student's personal beliefs and values, or empathy rather than by self-esteem as they carry out their responsibilities as student nurses.

Besides that, self-esteem as measured in this study was generalized and was answered using Rosenberg's Self Esteem Scale (RSES) (1965), which measures a person's overall sense of self-worth and self-respect, rather than measuring academic or task-specific worth. It is possible that a student may feel confident in their general self-worth but still struggle with intrinsic motivation toward specific academic tasks or vice versa (Mohamed, 2019). In contrast, academic

self-concept or self-efficacy, which relate directly to one's belief in their ability to succeed in academic contexts may offer more precise predictors of intrinsic motivation within educational settings. However, due to the specificity of this measurement, it may overlook certain areas which influence intrinsic motivation towards other tasks as well (Scherrer & Preckel, 2018; Yun et al., 2020)

It is also worth considering that intrinsic motivation may remain relatively stable or be shaped by personal values and long-term career goals, whereas self-esteem can fluctuate based on social feedback, academic challenges, or certain life events (Cingel et al., 2022). Therefore, the two constructs may operate independently in some students, leading to a weak or inconsistent association at the group level. This relates with cultural and environmental influences which may mediate the relationship between self-esteem and intrinsic motivation. For example, in settings where academic or career success is highly emphasized by family or society, especially here in Malaysia, students may feel compelled to maintain motivation regardless of how they evaluate their self-worth, as they try to uphold the societal perception towards themselves (Teo et al., 2022). In such cases, motivation may be sustained more by internalized social expectations rather than by intrinsic personal satisfaction through learning or simply by adhering to one's personal beliefs and values.

In conclusion, this study found no significant association between self-esteem and intrinsic motivation among nursing students. Despite the lack of statistical significance, these findings are important as they highlight the need to examine more specific and nuanced psychological constructs when assessing motivational processes in nursing education. Rather than focusing solely on global self-esteem, future studies might explore the roles of self-determination, academic self-efficacy, resilience, and clinical confidence as potentially stronger predictors of motivation and performance. This outcome also suggests that intrinsic motivation

in this context may be influenced more by personal values, professional identity, or other internal and external factors rather than by generalized self-esteem. These findings emphasize the complexity of psychological variables in professional education and support the need for more targeted research and interventions that address the specific motivational and emotional needs of nursing students.

5.2.6 Association between Self-Esteem and Extrinsic Motivation

One of the major findings of this study is the significant association between self-esteem and extrinsic motivation among nursing students, for both performance-approach, and performance-avoidance. For performance-approach motivation, X^2 (4, 165) = 23.397, p = .000. While for performance-avoidance, X^2 (4, 165) = 14.293, p = .006. This suggests that the level of self-worth an individual perceives is meaningfully linked to their reliance on external factors such as rewards, recognition, competition, or fear of failure or looking incompetent compared to others as motivational drivers.

According to Topçu & Leana-Taşcılar (2016), individuals with lower self-esteem may exhibit more controlled forms of motivation, such as external regulation, which can be understood as adjusting behaviours based on perception of others. For example, their actions are driven by external approval or the avoidance of guilt and shame. For nursing students, this may manifest as studying or performing well during lectures or clinical placements to receive praise from educators or their peers, achieving high grades or excelling in terms or academic performance, or avoiding criticism and reducing risk of humiliation during clinical assessments, be it from the staff, patients, educators or even peers (Hamm & Yeh, 2024). These results are consistent with previous research which have documented a significant association between self-esteem and extrinsic motivation, such as studies by Opelt & Schwinger, (2020), and Carranza et al., (2022), among nursing students in Germany and Peru respectively.

Nursing students with low to moderate self-esteem may be more vulnerable to external pressures and may experience academic tasks as performance-based challenges rather than opportunities for personal and professional growth (Berestova et al., 2022). This is because they depend on these tangible results to drive them in their daily tasks as nursing students. This dependency on extrinsic motivators can lead to anxiety, burnout, and disengagement, particularly in the demanding context of nursing education, where students are expected to juggle theory from lectures prior to clinical placements and relate them with real life clinical experiences (Hendijani et al., 2016). On the other hand, students with high self-esteem are more likely to experience extrinsic motivation in a more autonomous form (Farčić et al., 2020). These students may still value grades and recognition, but they may integrate these rewards into a broader sense of purpose, professional identity, and intrinsic satisfaction, such as incorporating self-evaluation methods into their behaviour making decisions. High self-esteem may also serve as a buffer against negative effects of stress, allowing students to remain motivated without becoming overly dependent on external validation (Labrague et al., 2016).

The significant association found in this study highlights a critical point; while extrinsic motivation can play a beneficial role in short-term goal achievement, such as completing assignments, passing exams, or doing well in clinical placements, its long-term effectiveness is questionable if not supported by healthy self-esteem and intrinsic motivation which serves as a mediator against the negative side-effects of dependency on external motivators (Zarshenas et al., 2019). Nursing education that focuses solely on performance and assessment, while simultaneously comparing different students, either knowingly or unknowingly, without addressing students' emotional and psychological needs may inadvertently reinforce extrinsic dependence, particularly among those with lower self-esteem, causing a downward spiral on those with already negative self-perceptions (Cleary et al., 2018).

These findings underscore the importance of nurturing psychological resilience and self-worth in nursing students. Educators, preceptors, and clinical supervisors must recognize the role of self-esteem in shaping how students are motivated and how they respond to academic and clinical challenges (Valizadeh et al., 2016). Educational interventions such as mentorship programs, reflective writing, positive reinforcement, constructive feedback, and opportunities for autonomous learning may help build students' self-esteem. Furthermore, the clinical environment should promote a sense of competence, and autonomy, which are central to sustaining autonomous motivation and improving self-perception, therefore encouraging more confident and competent future nurses (Flott & Linden, 2015; Yeşilyurt & Kendirkiran, 2024). Nursing students who feel respected, supported, and capable in clinical settings are more likely to develop internal motivation and a professional identity rooted in self-confidence rather than external approval. While this study establishes a significant association, the directionality of the relationship remains unclear. The cross-sectional design of this study limits the understanding of whether low self-esteem leads to higher extrinsic motivation or whether reliance on extrinsic motivators can erode self-esteem over time (Valizadeh et al., 2015).

In summary, the significant association between self-esteem and extrinsic motivation among nursing students highlights the complex interplay between psychological well-being and motivational drivers in academic settings. Students with lower self-esteem may depend more on external validation, while those with higher self-esteem exhibit a more balanced motivational profile. These findings emphasize the need for educational strategies that support both academic achievement and the development of healthy self-esteem, ultimately fostering more resilient, autonomous, and motivated future nurses.

5.2.7 Association between Academic Performance and Intrinsic Motivation

The present study found no statistically significant association between academic performance and intrinsic motivation among UNIMAS undergraduate nursing students, for both mastery-approach and mastery-avoidance, with X^2 (6, 165) = 4.101, p = .663 for mastery-approach, and X^2 (6, 165) = 6.514, p = .089 for mastery-avoidance respectively. This finding suggests that a student's internal desire to learn for personal satisfaction, curiosity, or interest in nursing as a discipline does not necessarily translate into higher academic grades or better performance in formal assessments.

This result is noteworthy when comparing to previous literature that explains intrinsic motivation, which is acting out of genuine interest and enjoyment of learning, is typically associated with more effective learning, deeper engagement, and better long-term outcomes (Elbsuony, 2016; Rogers, 2018; Sivrikaya, 2019). However, the absence of a significant association in this study may not necessarily indicate that there is no relationship between intrinsic motivation and academic performance, however it just reflects the complexity and multidimensionality of academic performance in nursing education.

Several factors may account for the lack of association observed. Firstly, the nature of assessments throughout the nursing program itself often measures academic performance in nursing through grades, exams, and objective structured clinical examinations (OSCEs), which may emphasize memorization of steps, technical or skill competencies, or adherence to procedural standards (Obizoba, 2018). These metrics may not adequately reflect the depth of understanding or the personal engagement with learning resources, which is characteristic to intrinsic motivation. Thus, intrinsically motivated students may excel in areas which are not captured by grades, but are still invaluable in nursing, such as empathy, ethical reasoning, or reflective thinking (Amin et al., 2025).

Besides that, the presence of external pressures and strategic learning styles may also play a role in affecting the results of this study. Due to the high-stakes nature of nursing education, where a single wrong decision may end up at the cost of a life, even intrinsically motivated students may adopt strategic or extrinsically driven learning behaviours to meet academic requirements (Ellen et al., 2019). For instance, students might prioritize studying exam-relevant content or mastering clinical checklists over engaging deeply with material they find personally meaningful. This disconnection between internal motivation and external performance metrics could overshadow any positive effects of intrinsic motivation on grades.

Furthermore, the undeniable stress, workload, and rate of academic burnout among nursing students as they frequently face intense academic and clinical demands, which can lead to mental fatigue, stress, and reduced motivation over time (Karabulut et al., 2021). In high-stress environments, even intrinsically motivated students may experience cognitive and sensory overload, that negatively impacts their academic performance and may be detrimental to their overall well-being in the long run. This suggests that intrinsic motivation alone may not be sufficient to overcome structural or environmental barriers to academic success.

Lastly, individual differences and external commitments of the students may also affect the results. Factors such as prior academic background, socioeconomic status, family responsibilities, and employment may have a stronger influence on academic performance than motivation type (Al-Osaimi & Fawaz, 2022; Hamm & Yeh, 2024). For example, a highly motivated student working part-time or juggling family responsibilities may not perform as well academically due to limited study time, despite a high level of personal interest in nursing.

In conclusion, although no direct link between intrinsic motivation and academic performance was found, this does not diminish the importance of fostering intrinsic motivation in nursing education. Intrinsically motivated students are more likely to engage in lifelong learning, which

is a critical component of professional development in nursing (Qalehsari et al., 2017). They may also exhibit greater clinical curiosity, reflection, and empathy in patient care (Chen et al., 2022) . Finally, this may help develop a stronger professional identity and resilience in emotionally challenging clinical settings (Zhu et al., 2024).

5.2.8 Association between Academic Performance and Extrinsic Motivation

The study also revealed no statistically significant association between academic performance and extrinsic motivation among nursing students, with X^2 (6, 165) = 5.738, p = .453 for performance-approach motivation and X^2 (6, 165) = 4.150, p = .656 for performance-avoidance motivation . This finding reveals that the degree to which students are driven by external rewards, such as grades, praise, recognition, or fear of failure does not appear to directly predict their academic outcomes in terms of grade point average (GPA) or formal assessments. This result may initially seem unexpected, especially considering previous literature have expressed that extrinsic motivation is often linked to goal-directed behaviour, which can play a role in helping students meet academic requirements (Bronson, 2016; Messineo et al., 2019; Bayoumy & Alsayed, 2021). However, the absence of a significant association suggests a more dynamic relationship between motivation and academic performance, particularly in the context of nursing education.

In the context of nursing education, where both theoretical knowledge and clinical competence are required, academic performance is multifactorial and may not be strongly influenced by extrinsic drivers alone. This could explain the lack of significant association observed in the present study. Following this, extrinsic motivation may promote short-term effort, causing a short period of improved academic performance, however it does not ensure long-term success (Ghiasvand et al., 2017). In nursing education especially, where lifelong learning is a fundamental core, motivation driven from external factors often fades which then leads to

diminished academic performance (Mlambo et al., 2021). Nursing students motivated by external factors may study primarily to pass exams or meet course requirements, focusing on immediate performance rather than genuine comprehension. While this may produce short-term academic gains, it may not consistently yield high performance across varied assessments or long-term coursework, resulting in an overall weak correlation.

Besides that, a mismatch between motivation type and evaluation methods may also explain the insignificant association found**.** If students are extrinsically motivated by grades or approval but assessments emphasize critical thinking, reflective practice, or clinical judgment, their motivation may not effectively support the skills being tested (Özen, 2017). In this case, external motivation may not align well with how success is measured, weakening its impact on academic performance. Students who are extrinsically motivated may adopt surface learning strategies, like memorizing information for an exam or focusing only on content that will be tested, rather than seeking a deep understanding of the material (Tranquillo & Stecker, 2016). If academic success is being measured through higher-order skills such as critical reflection, clinical reasoning, or decision-making in unpredictable real-world scenarios, then a student's performance depends more on conceptual understanding, integration of knowledge, and adaptability, not just memorization or compliance (Aktaş & Karabulut, 2015). Thus, if a student is driven mainly by extrinsic rewards, their approach may not prepare them well for complex or integrated assessments. For example, this can be related to students who memorize drug names and doses but fail to understand the rationale behind medication choices in different patient contexts. In clinical evaluations especially, students are frequently assessed on their communication skills between themselves, the healthcare team, and the patients, empathy, and professionalism, all of which are qualities that are not easily improved through extrinsic motivation alone (Kotera et al., 2021). This misalignment means that even highly extrinsically motivated students might not

perform better academically if their motivation does not support the type of learning and competencies that nursing education values and assesses.

Furthermore, over justification of external motivators on improvement of academic performance and reduced academic engagement of students may undermine intrinsic interest (Van et al., 2021). In highly pressured academic environments, students may become overly focused on external outcomes and lose connection to the deeper value of their learning, which can negatively affect performance in subtle ways (Czikari et al., 2018). For nursing education specifically, focusing on learning the steps and procedures to give care while undervaluing how to provide said care empathetically or learning why the care is important is a prime example of this.

Lastly, students with strong extrinsic motivation may vary widely in other factors that influence academic performance, such as time management, emotional regulation, stress tolerance, and support systems. These variables may moderate the impact of motivation, thereby diluting any consistent association with academic achievement (Dickson & Gilson, 2015; Volkert et al., 2017; Nasurdin et al., 2018). Variables such as self-esteem, personal background, mental health, learning environment, or even socioeconomic status can moderate or influence the strength and direction of this relationship. This may correlate to the significant association between self-esteem and extrinsic motivation, where self-esteem may act as a more dominant trait which interacts with extrinsic motivation.

In summary, the absence of a significant association between academic performance and extrinsic motivation among nursing students suggests that external rewards and pressures alone may not effectively drive meaningful academic success in this context. This finding underscores the possibility that extrinsically motivated students may adopt surface-level learning strategies that do not align with the deeper, more integrated competencies required in nursing education.

As such, relying solely on external motivators may be insufficient to enhance academic performance. These results highlight the need for educational approaches that promote autonomous motivation and deeper engagement, while also supporting students in developing the skills and self-regulation necessary for long-term academic and professional growth.

5.3 Summary of findings of the study

The present study examined the association among academic performance, self-esteem, and different motivational factors among UNIMAS undergraduate nursing students. The results indicated that most students demonstrated above-average academic performance, aligning with previous research suggesting that many students in structured academic programs can achieve high academic outcomes when adequately supported (Alshammari et al., 2017). Most participants also reported average levels of self-esteem, suggesting a generally stable self-concept among the student population.

The major findings revealed that most students possessed high levels of motivation across all domains of intrinsic and extrinsic motivation. This suggests that both internal factors (e.g., interest, personal satisfaction, fear of forgetting) and external drivers (e.g., rewards, recognition, fear of humiliation) may play a significant role in sustaining student engagement and effort. Such high levels of motivation could potentially serve as a buffer against academic stress and may contribute to academic persistence, regardless of self-esteem or academic performance levels.

In terms of associations, only between self-esteem and extrinsic motivation was a significant association found. This may indicate that students with varying levels of self-esteem are more influenced by external rewards or pressures, perhaps using them as a compensatory mechanism to affirm their sense of self-worth. Moreover, no significant relationship was found between self-esteem and intrinsic motivation. This contrasts with some earlier studies that have

suggested a positive link between self-concept and internally driven motivation (Chang et al., 2021).

Furthermore, the absence of significant associations between academic performance and both intrinsic and extrinsic motivation suggests that motivation alone may not directly translate into higher academic outcomes in this context. This finding implies that other mediating factors, such as personal habits and values, academic resilience, or institutional support might play a more critical role in influencing academic performance.

Overall, these findings highlight the complex interplay between psychological and academic variables. They underscore the importance of addressing not only cognitive and behavioural factors but also the emotional and motivational dimensions of student development in educational settings.

5.4 Implications, recommendations, future research

The findings of this study offer several important implications for nursing education, student support services, and future research. The significant association between self-esteem and extrinsic motivation highlights the importance of addressing students' psychological well-being within academic environments. Nursing educators should be mindful that students with lower self-esteem may rely more heavily on external validation, which may not sustain long-term engagement or academic resilience. Educational interventions should therefore aim to build students' confidence and promote intrinsic motivation through autonomy-supportive teaching methods, such as active learning, problem-based learning, and reflective practice.

The lack of significant association between both intrinsic and extrinsic motivation with academic performance suggests a potential misalignment between how motivation is expressed and how academic success is measured. Current assessment methods may not fully capture

students' engagement, effort, or depth of understanding. Educators should consider incorporating more holistic and formative assessments, including peer evaluations, reflective reports, and clinical simulations that better reflect the range of skills and motivations that contribute to professional nursing competence.

Furthermore, since neither intrinsic nor extrinsic motivation alone showed a direct link to academic performance, it is crucial to cultivate a balanced motivational climate. This includes recognizing achievement (to support extrinsic motivation) while also encouraging personal interest, curiosity, and a sense of purpose in nursing practice (to support intrinsic motivation). Programs should emphasize the relevance of coursework to real-world nursing roles, helping students connect their studies to meaningful future outcomes. Besides that, given the role of self-esteem in shaping motivation, student support services must address not only academic concerns but also emotional and psychological development. Counselling services, mentorship programs, and faculty-student relationships that affirm students' self-worth can contribute to improved motivation and coping strategies, especially during clinical placements and exam periods.

At an institutional level, the results suggest a need for integrated policies that prioritize student-centred learning, emotional support, and motivational development. Curriculum designers should consider embedding opportunities for students to experience success, autonomy, and meaningful reflection throughout their academic journey, thus supporting a positive learning environment which will eventually lead to the development of strong professional identity of these future nurses.

With regards to future research, though this study has contributed valuable insights into the relationships between academic performance, self-esteem, and motivation among nursing students, several areas remain open for further exploration. Looking into study designs, longitudinal study designs could be considered to examine how variables interact as the program

progresses. For example, longitudinal study designs can examine how self-esteem and different types of motivation evolve over time and how they interact with academic performance throughout the nursing program. A longitudinal approach would provide a clearer understanding of causal relationships and changes across academic years or as students gain more experience through their clinical placements.

Besides that, inclusion of qualitative or mixed method approaches can also be considered. To complement the quantitative findings which are more superficial, future studies could incorporate qualitative or mixed method approaches such as interviews or focus groups between different years, to further explore students' personal experiences and perceptions of motivation and self-esteem, to obtain more in-depth findings based on thematic analyses. This would allow for a richer, more nuanced understanding of how these psychological factors influence learning and professional identity development of the student nurses.

Similar studies could be replicated among different student populations, instead of just nursing, such as medical, allied health, or non-healthcare students. Comparative studies across these programs could reveal important insights or factors that affect self-esteem, motivation and academic performance. Moreover, since academic performance in nursing involves both theoretical and clinical competency, future studies should consider evaluating how motivation and self-esteem relate specifically to clinical performance, including communication skills, decision-making, critical thinking, and professional behaviour. This could help bridge the gap between academic success and clinical preparedness.

Finally, future research could involve the design and evaluation of intervention programs aimed at enhancing self-esteem and promoting intrinsic motivation. Measuring their effectiveness in improving academic outcomes or reducing dropout rates would offer practical value for nursing educators and institutions.

5.5 Limitations of the study

Despite this study providing understandings into the associations between academic performance, self-esteem, and motivation among UNIMAS undergraduate nursing students, several limitations should be acknowledged in this study. This includes the use of a cross-sectional design. This limits the ability to draw causal inferences. The relationships observed represent a snapshot in time and do not capture how self-esteem or motivation may fluctuate throughout the academic journey or influence academic performance longitudinally.

Moreover, all the data in this study were collected through self-reported questionnaires, which are subject to social desirability bias, recall bias, and subjective interpretation. Participants may have overestimated or underestimated their motivation or self-esteem due to personal beliefs, emotional state, or perceived expectations. The findings may also not be generalizable beyond the specific population studied. If the sample was drawn from a single program, institution, or geographic area, the results may not reflect the experiences of nursing students in different educational settings, countries, or cultural contexts.

Furthermore, academic performance was measured based on cumulative grade point average (CGPA). This may not fully capture the holistic nature of nursing education, which includes clinical skills, critical thinking, communication, and professionalism, all of which are key components that may be influenced by motivation and self-esteem but not reflected in grades alone. Besides that, she study did not control for other confounding factors that could influence academic performance or motivation, such as stress levels, mental health status, financial constraints, learning environment, or teaching quality. These variables may mediate or moderate the relationships being examined. Lastly, the categorization of variables into discrete groups may have also resulted in loss of variability and sensitivity, potentially obscuring subtle but meaningful associations between the variables.

5.6 Conclusions

This study set out to examine the association between academic performance, self-esteem, and different motivational factors among UNIMAS undergraduate nursing students. As future healthcare professionals, nursing students must balance academic rigor with emotional resilience and motivation to succeed in both classroom and clinical settings. Understanding how psychological factors like motivation and self-esteem influence academic success is therefore critical to supporting student development and improving educational outcomes.

The findings revealed a significant association between self-esteem and extrinsic motivation, with the association between self-esteem and performance-approach, X^2 (4, 165) = 23.397, p = .000, and the association between self-esteem and performance-avoidance, X^2 (4, 165) = 14.293, p = .006. This suggests that nursing students with higher self-esteem are more likely to be motivated by external rewards such as grades, recognition, and approval. However, the study also found no significant association between self-esteem and academic performance, nor between academic performance and either intrinsic or extrinsic motivation. These results indicate that while motivation and self-perception are important aspects of the student experience, they may not directly predict academic performance as measured by grades or CGPA or are overshadowed by other variables affecting the academic performance of these future nurses.

Several possible explanations for these findings were discussed, including the complexity of how academic performance is assessed in nursing programs, the limitations of extrinsic motivation in supporting deep learning, and the potential influence of external factors such as stress, workload, and personal responsibilities. The findings highlight the need for balanced motivational support systems, improved assessment strategies, and interventions that build students' self-worth and intrinsic engagement in learning.

Despite its contributions, this study is not without limitations. The cross-sectional design, use of self-reported data, and limited scope of academic performance measures all suggest caution in generalizing the results. Nonetheless, the study offers important implications for nursing educators and institutional policymakers, particularly in the design of learning environments that foster confidence, internal motivation, and holistic student success. Future research is encouraged to build on these findings through longitudinal designs, qualitative insights, and intervention-based studies, to deepen our understanding of how psychological and academic factors interact in the nursing education context.

In conclusion, while academic performance remains a central concern in nursing education, this study emphasizes that motivation and self-esteem are critical components of the student experience that deserve ongoing attention, not only for academic success but for the development of competent, confident, and compassionate future nurses.

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Appendices

Appendix I: Research Instrument

Instruction: Please tick (✓) the boxes provided for the answer you feel is the correct response and write your answer in the space provided

Section A: Sociodemographic Information

1. Age: _____ years old

2. Gender:
   a. Male ☐
   b. Female ☐

3. Ethnicity
   a. Malay ☐
   b. Chinese ☐
   c. Indian ☐
   d. Others: _____

4. Year of Study
   a. Year 2 ☐
   b. Year 3 ☐
   c. Year 4 ☐

5. CGPA:
   a. Less than 2.00 ☐
   b. 2.00 – 2.50
   c. 2.51 – 3.00 ☐
   d. 3.01 – 3.50 ☐
   e. Greater than 3.50 ☐

Section B: Self-Esteem

Please circle your answer in the provided boxes.

The following questions will ask regarding your level of self-esteem.

Strongly agree = 3 ; Agree = 2 ; Disagree = 1 ; Strongly disagree = 0

Item	Particulars	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.	3	2	1	0
2.	I feel that I have a number of good qualities.	3	2	1	0
3.	All in all, I am inclined to feel that I am a failure.	3	2	1	0
4.	I am able to do things as well as most other people.	3	2	1	0
5.	I feel I do not have much to be proud of.	3	2	1	0
6.	I take a positive attitude toward myself.	3	2	1	0
7.	On the whole, I am satisfied with myself.	3	2	1	0
8.	I wish I could have more respect for myself.	3	2	1	0
9.	I certainly feel useless at times.	3	2	1	0
10.	At times I think I am no good at all.	3	2	1	0

Section C: Motivational Factors

Please circle your answer in the provided boxes. The following questions will ask regarding your academic performance. Strongly agree = 5 ; Agree = 4 ; Neutral = 3; Disagree = 2 ; Strongly disagree = 1

Item	Particulars	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	My aim is to completely master the material presented in this class.	5	4	3	2	1
2.	I am striving to do well compared to other students	5	4	3	2	1
3.	My goal is to learn as much as possible	5	4	3	2	1
4.	My aim is to perform well relative to other students	5	4	3	2	1
5.	My aim is to avoid learning less than I possibly could	5	4	3	2	1
6.	My goal is to avoid performing poorly compared to others	5	4	3	2	1
7.	I am striving to understand the content of this course as thoroughly as possible	5	4	3	2	1
8.	My goal is to perform better than the other students	5	4	3	2	1
9.	My goal is to avoid learning less than it is possible to learn	5	4	3	2	1

10.	I am striving to avoid performing worse than others	5	4	3	2	1
11.	I am striving to avoid an incomplete understanding of the course material	5	4	3	2	1
12.	My aim is to avoid doing worse than other students	5	4	3	2	1

Appendix II: Ethical Approval

Aaron Kendall Lu Soon Hua,

Faculty of Medicine and Health Sciences,

Universiti Malaysia Sarawak,

94300 Kota Samarahan,

Sarawak.

The Chairman,

Medical Research Ethics Committee,

Faculty of Medicine and Health Sciences,

Universiti Malaysia Sarawak,

94300 Kota Samarahan,

Sarawak. 15th December 2024

Professor/Associate Professor/Dr/Sir/Madam,

REQUEST FOR APPROVAL TO CONDUCT RESEARCH PROJECT

I am a final-year student pursuing a Bachelor of Nursing with Honours at the Faculty of Medicine and Health Sciences, UNIMAS. I am enrolled in MDJ 4653 Final Year Project I, in which the course is coordinated by Madam Shalin Lee Wan Fei. Please find my details as follows:

Full name: Aaron Kendall Lu Soon Hua

Matrix number: 77722

IC No.: 020108-13-0711

I would like to request the kind approval from the Faculty of Medicine and Health Sciences Medical Research Ethics Committee to conduct the following study:

Research title: The Relationship between Self-Esteem, Different Motivational Factors, and Academic Performance among UNIMAS Undergraduate Nursing Students

Supervisor's name: Ms Feryante Rintika anak Belansai

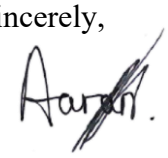
Email address: bferyante@unimas.my

Supervisor's HP number: +6019 – 889 4780

Please find the required documents as appended for your kind consideration and approval.

Thank you.

Yours sincerely,



(Aaron Kendall Lu Soon Hua)

Appendix III: Participant Information Sheet and Informed Consent

PARTICIPANT INFORMATION SHEET

1. Title of the study	**:**	**Understanding the Correlation between Self-Esteem and Academic Performance among UNIMAS Undergraduate Nursing Students**
2. Main Researcher	**:**	**Aaron Kendall Lu Soon Hua**
3. Supervisor	**:**	**Miss Feryante Rintika anak Belansai**
4. Institution	**:**	**Department of Nursing, Faculty of Medicine & Health Sciences, Universiti Malaysia Sarawak**
5. Name of sponsor	**:**	**No external funding**

1. Introduction:

It is important to understand why the study is being carried out and what it involves. Please take your time to read through and understand the information carefully before deciding to participate. Contact the study researcher if anything is unclear or if you would like clarification regarding the study. After you are satisfied that you understand the study and that you wish to participate, you must sign this informed consent form.

Your participation in this study is voluntary. You may also refuse to answer any questions you do not wish to answer. If you volunteer to be in this study, you may withdraw from it at any time. If you withdraw or refuse to participate in this study, it will not have any adverse effects on you as a student.

2. What is the purpose of the study?

The primary aim of this study is to understand the correlation between self-esteem and academic performance among UNIMAS undergraduate nursing students. By focusing on these key factors, I seek to understand how an individual's self-esteem affects their academic performance, be it positively or negatively. Additionally, I aim to explore possible interventions and support systems to boost self-esteem within the nursing students and therefore improve their academic performance.

3. Who can participate in this study?

In this study targeting UNIMAS undergraduate nursing students, the inclusion and exclusion criteria have been identified to set eligible participants. Inclusion criteria comprise of nursing students enrolled in the Bachelor of Nursing with Honours Programme at the Faculty of Medicine and Health Sciences (FMHS), Universiti Malaysia Sarawak (UNIMAS). Conversely, exclusion criteria are established to exclude individuals with potential confounding factors which might affect their self-esteem. This encompasses students with less than two (2) completed semesters in the programme and post-registration students. These criteria collectively aim to ensure the study's precision, validity, and relevance to the targeted research objectives.

4. What are my responsibilities when taking part in this study?

It is important that you respond openly and comprehensively to all inquiries posed by the researcher, a process expected to take approximately 5 - 10 minutes of your time.

5. What are the potential risks and side effects of being in this study?

Participation in this study is completely voluntary, and your decision will not have any subsequent side effects. The risk associated with this study is primarily related to time consumption, otherwise minimal risks are involved. You have the right to refuse to answer any questions that may make you feel uncomfortable, and you can withdraw from the study at any point without penalties.

6. What are the benefits for me of being in this study?

There may or may not be any direct benefits to you. However, this study may help to establish interventional support in boosting nursing students' self-esteem. By focusing on how self-esteem impacts difference perspectives of academic performance, the study aims to provide valuable insights into effective strategies for enhancing self-esteem and positively impacting academic performance. Successful interventions could lead to an increased sense of self-esteem among nursing students and therefore improve academic outcomes. However, it is important to note that feedback on study findings will not be provided at the end of the study.

7. Who is funding this study?

This study is not receiving any external funding, is fully sponsored by the main study researcher. You will not be paid for participating in this study.

8. Will my information be kept private?

Your privacy and autonomy will be highly respected throughout this research process. Your information will solely be utilised for the specified purposes of this study, collected through hardcopy questionnaires by the researcher. Subsequently, the data will be collected into a softcopy format for analysis purposes. All collected information will be handled with strict confidentiality. Your identity will remain confidential, and your consent will be sought before commencing the study.

9. Who should I call if I have questions?

If you have any questions regarding the study, please contact the main study researcher, Aaron Kendall Lu Soon Hua, at the contact number 017-867 9515 or email aaronkendall0201@gmail.com.

10. Ethical review of the study

This study has been approved by the Medical Research Ethical Committee of Universiti Malaysia Sarawak

INFORMED CONSENT FORM

Title of Study: Understanding the Correlation between Self-Esteem and Academic Performance among UNIMAS Undergraduate Nursing Students

By signing below, I confirm the following:

- I have been given written information for the above study and have read and understood the information given.
- I have had sufficient time to consider participation in the study and have had the opportunity to ask questions, and all my questions have been answered satisfactorily.
- I understand that my participation is voluntary, and I can withdraw from the study without giving a reason, and this will in no way affect my future treatment.
- I understand the risks and benefits, and I freely give my informed consent to participate under the conditions stated.
- All personal details will be treated as STRICTLY CONFIDENTIAL.
- While information gained in this study may be used in presentations, I will not be identified, and information concerning me will remain strictly confidential.

Subject Information

Signature: **I/C number:**

_____ _____

Name: **Date:**

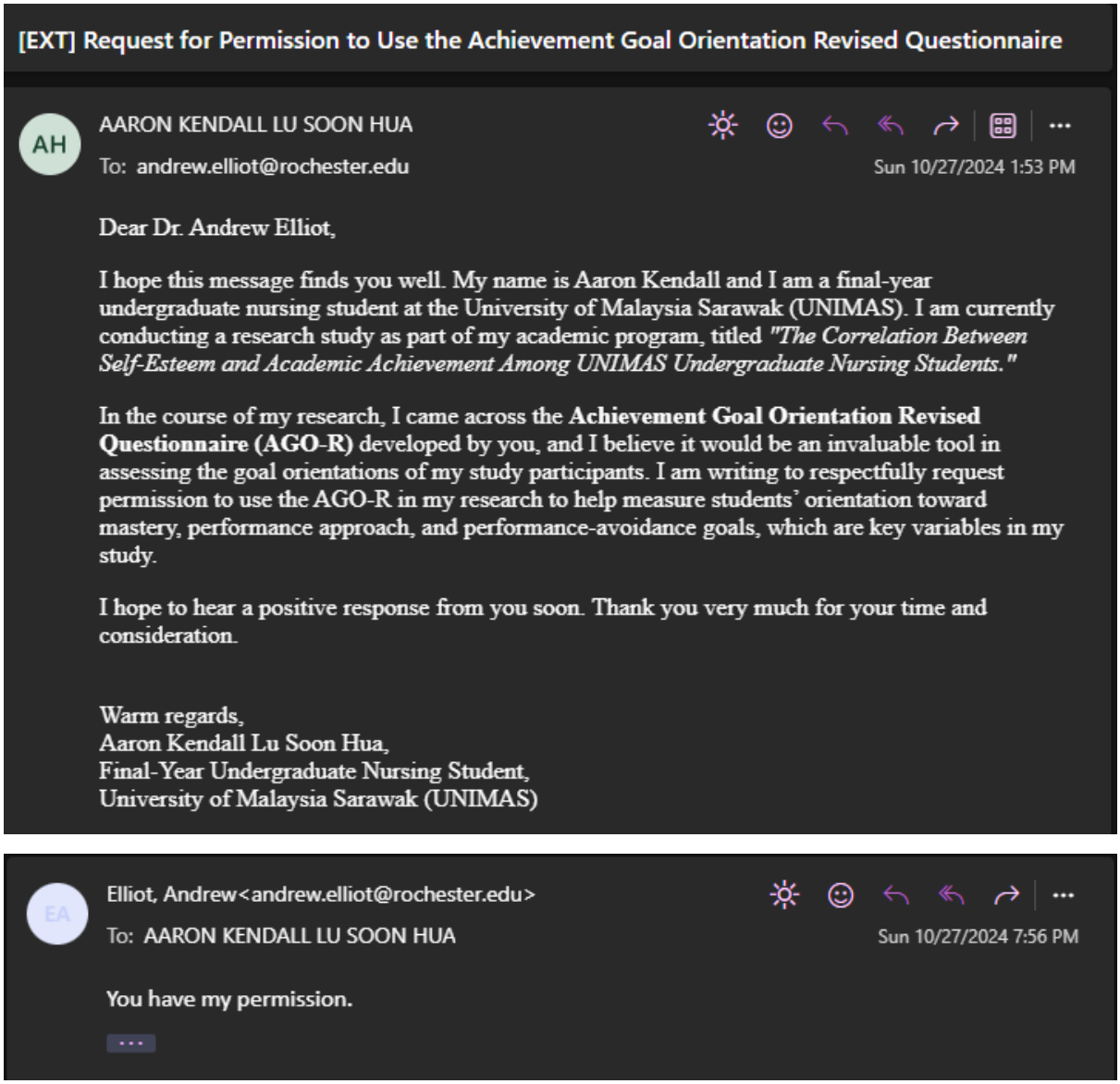
_____ _____

Investigator Conducting Informed Consent

Signature: **I/C number:**

Name:	**Date:**
Aaron Kendall Lu Soon Hua	**xx/xx/202x**

Appendix IV: Permission to use questionnaire



[EXT] Request for Permission to Use the Achievement Goal Orientation Revised Questionnaire

AH

AARON KENDALL LU SOON HUA

To: andrew.elliot@rochester.edu

Sun 10/27/2024 1:53 PM

Dear Dr. Andrew Elliot,

I hope this message finds you well. My name is Aaron Kendall and I am a final-year undergraduate nursing student at the University of Malaysia Sarawak (UNIMAS). I am currently conducting a research study as part of my academic program, titled *"The Correlation Between Self-Esteem and Academic Achievement Among UNIMAS Undergraduate Nursing Students."*

In the course of my research, I came across the **Achievement Goal Orientation Revised Questionnaire (AGO-R)** developed by you, and I believe it would be an invaluable tool in assessing the goal orientations of my study participants. I am writing to respectfully request permission to use the AGO-R in my research to help measure students' orientation toward mastery, performance approach, and performance-avoidance goals, which are key variables in my study.

I hope to hear a positive response from you soon. Thank you very much for your time and consideration.

Warm regards,
Aaron Kendall Lu Soon Hua,
Final-Year Undergraduate Nursing Student,
University of Malaysia Sarawak (UNIMAS)

EA

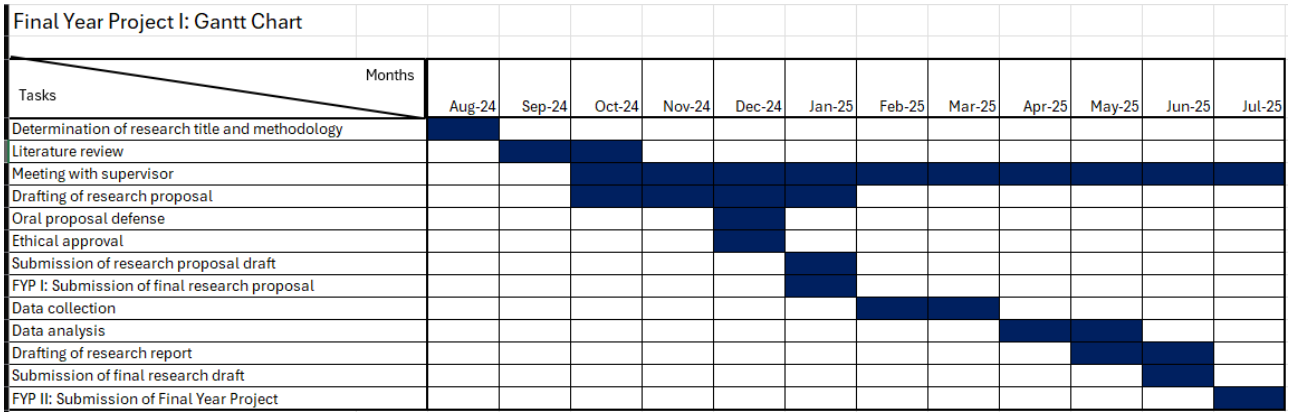
Elliot, Andrew<andrew.elliot@rochester.edu>

To: AARON KENDALL LU SOON HUA

Sun 10/27/2024 7:56 PM

You have my permission.

Appendix V: Gantt Chart



Appendix VI: Proposed Budget

No.	Item	Quantity	Price per unit (RM)	Total (RM)
1.	Printing and binding of written report	2	40	80
2.	Printing of questionnaire	155	0.50	77.50
3.	SPSS Software	1	5	5
4.	Miscellaneous	30	30	30
			Grand Total (RM)	**192.50**

Appendix VII: Turnitin Similarity Index Report

Final Checking

ORIGINALITY REPORT

9%	7%	6%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Roy F. Baumeister, Jennifer D. Campbell, Joachim I. Krueger, Kathleen D. Vohs. "Does High Self-Esteem Cause Better Performance, Interpersonal Success, Happiness, or Healthier Lifestyles?", Psychological Science in the Public Interest, 2016 Publication	1%
2	Submitted to Universiti Malaysia Sarawak Student Paper	<1%
3	Submitted to mu Student Paper	<1%
4	ir.unimas.my Internet Source	<1%
5	www.researchgate.net Internet Source	<1%
6	ejournal2.undip.ac.id Internet Source	<1%
7	Brown, Khadijah S.. "Self-Efficacy Focused Summer Bridge Programs: A Mixed-Method Study Assessing the Impact of Self-Efficacy Programming on Success Perceptions of Students Transitioning to College.", Regent University Publication	<1%

8	www.frontiersin.org Internet Source	<1%
9	bmcinfectdis.biomedcentral.com Internet Source	<1%
10	Smith, Dalithia C.. "Equity as Strategy: Leveraging Dei, Trust, and Leadership to Advance Organizational Outcomes.", Case Western Reserve University Publication	<1%
11	Submitted to University of Strathclyde Student Paper	<1%
12	ris.utwente.nl Internet Source	<1%
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14	bcphr.org Internet Source	<1%
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16	Kirksey-Tarver, Velma. "An Analysis of the Institute for Global Outreach [IGO] Student Empowerment Initiatives—The Case of Academic Performance of Destitute Undergraduate Students in Ethiopia: Policy Implications", Southern University and Agricultural and Mechanical College, 2024 Publication	<1%
17	ieepj.hormozgan.ac.ir Internet Source	<1%
18	www.science.gov Internet Source	<1%
19	Keon Woo, Junghoon Lee, Chae-Eun Jung, Jungwon Park, Yoonsoo Choy. "The Association Between Obstructive Sleep Apnea and Oral Function, Using the Korea National Health and Nutrition Examination Survey Data", Healthcare, 2025 Publication	<1%
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22	Precious Chisom CHILAKA, Udunma Olive CHIJIOKE, Chigozie Okwudili OBASEKI, Echezona Nelson Dominic EKECHUKWU. "Prevalence, Patterns and Predictors of Mental Health Challenges Among Clinical Students – A Mixed Methods Study", Springer Science and Business Media LLC, 2025 Publication	<1%
23	cancer.jmir.org Internet Source	<1%
24	Minnella, Janice M. "Achievement goals, self-efficacy, metacognition, and learning strategies as predictors of asynchronous	<1%

	learners' academic success", Proquest, 20111108 Publication	
25	Richard Nyankomako Codjoe, Linda Ama Owusuaa Amoah, Solomon Kofi Amoah. "School environmental factors, pupils' characteristics, and academic performance: The case of junior high school pupils of the Krachi West District of Ghana.", Heliyon, 2024 Publication	<1 %
26	Submitted to Taylor's Education Group Student Paper	<1 %
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32	Meier, Angelika M., Marion Reindl, Robert Grassinger, Valérie-D. Berner, and Markus Dresel. "Development of achievement goals across the transition out of secondary school", International Journal of Educational Research, 2013. Publication	<1 %
33	Muhammad Ikhwan Mud Shukri, Anisah Baharom, Ahmad Iqmer Nashriq Mohd Nazan. "Self-esteem and stress: a structural equation modelling of biosocial determinants, psychological mediators and anxiety among Malaysian undergraduates", PeerJ, 2025 Publication	<1 %
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66	Hannele Polku, Tuija M. Mikkola, Erja Portegijs, Merja Rantakokko, Katja Kokko, Markku Kauppinen, Taina Rantanen, Anne Viljanen. "Life-space mobility and dimensions of depressive symptoms among community-dwelling older adults", Aging & Mental Health, 2014 Publication	<1%
67	Jaiteg Singh, S B Goyal, Rajesh Kumar Kaushal, Naveen Kumar, Sukhjit Singh Sehra. "Applied Data Science and Smart Systems - Proceedings of 2nd International Conference on Applied Data Science and Smart Systems 2023 (ADSSS 2023) 15-16 Dec, 2023, Rajpura, India", CRC Press, 2024 Publication	<1%
68	Jennifer DaCosta. "chapter 5 Marginalization of Black Males in Science, Technology, Engineering, and Mathematics", IGI Global, 2025 Publication	<1%
69	Lalit Prasad, Anatoliy Goncharuk, Teddy Fauzi, Hanna Doroshuk, Sri Sundari. "Sustainable Smart Technology Businesses in Global Economies - Proceedings of International Conference on Sustainable Smartech Businesses and SMEs across Global Economies", Routledge, 2025 Publication	<1%
70	Ma. Carmen Martín-Cocinas Fernández, Magdalena Gómez-Díaz, Rosario Gómez-Sánchez, Ma. Carmen Conesa-Fuentes et al. "Effects of an Emotional Education Program on Prisoners: An Experimental Study", Journal of Forensic Nursing, 2022 Publication	<1%
71	Mohamed Ali Nemt-allah, Ahmed Fikry Bahnasawy, Waleed El-Sayed. "Psychometric Evaluation of the Academic Intrinsic Motivation Scale in Elementary Education", Springer Science and Business Media LLC, 2025 Publication	<1%
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89	Huy Phuong Phan. "Students' academic performance and various cognitive processes of learning: an integrative framework and empirical analysis", Educational Psychology, 2010 Publication	<1%
90	Ji Young Lim, Kyu Yon Lim. "Co-regulation in collaborative learning: Grounded in achievement goal theory", International Journal of Educational Research, 2020 Publication	<1%