

**BIG FIVE PERSONALITY TRAITS AND ACADEMIC GOAL ORIENTATIONS
AS PREDICTORS OF ACADEMIC SELF-HANDICAPPING AMONG
UNDERGRADUATE STUDENTS OF KENYATTA UNIVERSITY, KENYA**

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**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF
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DECLARATION

I confirm that this thesis is my original work and has not been presented in any other university or institution for certification. This thesis has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance and in line with anti-plagiarism regulations.

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DEDICATION

I dedicate this thesis to my wife Julia, and my two lovely daughters Faith and Grace.

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ABBREVIATIONS AND ACRONYMS

A	Agreeableness
AGO	Achievement Goal Orientation
AGQ	Achievements Goal Questionnaire
ANOVA	Analysis of Variance
ASH	Academic Self Handicapping
BFI	Big Five Inventory
BFPT	Big Five Personality Trait
C	Conscientiousness
E	Extraversion
GPA	Grade Point Average
KU	Kenyatta University
KUCCPS	Kenya Universities and Colleges Central Placement Services
KUERB	Kenyatta University Ethics Review Board
MANCOVA	Multivariate Analysis of Variance
MAP	Mastery Approach
MAV	Mastery Avoidance
N	Neuroticism
NACOSTI	National Commission of Science, Technology, and Innovation
O	Openness to experience
PAP	Performance Approach
PAV	Performance Avoidance
RSES	Rosenberg Self-Esteem Scale
SE	Self Esteem
SHS	Self-Handicapping Scale
SPSS	Statistical Package for Social Sciences

ABSTRACT

In Kenyatta University, a significant number of undergraduate students are discontinued from their studies every year for failing to meet academic requirements. This may reverse the gains made by the university in its role in human and social capital development. Failure to meet academic requirements among university students is a form of self-handicapping which has not extensively been researched on in Kenya and this may limit the support given to students. This study, therefore, examined how the Big Five personality traits and achievement goal orientations predict academic self-handicapping among university students. The study was anchored on self-worth and Big Five personality theories. A convergent parallel mixed method research design was used. The study targeted all third year undergraduate students in the 2019/2020 academic year. Purposive, stratified, and simple random sampling techniques were used. The study involved 391 undergraduate students. Questionnaires and an interview schedule were used for data collection. A pilot study involving 30 students established the reliability and validity of the research instruments. Data were analyzed using SPSS (v.24). The results revealed significant positive correlations between three of the Big Five personality traits and academic handicapping: Neuroticism ($r = .41, p < .05$), openness to experience ($r = .33, p < .05$) and conscientiousness ($r = .20, p < .05$). Agreeableness had a significant negative correlation with academic self-handicapping ($r = -.11, p < .05$). Only extraversion had a non-significant correlation with academic self-handicapping ($r = .05, p > .05$). In addition, only two out of the four academic goal orientations had significant correlations with academic handicapping: mastery approach ($r = -.13, p < .05$), and performance avoidance ($r = .15, p < .05$). Non-significant correlations were reported for mastery avoidance ($r = .09, p > .05$) and performance approach ($r = .04, p > .05$). A stepwise regression revealed that the Big Five personality traits and achievement goal orientation accounted for 27% of variation in undergraduate students' academic self-handicapping. When self-esteem was added in the model, it significantly accounted for a 4 % change in the variation of students' academic self-handicapping ($\Delta R^2 = .04, \Delta F (9, 306) = 1.92, p = .04$). The prediction model was statistically significant ($F (19, 306) = 7.12, p < .05, \text{Adjusted } R^2 = .26$). Thus efforts to understand how the Big Five personality traits and achievement goal orientation predict academic self-handicapping should pay attention to self-esteem as a moderator. The study recommends that interventions aimed at guiding undergraduate students to reduce neuroticism, openness to experience and performance avoidance orientation may be beneficial in efforts to reduce academic self-handicapping tendencies. Educational practices that foster mastery goals and enhance students' self-esteem may help in reducing self-handicapping among university students.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This chapter provides the study's background, problem statement, purpose, and objectives. The research questions, the significance of the study, the limitations and delimitations and the assumptions are all presented. It ends by presenting the theoretical and conceptual framework, as well as the operational definitions.

1.2 Background to the Study

Tertiary education is a global indicator of achievement at both individual and society levels. In fact, gaining admission to the university is treasured by many students since it opens diverse opportunities for employment and further education. However, the university learning environment is very evaluative and competitive relative to the other levels of education. Despite the apparent freedom, minimal adult supervision, and constant peer influence, the typical academic life at the university is characterized by many examinations to be done, term papers to be written and assignments to be completed within strict deadlines. This bittersweet experience may push students to constantly ruminate on the possibility of failure (McMahon, 2004; Zahid, 2013).

University students are also under constant pressure from their significant others to perform well in their academics. Such pressures condition the students to associate their academic grades with their abilities. When students consider grades as a reflection of their ability, they tend to use different strategies to protect their self-esteem especially in situations that

threaten them with failure (Covington, 1997 as cited by Wawire, 2010; Schwinger & Stiensmeier-Pelster, 2011).

One strategy that students might use is academic self-handicapping. In this strategy, a student complicates personal success through self-imposed obstacles in important performance situations. The strategy works by allowing students to get an excuse for either failure or success. For example, when students fail, they blame external factors (De Castella, et al., 2013; Midgley & Urdan, 2001; Schwinger, et al., 2014). In contrast, when students succeed, they take credit as having overcome challenges and negative conditions (Kalyon, et al., 2015). This is a win-win situation making the strategy quite appealing to many students who end up using it from primary to tertiary institutions (Cheng & Wang, 2018; Ommundsen, 2004).

At the university, students mainly self-handicap through procrastination, missing lectures, substance abuse, withdrawal of efforts, and having unrealistic goals (Schwinger et al. 2021). These handicaps have the short-term effect of sustaining a student's motivation and positive feelings whenever faced with imminent failure. They also protect one's self-esteem and enhances one's positive view by others by masking the connection between one's ability and performance (Török & Szabó, 2018). However, there is sufficient evidence that academic self-handicapping almost always harms students' academic achievement and psychological well-being (Abaci & Akin, 2011).

According to Zuckerman and Tsai (2005), there are three reasons why the consequences of academic self-handicapping tendencies are negative: First, some behaviors might be debilitating in themselves. Second, the self-handicaps may impede performance hence

limiting academic success (Garcia et al., 1995) which might have a variety of negative effects on psychological wellbeing. In fact, anxiety, depression, low self-esteem, and drug abuse have all been associated to self-handicapping (Kearns, et al., 2007). Third, persistent self-handicapping might lead to self-deception.

Studies on self-handicapping consider it both as a trait and as a state (Török & Szabó, 2018). The trait approach focuses on the student characteristics that lead to self-handicapping. Based on the critical roles of students' personal characteristics in understanding how they pursue different goals and react to failure, some studies have reported that self-handicapping increases with neuroticism and is reduced by conscientiousness (Bobo et al. 2013; Litvinova et al., 2015). The BFPTs have actually been linked to self-handicapping in diverse areas such as studying, sports, and work (Schwinger, 2013). Thus, in this study the BFPTs were expected to account for differences in students' academic self-handicapping.

Studies on self-handicapping as a state mainly focus on how contextual or situational factors enhance its likelihood. This approach suggests that self-handicapping increases when the learning environment is characterized by uncertainty and difficult tasks (Schwinger, 2013). Notably, the type of goals emphasized by the social environment may also enhance self-handicapping. For example, evidence from goal orientation theory show that self-handicapping varies with the type of goals that students pursue. When students focus on mastering content, academic self-handicapping decreases, but when they focus on outshining their peers, it increases (Chen et al., 2018; Ferradás et al., 2018; Standage et al., 2007). Even in the refined goal theory (Elliot & McGregor, 2001) self-handicapping

increases when students adopt goals that focus on not appearing as not knowing (Chen et al., 2009). This led to the expectation that student's achievement goal orientation would predict academic self-handicapping in this study.

Chronic academic self-handicapping has also been accounted for by self-related beliefs like: self-esteem, implicit theories of intelligence, self-control, typical attribution style (Uysal & Knee, 2012). Studies on these factors reveal that low self-esteem, having characteristics such as being highly sensitive to failure feedback, having a poor success orientation, and having a strong fear of failing predict students' self-handicapping (De Castella, et al., 2013; Török & Szabó, 2018).

Since protecting self-esteem is the objective of academic self-handicapping, it is expected that students' levels of self-esteem are linked to their self-handicapping. In fact, there is compelling evidence that self-esteem moderates on the relationships between personality traits, self-handicapping, and goal orientations (Pulford, et al. 2005; Reis & Peixoto, 2013, Schwinger et al. 2021). According to Reis and Peixoto (2013), some personality traits lower students' self-esteem thus increasing self-handicapping tendencies. Further, research evidence from South Africa (Alesi & Pepi, 2012); Nigeria (Litvinova, et al., 2015) and Kenya (Wawire, 2010) show that students' self-esteem varies with the type of goals they pursue and this is linked to differences in their academic self-handicapping. In this study, self-esteem was envisaged to moderate the links among, personality traits, self-handicapping and achievement goal orientations.

Based on the foregoing, it is possible to argue that self-related beliefs, achievement goals, and personality traits are correlates of academic self-handicapping. However, existing studies have studied these variables separately with scarce evidence of how they predict academic self-handicapping jointly. In addition, few studies have focused on the concept of academic self-handicapping among students in Kenyan universities.

This study proposed that Kenyan University students were likely to participate in academic self-handicapping due to the challenging nature of both admission criteria and the highly evaluative academic environment (Torok & Szabo, 2018). Since academic self-handicapping had been reported among high school students in Kenya (Wawire, 2010), it was likely that they transitioned into the university with the self-protective strategy. In addition, some forms of behavioral self-handicapping had been reported among university students in Kenya. For example, in the 2015/2016 academic year, 162 students were suspended and 868 were dropped, according to data from Kenyatta University's test administration unit. 174 students were suspended and 433 were dropped during the 2016/2017 academic year, 97 students were suspended and during the 2017-2018 academic year, 1045 students were dropped. The reasons for these suspensions and discontinuations were failure to meet academic expectations and/or engaging in examination malpractices (KU Exams Office, 2020). These reasons are forms of behavioral self-handicapping (Török & Szabó, 2018). However, there is paucity of studies on predictors of handicapping among university students in Kenya.

From the foregoing, it was conceptualized that university students' personality traits and achievement goals were likely to explain differences in their academic self-handicapping.

It was also anticipated that their levels of self-esteem would account for further differences in academic self-handicapping. Thus, this study sought to find out if the Big Five personality traits and goal orientations of Kenyatta University students predicted their academic self-handicapping.

1.3 Statement of the Problem

In a span of three academic years (2015/2016 – 2017/2018), around 433 undergraduate students were suspended and about 2,346 were discontinued from their studies in Kenyatta University. This is worrying and if left unaddressed, these numbers are likely to keep rising and this will reverse the gains made by the university in capacity development. As a consequence, lower production of skilled manpower may undermine the attainment of Kenya's Vision 2030 and the sustainable development goals.

This issue may be exacerbated by the competitive university learning environment, which encourages some students to use academic self-handicapping tactics in order to safeguard personal self-worth when they fail exams. Self-handicapping excuses failure and this may limit a student's ability to develop wholly or learn adequate skills in other areas that are critical to their success in life. Academic self-handicapping may also affect the mental health of the students since it may result to more academic failure leading to negative emotions and even difficulties adjusting to the university environment. Eventually, some students may end up depressed or eventually drop out of the university.

Several studies on the predictors of academic self-handicapping have been conducted (Jones & Berglas, 1978; Urdan, 2004; Wawire, 2010; Yavuzer, 2015). The Big Five

personality traits and goal orientations have been investigated separately, although they have been found to predict academic self-handicapping.

It largely remains unclear how the two interlink and/or differ in predicting academic self-handicapping. In addition, most of the previous studies used experimental design with small samples limiting the generalization of their findings. In Kenya, secondary school students have been the focus of much of the research on academic self-handicapping. It was, therefore, necessary to examine handicapping at the university academic environment which, in addition to being competitive, has lesser parental/teacher control and is more demanding (McMahon, 2004). Using a convergent parallel mixed method design and a reasonably large sample, this study investigated academic goal orientations and the Big Five personality traits as predictors of academic self-handicapping among Kenyatta University undergraduate students.

1.4 Purpose of the Study

The objective of this study was to establish if academic goal orientations, and the Big Five personality traits, may predict academic self-handicapping in Kenyatta University undergraduate students.

1.5 Objectives of the Study

This research focused on four objectives:

- i. To investigate the relationship between the Big Five personality traits and academic self-handicapping among undergraduate students.
- ii. To establish the relationship between academic goal orientations and academic self-handicapping among undergraduate students.

- iii. To examine the moderating effect of self-esteem on the relationship between the Big Five personality traits, academic goal orientations, and academic self-handicapping.
- iv. To establish the prediction equation for academic self-handicapping from the Big Five personality traits and academic goal orientations.

1.6 Research Hypotheses

Four hypotheses were advanced:

- i. There is a significant relationship between the Big Five personality traits and academic self-handicapping among undergraduate university students.
- ii. There is a significant relationship between academic goal orientations and academic self-handicapping among undergraduate students.
- iii. There is a significant moderating effect of self-esteem on the relationship between the Big Five personality traits, academic goal orientations, and academic self-handicapping.
- iv. There is a significant prediction equation for academic self-handicapping from the Big Five personality traits and academic goal orientations.

1.7 Significance of the Study

The study may inform universities to foster an academic setting that reduce academic self-handicapping by nurturing competence and alleviating concerns about academic failure. The findings may also inform academic self-handicapping prevention interventions that aim at increasing students' self-esteem and adoption of mastery approach goals. In addition, the outcomes of this study may contribute to the body of information on academic self-handicapping factors, particularly when academic goal orientations and personality

traits are investigated together. The findings may inform theories that explain the two variables together. In addition, the study may inform future studies that wish to test the effectiveness of academic self-handicapping prevention interventions targeting achievement goals, personality traits, and self-esteem.

1.8 Limitations and Delimitations of the Study

1.8.1 Limitations of Study

Caution is advised when applying the findings of the study to other universities that use different evaluation criteria from the one at Kenyatta University. This is because students respond differently to different modes of assessment and grading. The self-report responses to questionnaires might have been subjective. However, to limit the degree of subjectivity, the researcher consistently instructed the respondents how to fill out the questionnaires. The correlational analysis used only highlighted the research variables' relationships without revealing the causes of academic self-handicapping.

1.8.2 Delimitations of the Study

The research was limited to Kenyatta University undergraduate students. The sample only included third year undergraduate students. Postgraduate students were not involved. The researcher utilized a convergent parallel mixed methods design and solely used interview guidelines to supplement the data already collected in the questionnaire. The primary predictors of academic self-handicapping were goal orientations and personality traits with self-esteem acting as a moderating variable. Other potential academic self-handicapping predictors were excluded.

1.9 Assumptions of the Study

The students were assumed to have been truthful in their self-reported data. Academic self-handicapping was also thought to be linked to students' academic goal orientations and personality factors. Finally, the study assumed that the students used academic self-handicapping strategies to maintain their self-worth.

1.10 Theoretical and Conceptual Framework

1.10.1 Theoretical Framework

1.10.1.1. Self-worth Theory of Achievement Motivation (Covington, 1984; 2004).

This theory views self-worth as one's value to others. The theory suggests that students interpret school grades as indicators of ability in their areas of study, which in turn shows their worth to others. Covington argues that when students fail to achieve their goals in some subjects and they try to protect their self-esteem through ego-protective strategies like self-handicapping.

Covington asserted that self-handicapping works by delinking academic performance from one's abilities. As a result, the theory views a threat to a person's self-esteem as a vital trigger for self-handicapping. The theory argues that a student with low self-esteem has low expectations for success which in turn makes them more sensitive to any risk of failure setting in motion self-handicapping tendencies. This way, the theory links self-handicapping to students' goals, achievement expectations, self-esteem and personality (Covington, 2004; Schwinger et al. 2021).

When Vallacher and Wegner (1987) asserted that our goals guide how we interpret and respond to specific situations as manifested by our various levels of action, they may not have anticipated the impact it would have in research on the relationship between students' goals for success and their self-handicapping. The assumption that students' achievement goals relate to how they experience threats to self-esteem in school situations is informed by the achievement goal orientation theory (Elliot & McGregor, 2001). This theory extends Covington's theory by defining achievement goals as the motivations behind students' achievement-related actions. The theory classifies goals into four: performance-avoidance goals (the need to conceal incompetence), performance-approach goals (the need to appear competent), mastery avoidance (the desire to avoid misunderstanding or reduction of ability), and mastery-approach goals (the desire to learn or develop competence).

Evidence shows that self-handicapping is a typical among students who are performance-avoidance oriented since they focus on avoiding appearing as incompetent or dumb than their classmates (Midgley & Urdan, 2001; Schwinger & Stiensmeier-Pelster, 2012). In contrast students with performance approach orientation are more focused on appearing more competent or smarter than their classmates. Whereas some researchers argued that self-handicapping increased with performance-approach goals (Cheng & Lam, 2013; Rhodewalt, 1994), others observed that it decreases (Ommundsen, 2004), and still others found no relations at all (Midgley & Urdan, 2001; Shih, 2005). Students with mastery-approach goals focus on attaining competence and this is constantly associated with low self-handicapping while mastery-avoidance-oriented ones want to hide incompetence and this is always associated with high self-handicapping (Elliot & Church, 2003; Schwinger & Stiensmeier-Pelster, 2011).

In this study, this theory addressed the interrelationships among self-worth, academic goal orientations and academic self-handicapping. To defend their self-worth, students resort to self-handicapping. Goal orientations determine whether the students concentrate on their tasks to understand them better or engage in the same tasks for the purposes of demonstrating their abilities. This determines whether students engage in self-handicapping or not. The mediating variable of self-esteem is the basis on which people's self is built. Personality of the students defines who they view themselves to be and therefore have a direct bearing on their self-esteem. It was therefore necessary to include a second theory that specifically addressed the links between personality and self-handicapping.

1.10.1.2. The Big Five Personality Theory (Goldberg, 1993).

This theory defines personality by five major qualities: agreeableness, experience, openness to conscientiousness, extraversion and neuroticism. Each of the five dimensions describes specific personality characteristics of an individual. Research has confirmed that in nearly all measurements of personality, the five dimensions are relatively stable.

People high on agreeableness are optimistic and view challenges as an opportunity for improvement (Goldberg, 1993). They have the tendency of caring, being sympathetic, helping others and expect the same in return. Individuals with extraversion personality type are social and have positive emotions. They are talkative, assertive, and optimistic. They are resilient and persist on problem solving until they get a solution. Neuroticism personality is characterized by nervousness, fear, tension, and anger. Individuals with this type of personality more often have emotional maladjustment. However, those with low

levels of neuroticism are emotionally stable. People with conscientiousness personality type are determined to succeed, have self-discipline and their effort on a task is mostly determined by external factors. They are goal oriented, organized, obey rules and set priorities. Such individuals tend to be successful in whatever they do. People with openness type of personality are imaginative, creative and innovative. They think critically, are sensitive, curious to learn and appreciate new ideas. They perform well in tasks that required deductive reasoning.

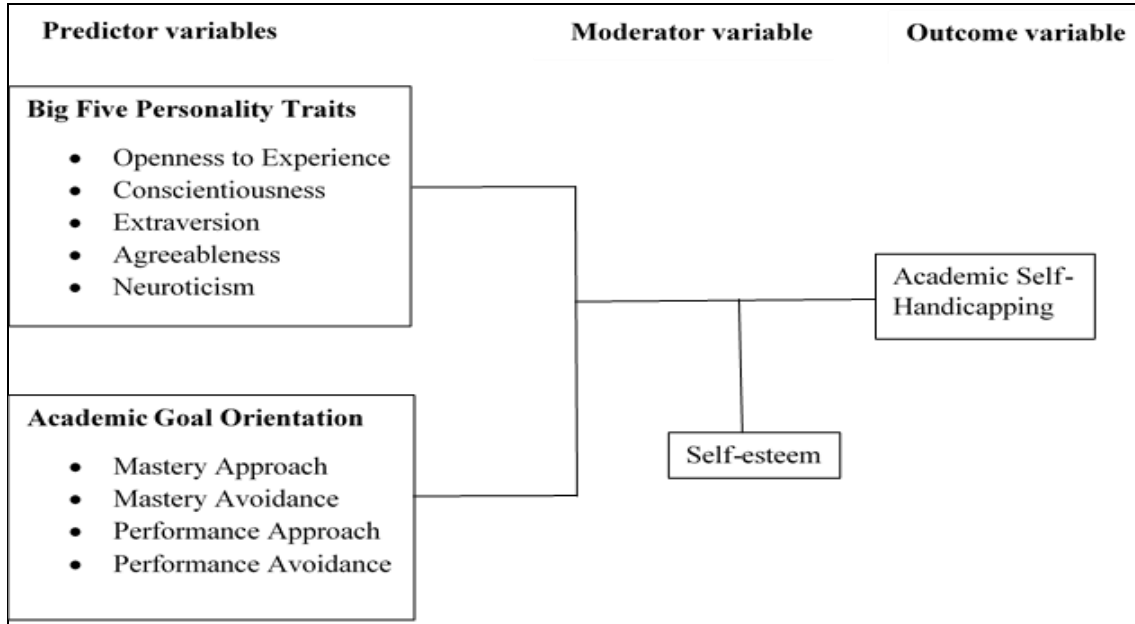
Recent studies have identified some dimensions of the Big Five personality theory as most relevant to a range of educational outcomes (Bergold & Steinmayr, 2018; Brandt et al., 2020). Furthermore, the model has been linked to behaviors relevant in problem solving and achievement such as imagination, creativity, fantasy, optimism, and talent (Goldberg, 1993). Sometimes success comes after a series of setbacks that students have to endure. Therefore, in the face of failure, the personality traits of a student determine the strategies used either to succeed or succumb to self-handicapping.

In this study, this theory was used to explain how the Big Five personality traits are conceptualized and how they relate to university students' academic self-handicapping. Each of the undergraduate students has unique personality and sometimes academic challenges such as underachievement and pressure to meet deadlines are inevitable. According to this theory, the Big Five personality traits and academic self-handicapping are linked. Therefore, it formed a hypothetical basis to answer the research questions.

1.10.2 Conceptual Framework.

This section explains how the relationships among the study variables are conceptualized.

Figure 1.1: *Conceptual Framework*



As presented in Figure 1.1, the Big Five personality traits and academic goal orientation were used as predictor variables in this study. The Big Five personality traits are: openness to new experience, neuroticism, conscientiousness, extraversion and agreeableness. Academic goal orientation consists of two domains; task-goal orientation and ego-goal orientation each with approach and avoidance levels. The moderator variable was self-esteem. The outcome variable was academic self-handicapping. It was hypothesized that conscientiousness, neuroticism, agreeableness, openness to new experience extraversion, and are related to academic self-handicapping. Another hypothesis of the model was that task-goal orientation and ego-goal orientation predict academic self-handicapping. It was also hypothesized that the relationship between academic goal orientations, the Big Five personality traits and academic self-handicapping is moderated by students' self-esteem.

1.11 Operational Definition of Terms

Academic Self-handicapping	A student's score on the self-handicapping scale concerning how they protect their self-worth when they don't perform well in academics.
Agreeableness	It was the score of the student on the Big Five Inventory (BFI) on how often they sought help from others when faced with a challenge in the completion of academic assignments.
Conscientiousness	It was the score of the student on the BFI concerning how thorough and organized the student is in performing tasks.
Extraversion	It was the score of the student on the BFI on student performance of tasks using help from other people rather than working on the tasks on his own.
Mastery Approach Goal Orientation	It refers to the score of the student on the Achievement Goal Questionnaire (AGQ) on how students perform a task for the sake of understanding the task and making use of the knowledge gained.
Mastery Avoidance Goal Orientation	It was a student's AGQ score on how they perform academic work in order to avoid learning less.

Neuroticism	It was the score of the student on the BFI regarding the tension and worry the student experiences when encountered by a challenge in the performance of a task.
Openness to Experience	It is the score of the student on the BFI concerning the use of new and different approaches in the performance of a task.
Performance Approach Goal Orientation	It was the score of the student on the Achievement Goal Questionnaire (AGQ) on how students perform academic tasks trying to outperform others.
Performance Avoidance Goal Orientation	It was the student's score on the Achievement Goal Questionnaire (AGQ), which assessed how pupils accomplish academic activities in order to avoid looking inept to the others.
Self-esteem	It is the score of the student on the Rosenberg Self-esteem Scale (RES) regarding the confidence the student has in his /her academic abilities.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter identified the related literature that was reviewed according to the study's objectives. The literature review is organized as follows; association of the Big Five personality traits and academic self-handicapping, academic goal orientations and academic self-handicapping, self-esteem and academic self-handicapping. A summary and gap analysis are included at the end.

2.2 Relationship between the Big Five Personality Traits and Academic Self-Handicapping

The Big Five traits in personality which consist of extroversion, neuroticism, openness to experience, conscientiousness, and agreeableness have previously been associated with a variety of behaviors (Benet-Martinez & Ozer, 2005). Additionally, this is the most used model for studying how students' personal characteristics explain differences in their learning behaviors and academic achievement (Adil et al. 2020). Evidence from college and university students' shows that increases in openness to experience, extraversion, and agreeableness go with increases in academic achievement (Zandieh, & Jafariharandi, 2020)

Theorists argue that academic self-handicapping is both anticipatory and intentional. When a self-handicapper suspects failure, they will always use the strategy beforehand to get an excuse for eventual failure. In addition, self-handicappers use the strategy to project a good image of themselves and shield their self-esteem (Urdan & Migley, 2001). A student who

uses excuses diverts any blame and is likely to make it difficult to accept their facing personal weaknesses in a healthy way making it very hard to adapt healthy academic identities. A healthy student identity is important since there is evidence that academic identity is linked to academic achievement (Irerri, 2015; Ireri et al. 2015). In fact, among Kenyan students, academic identities characterized by lack of personal agency in academic values have been linked to low academic achievement. Considering that academic identity is an aspect of students' personality, it was envisaged self-handicappers would possess certain personality traits more hence the expectation that the strategy is linked to the Big Five traits.

In fact, several studies have looked into the relationship between the Big Five personality qualities and academic self-handicapping. In Ukraine, Nosenko et al. (2016) predicted self-handicapping using the Big Five personality traits among 120 undergraduate students aged 18 to 25. The study established self-handicapping increases with neuroticism and decreases with conscientiousness and extraversion. Although these findings are quite insightful, they are based on a general view of self-handicapping which may not inform context-specific interventions focusing on the variable. The current study focused on academic self-handicapping in order.

Another study by Cheng and Law (2015) among 62 Chinese university students provided evidence that personality traits have the potential to shape student's academic self-handicapping tendencies. In that study self-handicapping related positively with neuroticism and inversely with transparency, conscientiousness, and agreeableness. Despite its promising results, the study only involved a relatively small sample size and

collected personality data using a 100-item questionnaire which is rather long. Considering the demerits of a small sample and the fear that too many items may affect reliability by causing respondent fatigue (Ambler et al. 2021; Sahlqvist, et al. 2011), the current study used a comparatively larger sample and a shorter questionnaire.

Evidence from college students in Turkey (Kalyon et al. 2015) further indicates that personality traits explain almost a third of the variation in self-handicapping. Kalyon et al (2015) further established that self-handicapping levels were higher among students with a narcissistic personality and a sense of entitlement. In fact, personality traits were reported as significant predictors of self-handicapping. Granted the contextual character of self-handicapping (Schwinger et al. 2021), a question that lingered was whether personality was an antecedent of self-handicapping in contexts like Kenya that are largely underrepresented in such research.

Burbidge, et al. (2018) proposed on how academic identity mediates the association between the Big Five factors of personality and college GPA. Their findings suggest that all the five traits significantly correlate with academic achievement with conscientiousness being the strongest. Since academic self-handicapping is linked to low academic achievement, and low achievement is linked to low self-esteem, it was suspected that the personality traits linked with low academic achievement may increase academic self-handicapping moderated by self-esteem.

Some researchers like Kinon and Murray (2017) have studied several psychological factors, together with personality traits, either as antecedents or moderators of self-handicapping. Among students at the University of California, Berkeley, Kinon and

Murray (2017) found that self-handicapping has an inverse relationship with the BFI's subscales of conscientiousness, agreeableness, and openness to new experiences. However, self-handicapping had a positive correlation with neuroticism. In addition, the college handicappers seemed to have their self-handicapping triggered by maladaptive self-beliefs like low self-efficacy and self-esteem. The handicappers also had life satisfaction. The link between self-handicapping, personality and college GPA was further confirmed by Burbidge et al. (2018). Evidence from undergraduate students in Nigeria (Litvinova et al. 2015) further suggest that self-handicapping decreases with the BFI's openness to new experiences, conscientiousness, and agreeableness subscales. Considering that contextual conditions may introduce variations in self-handicapping (Schwinger et al. 2021) and that the instruction, evaluation, and grading at the universities around the world have important differences, the current study among Kenyan students was deemed necessary.

In Nairobi, Kenya, Wawire (2010) investigated the antecedents of self-handicapping among 400 secondary school students with a mean age of 17 years. Both quantitative and qualitative data revealed that self-concept, self-consciousness, ego orientation, and entity beliefs all predicted self-handicapping. However, the study only looked at secondary school students and did not examine all of the Big 5 personality traits. The current study looked at the association between university students' academic self-handicapping and the Big Five personality traits.

A correlational research by Cocorada (2011) examined relations between self-reported handicapping and learning motivation among 232 high school students adolescence in Romania. The results revealed that personality variables like self-esteem predicted self-

handicapping. It was also found out that academic performance had no significant relationship with self-handicapping.

A number of studies report interesting patterns in the links between personality traits and academic achievement. A study by Jia et al. (2020) among 308 college students revealed a positive connection between academic achievement and neuroticism. This was in contrast to other studies which have shown no relationship between academic performance and neuroticism (Graziano & Hair, 2013). Paunonen et al. (2014) concluded that agreeableness and openness to experience were associated strongly with GPA. Some earlier studies (Allik et al. 2007; Karau et al. 2009) also provided evidence of a positive association between academic achievement and conscientiousness.

Regarding other domains like agreeableness the study found a less significant positive correlation with academic achievement (Paunonen & O'Conner, 2007). Therefore, different results by various researchers indicated and demonstrate different degree of relationships between Big-Five personality traits and students' learning behaviour.

In Kenya, Ileri et al. (2018) investigated how the Big Five personality traits related with statistics anxiety among 575 fourth year Bachelor of Education students in Kenyatta University owing to high failure rates in the compulsory educational statistics and evaluation course. They found that an increase in agreeableness significantly increased computational self-concept and statistics interpretation anxiety. In addition, neuroticism significantly increased with computational anxiety and test/class anxiety. Conscientiousness, extraversion, and openness to experience were not related to fear of statistics. Considering that self-concept and fear are important proxies of self-

handicapping, the above study suggests presence of contextualized academic self-handicapping among undergraduate students in Kenyatta University.

2.3 Relationship between Academic Goal Orientations and Academic Self-handicapping

Scholars have studied the relationship between academic self-handicapping and academic goal orientations. Research seems to give rather consistent patterns of the correlations between achievement goals and self-handicapping. Majority of studies seem to suggest that students with avoidance-oriented goals tend to self-handicap more than those with the approach-oriented goals (Stienmei-Pelster et al., 2011).

Ferradás et al. (2018) investigated the relationship between accomplishment goals and academic self-handicapping among 1028 university students randomly sampled in Spain. Achievement goals profiles were obtained using profile analysis. Multivariate analyses revealed substantial links between academic self-handicapping and accomplishment goal profiles. Whether achievement goal profiles obtained through profile analysis relate with self-handicapping in the same way as achievement goals measured through the Achievement Goal Questionnaire (AGQ) remains an open question. This study chose the latter method.

Other studies show evidence that achievement goal orientation relates with both adaptive and maladaptive behavior strategies among secondary school students. In a study in Croatia among 403 secondary school students aged 16 to 19, Zubkovic and Kolic (2014) reported a link between achievement goals, academic self-handicapping and work avoidance habits. In Turkey, Kapikiran (2012) studied 586 secondary students (average

age of 16.08 years) and found that self-handicapping mediated between negative thoughts and intrinsic motivation.

In college students in China, Chen et al. (2018) looked at the relationship between achievement goals, self-esteem, and academic self-handicapping. The study reported that self-handicapping increased with performance avoidance goals. On the other hand, self-esteem tended to decrease with performance-avoidance goals. Thus learners need to be encouraged to adapt performance approach goals to decrease their self-handicapping tendencies.

In Iran, Zarshenas et al. (2019) established that training on problem solving increased students' motivation orientation which directly reduces their self-handicapping. The study was designed to investigate self-handicapping among 90 students enrolled in a nursing course. The experimental design was used with equal samples of 45 students in the control and experimental groups. The results showed that training on problem solving reduced self-handicapping tendencies. Training on problem solving had an impact on motivation orientation of the students which directly affects self-handicapping.

In another major study, Maria del Mar Ferradas (2016) found out that both acted and claimed self-handicapping are promoted by ego oriented goals. Whereas work avoidance goals only increased acted self-handicapping, mastery approach goals decreased both types of self-handicapping. In Turkey, a study among grade seven students by Yasemin (2010) related cheating behavior, academic self-efficacy beliefs, handicapping strategies and personal goal orientations. It was reported that mastery goal orientations discouraged

cheating and but students with high self-handicapping were more likely to be involved in cheating.

Sami et al. (2007) conducted a longitudinal study on achievement orientation, school adjustment and wellbeing among Swedish adolescents, a sample of 734 adolescents was used. Questionnaires measuring achievements beliefs and behaviors were used to collect data. Five achievement orientation groups were identified using clustering-by-cases analysis, these were; optimism, defensive permission, self-handicapping and learned helplessness. It was found out that an increase in engagement with school predicted optimism while a decrease in engagement with school predicted self-handicapping.

A related study by Parvin et al. (2010) queried how goal orientation related with learning strategies among 300 university students. The findings revealed a positive relationship between learning goal orientation and learning strategies. It was further reported that an increase in performance goal orientation was matched by a decrease in learning strategies.

A study by Sahin (2012) among 586 adolescent students in Denali examined how both achievement goal orientations and self-handicapping mediated and moderated the relationship between intrinsic motivation and negative automatic thoughts. According to mediation analysis, learning goal orientation was a mediator while self-handicapping was a partial mediator of the relationship. However, moderation analysis indicated that both self-handicapping and goal orientations had no moderation effect on the relationship.

In Iran, Samanch et.al. (2015) investigated the relationship between self-handicapping, test anxiety and personality traits among 126 college students of Ahvaz. A significant

relationship was reported between personality traits and self-handicapping, self-handicapping and test anxiety, and test anxiety and personality traits.

In Spain, Ferradas et al. (2016) studied links between academic goals and self-handicapping strategies among 940 university students. Data were collected using Skaalvisk's goal orientation Scale (1997). The results showed that whereas ego oriented goals promoted both acted and claimed self-handicapping, mastery oriented goals seemed to decrease both types of self-handicapping.

In Nigeria, Asuquo and Kalu (2016) looked at the relationship between learning techniques, academic accomplishment and goal orientation in a random sample of 82 students aged between 16-35 years from Calabar College. The findings revealed that goal orientation, learning styles, and academic achievement are all linked. The researcher intended to see if similar results could be obtained when university students self-handicapped their academic performance.

The association between academic goal orientations and academic self-handicapping has received minimal attention in Kenya. However, studies on the link involving learning outcomes and goal orientation have been conducted. In a study among 385 secondary school students, Ireri et al. (2020) found that approach goals were positive indicators of success while avoidance goals were negative predictors. Similar findings had been reported among Kenyan secondary school students by Ng'ang'a et al. (2018). These findings suggest that approach goals are more beneficial than avoidance ones among secondary school students in terms of school success. Since academic self-handicapping is linked to low academic success, and low success is linked to low self-esteem, it was anticipated that

avoidance goals may increase academic self-handicapping moderated by self-esteem among university students.

2.4 The Moderating Effect of Self-esteem in the Prediction of Academic Self-handicapping

According to Lamia (2017), when threatened with failure, students lessen chances for being blamed or for blaming themselves by making excuses. The excuses shield them from emotions that can hurt their self-esteem. Paradoxically, the same excuses trigger negative self-views that further lower self-esteem (Hiçdurmaz & Öz, 2011). Thus, instead of learning from their mistakes, handicappers condition themselves to viewing ability as something that can never be improved on but can only be displayed (Abaci & Akin, 2011). Due to the aforementioned, individuals wallow in anxiety and fear that they will be unsuccessful. This leads to creating own barriers to success in order to escape blame whenever they fail. Based on this, they approach achievement situations expecting failure occasioning a cycle of self-handicapping (Yavuzer, 2015).

In several studies, self-esteem has either been used either as a predictor or a moderator in the prediction of academic self-handicapping. In a study by Cheng and Law (2015), personality variables and self-esteem were used to predict academic self-handicapping among 62 university students taking a psychology course in China. Neutral personality significantly predicted academic self-handicapping mediated by self-esteem. The findings revealed differences in the effects of personality traits on undergraduate students' self-esteem and academic self-handicapping. The researchers recommended similar studies to

be undertaken in different locations in order to obtain more reliable results, hence the motivation to conduct the current study in Kenya.

Ferradás et al. (2018) investigated the function of self-esteem as a mediating factor in the link between accomplishment objectives and self-handicapping among 1028 university students ($M_{age} = 21.36$, $SD = 3.81$) from Spain. Latent profile analysis was done to obtain the profiles of the students. A MANCOVA revealed that the profiles differed significantly in achievement goals and academic self-handicapping by levels of self-esteem. There is additional evidence that students with low self-esteem tend to have higher levels of self-handicapping (Chen et al. 2018; Yildirim & Demir, 2019). Such students tend to set low academic targets as an ego protective strategy. Among primary school pupils Alesi et al. (2012) found that those with low self-esteem handicapped more but, interestingly, the study by Rappo et al. (2017) found that self-handicapping was more frequent among individuals with high self-esteem. The inconsistencies in the above findings may be due to differences in learning and cultural milieu as suggested by Yildirim and Demir (2019) hence the need to further research on the variables in underrepresented contexts like Kenya.

Sau and Mei (2015) investigated how self-esteem mediates in the prediction of self-handicapping relationship from personality among 62 psychology undergraduates in Malaysia. It is reported that neutral personality had a negative prediction of academic self-handicapping mediated by self-esteem. It was clear that personality traits contribution to self-handicapping differed by levels of self-esteem among undergraduate students.

In a study involving 34 male basketball players from France aged 21 years on average, Guillaume et al. (2011) found that self-esteem plays a noteworthy influence in self-

handicapping. Regression results revealed that self-esteem decreased self-handicapping. Self-confidence played a significant function in mediating the association between self-esteem and self-handicapping. To the best of the researcher's knowledge, little research has focused on how self-esteem moderates the links among the Big Five personality traits, academic self-handicapping, and goal orientation in Kenya, a gap that this study attempted to fill.

Jumareng and Setiawan (2021) examined how achievement goals were correlated to the various aspects of self-esteem, adversity quotient and self-handicapping among 80 female students. It was established that increases in self-esteem and adversity quotient, self-handicapping were matched by increases in goal achievement. Considering evidence that there exists a relationship between self-esteem facets, learning strategies, test anxiety, and academic achievement (Kärchner, et al. 2021) and that effort-management and test anxiety significantly mediate self-esteem there was need to explore how self-esteem moderates prediction of self-handicapping from achievement goals and personality traits.

2.5 Summary of Reviewed Literature and Gap Identification

In several studies, a student's Big Five personality traits and goal orientations have been found to predict academic self-handicapping. Nonetheless, most of the studies focused on general self-handicapping, while others looked at the relationship between academic achievement and self-handicapping mainly among secondary school students. There are inconsistent findings in the association between self-handicapping and the Big Five personality traits. This study was an effort to fill this gap and to contribute to knowledge in this field.

Concerning goal orientations, in most of the studies the variables were experimentally induced and in the area of sports. The majority of the study on academic self-handicapping and academic goal orientations was done on people in industrialized countries, and since culture may influence these constructs, the researcher found it necessary to do a study on them in a Kenyan context.

The reviewed studies generally indicated that self-esteem is a mediator variable owing to its relationship with self-handicapping tendencies. In some studies, self-handicapping increased with low self-esteem while in others it increased high self-esteem. These inconsistencies underlined the need for more research on the variables. Very few studies were conducted in an African setting. The available Kenyan studies on the constructs of interest only involved high school students. The focus of this research was to establish if there was a link between the Big Five personality traits, goal orientations, and academic self-handicapping among university undergraduates.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter details the research design, research variables, study location, target population, sampling techniques, and sample size determination. In addition, the chapter discusses research instruments, data collection and analysis processes, as well as logistical and ethical issues.

3.2 Research Methodology

The study used mixed methodology to establish the association between personality factors, goal orientations, and academic self-handicapping. In this study, quantitative results obtained from a structured questionnaire were integrated with qualitative ones obtained from in-depth interviews to make them more understandable as per the guidelines by Creswel (2018).

3.3 Research Design

A convergent parallel mixed methods design was used. This involved using both quantitative and qualitative data to produce a comprehensive analysis to address the research problem. With this method, the researcher gathered both qualitative and quantitative data simultaneously from Kenyatta University undergraduate students and then analyzed and considered the two together while explaining the overall findings (Creswel, 2018). The nature of the linkages between goal orientations, the Big Five

personality traits and academic self-handicapping was determined using correlational analysis. Self-esteem was also looked into as a moderator variable.

3.4 Research Variables

The predictor variables of this study were the Big Five personality traits operationalized in terms of five facets (neuroticism, openness to new experience, extraversion, conscientiousness, and agreeableness) and the goal orientations differentiated into four types: mastery approach, mastery avoidance, performance approach, and performance avoidance. The outcome variable was academic self-handicapping. Self-esteem was the moderating variable. All the variables in this study were measured at interval level of measurement.

3.5 Location of the Study

The locale of this study was Kenyatta University. Research done on self-handicapping among high school students in Nairobi County recommended that similar research be conducted using students at higher levels (Wawire, 2010). However, too little attention has been paid to this recommendation. Wambua (2019) notes that a significant number of university students in public universities fail examinations while others drop out. Between the year 2016 and 2019, there were 2779 cases of students who were either suspended or discontinued due to issues related to examinations in Kenyatta University leads with 2779 (Kenyatta University Exams Office, 2020). Within the same period, the University of Nairobi had 587 cases while Mount Kenya University reported 358. Considering that academic discontinuations are mainly linked to failure in examinations or cases of academic dishonesty that could be behavioral manifestations of self-handicapping, the

researcher, therefore, deemed Kenyatta University as an ideal context to investigate academic self-handicapping among undergraduate students.

Kenyatta University admits undergraduate students from all over the country as randomly placed by the Kenya Universities and Colleges Central Placement Services (KUCCPS). This target population was, therefore, considered to be free of any cultural and geographical bias. The university's undergraduate courses involve competitive evaluation of student's abilities and intelligence. This in itself provides a conducive environment for academic self-handicapping to thrive as implied by the high number of cases of students involved in examination related issues.

3.6 Target Population

This study's target population was 12,887 third-year undergraduate students (both government and self-sponsored) in Kenyatta University in the academic year 2019/2020. Third year students were targeted in this study because they have already developed high perceived academic control and therefore they might have engaged in self-handicapping tendencies due to the competitive and demanding learning environment they find themselves in. Fourth year students were not considered because some of them would be taking less number of units which might affect their perceived academic control and hence provide inconsistent responses.

Table 3.1: Schools in Kenyatta University

School	Third Year Students	% of the Target
	Enrolment	Population
Education	4439	34
Humanities	590	5
Business	1765	14
Security and Diplomacy	1942	15
Environmental Studies	738	6
Law	494	4
Medicine	569	4
Agriculture	425	3
Economics	421	3
Engineering	388	3
Public Health	404	3
Creative Arts	260	2
Visual and Performing Arts	209	2
Total	12887	100

Note. Kenyatta University admissions office (2019)

3.7 Sampling Techniques and Sample Size Determination

3.7.1 Sampling Techniques

In this study, purposive sampling, stratified sampling, and simple random sample were all used. Kenyatta University was purposively selected as the location of this study. Stratified sampling was used to choose the Kenyatta University schools that would be included in the study. Thereafter, selection of third year undergraduate students in different programs in the selected schools was by simple random sampling. This method provided each student with an equal chance to participate in the research thus enhancing the reliability of the findings.

3.7.2 Sample Size Determination

Since the study targeted a definite population, the desired number of participants was determined using the formula given by Yamane (1967):

$n = \frac{N}{1+N(e)^2}$, Where n is the sample size, N is target population and e is the level of precision (0.05). With a target population of 12887 third year students, the resultant sample size was:

$$n = \frac{12887}{1+12887(0.05)^2} = 391.$$

Heeding the recommendation by Draugalis et al. (2008) that the common research phenomena of non-response and missing data should be addressed during planning by increasing the sample size by 10 % - 20 %, the sample size was increased by 10 % yielding a total of 431 students. To work out the sample size per school, the formula for proportionate stratified sampling by Kish (1965) was used: $n_h = (N_h / N) \times n$. Where ' n_h '

represents the sample size for the school ' h ', ' N_h ' represents the total number of third year students within the school ' h ' and ' N ' represents the overall population of third year students at Kenyatta University. Table 3.2 shows the sample size per school.

Table 3.2: Sample Size

School	Third Year Students Enrolment	Sample Size
Education	4439	148
Humanities	590	20
Business	1765	60
Security and Diplomacy	1942	65
Environmental Studies	738	25
Law	494	17
Medicine	569	20
Agriculture	425	16
Economics	421	15
Engineering	388	13
Public Health	404	14
Creative Arts	260	10
Visual and Performing Arts	209	8
Total	12,887	431

Note. Kenyatta university admissions office (2019)

3.8 Research Instruments

A questionnaire and an interview schedule were used for data collection in this study (See Appendix B and Appendix C).

3.8.1 The Big Five Inventory (BFI)

The 44-item Big Five Inventory (BFI; John, et al.1991) was used to measure personality traits. The BFI was scored on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items 1, 6, 11, 16, 21, 26, 31, and 36 were used to assess extroversion. Items 2, 7, 12, 17, 22, 27, 32, 37, and 42 assessed agreeability, while items 3, 8, 13, 18, 23, 28, 33, 38, and 43 assessed conscientiousness. Items 4, 9, 14, 19, 24, 29, 34, and 39 established neuroticism, while items 5, 10, 15, 20, 25, 30, 35, 40, 41, and 44 measured openness. The following items were reverse scored; 2, 6, 9, 12, 18, 21, 23, 24, 27, 31, 35, 37, 41 and 43. The expected highest score was 220 while the lowest score was 44. John et al. (1991) reported a high reliability of $\alpha = .80$. The reliability of this scale using a sample of university students was established during the pilot study. The instrument has open access for researchers for non-commercial purposes.

3.8.2 Self-Handicapping Scale (SHS)

To assess academic self-handicapping, the Rhodewalt (1984) SHS was employed. There are 25 questions on the questionnaire, with scores ranging from 25 to 125. The scoring technique included calculating the sum of each item's scores. A score of 100 to 125 indicated high degree of academic self-handicapping, a score between 75 of 99 indicated moderate degree of academic self-handicapping while any score below 75 indicated low degree of academic self-handicapping as per the guidelines by Rhodewalt (1994). The scale has an excellent internal consistency ($\alpha = .78$) and a test-retest reliability $r = .74$ of 1-month (Strube, 1986). Wawire (2010) used this scale among secondary school students and reported a reliability of .91.

3.8.3 Self- Esteem Scale

Participants' scores on the 10-item Rosenberg (1965) Self- Esteem Scale (RSES) revealed their self-esteem. The scale uses a 4-point Likert scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*) for items 2, 5, 6, 8, and 9. Items 1, 3, 4, 7, and 10 were reverse coded. The projected range of scores was 1 to 40. A score of 1-14 showed low self-esteem, average self-esteem was 15-25, and high self-esteem was indicated by a score of 26-40. (Rosenberg, 1965). Cronbach alpha has been shown to be high ($\alpha = .81$). The scale is in the public domain.

3.8.4 Achievement Goal Questionnaire

The Achievement Goal Questionnaire (AGQ, Elliot & Murayama, 2008) was used to examine task and ego-oriented goals. This 12-item scale has a five point Likert scale ranging from 1= *strongly disagree* to 5 = *strongly agree*. The AGQ measured the constructs as follows; 1, 7, and 3 (mastery approach); 5, 11, and 9 (mastery avoidance); 4, 2, and 8 (performance approach); 12, 10, 6 (performance avoidance). A score between 3 and 6 on the mastery approach sub-scale indicated that the respondent has mastery avoidance goal orientation while a score between 7 and 15 indicated that the respondent has mastery approach goal orientation. The same criteria was used to interpret the scores on performance goal orientation sub scale. Internal consistency ranged from .77 to .91 according to Elliot and Murayama. The scale is openly accessible to researchers.

3.8.5 Interview Schedule

To get further information about the association between academic goal orientation, academic self-handicapping and the Big Five personality traits, interviews were done. The

academic goal orientation semi-structured interview guide had four questions, while the Big Five personality traits interview guide had seven. The tool collected qualitative data on academic self-handicapping using nine questions. The information collected was organized into themes that were incorporated in hypothesis testing.

3.9 Pilot Study

A pilot study was done with 39 undergraduate students who were not involved in the main investigation. Three students (two government and one self-sponsored) were randomly sampled from each of the 13 schools. The pilot study assisted in determining the instruments' validity and reliability.

3.9.1 Reliability Analysis

The internal consistency of the measures was determined using Cronbach's alpha coefficient, which is the most dependable test of inter-item consistency for Likert or rating scales (Creswell et al., 2011). The Cronbach Alpha values computed for the questionnaire subscales are provided in Table 3.3.

Table 3.3: Reliability Coefficients for the Questionnaire

Scale	<i>N</i> (Items)	α (Authors)	α (Pilot)	Conclusion
Academic Goal Orientations	12	.91	.84	Reliable
Big Five Personality Traits	44	.80	.79	Reliable
Academic Self-Handicapping	25	.78	.75	Reliable
Self-Esteem	10	.81	.74	Reliable

As indicated in Table 3.3, all of the measures satisfied the required degree of internal consistency, with Cronbach's alpha values ranging from .74 (Self-Esteem) to .84 (Academic Goal Orientations). Different researchers (Creswell, 2014; Oso & Onen, 2009, Sireci & Sukin 2013; Tavakol & Dennick, 2011) agree that a Cronbach alpha between 0.7 and 0.8 implies a strong internal reliability. Thus, it was deduced that all the instruments had adequate internal consistency reliability.

3.9.2 Validity Analysis

Experts from Kenyatta University's Educational Psychology Department reviewed the questionnaires to ensure face validity, and their suggestions were taken into account in refining the final questionnaire. Exploratory factor analysis (principal components) was used to establish the internal validity of the sub scales. The results for the reliability and validity analyses for the sub-scales are summarized as in Tables G.4 to G.7 (Appendix G).

The Bartlett's Test for Sphericity and the Kaiser-Meyer-Oklin (KMO Index) results show that each sub-measurement scale had high internal validity. Peat and Barton (2005) provide a criteria for interpreting the Kaiser-Meyer-Oklin measure of sample adequacy thus: values ranging between 0.5 and 0.7 are acceptable; from 0.7 to 0.8 it is good; excellent when between 0.8 and 0.9; and exceptional if the values are over 0.9. All of the results for this study were greater than 0.7, indicating that the data had acceptable internal validity. Similarly, Peat and Barton (2005) recommends that the Bartlett's Sphericity test statistic should be less than 0.05 for sufficient internal validity. The results reveal that all of the questionnaire's sub-scales pass Bartlett's sphericity test ($p < .05$), indicating that the scales have good internal validity.

3.10 Data Collection Techniques

Data were collected using questionnaires and interviews. The researcher administered the questionnaires after assuring respondents that the gathered information would remain confidential. The questionnaires were collected immediately after the respondents were through with answering the questions. In addition, the researcher gathered qualitative data from a group of 50 students who were chosen at random from the study population. The interview responses were recorded using mobile phone voice recorder which were then coded and stored in the laptop for analysis. The data obtained through interviewing were used to compliment the information obtained from the students' quantitative data.

3.11 Data Analysis

The Statistical Package for Social Sciences (SPSS) version 25.0 was used to analyze the data. Both inferential and descriptive statistics were employed. Descriptive statistics were presented in tables and figures. The inferential statistics aided in hypothesis testing at a significance level of .05. The following hypotheses were tested using multiple regression analysis and Pearson's product moment correlation:

H₀₁: There is no significant relationship between the Big Five personality traits and academic self-handicapping among undergraduate university students.

To test the relationship between each of the Big Five personality traits and academic self-handicapping, the following supplementary hypothesis were advanced:

H_{01.1}: There is no significant relationship between extraversion and academic self-handicapping among undergraduate university students.

H_{01.2}: There is no significant relationship between agreeableness and academic self-handicapping among undergraduate university students.

H_{01.3}: There is no significant relationship between conscientiousness and academic self-handicapping among undergraduate university students.

H_{01.4}: There is no significant relationship between neuroticism and academic self-handicapping among undergraduate university students.

H_{01.5}: There is no significant relationship between openness to experience and academic self-handicapping among undergraduate university students.

Pearson correlation analysis was used to test the supplementary hypotheses.

H₀₂: There is no significant relationship between academic goal orientation and academic self-handicapping among undergraduate university students.

Since academic goal orientations comprised of four levels, to make hypothesis testing more focused the following supplementary hypotheses were formulated:

H_{01.1}: There is no significant relationship between mastery approach goal orientation and academic self-handicapping among undergraduate university students.

H_{01.2}: There is no significant relationship between mastery avoidance goal orientation and academic self-handicapping among undergraduate university students.

H_{01.3}: There is no significant relationship between performance approach goal orientation and academic self-handicapping among undergraduate university students.

H_{01.4}: There is no significant relationship between performance avoidance goal orientation and academic self-handicapping among undergraduate university students.

The supplementary hypotheses were tested using Pearson correlation analysis.

H₀₃: There is no significant moderating effect of self-esteem, Big Five personality traits, goal orientations and academic self-handicapping. Test: Linear regression analysis.

H₀₄: There is no significant prediction equation for academic self-handicapping from big five personality traits and academic goal orientations. Test: Multiple regression analysis.

Qualitative data were thematically analyzed and the results were incorporated in hypothesis testing. The themes were organized as per the study objectives.

3.12 Logistical and Ethical Considerations

3.12.1 Logistical Considerations

The researcher requested a clearance document from Kenyatta University's graduate school. The Kenyatta University Ethics Review Board (KUERB) also gave their approval (See Appendix D). The researcher then applied to the National Commission for Science, Technology, and Innovation (NACOSTI) for a research permit. Following the issuance of the permit, the commission required the researcher to obtain an authorization letter from Kenyatta University's Deputy Vice Chancellor (Research, Innovation, and Outreach) in order to gather data from the selected participants. Once all the research clearances were obtained, the researcher photocopied the questionnaires and interview guides and assembled all the necessary resources.

3.12.2 Ethical Considerations

The participants were fully told about the study's purpose, and complete anonymity was preserved. The researcher assured the respondents that the study would not expose them to any risk. Participation of students in the study was voluntary; it was devoid of any coercion or inducements. A consent form for the participants was provided by the researcher (Appendix A). The findings were summarized without disclosing the respondents' identities. In addition, the researcher obtained all ethical approvals before carrying out the research.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION, AND DISCUSSION

4.1 Introduction

This chapter presents the findings and their interpretations arranged into seven parts: Introduction; general and demographic information; relationship between Big Five personality traits and academic self-handicapping; relationship between academic goal orientations and academic self-handicapping; the moderating effect of self-esteem in the prediction of academic self-handicapping; the prediction equation for academic self-handicapping; and qualitative data analysis.

4.2 General and Demographic Information

This section presents the questionnaire return rate as well as participants' age, gender, and school.

4.2.1 Questionnaire Return Rate

The study involved a total of 431 third year undergraduate students of Kenyatta University in the academic year 2019/2020. Upon administering the questionnaires, the return rate was as summarized in

Table 4.1: Questionnaire Return Rate

Respondents	Questionnaires administered	Questionnaires returned	Return rate (%)
Third year Students	431	326	75.6

As shown in Table 4.1, the study's response rate was 75.6 % which was deemed excellent for the study. As per the criteria by Creswell (2014), a response rate of 50% is adequate; 60% is good; and 70% and above is excellent for a survey.

4.2.2 Respondents' Background Information

The questionnaire first required participants to give their gender and age. This was important in establishing the representativeness of the sample as well as in permitting meaningful generalization of the study results. The participants' gender and age were as given in

Table 4.2: Respondent Gender and Age

Demographic	Category	<i>n</i>	%
Gender	Male	178	54.60
	Female	148	45.40
Age ^a	17-20	62	19.02
	21-24	220	67.48
	25-28	39	11.96
	≥ 29	5	1.53

Note. *N* = 326.

^a Age in years. $M_{\text{age}}(SD) = 22.52 (2.24)$; Range = 19-32 years.

As shown in Table 4.2, over half of the respondents (54.6 %) were male with females constituting 45.4 % of the sample. In terms of age, majority (67.48 %) ranged between 21-24 years and close to a fifth (19.02 %) were aged between 17 and 20 years. Notably, 11.96 % of the respondents were aged between 25 and 28 years. Those aged 29 years and above were the least (1.53 %) in the study. Overall, the respondents had a mean age of 22.52 ($SD = 2.24$) years. The youngest participant was aged 19 while the oldest was aged 32.

The participants were also categorized in terms of their respective schools within Kenyatta University. Table 4.3 presents information on number of respondents selected from each school.

Table 4.3: Respondent school

School	Frequency	Percent
Education	94	28.8
Humanities	16	4.9
Business	52	16.0
Security & Diplomacy	52	16.0
Environmental Studies	22	6.7
Law	16	4.9
Medicine	13	4.0
Agriculture	13	4.0
Economics	13	4.0
Engineering	12	3.7
Public Health	8	2.5
Creative Arts	8	2.5
Visual and Performing Arts	7	2.1
Total	326	100.0

As shown in Table 4.3, over a quarter of the respondents (28.8 %) were from the School of Education. The School of Business and the School of Security and Diplomacy each constituted 16.0% of the sample. The other schools, although in relatively small proportions, were also represented in the study, with the school of Visual and Performing Arts being the least represented at 2.1%. These findings indicated proportionate representation of all schools in the study.

4.3 Relationship between Big Five Personality Traits and Academic Self-Handicapping

The first objective of the study established how the Big Five personality traits (BFPT) correlated with academic self-handicapping among undergraduate university students.

Descriptive statistics for the distribution of the BFPT were first given followed by computing the correlation between the BFPT and academic self-handicapping.

4.3.1 Descriptive Statistics for Big Five Personality Traits

The distribution of the BFPT scores was described using the mean, range, standard deviation, skewness, and kurtosis values as given in **Table 4.4. Descriptive Statistics**

Table 4.4: Descriptive Statistics for the Overall BFPT Scores

	N	Range	Min	Max	M	SD	Sk	Kur
BFPT	326	132	66.00	198.00	133.41	16.61	.28	1.59

Note. BFPT=Big Five Personality Traits; Min = Minimum; Max. Maximum; SD = Standard deviation; Skew = Skewness; Kurt = Kurtosis.

As shown in Table 4.4, the Big Five personality traits had a mean of 133.41 ($SD= 16.61$) with scores ranging from 66 to 198. The expected range was 44 to 220. The skewness and kurtosis indices for BFPT were below ± 3 meeting the criteria specified by Peat and Barton (2005) for a normal distribution. The BFPT scores were further aggregated in terms of gender and the results were as presented in **Table 4.5. Descriptive statistics for BFPT Scores by Gender**

Table 4.5: Descriptive statistics for the Overall BFPT Scores by Gender

Gender	n	Range	Min	Max	M	SD	Sk	Kur
Male	178	107	91	198	133.90	16.96	.62	1.57
Female	148	112	66	178	132.83	16.21	-.20	1.57

Note. Min = Minimum; Max. Maximum; SD = Standard deviation; Sk = Skewness; Kur = Kurtosis

As given in Table 4.5, the male respondents had a mean BFPT score of 133.90 ($SD = 16.96$) with a range of 91 to 198. For female students, the mean was 132.83 ($SD = 16.21$) and a range of 66 to 178. Thus, the male students had a slightly higher mean score than female respondents. The skewness and kurtosis indices for both male and female respondents were below ± 3 , the suggested range for a normal distribution (Peat & Barton, 2005).

The distribution of the BFPT in terms of the respondents' age categories was also determined. The data were summarized in Table 4.6.

Table 4.6 Descriptive Statistics For Overall BFPT Scores by Age

Age (years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	Range	<u><i>Sk</i></u>	<u><i>Kur</i></u>
17-20	62	133.34	18.70	91	198	107	.79	1.97
21-24	220	133.05	16.29	66	191	125	.13	1.70
25-28	39	135.49	15.60	102	167	65	-.02	-.12
≥ 29	5	134.00	13.79	119	151	32	.21	-2.41

Note. *N* = Sample size; *Min* = Minimum; *Max*. Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

As displayed in Table 4.6, students aged between 25 and 28 years had the highest mean score of 135.49 ($SD = 15.60$) with a range of 102 to 167. The respondents aged 29 and above had an average of 134 ($SD = 13.79$) with scores ranging from 119 to 151. Respondents aged between 21 and 24 posted a mean of 133.05 ($SD = 16.29$) and a range of 66 to 191. Among the respondents aged 17 to 20, the mean was 133.34 ($SD = 18.70$) with a range of 91 to 198. The skewness and kurtosis coefficients indicate that the scores of the students in all the age categories were normally distributed because the coefficients were less than three as recommended by Peat and Barton (2005).

The BFPT are in five subscales: agreeableness, extroversion, conscientiousness, neuroticism, and openness. The subscale summary statistics were as presented in Table 4.7.

Table 4.7 description of BFPT Subscale Score

Big five personality trait	<i>N</i>	<i>R</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<u><i>Sk</i></u>	<u><i>Kur</i></u>
Agreeableness	326	27	13	40	26.93	3.97	.06	.60
Extroversion	326	29	9	38	25.24	4.18	-.18	.21
Conscientiousness	326	27	13	40	28.29	4.07	.03	.49
Neuroticism	326	26	10	36	23.17	5.09	.05	-.35
Openness	326	28	18	46	30.06	4.79	.19	.16

Note. *N* = Sample size; *Min* = Minimum; *Max*=Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

The findings in Table 4.7 show that agreeableness had a mean of 26.93 (*SD* = 3.97) with a range of 13 to 40. The mean for extroversion was 25.24 (*SD* = 4.18) with scores ranging from 9 to 38. Conscientiousness subscale had a mean of 28.29 (*SD* = 4.07) with a range of 13 to 40. The mean for neuroticism was 23.17 (*SD* = 5.09) and scores ranged from 10 to 36. Openness had a mean of 30.06 (*SD* = 4.79) with scores ranging from 18 to 46. The scores on all the BFPT subscales were normally distributed as evidenced by the skewness and kurtosis coefficients of below three.

4.3.2 Descriptive Statistics for Academic Self-Handicapping

Academic self-handicapping, the outcome variable, was operationalized in terms of how university students rated themselves on several indicators of self-handicapping in a 25-item questionnaire on a scale of 1 to 5. Students' ratings of the indicators of academic self-handicapping were summarized using descriptive statistics like percentages, frequencies,

measures of central tendency, dispersion, and distribution shape some of which are shown in Table 4.8.

Table 4.8 Descriptive Statistics of Academic Self-handicapping Scores

	<i>N</i>	Range	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
ASH	326	68	43	111	84.04	10.88	-0.15	0.75

Note. ASH = Academic self-handicapping; *N* = Sample size; *Min* = Minimum; *Max* = Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

As shown in Table 4.8, the mean score of academic self-handicapping was 84.04 (*SD* = 10.88) and the scores ranged from 43 to 111. The expected range was from 25 to 125. The values for the skewness and kurtosis coefficients were both below three approximating a normal distribution for the scores (Peat & Barton, 2005).

Academic self-handicapping scores then by grouped by gender as shown in Table 4.9.

Table 4.9: Descriptive Statistics of Academic Self-handicapping Scores by Gender

Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	Range	<i>Sk</i>	<i>Kur</i>
Male	178	133.90	16.96	91	198	107	.62	1.57
Female	148	132.83	16.21	66	178	112	-.20	1.57

Note. *N* = Sample size; *Min* = Minimum; *Max*. Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

As given in Table 4.9, the academic self-handicapping mean score for male respondents was 133.90 (*SD* = 16.96) with scores ranging between 91 and 198. The mean for female respondents was 132.83(*SD* = 16.21) with scores ranging from 66 to 178. The kurtosis and skewness coefficients were below 3 for the scores of both male and female students

indicating that ASH scores were normally distributed as per the criteria suggested by Peat and Barton (2005).

Before hypothesis testing, it was also deemed necessary to establish the distribution of academic self-handicapping scores by age as presented in Table 4.10.

Table 4.10 Description of Academic Self-handicapping Scores by Age

Age Category	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	Range	<i>Sk</i>	<i>Kur</i>
17-20	62	82.48	11.84	44.00	109.00	65.00	-.73	1.72
21-24	220	84.29	10.66	61.00	111.00	50.00	.30	-.29
25-28	39	84.69	10.33	43.00	100.00	57.00	-1.71	5.68
29 and above	5	87.00	13.93	75.00	105.00	30.00	.67	-2.67

Note. *N* = Sample size; *Min* = Minimum; *Max.* Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

The results presented in Table 4.10 indicate that respondents aged 29 and above had the highest mean score of 87 ($SD = 13.93$) while those aged between 17 and 20 years had the lowest mean score of 82.48 ($SD = 11.84$). Respondents aged between 21 and 24 years scored a mean of 84.29 while those aged between 25 and 28 years scored a mean of 84.69 ($SD = 10.33$). In the age category of 25-28 years, the scores were not normally distributed since the kurtosis value exceeded 3. In all the other age categories, the scores of the respondents were normally distributed as evidenced by skewness and kurtosis coefficients of below 3 per the guidelines by Peat and Barton (2005).

In this study, ASH had three categories: low, moderate and high. The distribution of the respondents into these categories is presented in Table 4.11.

Table 4.11 Description of Levels of Academics Self-handicapping

Level of ASH	Frequency	Percent
Low	77	23.6
Moderate	224	68.7
High	25	7.7
Total	326	100.0

Note. ASH = Academic Self-handicapping.

The data (Table 4.11) indicated that majority of the students (68.7%) had moderate level of ASH while 23.6% had low level. Only 7.7% of the respondents had high levels of ASH. The high prevalence of ASH among the sample underlined the importance of investigating its predictors among undergraduate students.

The levels of ASH across gender were also explored as given in Table 4.12.

Table 4.12: Descriptions of Academic Self-handicapping Levels by Gender

		Gender		Total
		Female	Male	
ASH Levels	Low	37 (48.05)	40(51.95)	77 (100)
	Moderate	96(42.86)	128(57.14)	224(100)
	High	15(60.00)	10(40.00)	25(100)
Total		148(45.40)	178(54.60)	326(100)

Note. ASH = Academic Self-handicapping.

The results presented in Table 4.12 indicate that in both low and moderate levels of ASH there were more males than females. In contrast, more females had a high level of ASH than males.

4.3.3 Hypothesis Testing

To first objective focused on whether there is a significant relationship between the Big Five personality traits and academic self-handicapping among undergraduate students. Accordingly, the following null hypothesis was formulated:

H₀₁: There is no significant relationship between big five personality traits and academic self-handicapping among undergraduate university students.

To test the relationship between each of the big five personality traits and academic self-handicapping, the following supplementary hypothesis were advanced:

H_{01.1}: There is no significant relationship between extraversion and academic self-handicapping among undergraduate university students.

H_{01.2}: There is no significant relationship between agreeableness and academic self-handicapping among undergraduate university students.

H_{01.3}: There is no significant relationship between conscientiousness and academic self-handicapping among undergraduate university students.

H_{01.4}: There is no significant relationship between neuroticism and academic self-handicapping among undergraduate university students.

H_{01.5}: There is no significant relationship between openness and academic self-handicapping among undergraduate university students.

The relationship between each of the Big Five personality traits and academic self-handicapping was checked using Pearson's correlation coefficient as presented in Table 4.13.

Table 4.13: Correlation Analysis of Personality Traits and Academics Self-Handicapping

BFP Trait	<i>r</i>
Extraversion	.05
Agreeableness	-.11*
Conscientiousness	.20**
Neuroticism	.41**
Openness	.33**

Note. $N=326$. BFP = Big Five Personality

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 4.13 indicate that three personality traits had statistically significant positive correlations with academic handicapping, namely: Conscientiousness ($r(324) = .20, p = .00$), neuroticism ($r(324) = .41, p = .00$) and openness to experience ($r(324) = .33, p = .00$). On the other hand, a weak negative marginally significant relationship was found between agreeableness and academic self-handicapping ($r(324) = -.11, p = .05$). Therefore, the null hypotheses based on each of these personality traits were rejected. Extraversion is the only personality trait that did not significantly relate with academic self-handicapping ($r(324) = .05, p = .36$). Thus the supplementary null hypothesis on this personality trait was rejected.

4.3.4 How the Big Five Personality Traits Predict Academic Self-Handicapping

Regression analysis ascertained how the Big Five personality traits predicted students' self-handicapping. A coefficient of determination estimated the amount of variance in students' self-handicapping that was explained by the Big Five personality traits. Table 4.14 shows the regression model summary.

Table 4.14: Model Summary of Personality Traits on Students' Self –handicapping

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEE</i>
1	.48 ^a	.23	.21	6.95

Note. *N* = 326. *SEE* = Standard Error of the Estimate.

a. Predictors: (Constant), Openness to Experience, Agreeableness, Extraversion, Conscientiousness, Neuroticism.

The model in Table 4.14 had an Adjusted *R*² value of .23 showing that the Big Five personality traits accounted for 23% of the variation in self-handicapping among the undergraduate university students. An analysis of variance (ANOVA) established whether the Big Five personality traits were significant predictors of students' self-handicapping as shown in Table 4.15.

Tables 4.15 ANOVA for the Regression Model for the Big Five Personality Traits

Model	Sum of Squares	<i>Df</i>	Mean Square	<i>F</i>	Sig.
1					
Regression	4503.67	5.00	900.73	18.65	.00 ^b
Residual	15453.13	320.00	48.29		
Total	19956.80	325.00			

a. Dependent Variable: Academic Self-Handicapping

b. Predictors: (Constant), Openness to Experience, Agreeableness, Extraversion, Conscientiousness, Neuroticism.

As displayed in Table 4.15, the model for predicting students' academic self-handicapping using the Big Five personality traits was statistically significant $F(5, 320) = 18.65, p < .05$.

To establish the contribution of each of the Big Five personality traits in predicting academic self-handicapping, the values of the regression coefficients were evaluated. For each trait, the null hypothesis stated that the regression weight was equal to zero ($H_0: \beta_i = 0$) with the corresponding alternative hypothesis stating that the regression weight was not zero ($H_1: \beta_i \neq 0$). Table 4.16 shows the values of the regression coefficients.

Table 4.16 Regression Coefficients of Personality Traits on Students' Self-handicapping

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	[95% CI]
(Constant)	33.70	5.79		5.82	.00	[22.31, 45.10]
Extraversion (X1)	-.05	.88	.00	-.06	.96	[-1.78, 1.68]
Agreeableness (X2)	-2.30	1.13	-.10	-2.03	.04	[-4.52, -.08]
Conscientiousness (X3)	2.19	1.09	.10	2.00	.05	[.03, 4.34]
Neuroticism (X4)	4.99	.83	.32	6.00	.00	[3.35, 6.62]
Openness to Experience (X5)	3.86	1.00	.20	3.87	.00	[1.90, 5.82]

Note. $N = 326$. *B* = unstandardized coefficient; *SE* = standard error for *B*; CI = confidence interval.

The hypothesized regression equation was:

$$\hat{Y} = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \beta X_4 + \beta X_5 + \epsilon$$

Where: \hat{Y} = Predicted Academic Self-handicapping; βX_{1-5} = regression weight for each of the Big Five Personality Traits and ϵ is the error term.

As shown in Table 4.16, out of the five personality traits only neuroticism, openness to new experience, and conscientiousness had significant positive regression weights ($p <$

.05). Neuroticism made the highest contribution in predicting academic self-handicapping ($\beta = .32, p = .00$), followed by openness to experience ($\beta = .20, p = .00$). Notably, conscientiousness had a positive regression weight that was just marginally significant ($\beta = .10, p = .05$). Agreeableness had a significant negative regression weight ($\beta = -.10, p = .04$). In this study, extraversion did not have a significant contribution in the prediction of academic self-handicapping. Thus, the resultant equation for predicting academic self-handicapping from the Big Five personality traits was:

$$\hat{Y} = 33.70 - 0.10X_2 + .10X_3 + .32X_4 + .10X_5 + \varepsilon.$$

Where: \hat{Y} = Predicted Academic Self-handicapping; X_2 = Agreeableness; X_3 = Conscientiousness; X_4 = Neuroticism; X_5 = Openness to Experience; ε = the error term.

4.3.5 Discussion of the Findings

The first objective of the study was to find out whether there was a significant relationship between the Big Five personality traits and academic self-handicapping. Bivariate correlations indicate that conscientiousness, neuroticism and openness to experience all had statistically significant positive correlations with academic handicapping among Kenyatta University students. Only agreeableness had a significant inverse correlation to academic self-handicapping. A multiple regression analysis further revealed that the Big Five personality traits significantly predicted academic self-handicapping ($F(5, 320) = 18.65, p < .05$). The results further showed that neuroticism had the highest predictive value on academic self-handicapping followed by openness to experience, and then conscientiousness. Agreeableness had a significant negative predictive value on academic self-handicapping. The personality traits explained 23 % of variance in academic self-handicapping among Kenyatta University undergraduate students.

Personality theory argues that students' personalities are crucial in determining their academic outcomes within a demanding, competitive and challenging academic environment. Considering the importance attached to college grades, when students are unable to successfully accomplish valued academic tasks, their self-esteem is affected (Burns & Martin, 2021). Based on this, students interpret their abilities and academic performance as their overall worth. This may be the link between Big Five personality traits and academic self-handicapping in this study.

The study findings were consistent with previous studies that report significant positive correlation between academic neuroticism and self-handicapping among undergraduate students in China (Li et al. 2017), Nigeria (Litvinova, et al. 2015), Serbia (Prpa, 2017); and Ukraine (Nosenko et al., 2016) among others. The finding on a negative correlation between agreeableness and self-handicapping was consistent with those reported by Litvinova et al. (2015).

On the other hand, the results contrasted some findings among undergraduate students. Whereas, the study found self-handicapping as increasing with conscientiousness, openness to experience and extraversion, evidence from undergraduate students in Ghana (Ocansey et al. 2020) and China (Chen et al. 2018) shows self-handicapping as being inversely related to conscientiousness and openness to new experience. The study findings also contrast those reported among university students in China that students with low self-handicapping have high levels of conscientiousness, extroversion and neuroticism (Li et al., 2017; Tang & Zhang, 2017).

Studies on the correlations between the Big Five personality traits and self-handicapping have produced a mixed bag of results. As if adding to this inconsistency, this study contrasts Litvinova et al. (2015) who found that academic self-handicapping had negative correlations with agreeableness, conscientiousness, and openness to experience among Nigerian students. It also contrast Ocansey et al. (2020) finding of a positive correlation between agreeableness and academic self-handicapping in Ghana. The inconsistencies may be due to the fact that students' personality traits and their prediction of academic self-handicapping may differ according to participants' cultural background, courses, and the competitiveness of the university environment. This mirrors the view of personality traits as being dynamic and context-specific (Quirin et al., 2020).

Although the study sample was similar to those involved in recent studies among college students (Li, et al. 2020; Litvinova et al. 2015; Nosenko et al., 2016; Ocansey et al., 2020) the respondents in the current study were undergraduate third year students in Kenyatta University. May be differences in learning orientation, academic experience, distinct academic programs, age, and cultural backgrounds are behind the inconsistencies in the results. Bleidorn (2017) emphasizes the role of situational, socioeconomic, and cultural contexts on the differences in the personality traits. That the study findings disagrees with some earlier studies may be interpreted guided by the evidence that the relationship between BFPT and self-handicapping differs depending on students' cultural background, academic environment, educational system and academic experiences (Alzangana, 2017; Kertechian, 2018).

4.4 Relationship between Academic Goal Orientations and Academic Self-Handicapping

The second aim of the study was to test the relationship between academic goal orientations and academic self-handicapping among undergraduate students. To address this objective, descriptive statistics were first used to summarize students' academic goal orientations and then inferential statistics were used to establish the relationship between academic goal orientations and academic self-handicapping.

4.4.1 Description of Academic Goal Orientations

Students' scores on the 12-item AGQ were expected to range from 12 to 60. The subscale totals were used to infer the four academic goal orientations: mastery approach, mastery avoidance, performance approach, and performance avoidance. The descriptive statistics for the subscale scores were as given in Table 4.17.

Table 4.17 Description of Academic Goal Orientation Scores

AGO Subscale	α	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Mastery Approach	.71	3	15	11.69	2.74	-1.19	1.16
Mastery Avoidance	.54	4	15	10.57	2.76	-0.36	-0.65
Performance Approach	.73	3	15	10.76	2.84	-0.60	-0.25
Performance Avoidance	.73	3	15	10.61	2.91	-0.42	-0.70

Note. AGO = Academic goal orientation; *N* = Sample size; *Min* = Minimum; *Max.* Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis.

As given in Table 4.17, academic goal orientation scores ranged from 3 to 15 with the subscale means ranging from 10.57 to 11.69. The standard deviations were almost similar

ranging from 2.74 to 2.91. The skewness and kurtosis coefficients were all below three indicating that the scores normally distributed as per the guidelines by Peat and Barton (2005). The scores were further explored based on the respondent's gender and the results were is displayed in Table 4.18.

Table 4.18: Description of Academic Goal Orientation Scores by Gender

AGO	<i>Female (n = 148)</i>						<i>Male (n = 178)</i>					
	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Sk</i>	<i>Kur</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Sk</i>	<i>Kur</i>
MAP	11.49	2.93	3	15	-1.21	1.00	11.87	2.57	3	15	-1.13	1.15
MAV	10.78	2.83	4	15	-0.46	-0.56	10.39	2.70	4	15	-0.28	-0.69
PAV	10.82	2.81	3	15	-0.02	-0.75	10.72	2.87	3	15	-0.49	-0.39
PAP	10.64	2.81	3	15	-0.49	-0.44	10.59	2.99	4	15	-0.87	-0.38

Note. AGO = Achievement Goal Orientation; MAP = Mastery Approach; MAV = Mastery Avoidance; PAP = Performance Approach; PAV = Performance Avoidance; *M* = Mean; *SD* = Standard deviation; *Min* = Minimum; *Max.* Maximum; *Sk* = Skewness; *Kur* = Kurtosis.

The achievement goal orientation subscale scores for both female and male participants had similar ranges with the exception of the performance approach goals (see Table 4.18). In this subscale, the females' scores ranged from 3 to 15 while those of males ranged from 4 to 15. The subscale means ranged from 10.64 to 11.49 for females and from 10.39 to 11.87 for males. The range of subscale standard deviation scores from 2.81 to 2.93 was narrower among females than among males which ranged from 2.57 to 2.99. The results indicate that female respondents had a slightly higher mean scores in mastery goals while males had slightly higher scores than females in performance goals.

The achievement goal orientation scores were further processed in terms of the participants' age categories and the results were as presented in Table 4.19.

Table 4.19 Description of Academic Goal Orientation Scores by Age

Age ^a	<i>M</i>	<i>SD</i>	<i>R</i>	<i>Sk</i>	<i>Kur</i>	<i>M</i>	<i>SD</i>	<i>R</i>	<i>Sk</i>	<i>Kur</i>
Mastery Approach						Mastery Avoidance				
17-20	11.52	3.04	3-15	-1.16	0.53	10.37	2.71	4-15	-0.50	-0.73
21-24	11.85	2.62	3-15	-1.26	1.63	10.66	2.82	4-15	-0.33	-0.69
25-28	10.95	2.96	3-15	-0.86	0.39	10.62	2.59	4-15	-0.66	0.01
≥ 29	12.80	1.64	11-14	-0.61	-3.33	8.40	1.52	6-10	1.46	-1.12
Performance Approach						Performance Avoidance				
17-20	10.95	2.99	4-15	-0.97	-0.24	10.34	2.55	6-15	-0.16	-1.08
21-24	10.75	2.83	3-15	-0.12	-0.54	10.74	3.00	4-15	-0.48	-0.71
25-28	10.56	2.71	3-15	-0.47	-0.58	10.31	2.95	3-15	-0.60	-0.18
≥ 29	10.60	2.70	8-14	0.58	-2.71	11.00	3.08	7-15	0.09	-0.66

Note. *M*= Mean; *SD* = Standard deviation; *R* = Range; *Min* = Minimum; *Max.* Maximum; *Sk* = Skewness; *Kur* = Kurtosis.

^aAge grouped in years.

As shown in Table 4.19, respondents aged 29 and above had the highest mean scores in mastery approach and performance avoidance goals while those aged 25 to 28 had the lowest mean score in these subscales. Respondents aged 21 to 24 had the highest mean in mastery avoidance goal orientation while those aged 29 and above had the lowest. In addition, participants aged 17 to 20 years had the highest mean in performance approach

while those aged 29 and above had the lowest mean. In all the age categories, the scores had a similar pattern with regards to range. The skewness coefficients were all within the normal range but the kurtosis coefficient value for those aged 29 and above was above 3 in the mastery approach goals suggesting that their scores in this subscale were not normally distributed.

4.4.2 Hypothesis Testing

To determine whether there is a significant relationship between academic goal orientation and academic self-handicapping among undergraduate university students, the null hypothesis was:

H₀₂: There is no significant relationship between academic goal orientation and academic self-handicapping among undergraduate university students

Since academic goal orientations were in four subscales, it was necessary to formulate subscale-specific null hypotheses as follows:

H_{01.1}: There is no significant relationship between mastery approach goal orientation and academic self-handicapping among undergraduate university students.

H_{01.2}: There is no significant relationship between mastery avoidance goal orientation and academic self-handicapping among undergraduate university students.

H_{01.3}: There is no significant relationship between performance approach goal orientation and academic self-handicapping among undergraduate university students.

H_{01.4}: There is no significant relationship between performance avoidance goal orientation on and academic self-handicapping among undergraduate university students.

The relationship between students' academic goal orientations and self-handicapping was tested using Pearson's correlation coefficient and the results were as presented in Table 4.20.

Table 4.20: Correlation Analysis of Students' Academic Goal Orientation and Self-Handicapping

Achievement Goal Orientation	r^a
Mastery Approach	-.13*
Mastery Avoidance	.09
Performance Approach	.04
Performance Avoidance	.15**

Note. $N = 326$.

^aCorrelation with self-handicapping.

*Correlation is significant at $\alpha = 0.05$ (two tailed).

** Correlation is significant at $\alpha = 0.01$ (two tailed).

The results presented in Table 4.20 indicate that mastery approach had a significant negative correlation ($r(324) = -.13, p = .02$) while performance avoidance had a significant positive correlation with academic self-handicapping ($r(324) = .15, p = .01$). Therefore, the null supplementary hypotheses for these two subscales of academic goal orientations were rejected and alternative hypotheses adopted. On the other hand, academic self-handicapping had very weak positive non-significant correlations with mastery avoidance ($r(324) = .09, p = .10$) and performance approach ($r(324) = .04, p = .48$) academic goal orientation subscales. Thus, the data did not yield sufficient evidence to reject the supplementary null hypotheses for these subscales and therefore they were retained. The results seem to suggest that undergraduate university students who score low in mastery

approach and high in performance avoidance goal orientations are more likely to post high levels of academic self-handicapping and vice-versa.

4.4.3 Academic Goal Orientation as Predictors of Academic Self-Handicapping

Using regression analysis, a coefficient of determination estimated how academic goal orientation predicts students' self-handicapping. The tested null hypothesis was $H_0: \beta_i = 0$ and the corresponding alternative hypothesis was $H_1: \beta_i \neq 0$. The result of the regression model summary is seen in Table 4.21.

Table 4.21: Model Summary of Students' Academic Goal Orientation on Self-Handicapping

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	SEE
1	.28 ^a	.08	.07	7.57

a. Predictors: (Constant), Performance Avoidance, Mastery Approach, Mastery Avoidance, Performance Approach.

The regression model in Table 4.21 yielded an adjusted R^2 of .07 indicating that academic goal orientations accounted for 7 % of the variation in the level of self-handicapping among undergraduate university students. The significance of the prediction model was established through an Analysis of Variance (ANOVA) as shown in Table 4.22.

Table 4.22 ANOVA of Academic Goal Orientation on Students 'Self-handicapping

Model	Sum of Squares	<i>Df</i>	Mean	<i>F</i>	<i>Sig.</i>
1 Regression	1540.38	4	385.09	6.71	.00 ^b
Residual	18416.42	321	57.37		
Total	19956.80	325			

The data in Table 4.22 proved that academic goal orientation is a significant predictor of self-handicapping among undergraduate universality students ($F(4, 321) = 6.71, p < .05$).

The contribution of each academic goal orientation was inferred from the value of the respective regression coefficient as presented in Table 4.23.

Table 4.23: Regression Coefficients of Achievement Goal Orientation on Students' Self-Handicapping

	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	[95 % <i>CI</i>]
(Constant)	58.28	2.19		26.67	.00	[53.98, 62.58]
Mastery Approach	-.83	.20	-.29	-4.14	.00	[-1.22, -.44]
Mastery Avoidance	.36	.18	.13	2.03	.04	[.01, .71]
Performance Approach	.21	.21	.07	.98	.33	[-.21, .62]
Performance Avoidance	.42	.18	.16	2.30	.02	[.06, .78]

Note. $N = 326$; *B* = unstandardized coefficient; *SE* = standard error for *B*; *CI* = confidence interval.

The findings in Table 4.23 revealed that among the undergraduate students, mastery approach goals had the highest but negative contribution in predicting academic self-handicapping ($\beta = -.29, p = .00$), followed by performance avoidance goals ($\beta = .16, p = .02$) and mastery avoidance goals ($\beta = .13, p = .04$). Performance approach had a very low and statistically non-significant predictive value ($\beta = .07, p = .33$) on academic self-handicapping.

The anticipated prediction equation was:

$$\hat{Y} = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \beta X_4 + \epsilon.$$

Where: \hat{Y} = predicted academic Self-handicapping; X_1 = Mastery Approach; X_2 = Mastery Avoidance; X_3 = Performance Approach; X_4 = Performance Avoidance academic goal orientation and ϵ is the error term.

However, as per the study results, the obtained prediction equation was:

$$\hat{Y} = 58.28 - 0.29X_1 + .13X_2 + .16X_4 + \epsilon.$$

Where: \hat{Y} = predicted academic Self-handicapping; X_1 = Mastery Approach; X_2 = Mastery Avoidance; X_4 = Performance Avoidance academic goal orientation and ϵ is the error term.

From the foregoing, there was sufficient evidence to reject the null hypothesis and conclude that academic achievement goal orientation significantly predicted academic self-handicapping among undergraduate university students.

4.4.4 Discussion of the Findings

The second objective sought to find out the relationship between academic goal orientation and academic self-handicapping among undergraduate students. The correlation analysis indicated that only three academic goal orientations had significant positive correlations with academic self-handicapping. Whereas self-handicapping decreased when students had higher mastery approach goal orientation, it seemed to increase when students had higher performance avoidance goal orientation. Both mastery avoidance and performance approach goal orientations had positive non-significant correlations with academic self-handicapping. The results imply that a university student with a high level of performance

approach academic goal orientation has a lower level of academic self-handicapping and vice-versa. On the other hand, a university student with a high level of performance avoidance goal orientation has a high level of academic self-handicapping. A standard multiple regression analysis revealed that three academic goal orientation subscales were significant predictors of self-handicapping ($F(4, 321) = 6.71, p < .05$) and that the three academic goal orientations accounted for 7 % of the variation in academic self-handicapping among the undergraduate university students.

The pattern of the correlations between mastery approach and performance avoidance with academic self-handicapping was consistent with findings among university and college students in China (Chen, et al. 2017), Nigeria (Asuquo & Kalu, 2016), Spain (Ferradás et al. 2016; Ferradás et al. 2018), and Turkey (Akin, 2014). Similar results have also been reported among high school students in England (Yu & Mclellan, 2019), Canada (Gervasi, 2019), Kenya (Ng'ang'a et al. 2018) and in USA (Lee, et al., 2021); as well as among young athletes (Molenaar, et al. 2021). The results suggest that when university students focus on improving their knowledge, skills and the development of competence, they engage in less self-handicapping behaviours. On the other hand, when they focus on avoiding failure in front of others, they engage in more self-handicapping behaviours.

The positive correlation between academic self-handicapping and academic goal orientation may be explained by the assertions of self-worth theory of achievement motivation by Covington (1984). The theory argues that achievement goals give energy and direction to achievement behaviours (Elliot, 2005). Extant literature on the theory shows that on one hand, mastery goals and performance-approach goals are almost always

beneficial to students in academic work. On the other hand, performance-avoidance goals typically deter students' performance (Elliot, 2005).

The general contention is that mastery and performance approach goals make students to focus on attaining competence while performance avoidance goals prime students to focus on potential failure. Thus, the theoretical position is that mastery and performance approach goals should reduce self-handicapping while performance avoidance should enhance it (Elliot, 2005). The fact that mastery approach had a negative correlation with self-handicapping while both mastery and performance avoidance goals had positive correlations seems to validate the theoretical position. This was buttressed by the fact that performance approach was not a significant predictor of self-handicapping. The findings seem to add weight to the theory's assertion that students' goals are linked to academic self-handicapping.

4.5 Moderating Effect of Self-Esteem in the Prediction of Academic Self-Handicapping

The third objective of the study investigated the moderating effect of self-esteem on the relationship between the Big Five personality traits, academic goal orientations, and academic self-handicapping. In the next sections, the respondents' scores in self-esteem are described followed by statistical testing for its moderating effect on the links between the BFPTs, academic goal orientations, and academic self-handicapping.

4.5.1 Description of Students' Self-Esteem

In this study, self-esteem was operationalized using scores obtained from the 10-item RSES. In each RSES item, students' Self-Esteem scores were generally above average

(Table G.3, Appendix G). The descriptive statistics for the overall scores in RES were as summarized in Table 4.24.

Table 4.24 Descriptive Statistics Of Self-Esteem Scores

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	<u><i>Sk</i></u>	<u><i>Kur</i></u>
Self-esteem	326	17	34	25.29	3.75	.01	-.62

Note. *N* = Sample size; *Min* = Minimum; *Max.* Maximum; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis

The mean self-esteem score was 25.29 (*SD* = 3.75) with a range of 17 to 34. The skewness and kurtosis coefficients were quite small indicating that the scores were normally distributed. The self-esteem scores were further examined based on the respondent's gender as presented in Table 4.25.

Table 4.25 Descriptive Statistics of Self-Esteem Score by Gender and Age

Variable		<i>n</i>	<i>M</i>	<i>SD</i>	<i>R</i>	<u><i>Sk</i></u>	<u><i>Kur</i></u>
Gender	Male	148	25.14	3.77	17-34	-.02	-.67
	Female	178	25.42	3.75	17-34	.05	-.58 $t(324) = -.67, p = .50$
Age (Years)	17 -20	62	24.89	3.86	17-33	-.11	-.76
	21- 24	220	25.38	3.75	17-34	.02	-.58 $F(3, 322) = .72, p = .54$
	25 - 28	39	25.18	3.73	20-34	.38	-.46
	≥ 29	5	27.20	3.11	22-30	-1.55	2.68

Note. *N* = Sample size; *R* = Range; *SD* = Standard deviation; *Sk* = Skewness; *Kur* = Kurtosis

As given in Table 4.25 the mean self-esteem score of male respondents was 25.14 (*SD* = 3.77) while female respondents had a mean of 25.42 (*SD* = 3.75). The self-esteem scores of both male and female respondents ranged from 17 to 34. The scores were normally distributed as indicated by the skewness and kurtosis coefficients of below three. Notably,

the self-esteem mean scores were not significantly different in terms of gender ($t(324) = -.67, p = .50$).

The findings in Table 4.25 further indicated that respondents aged between 17 and 20 scored a mean of 24.89 ($SD = 3.86$). Those aged between 21 and 24 years had a mean of 25.38 ($SD = 3.75$). The means for respondents in the age categories 25-28 years and 29 years and above were 25.18 ($SD = 3.73$) and 27.20 ($SD = 3.11$) respectively. The differences in the self-esteem means for the age categories were not statistically significant $F(3, 322) = .72, p = .54$.

Self-esteem of the respondents was categorized into low, moderate and high as presented in Table 4.26.

Table 4.26 Respondents' Levels of Self-Esteem

Level of Self-esteem	Frequency	Percent
Normal	171	52.5
High	155	47.5
Total	326	100.0

Notably, more than half of the respondents (52.5 %) had normal levels of self-esteem while 47.5 % had high self-esteem (see Table 4.26).

4.5.2 Hypothesis Testing

The study sought to investigate the moderating effect of self-esteem on the relationship between the BFPT, academic goal orientations and academic self-handicapping. The null hypothesis tested was, “self-esteem has no significant moderating effect on the relationship

between the BFPT, academic goal orientations and academic self-handicapping.” A hierarchical regression was used to test for the moderation effect. The moderator variable and all the three variables were first centered, to reduce multi-collinearity issues and to enhance interpretability.

First, additive regression model (block 1) predicting the outcome variable Y (academic self-handicapping) from both the predictor variables X_i (BFPT and academic goal orientations) and the moderator variable M (Self-esteem) was factored in Model 1. Secondly, a multiplicative interaction was added to model 1 and checked whether it was significant and whether it occasioned a significant change in R^2 . Moderation was expected to have occurred if the addition of the interaction term in model, yielded significant main effects and interaction. Table 4.30 shows the summary for the moderating effect of self-esteem on the relationship between the BFPT, academic goal orientations and academic self-handicapping.

Table 4.27 Moderation Effects Model Summary

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEE</i>	Change Statistics				
					ΔR^2	ΔF	<i>df</i> ₁	<i>df</i> ₂	<i>p</i> ΔF
1	.51 ^a	.27	.24	6.82	.27	11.45	10	315	.00
2	.55 ^b	.31	.26	6.72	.04	1.92	9	306	.04

a. Predictors: (Constant), Performance Avoidance, Openness, Agree, Extra, Consc, Neur, Mastery Approach, Mastery Avoidance, Performance Approach

b. Predictors: (Constant), Performance Avoidance, Openness, Agree, Extra, Consc, Neur, Mastery Approach, Mastery Avoidance, Performance Approach, Neuroticism*Self Esteem, Extraversion*Self Esteem, Mastery Avoidance*Self Esteem, Agreeableness*Self Esteem, Conscientiousness*Self Esteem, Openness*Self Esteem, Performance Approach*Self Esteem, Performance Avoidance*Self Esteem, Mastery Approach*Self Esteem.

c. Dependent Variable: SMEAN(SHQa).

As indicated in Table 4. 27 the base Model 1 independently accounted for 27 % of the variation ($R^2 = .27$) of academic self-handicapping among the undergraduate students. Upon adding the interaction term in Model 2, the model explained a total of 31 % ($R^2 = .31$) of variation in the level of academic self-handicapping among the undergraduate students. In Model 2, when the interaction term between self-esteem, and the Big Five personality traits and academic goal orientations was added, it significantly accounted for 4 % of the variance in level of academic self-handicapping among the undergraduate universities ($\Delta R^2 = .04$, $\Delta F(9, 306) = 1.92$, $p = .04$).

Considering that R square change was significant there was sufficient evidence to reject the null hypothesis that, self-esteem has no significant moderating effect. Consequently, it was concluded that self-esteem has a moderating effect on the relationship between the Big Five personality traits, academic goal orientations, and academic self-handicapping among the undergraduate university students. The significance of the model was tested using ANOVA as presented in Table 4.28.

Table 4.28: ANOVA Summary Table

Model		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
1	Regression	5320.39	10	532.04	11.45	.00 ^b
	Residual	14636.41	315	46.46		
	Total	19956.80	325			
2	Regression	6117.81	19	321.99	7.12	.00 ^c
	Residual	13838.99	306	45.23		
	Total	19956.80	325			

a. Dependent Variable: SMEAN(SHQa)

b. Predictors: (Constant), Performance Avoidance, Openness, Agree, Extra, Consc, Neur, Mastery Approach, Mastery Avoidance, Performance Approach

c. Predictors: (Constant), Performance Avoidance, Openness, Agreeableness, Extraversion, Conscientiousness, Neuroticism, Mastery Approach, Mastery Avoidance, Performance Approach, Neuroticism*Self Esteem, Extraversion*Self Esteem, Mastery Avoidance*Self Esteem, Agreeableness*Self Esteem, Conscientiousness*Self Esteem, Openness*Self Esteem, Performance Approach*Self Esteem, Performance Avoidance*Self Esteem, Mastery Approach*Self Esteem.

The ANOVA results in Table 4.28 indicates that the two models are significant. Model 1, which is without the interaction term, was significant, $F(10, 315) = 11.45, p < .05$. Equally, the multiplicative model (Model 2) was also significant, $F(19, 306) = 7.12, p < .05$. This confirms that the models can be used to predict students' academic self-handicapping when the BFPT and academic goal orientations, are factored in with the level of self-esteem as a moderator variable.

These results prompted the researcher to explore whether the interaction effect was similar for students with normal self-esteem and those with high self-esteem. The results were as presented in Table 4.29.

Table 4.29 Moderation Effects Models Summary by Level of Self-Esteem

SE Level	Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEE</i>	Change Statistics				
						ΔR^2	ΔF	<i>df</i> ₁	<i>df</i> ₂	<i>p</i>
Normal	1	.50 ^a	.25	.21	6.70	.25	5.99	9	161	.00
	2	.54 ^b	.29	.21	6.69	.04	1.04	9	152	.41
High	1	.54 ^a	.30	.25	6.89	.30	6.76	9	145	.00
	2	.63 ^b	.39	.31	6.62	.10	2.36	9	136	.02

Note. *N* = 326. *SE* = Self Esteem, *SEE* = Standard Error of the Estimate.

- a. Predictors: (Constant), Performance Avoidance, Openness, Agreeableness, Extraversion, Conscientiousness, Neuroticism, Mastery Approach, Mastery Avoidance, Performance Approach.
- b. Predictors: (Constant), Performance Avoidance, Openness, Agreeableness, Extraversion, Conscientiousness, Neuroticism, Mastery Approach, Mastery Avoidance, Performance Approach, Neuroticism*Self Esteem, Extraversion*Self Esteem, Mastery Avoidance*Self Esteem, Agreeableness*Self Esteem, Conscientiousness*Self Esteem, Openness*Self Esteem, Performance Approach*Self Esteem, Performance Avoidance*Self Esteem, Mastery Approach*Self Esteem.
- c. Dependent Variable: Self-handicapping.

As presented in Table 4.29, there were notable differences in how self-esteem moderated the relationships between the study variables. Among students with normal self-esteem, the base model was significant ($F(9, 161) = 5.99, p < .05$) and the predictor variables accounted for 25 % of variance in students' self-handicapping. On the other hand, the multiplicative model (Model 2) accounted for 29 % of variance in students' self-handicapping. This implied that adding the interaction term between self-esteem, and the Big Five personality traits and academic goal orientations to the regression model changed the variance accounted for only by 4 %. However, this change was not significant ($\Delta R^2 = .04, \Delta F(9, 152) = 1.04, p = .41$).

Among students with high level of self-esteem, the base model (Model 1) was significant ($F(9, 145) = 6.76, p < .05$) and it accounted for 30 % of variance in students' self-handicapping. For students with high self-esteem, the multiplicative model (Model 2) accounted for 39 % of variance in students' self-handicapping. The change introduced by adding self-esteem's interactions with the Big Five personality traits and academic goal orientations to the regression model was significant ($\Delta R^2 = .10, \Delta F(9, 136) = 1.04, p < .05$). The significance of the model across the levels of self-esteem was ascertained through ANOVA as displayed in Table 4.30.

Table 4.30 ANOVA Summary Table per Level of Self-Esteem

Level of SE	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Normal	Regression	2417.47	9.00	268.61	5.99	.00 ^b
	1 Residual	7224.91	161.00	44.88		
	Total	9642.38	170.00			
	Regression	2835.10	18.00	157.51	3.52	.00 ^c
	2 Residual	6807.28	152.00	44.78		
	Total	9642.38	170.00			
High	Regression	2889.07	9.00	321.01	6.76	.00 ^b
	1 Residual	6880.87	145.00	47.45		
	Total	9769.94	154.00			
	Regression	3817.63	18.00	212.09	4.85	.00 ^c
	2 Residual	5952.31	136.00	43.77		
	Total	9769.94	154.00			

b. Predictors: (Constant), Performance Avoidance, Openness, Agree, Extra, Consc, Neur, Mastery Approach, Mastery Avoidance, Performance Approach
c. Predictors: (Constant), Performance Avoidance, Openness, Agreeableness, Extraversion, Conscientiousness, Neuroticism, Mastery Approach, Mastery Avoidance, Performance Approach, Neuroticism*Self Esteem, Extraversion*Self Esteem, Mastery Avoidance*Self Esteem, Agreeableness*Self Esteem, Conscientiousness*Self Esteem, Openness*Self Esteem, Performance Approach*Self Esteem, Performance Avoidance*Self Esteem, Mastery Approach*Self Esteem.

The results in Table 4.30 revealed that the regression models for both levels of self-esteem were significant.

4.5.3 Discussion of the Findings

The third objective of the study sought to find out the moderating effect of self-esteem on the relationship between the BFPT, academic goal orientations and academic self-handicapping. The regression results established that self-esteem had a statistically significant positive moderating effect on the relationship between the BFPT, academic goal orientations, and students' academic self-handicapping among undergraduate university students. Therefore, the null hypothesis was rejected.

The findings on a positive moderating effect of self-esteem agree with those reported by Ferradás et al. (2018) that university students' levels of self-esteem was a basis for their individual differences in achievement goals and academic self-handicapping. It also agrees with Kamuk (2020) who reported that Turkish undergraduate students with a high self-esteem had low self-handicapping. Similar moderating effect of self-esteem were also reported by Atoum et al. (2019) among university students in Nigeria. However, in the studies by Atoum et al. (2019) and Kamuk (2020) self-esteem had non-significant moderating effect which contrasts the significant moderation effect reported in this study. Notably, it was exploratorily established that the moderation effect was more pronounced among students with high levels of self-esteem. Thus, the higher the undergraduate students' self-esteem, the more attenuated the links between the BFPT, goal orientations, and academic self-handicapping become.

Interestingly, the results from ANOVA offer evidence of significant moderating effect of self-esteem on the relationship between the Big Five personality traits, academic goal orientations and academic self-handicapping among university students. Both the base model (Model 1) and the multiplicative model (Model 2) were significant. This confirms that the models can be used in predicting the undergraduate' academic self-handicapping from Big Five personality traits and academic goal orientations with the level of self-esteem factored in as a moderator variable.

The findings contrast those of earlier studies that revealed self-esteem as having a negative moderating effect on the relationship between the Big Five personality traits, academic goal orientations and academic self-handicapping have been reported. Barutcu and Demir (2020) found that among Middle East university students in Turkey, the moderation effect of self-esteem negatively predicted self-handicapping and goal orientation achievement. Filemoni (2017) reported that self-esteem negatively predicted self-handicapping. Self-confidence significantly mediated the relationship between self-handicapping and self-esteem.

Self-worth achievement motivation theory offers an explanation for the findings of the study on the moderating effects of self-esteem on. The theory explains that having a low self-esteem increases sensitivity to threat of a looming academic failure. There is evidence that people with low self-esteem end up in a vicious cycle. Individuals with low self-esteem cope maladaptively with threatening situations. They use self-handicapping to sanitize low academic performance which further lowers their self-esteem (Gustavson & Miyake, 2017). It appears that one route towards self-handicapping among university

students is by adopting performance avoidance goals. Other students may set goals that are easily achievable, thereby minimizing the likelihood of failure and associated self-handicapping tendencies.

From the current study the undergraduate students often got temporally relief by avoiding failure using these strategies. However, goal theory argues that this strategy finally destroys the will to learn and achieve success in academics. Failure affects self-esteem and if it is chronic it affects personality. The study results suggest that high self-esteem can act as a buffer between BFPTs, achievement goals, and academic self-handicapping.

4.6 Prediction Equation for Academic Self-handicapping

This section presents test for assumptions for multiple regression, hypothesis testing and discussion of the findings.

4.6.1 Diagnostic Tests

The collected data were checked to rule out any violation of the multiple regression analysis' assumptions of: normality, multi-collinearity, independency, heteroscedasticity and homoscedasticity.

4.6.1.1 Normality Test Results

Normality assumption is evidenced when residuals distribute normally around the predicted scores. Following Gravetter and Wallnau's (2014) recommendation, a Shapiro-Wilk's test (W) was used to test for normality. When the W is significantly smaller than 1, it implies that the normality is not met. Razali and Wah (2011) recommend the use of

Shapiro-Wilk's test for small and medium samples up to $n = 2000$. The normality tests for the study variables were as presented in Table 4.31.

Table 4.31. Normality Test for the Study Variables

Variable	<i>Sk</i> (<i>SE</i>)	<i>Kur</i> (<i>SE</i>)	<i>W</i>	<i>df</i>	<i>p</i>
Academic self-handicapping	-.05(.14)	.40(.27)	.99	326	.01
Extraversion	-.11(.14)	.32(.27)	.99	326	.02
Agreeableness	-.05(.14)	-.03(.27)	.99	326	.00
Conscientiousness	.25(.14)	.04(.27)	.99	326	.01
Neuroticism	-.06(.14)	-.25(.27)	.99	326	.06
Openness	.04(.14)	.06(.27)	.99	326	.04
Mastery approach goal orientation	-1.19(.14)	1.16(.27)	.89	326	.00
Mastery avoidance goal orientation	-.36(.14)	-.65(.27)	.96	326	.00
Performance approach goal orientation	-.60(.14)	-.25(.27)	.95	326	.00
Performance avoidance goal orientation	-.42(.14)	-.70(.27)	.95	326	.00
Self-esteem	.01(.14)	-.62(.14)	.98	326	.00

Note. *SK*= Skewness; *SE* = Standard error; *Kur*= Kurtosis; *W*= Shapiro-Wilk's test.

As presented in Table 4.31, the skewness and kurtosis statistics for all the study variables were within the normal range. However, a Shapiro-Wilk's test ($p < .05$) showed a significant departure from normality for all the variables except neuroticism. Further, when Skewness and Kurtosis were each divided by their respective standard errors, the values for self-handicapping and the Big Five personality subscales were well within the range of -1.96 and 1.96 suggesting normality of the data, as per the criteria outlined by Tabachnick and Fidell (2019). However, the values for the achievement goal orientations and self-esteem were all beyond this range of normality. Thus these variables were transformed logarithmically [(Log 10), $NEWX = LG10(K - X)$] to remove skewness before computing inferential statistics as suggested by Tabachnick and Fidel (2019).

4.6.1.2 Assumptions of Multi-Collinearity and Singularity

In this study, multi-collinearity was tested using tolerance and the Variance Inflation Factor (VIF). Calculated using the formula $1-R^2$, tolerance is the degree of variance in an independent variable not explained by other independent variables in the model. The VIF is the reciprocal of tolerance. Table 4.32 presents the tolerance and VIF values for the study variables.

Table 4.32. Tolerance and Variance Inflation Factor (VIF) Statistics

	Tolerance	VIF
Extraversion	.92	1.09
Agreeableness	.98	1.02
Conscientiousness	.92	1.09
Neuroticism	.82	1.22
Openness to Experience	.82	1.22
Mastery Approach Achievement Goal Orientation	.54	1.85
Mastery Avoidance Achievement Goal Orientation	.69	1.44
Performance Approach Achievement Goal Orientation	.47	2.14
Performance Avoidance Achievement Goal Orientation	.61	1.64

In interpreting the findings in Table 4.32, the study was guided by different authorities (Schäfer & Schwarz, 2019; Tabachnick & Fidell, 2019) who specify that variables with tolerance values less than 0.10 and VIF greater than 10 may need to be revised. The popular criteria is that VIF values of above 3 indicate violation of the assumption of multicollinearity (Schäfer & Schwarz, 2019; Tabachnick & Fidell, 2019). From Table 4.32, it is evident that multi-collinearity was not a concern in all the measures since the VIF values were all below 3.

4.6.1.3 Test for Independence of Observations

To test whether the sample scores were independent from each other, the Durbin-Watson test was used. This was necessary to ensure that the results from the study sample reflect what would be found in the entire population of undergraduate Kenyatta University students with regard to the prediction of self-handicapping from the Big Five personality traits and academic goal orientations. The test for independence in the model was as summarized in Table 4.33.

Table 4.33.model summary for test of independence

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SEE</i>	Durbin-Watson
1	.52 ^a	.27	.24	6.82	1.69

a. Predictors: (Constant), Performance Avoidance , Openness to Experience, Agreeableness, Extraversion, Self-esteem, Conscientiousness, Neuroticism , Mastery Approach, Master A voidance, Perform ance Approach.

b. Dependent Variable: Academic Self-Handicapping.

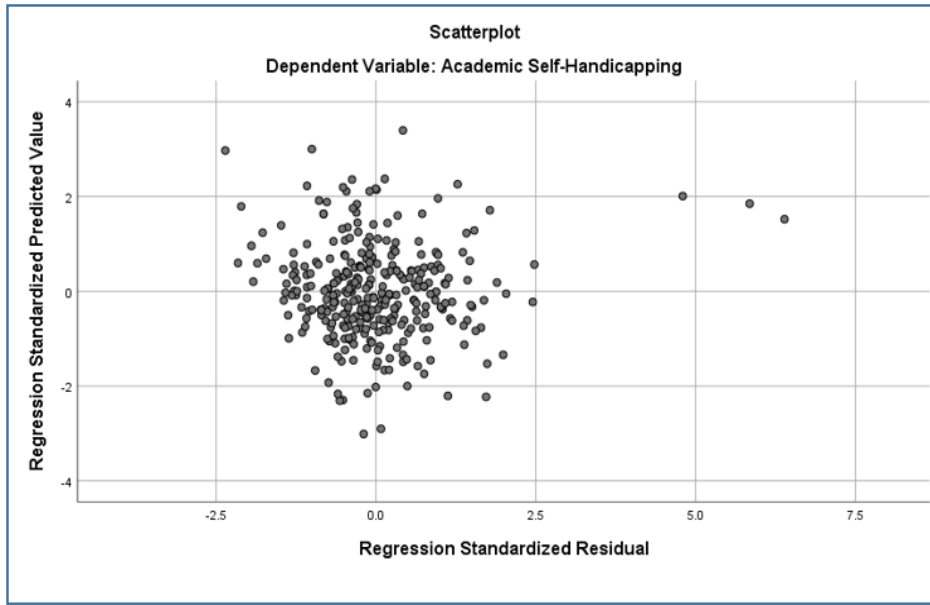
As given in Table 4.33 the Durbin-Watson value was 1.69. Considering the rule of thumb by Tabachnick and Fidell (2019) that if the Durban-Watson value is less than 1 or over 3 then it is counted as being significantly different from 2 and as such as indicating a violation of the assumption, the obtained value suggested that the data met the assumption of independence of errors.

4.6.1.4 Heteroscedasticity and Homoscedasticity

The study also investigated the assumption of the error term being the same across all values of the independent variables (heteroscedasticity). According to Gravetter and Wallnau (2014) a well-fitting model should have no pattern to the residuals plotted against the fitted values. If the variance of the residuals is non-constant then the residual variance

is said to be heteroscedastic. This was shown graphically by fitting residuals versus fitted (predicted) values, as shown in Figure 4.1.

Figure 4.1: Scatter-Plot of Standardized Residuals against Standardized Predicted Values



Heteroscedasticity is not apparent when the scatter is not even and have no definite patterns. Figure 4.1 shows that the dots had a nearly pattern less scatter suggesting lack of pure Heteroscedasticity.

4.6.2 Hypothesis Testing

The study sought to establish a linear model that could be used to predict students' academic self-handicapping given the Big Five personality traits and academic goal orientations with students' self-esteem as a moderator variable. The Big Five personality traits together with the four aspects of academic goal orientations were entered as predictor variables with the interaction term included.

Multiple-regression established the unique variance in students' academic self-handicapping explained by each aspect of Big Five personality traits, academic goal orientations and self-esteem and their interactions. Looking at the coefficients (see Table 4.34 see next page), it was evident that the various personality traits and academic goal orientations contributed differently in predicting academic self-handicapping. Among the Big Five personality traits Neuroticism had the single highest contribution ($B = 4.67$) on academic self-handicapping, followed by openness ($B = 3.20$) and conscientiousness ($B = 2.23$). Extraversion and agreeableness had non-significant predictive weights on academic self-handicapping.

Table 4.34: Regression Coefficients

Model	Unstandardized Coefficients					95% CI
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	
(Constant)	37.75	6.57		5.74	.00	[24.82,50.69]
SE	-.12	.11	-.06	-1.13	.26	[-.34,.09]
E	.57	.89	.03	.64	.52	[-1.17,2.32]
A	-1.84	1.12	-.08	-1.64	.10	[-4.05,.37]
C	2.23	1.08	.10	2.07	.04	[.11,4.35]
1 N	4.67	.85	.30	5.51	.00	[3.00,6.34]
O	3.20	1.03	.17	3.11	.00	[1.17,5.22]
MAP	-.47	.19	-.17	-2.47	.01	[-.85,-.10]
MAV	.12	.16	.04	.74	.46	[-.20,.45]
PAP	-.15	.20	-.05	-.77	.44	[-.54,.24]
PAV	.41	.17	.15	2.46	.01	[.08,.74]
(Constant)	38.58	6.70		5.76	.00	[25.39,51.77]
SE	-.09	.11	-.04	-.79	.43	[-.31,.13]
E	.17	.89	.01	.19	.85	[-1.59,1.93]
A	-1.56	1.15	-.07	-1.36	.17	[-3.82,.69]
C	2.01	1.10	.09	1.83	.07	[-.15,4.18]
N	4.65	.85	.29	5.50	.00	[2.99,6.32]
O	3.08	1.06	.16	2.91	.00	[1.00,5.17]
MAP	-.51	.20	-.18	-2.58	.01	[-.90,-.12]
MAV	.20	.16	.07	1.24	.21	[-.12,.53]
2 PAP	-.18	.20	-.06	-.89	.38	[-.56,.21]
PAV	.38	.17	.14	2.26	.02	[.05,.71]
E*SE	-.43	.39	-.06	-1.10	.27	[-1.20,.34]
A*SE	.67	.41	.08	1.63	.10	[-.14,1.47]
C*SE	.37	.39	.05	.94	.35	[-.40,1.14]
N*SE	.67	.45	.08	1.51	.13	[-.20,1.55]
O*SE	.12	.45	.02	.28	.78	[-.76,1.01]
MAP*SE	-.32	.52	-.04	-.61	.54	[-1.35,.71]
MAV*SE	-1.27	.45	-.17	-2.81	.01	[-2.15,-.38]
PAP*SE	.42	.55	.06	.75	.45	[-.67,1.50]
PAV*SE	.14	.50	.02	.28	.78	[-.84,1.11]

Note. *N* = 326. SE = Self Esteem, E = Extraversion; A= Agreeableness; C = Conscientiousness, N = Neuroticism; O = Openness to Experience; MAP = Mastery Approach; MAV= Mastery Avoidance; PAP = Performance Approach; PAV = Performance Avoidance.

With regards to achievement goal orientations, only performance avoidance had a positive predictive weight ($B = .41$) on academic self-handicapping. Performance approach had a

significant negative predictive weight ($B = -.47$). In the second model, the significant predictors in the first model were still significant except consciousness. Only the interaction between mastery avoidance and self-esteem had a significant negative predictive weight ($B = - 1.27$) on the level of academic self-handicapping among the undergraduate university students. This suggests that self-esteem significantly moderates the relationship between mastery avoidance goal orientations and self-handicapping among the students. On the other hand, all the other interaction effects did not yield a significant effect on the model.

Generally, the model was adequate to predict the level of self-handicapping among the students. The model was statistically significant $F(10, 315) = 11.45, p < .05, R^2 = .27$. This confirms that the big five personality traits together with academic goal orientations were significant predictors accounting for about 27 % of variability of self-handicapping among the undergraduate university students. The model involving these predictor variables with the moderation effect of self-esteem was also statistically significant $F(19, 306) = 7.12, p < .05, R^2 = .31$. This implies that the predictor variables jointly with the moderating effect of self-esteem explained 31 % of the variability in academic self-handicapping among the undergraduate university students. This shows that the moderation effect of self-esteem led to a 4 % increase in the variability of academic self-handicapping among undergraduate university students.

The study was guided by a general regression prediction model as follows:

Academic Self-Handicapping (Y).

$$\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \beta_{15} X_{15} + \beta_{16} X_{16} + \beta_{17} X_{17} + \beta_{18} X_{18} + \beta_{19} X_{19} + \varepsilon$$

Where:

X_1 = Self-esteem, X_2 = Extraversion, X_3 = Agreeableness, X_4 = Conscientiousness, X_5 = Neuroticism, X_6 = Openness to Experience, X_7 = Mastery Approach, X_8 = Mastery Avoidance, X_9 = Performance Approach, X_{10} = Performance Avoidance, X_{11} = Self Esteem * Extraversion, X_{12} = Self Esteem * Agreeableness, X_{13} = Self Esteem * Conscientiousness, X_{14} = Self Esteem * Neuroticism, X_{15} = Self Esteem * Openness to experience, X_{16} = Self Esteem * Mastery Approach, X_{17} = Self Esteem * Mastery Avoidance, X_{18} = Self Esteem * Performance Approach and X_{19} = Self Esteem * Performance Avoidance.

Thus, the predicated optimum level of academic self-handicapping among undergraduate university students was represented by:

$$\hat{Y} = 38.58 + 4.65 X_5 + 3.08 X_6 + 0.38 X_{10} - 0.51 X_7 - 1.27 X_{17} + \varepsilon$$

Where:

X_5 = Neuroticism, X_6 = Openness to Experience, X_7 = Mastery Approach, X_{10} = Performance Avoidance, X_{17} = Self Esteem * Mastery Avoidance.

From the model, for each one unit rise in self-esteem, there is a subsequent drop in the level of academic self-handicapping by 0.12 units. Likewise, for each one unit increase in the level of mastery avoidance there is an ensuing increase in academic self-handicapping among the students by 0.12 units. However, an interaction between self-esteem and mastery avoidance academic goal orientations results into a huge drop in academic self-handicapping by 1.27 units.

4.6.3 Discussion of the Findings

The fourth objective of the study sought to establish the prediction equation for academic self-handicapping from the Big Five personality traits and academic goal orientations among undergraduate students. From the model, for each one unit increase in self-esteem, there is a subsequent drop in the level of academic self-handicapping by 0.12 units. On the other hand, for each one unit change in the level of neuroticism, openness to experience, personality traits and performance avoidance goal orientation, there is an increase in academic self-handicapping among the students by 4.67, 3.20, and 0.41 units respectively. In addition, a unit change in mastery approach goal orientation leads to a subsequent drop in the level of academic self-handicapping by 0.47 units. However, the interaction between self-esteem and mastery avoidance achievement goal orientation results into an ensuing drop in academic self-handicapping by 1.27 units.

Notably, self-esteem seems to reverse the relationship between some of the predictor variables and academic self-handicapping. For example, when alone extraversion and mastery avoidance are positive predictors of academic self-handicapping. However, when they interact with self-esteem, they have a negative prediction of academic self-handicapping. Individually, agreeableness, performance approach, and performance avoidance goal orientations are negative predictors of academic self-handicapping. However, when they interact with self-esteem, they have a positive prediction of academic self-handicapping.

The study results were consistent with the findings among university students in Spain (Ferradás et al., 2018) and in Turkey (Barutcu & Demir, 2020). The results showed that

the various personality traits, aspects of academic goal orientations and academic performance satisfaction contributed differently in influencing academic self-handicapping. Academic goal orientations were found to uniquely influence academic self-handicapping which agreed with findings among college students in Nigeria (Atoum et al. 2019) where a significant relationship between goal orientations, self-regulated learning strategies, and academic self-handicapping was reported.

According to Covington (1984), there are two strategies used by students in academic goal orientation strategies to evade failure; giving excuses and conviction for success. The excuses given by students include setting unrealistic goals and procrastination; this allows the students to use academic self-handicapping to protect their esteem. On the other hand, students may set goals that are easily achievable, thereby minimizing the likelihood of failure and self-handicapping tendencies. According to self-worth achievement motivation theory self-esteem is the foundation upon which the self-worth of an individual rests. A student's personality defines who they view themselves to be and therefore will have a direct bearing on their self-esteem (Bleidorn, 2017). In addition, goal orientations will determine whether the undergraduate students will concentrate on their tasks to understand learning content or engage in the same tasks for the purposes of demonstrating their abilities (Covington, 1984). This will determine whether students will resort to academic self-handicapping or not.

The results suggest that self-esteem reverses the direction of the relationship between the extraversion and agreeableness with academic self-handicapping. It also reverses the relationship between mastery avoidance, performance approach and performance

avoidance goal orientations and academic self-handicapping. Future studies may establish the specific aspects of these predictors that facilitate this unique interaction with self-esteem. The results further suggest the need for more understanding on how the BFPT, achievement goal orientation and self-esteem cross-pollinate in their links with academic self-handicapping.

4.7 Qualitative Data Analysis

4.7.1 Coding Method

Coding of qualitative data was guided by coding procedure proposed by Linneberg and Korsgaard (2019). This started with developing categories of research aspects that were investigated, development of codes based literature review and identification of themes from the coded data. As per the criteria by Linneberg and Korsgaard (2019) this study used deductive coding in which a coding frame was generated guided by the Big Five personality theory and self-worth theory.

Regarding personality, the students' responses were categorized into the five personality types: neuroticism, conscientiousness, openness, extraversion and agreeableness. Their responses in goal orientation were used also to categorize them into either mastery or ego goal orientation. For mastery goal orientation, coding entailed desire of the student to understand learning content and gain skills to be effective in the world of work and other responses that were related to this. On the other hand, coding in ego orientation focused on responses such as grades are more important than mastering the content, career choice, and performance in academics are influence by friends and parents.

Concerning personality, coding focused on the pointers to the Big Five personality traits in the responses provided. For instance, a student was coded as having agreeableness personality based on the extent to which the student sought help from other students or lecturers when faced with a challenge in academic tasks. The same procedure was followed to code the responses of the students on the other personality traits. While coding, some students exhibited multiple personality traits.

The students' responses on self-esteem were coded based on how the students regarded themselves in terms of academic abilities in comparison to their classmates. Coding in this scale was based on pointers to students feeling like failures, whether the student had anything to be proud of, whether the students felt they were of no value, and the extent to which learning achievement was associated with attitude. Coding for academic self-handicapping was based on the extent to which the students blamed external factors for their academic failures.

4.7.2 Description of the Qualitative Data and Code Book Development

Table 4.35 presents the description of achievement goals of the students involved in the study.

Table 4.35: Description of Interviewers ‘Achievement Goals

Goal Orientation Type	String	Percentage
Mastery orientation	Mastery of content is relevant in practice Passion to learn and make an impact in the field of study	52
Ego Goal Orientation	Good grades are more important than understanding the concept Motivated to work hard because of certificate	48

As shown in Table 4.35, over half (52 %) of the interviewed students had mastery goal orientation while 48 % had ego goal orientation. The findings mirrored the quantitative data which showed that the proportion of students with mastery goal orientation was slightly higher than that of students with ego goal orientation.

The interviewees’ Big Five personality traits were as described in Table 4.36.

Table 4.36. Description of the Big Five Personalities Traits

Personality Traits	String	Percentage
Extroversion	Cooperates with other students	62.2
Agreeableness	Out to solve problems in society	48.3
Conscientiousness	Motivated to achieve and know more	51.1
Neuroticism	Has feelings of low self-esteem Experiences mood swings	43.1
Openness	Potential makes them feel comfortable around people	54.1

The findings in Table 4.36 indicate that 62.2 % of the students interviewed had extroversion personality trait, 48.3 % had agreeableness personality trait, 51.1 % had conscientiousness personality trait, 43.1 % had neuroticism personality trait while 54.1 % had openness personality trait. The findings on self-esteem were categorized into low self-esteem, moderate and high as per the rubrics given in Table 4.37.

Table 4.37 coding in Self-Esteem Levels

Category	Coding String
Low self-esteem	Always feels not better than other students
Moderate	Sometimes feels as having no value
High Self-esteem	Always feels better than other students in academic ability

In addition interviewees' academic self-handicapping was coded as per the rubric in Table 4.38.

Table 4.38 Coding In Academics Self-handicapping

Academic Self-handicapping	Coding String
Tendency	
High tendency of ASH	Academic performance is affected by external factors; the student thinks anxiety affects performance, thinks has bad luck and does not accomplish challenging tasks
Low tendency of ASH	Academic success is affected by external factors to a small extent
No tendency of ASH	Academic success is not associated with external factors

Note. ASH = academic self-handicapping.

4.7.3 Reliability and Validity Checks of Qualitative Data

According to Silver (2019) reliability and validity in qualitative research deals with issues of quality and rigor of the research and trustworthiness of the data collected. The researcher used different techniques to establish the validity and reliability of qualitative data and findings. The researcher conducted rigorous literature review on qualitative measurement of Big Five Personality Traits, self-esteem, goal orientation and academic self-handicapping.

Qualitative data were collected using self-constructed interview schedules. To ensure that this tool was highly dependable in terms of face and content validity, the researcher used a number of techniques. To start with, the interview items were adapted from the Big Five Traits Measure (Stajkovic et al, 2018). The items were then modified for participants in higher institution of learning based on the study objectives to improve their validity. Secondly, the researcher used semi-structured interview questions to enhance objectivity by allowing participants to speak their mind openly. The structure also enabled interviewer to delve deeply in personal and sensitive issues using less intimidating questions and in collecting additional information on participants' thoughts, emotions and feelings regarding the issues that were under investigation.

A pilot study involving six participants helped in establishing the validity and reliability of the interview items as recommended by Lancaster et al. (2004). To enhance data validity the pilot study participants did not participate in the main study. After the pilot study the findings were then discussed with the supervisors. The findings from the pilot study and

recommendations from the supervisor enabled the researcher to make relevant changes to improve the quality of the responses and collected data.

The researcher enlisted research assistants who had already graduated and were familiar with research work. The research assistants were not part of the target population, this was necessary to reduce mediated biases (Eaton, 2017). Additionally, the researcher trained the assistants using Eaton guidelines on how to explain and administer interview questions and assure respondents of the privacy of the information they provided.

The qualitative data were collected from a group of 50 students who were randomly selected from the study sample. The interview responses were recorded using mobile phone voice recorder, then coded and stored in the laptop for analysis. This was done according to the recommendations by Farooq and De Villiers (2017) to reduce subjectivity and biases of responses transcription during the interview sessions.

4.7.4 Findings

This section presents the findings on goal orientation, big five personality traits, self-esteem and academic self-handicapping.

4.7.4.1 Academic Goal Orientations.

In this study, quantitative data revealed that majority of the students had task goal orientation. The interviewed students exhibited a view that task goal orientation was more important, as it leads to mastery of the content and career success. The students interviewed were given pseudo names to conceal their identity and the findings were as presented.

Jones. This was a male student whose career choice was prompted by technological development. The respondent argued that changes in the environment drove him into choosing a course that is compatible with the current trends of technology. Jones mentioned that his family background and future goals are what inspires him to work hard in his studies. He affirmed that friends are also part of the driving force; they help him in time management and in revision, which greatly influence his academic performance. Asked what was important in his studies; mastering the content or good grades, Jones replied "both are important since most companies today look at how good your transcripts are and how good you are in the field". Jones responses indicated that both task and ego goal orientations are important in academic and career aspirations.

Lones. This was a female student who was passionate in finance and business related career. Passion is what inspired her in pursuing a course in the field of commerce. Lones stated that her dreams, goals in life, and the desire to achieve is what makes her to consistently work hard in studies. Asked if friends influence her performance, Lones replied "not really" she affirmed that she don't mix friendship with her studies. When asked what was important: mastering content or good grades. Lones replied "mastering the content" because it will help her in applying the knowledge and skills in the field. Lones responses categorized her as having task goal orientation, whose motivation was mostly is intrinsic.

Bakes. This was a student whose career choice was inspired by her passion and great believe that she could do it. She mentioned that good grades, achievement of goals and desire for success are what kept her motivated to work hard in her studies. Bakes affirmed

that friends are part of her academic performance. They are the source of encouragement and are always helpful in getting academic materials in her field and in studying. When asked what was important in her studies; mastering the content or good grades. Bakes preferred mastering content. She argued that Mastering content will help her in performing well in her course, help her in the future and in application of knowledge when given an opportunity to practice. This implies that she was a self-motivated and task oriented individual.

In the quantitative phase achievement goal orientation significantly predicted self-handicapping and accounted for close to a sixth of its variance among the undergraduate university students. Qualitative findings further revealed that many students had task goal orientation approaches. From their responses it's evident that majority of the students had the intention to improve their knowledge, skills, and learning. The interviews showed that most of the students focused on positive results and application of what they are learning. These findings suggest that students are likely to develop academic self-handicapping tendencies when they fail to get the expected high academic results in order to protect their self-worth. This was likely among those students who set very high academic goals and who did not feel sufficiently competent in the courses they were taking. There is evidence that setting high standards for one's own performance creates grounds for excuses for poor performance which often results to academic self-handicapping (Yamane et al. 2017).

According to the self-worth theory of achievement motivation, students may adopt task orientated academic goals or ego oriented academic goals in an effort to protect their self-worth (Ferradas et Al., 2019). Adopting ego oriented academic goals elevates students'

chances to get favorable judgment from their peers and teachers. On the other hand, those with task oriented goals aim at enhancing skills and gaining more knowledge in their area of specialization. Thus the types of achievement goals pursued in the learning context relate to extent of achievement and to use of self-worth protective tendencies such as academic self-handicapping and setting low standards.

4.7.4.2 *The Big Five Personality Traits.*

Evidence points at links between the Big Five personality traits and learning outcomes. In this study, quantitative results indicated that extraversion, conscientiousness, openness and neuroticism negatively correlated to academic self-handicapping. Neuroticism had the highest negative impact on academic self-handicapping followed by conscientiousness and extraversion. Qualitative analysis results reveal distinct student personality characteristics with those related to neuroticism, conscientiousness and extraversion such as being reserved, social, optimistic, studying alone, self-discipline, self-motivation, goal orientation, academic values and determined to succeed in academics and in the career. Below are some of the findings:

Ben. A male student pursuing a career related to his mentors' profession orientation. His response to the question of how he thought of himself and others he said that, “studying is important and should be done daily to become a better person in the society.” This indicates that to him self-worth was derived from academics. Ben’s description of his feelings most of the time "jovial and ready for any news of motivation" indicated that he relied more on his emotional and extrinsic motivation, which characterize Openness Extraversion and Agreeableness personality traits.

George. This was a student whose passion was pursuing a career in computer and technology. George thought of himself as performing student working hard to improve himself and make an impact in his career. When asked to describe his feeling regarding how he handled his academics and related issues he responded that "I take most of my time researching and working with computers". His response implies that he was a reserved student who preferred working alone in his studies to make himself better.

Rachel. A female student pursuing teaching thought of herself as an achiever with instincts and capabilities for better performance in the course and didn't necessarily need to be influenced externally by other people to attain her goals. When asked of her feeling most of the time she responded that she felt "jovial and always willing to interact with people having different personalities and attitudes that influence my development". This implies that Rachel was a social, outgoing and goal oriented student determined to achieve her goals.

Rose. This was a female student pursuing medicine. She mentioned that she felt that she had a golden opportunity than other students and in most cases she felt gorgeous and wonderful because she had nothing to worry about. Rose's personality portrayed sense of self confidence, self-worth and motivation.

To explain the study's qualitative results, the Big Five personality theory argues that such personality traits are important in educational contexts considering the fact that in such environments learning involves problem solving. Success in academics comes after a series of setbacks that students have to endure. Therefore, in the face of failure, the personality traits of a student determine the strategies used either to succeed or succumb to self-handicapping. Furthermore, the qualitative results revealed that the big five personality traits were associated with high academic values and low academic self-handicapping. There is evidence that neuroticism, emotion-focused strategies, nervousness and precision

traits all strongly predict self-handicapping strategies among students (Mikaeel et al. 2017; Tang & Zhang, 2017).

4.7.4.3 *Self-Esteem, Goal Orientation, Big Five Personality Traits and Self-Handicapping.*

From the study, majority of the students reported that they felt good about themselves, they were in-control of their emotions, proud of their academic achievements and performed well when adequately prepared. Regarding self-esteem, majority of the students described themselves in terms of their academic abilities and future achievement in career. Others invoked their academic performance, academic task completion, and performance satisfaction and career goals to describe self-esteem. Students with task goal orientation exhibited high levels self-motivation, determination and were optimistic in attaining good grades consistently. Most students viewed mastery of learning content as more important as it brought along good grades and excellence in the field.

Beta. This was a female student passionate in art; drawing to be specific. She said that her motivation to work hard in studies come from her parents. Beta affirmed that friends influenced her performance negatively because she wasted a lot of time drinking alcohol and therefore she was unable to focus on her studies. When asked what was important in her studies; mastering content or good grades, she responded "mastering content, because am pursuing a technical course and knowledge acquired is needed in the field."

Beta describes herself as being talented and goal oriented. She felt happy most of the time, could not tolerate introverts and people with mood swings. When asked what made her feel comfortable around people she responded "age group and same kind of stories." Beta stated that she experienced mood swings during periods, when angered and when dealing

with personal issues. When asked how well she performed her duties she said "excellent" and affirmed that she disliked being a center of attraction.

In terms of abilities Beta viewed herself as better than others. When asked of a weakness that makes her feel like a failure she responded "self-esteem." She felt proud of herself as she had achieved most of her goals. She affirmed that at times she felt she was of no value and she rarely associated her achievement with her attitude. Her responses clarifies that personality traits, self-esteem and goal orientation contribute to students' overall academic performance and students' well-being.

Jode. The respondent was a male student who was pursuing a career he chose out of passion. Jode stated that his motivation comes from his parents and fellow students. He mentioned that his friends influenced his performance because they were ambitious. When asked what was important in his studies, "mastering content and good grades" he responded. He said that mastering content was important so that he could deliver in the field."

In terms of personality, Jode attached value to studying hard as it would benefit him and his life. When asked to describe circumstances that he didn't get along with others he stated "when it comes to personal studies because I need a lot of time and a good environment to study." Jode mentioned that he felt comfortable around people when sharing ideas. Jode affirmed that he never experienced mood swings, he performed his duties averagely and he liked being a center of attention.

About self-esteem, when asked to compare his abilities with those of his course mates he responded "am a bit better because I believe in myself." He mentioned that he hated

disappointment in his life because they made him feel like a failure. When asked if he had much to be proud of, he said "yes, my character." He affirmed that he did not associate his achievement to his attitude.

It was evident from the quantitative results that the Big Five personality traits, aspects of goal orientations and self-esteem contributed differently to academic self-handicapping. For instance, for each one unit rise in self-esteem, there was a subsequent change in the level of academic self-handicapping. Likewise, for each one unit improvement in the level of extraversion personality traits there was an ensuing drop in academic self-handicapping among the students. However, the findings indicated that an improvement of the interaction between self-esteem and extraversion personality resulted into an ensuing improvement in academic self-handicapping.

Similarly, the interviews revealed that those who portrayed high levels of self-esteem and self-value exhibited high goal orientation behaviors, self-determination and excellence in task performance. Notable, student responses pointed at achievement of goals, careers and good grades as the key sources of their sense of self-worth and self-esteem. Thus ability to successfully accomplish a valued activity seems to boost self-esteem. This resonates with evidence that academic failure lowers' a students' self-esteem and when chronic, failure makes students to display maladaptive personality traits (Chen et al., 2018). Such a student is likely to protect their self- esteem through academic self-handicapping and by setting unrealistic goals to justify the failure.

The qualitative findings revealed that undergraduate students' personality was part of their ambitions, self-value, determination, academic values and character. Personality was also

key in how students handle academic challenges such underachievement and pressure to meet deadlines, which determine their success or failure. This was consistent with Ocansey et al. (2020) findings which linked students' personalities to their academic value and self-handicapping as they navigate in the demanding, competitive and challenging academic environment.

To sum up, the qualitative analysis findings indicate that students' self-descriptions were interspersed with indicators of self-esteem, academic goal orientations, and academic self-handicapping. When students' pride was threatened they turned to self-handicapping. Those high in self-esteem reported high self-worth, academic performance, mastery goals and low self-handicapping. The findings echo those in the quantitative phase of the study and those reported in earlier studies (Chen et al., 2018; Ferradás et al., 2019) on the interrelationship between self-esteem, academic goal orientations and academic self-handicapping.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter is sub-divided into three sections: The summary of the findings, the conclusions of the study, and the recommendations.

5.2 Summary of the Findings

The study investigated the relationship between the Big Five personalities, academic goal orientation, and academic self-handicapping among undergraduate students. The study also examined the moderating effect of self-esteem on the relationship between the Big Five personality traits, academic goal orientations and academic self-handicapping. Furthermore, the study sought to establish whether there was a significant prediction equation for academic self-handicapping from the Big Five personality traits and academic goal orientations. To achieve this, the study formulated four research hypotheses aligned with the study objectives.

The first objective investigated the relationship between the Big Five personality traits and academic self-handicapping among undergraduate students. Significant correlations were found between four personality traits and academic self-handicapping. Whereas increase in conscientiousness, neuroticism and openness to experience was matched by an increase in academic self-handicapping, an increase in agreeableness went with a decrease in self-handicapping. Notably, neuroticism had the strongest correlation followed by openness and conscientiousness. Extraversion had the weakest and non-significant relationship with academic self-handicapping among the undergraduate students. Regression analysis

revealed that the Big Five personality traits accounted for a significant amount of variance in academic self-handicapping with conscientiousness, neuroticism and openness significantly predicting academic self-handicapping. Neuroticism had the highest predictive value followed by openness and conscientiousness while extraversion and agreeableness were not significant predictors.

The second objective aimed at establishing how academic goal orientation related with academic self-handicapping among undergraduate university students. The results indicated that only two of the four achievement goal orientations had statistically significant correlations with academic self-handicapping. Academic self-handicapping tended to increase with performance avoidance goals and to decrease with mastery approach goals among the undergraduate university students. Performance approach and mastery avoidance had weak non-significant correlations with academic self-handicapping.

The third objective examined how self-esteem moderated the relationship between the Big Five personality traits, academic goal orientations and academic self-handicapping. The findings indicated that self-esteem alone was not enough to predict academic self-handicapping. However, it significantly moderated the relationship between the Big Five personality traits, academic goal orientations and students' academic self-handicapping. An ANOVA showed that, although the predictor variables significantly predicted students' academic self-handicapping without combining with self-esteem, the percentage of variance they accounted for significantly increased upon interacting with self-esteem.

The fourth objective was to formulate an equation for predicting academic self-handicapping from the Big Five personality traits and academic goal orientations among undergraduate students. Each of the Big Five personality traits and the sub-domains of academic goal orientations contributed uniquely in the predicting academic self-handicapping in undergraduate students. Importantly, the most robust equation for predicting academic self-handicapping among undergraduate students in Kenyatta University involved neuroticism, openness to experience, mastery approach, performance avoidance, and an interaction between mastery avoidance and self-esteem.

5.3 Conclusions

The study generated interesting findings on how the Big Five personality traits and achievement goal orientations predict self-handicapping moderated by self-esteem. First, increase in neuroticism, openness to experience, and conscientiousness were associated with high levels of academic self-handicapping. In contrast, high levels of agreeableness personality trait go with low levels of academic self-handicapping. These findings suggest that cultivating the personality trait of agreeableness among undergraduate students may lower their academic self-handicapping.

Second, the results indicated that academic self-handicapping increases with a performance avoidance goal orientation and reduces with a mastery approach orientation among undergraduate students. It appears that when undergraduate students increasingly focus on avoiding situations where they will be perceived as being incompetent, they increasingly engage in academic self-handicapping tendencies. On the flip side, when students focus on gaining proficiency in their studies, they engage in less academic self-handicapping. These

results suggest the importance of encouraging students to change from a performance avoidance goal orientation to a more mastery approach goal orientation to minimize academic self-handicapping.

Third, the study found that the models for the prediction of academic self-handicapping from the Big Five personality traits and academic goal orientations were statistically significant with or without the interaction term (self-esteem). The results revealed that students protected their self-worth using academic self-handicapping based on their personality traits and academic goal orientation and that self-esteem is important in this process. The results suggest that academic self-handicapping is elevated when students have high levels of neuroticism, openness to experience, and performance avoidance goal orientation. In contrast, academic self-handicapping seems to decrease when the undergraduate students embrace a mastery approach goal orientation, or when they have high levels of self-esteem coupled with less adoption of a mastery avoidance goal orientation.

5.4 Recommendations

Informed by the study findings, the following recommendations for policy and further research were made:

5.4.1 Policy Recommendations

The study makes the following policy recommendations:

- i. The findings established a significant correlation between the Big Five personality traits and academic self-handicapping. The results could inform interventions aimed at reducing academic self-handicapping by systematically

training students to change their personality. Since the Big Five personality traits especially agreeableness, neuroticism, conscientiousness, and openness to experience were significant predictors of academic self-handicapping, it means that targeting them may beget practical benefits. The findings imply that any Big-Five-personality-traits-specific intervention strategy may benefit from two considerations: First, how each trait relates with self-handicapping and second, how significant the trait is in the maintaining self-handicapping considering self-esteem as a moderator.

- ii. In this study academic goal orientations had significant correlations with academic self-handicapping. The results suggest that performance-avoidance-oriented students are more likely to engage in academic self-handicapping. Therefore, it might be useful for university administrators to design motivational trainings aimed at assisting students to focus on the goal orientations that enhance learning, skills development, and academic success thus reducing academic self-handicapping. Moreover, because out of the four goal orientations, mastery approach was the most important predictor of self-handicapping, universities could adopt more interventions for making students more mastery approach oriented as a way of reducing academic self-handicapping.
- iii. The study established that there is an interrelationship among academic goal orientations, self-esteem, the Big Five personality traits, and academic self-handicapping. The results imply that interventions should target supporting

undergraduate students to be more oriented towards mastery goals and to change their personality more towards agreeableness and extraversion as they develop high self-esteem in efforts to reduce academic self-handicapping.

- iv. The prediction equation suggests that interventions aimed at guiding undergraduate students to reduce neuroticism, openness to experience, performance avoidance orientation may be beneficial in efforts to reduce academic self-handicapping tendencies. Such interventions would be more successful if they would empower students to develop high self-esteem as they shift from being mastery avoidance oriented and to increasingly being more mastery approach oriented.

5.4.2 Recommendations for Further Research

Based on the study findings, the following recommendations for further research were advanced:

- i. The research was conducted among third year undergraduate students and considering that students' academic experiences differ by year of study, generalizing this study results to all undergraduate students may be limited. The researcher, therefore, recommends replication of the study involving students from all years of study.
- ii. The research was conducted in one university in Nairobi County. Considering the fact that university learning environments vary from one university to another, caution is advised when generalizing the findings to other universities. Similar studies may be conducted in different universities from different counties and regions to enhance the generalizability of the findings.

- iii. Data analysis was based on correlation and regression analyses, which only established the relationships between the study variables without proving any causal links. Therefore, further research may consider using experimental designs to test for the actual causes of academic self-handicapping among undergraduate students.
- iv. In this study, the pattern of the correlations between self-handicapping and the Big Five personality traits of conscientiousness and openness to experience radically differed from those reported in other studies. More studies are needed to establish whether this is peculiar to the Kenyatta University context or whether it is the general trend among university students in Kenya.

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APPENDICES

APPENDIX A

Consent Letter

Researcher: James Njoroge Reg. No. E83/39576/2016

Title of the study: Big five personality traits, goal orientations as predictors of academic self-handicapping among undergraduate students of Kenyatta University, Kenya

I am a student at Kenyatta University pursuing a PhD in educational psychology. I am conducting my research at the same university as part of the requirement for the award of doctorate degree. I am kindly requesting you to participate in this study and you are free to ask questions before signing.

This aim of this study is to investigate the factors associated with academic self-handicapping and the findings may be used to enhance the quality of university education. Participation in this study is voluntary and if you agree to take part, you can decline participation or even withdraw at any time. Your identity will not be revealed and the findings from this research will be handled with confidentiality.

I have read and understood the details regarding this study and I agree to be involved.

Signature.....Date

APPENDIX B

Questionnaire

Dear, respondent

You have been selected at random to participate in this study. Please respond to the questions truthfully. The information you will provide will help in developing strategies to enhance learning among university students. Your input is confidential and will not be shared with other persons.

A. Background Information

1. Code.....
2. Gender: Female Male
3. Age (yrs) _____
4. Course.....School.....

Section B: Achievement Goal Questionnaire

Use the following scale and tick for each statement to indicate how much you disagree or agree with each of the statements. Strongly Disagree = 1, Disagree =2, Neutral=3, Agree=4 and strongly Agree= 5

	STATEMENT	SD	D	U	A	SA
1	My aim is to completely master the material presented in this class.					
2	I am striving to do well compared to other students.					

3	My goal is to learn as much as possible.					
4	My aim is to perform well relative to other students.					
5	My aim is to avoid learning less than I possibly could.					
6	My goal is to avoid performing poorly compared to others.					
7	I am striving to understand the content of this course as thoroughly as possible.					
8	My goal is to perform better than the other students.					
9	My goal is to avoid learning less than it is possible to learn.					
10	I am striving to avoid performing worse than others.					
11	I am striving to avoid an incomplete understanding of the course material.					
12	My aim is to avoid doing worse than other students.					

Section C: The Big Five Inventory

The following statement represents how you may feel or not feel about yourself as a third year undergraduate student. For each of the statements indicate by marking on the appropriate box how much you agree or disagree with the statements. If you strongly disagree(SD),mark in the first box, if disagree(D)mark in the second box, if not sure(U)mark in the third box, if you agree(A)mark in the fourth box, and if you strongly agree(SA), mark in the fifth box.

	Statement	SD	D	U	A	SA
	I					
1	Am the life of the party.					
2	Feel little concern for others.					
3	Am always prepared.					
4	Get stressed out easily.					
5	Have a rich vocabulary.					
6	Don't talk a lot.					
7	Am interested in people.					
8	Leave my belongings around.					
9	Am relaxed most of the time.					
10	Have difficulty understanding abstract ideas.					
11	Feel comfortable around people.					
12	Insult people.					

13	Pay attention to details.					
14	Worry about things.					
15	Have a vivid imagination.					
16	Keep in the background.					
17	Sympathize with others' feelings.					
18	Make a mess of things.					
19	Seldom feel blue.					
20	Am not interested in abstract ideas.					
21	Start conversations.					
22	Am not interested in other people's problems.					
23	Get chores done right away.					
24	Am easily disturbed.					
25	Have excellent ideas.					
26	Have little to say.					
27	Have a soft heart.					
28	Often forget to put things back in their proper place.					
29	Get upset easily.					
30	Do not have a good imagination.					
31	Talk to a lot of different people at parties.					
32	Am not really interested in others.					

33	Like order.					
34	Change my mood a lot.					
35	Am quick to understand things.					
36	Don't like to draw attention to myself.					
37	Take time out for others.					
38	Shirk my duties.					
39	Have frequent mood swings.					
40	Use difficult words.					
41	Don't mind being the center of attention.					
42	Feel others' emotions.					
43	Follow a schedule.					
44	Get irritated easily.					

Section D: Self Handicapping Questionnaire

For each of the statements indicate by marking on the appropriate box how much you agree or disagree with the statements. If you strongly disagree(SD),mark in the first box, if disagree(D)mark in the second box, if not sure(U)mark in the third box, if you agree(A)mark in the fourth box, and if you strongly agree(SA), mark in the fifth box.

	Statement	SD	D	U	A	SA
1	When I do something wrong, my first impulse is to blame circumstances					
2	I tend to put things off until the last moment.					
3	I tend to overprepare when I have an exam or any kind of “performance.”					
4	I suppose I feel “under the weather” more often than most people.					
5	I always try to do my best, no matter what.					
6	Before I sign up for a course or engage in any important activity, I make sure I have the proper preparation or background.					

7	I tend to get very anxious before an exam or “performance.”					
8	I am easily distracted by noises or my own creative thoughts when I try to read.					
9	I try not to get too intensely involved in competitive activities so it won’t hurt too much if I lose or do poorly					
10	I would rather be respected for doing my best than admired for my potential.					
11	I would do a lot better if I tried harder.					
12	I prefer small pleasures in the present to larger pleasures in the dim future.					
13	I generally hate to be in any condition but “at my best.”					
14	Someday I might “get it all together.”					
15	I sometimes enjoy being mildly ill for a day or two because it takes off the pressure.					
16	I would do much better if I did not let my emotions get in the way.					
17	When I do poorly at one kind of thing, I often console myself by remembering I am good at other things.					

18	I admit that I am tempted to rationalize when I don't live up to other's expectations					
19	I often think I have more than my share of bad luck in sports, card games, and other measures of talent.					
20	I would rather not take any drug that interfered with my ability to think clearly and do the right thing.					
21	I overindulge in food and drink more often than I should.					
22	When something important is coming up, like an exam or a job interview, I try to get as much sleep as possible the night before.					
23	I never let emotional problems in one part of my life interfere with other things in my life.					
24	Usually, when I get anxious about doing well, I end up doing better.					
25	Sometimes I get so depressed that even easy tasks become difficult.					

APPENDIX C:

Interview Schedule for Students

The purpose of this interview schedule is to collect information concerning your goal orientation, personality traits, self-handicapping and your self-esteem. Data recording will be done using audio taping and the information will not be shared with anyone or used for any other purpose. Participation is voluntary and if you agree to be involved, sign below.

Name.....SignatureDate.....

Semi-Structured Interview for Goal Orientation

- i. What or who influenced you to take the course you are studying? Explain how
- ii. What motivates you to work hard in your studies?
- iii. Do you think your friends influence your performance? If yes explain how
- iv. What do you think is important in your studies; mastering the content or good grades? Give reasons

Semi-Structured Interview for Personality Traits

- i. What do you think of yourself as a student and others?
- ii. How do you describe the feelings you find yourself having most of the time?
- iii. Describe circumstances under which you don't get along with others.
- iv. What makes you feel comfortable around people?
- v. Do you experience mood swings? If yes give the circumstances

- vi. How well do you perform your duties?
- vii. Would you like to be a centre of attention?

Semi-Structured Interview for Self-Handicapping

- i. To what extent do you think external factors influence what happens to you?
- ii. How well do you prepare before engaging in any activity?
- iii. Do you think anxiety affects your performance in exams?
- iv. Would you like to be respected for doing your best or admired for your potential? Give reasons
- v. How often do you think you have more than your share of bad luck in sports, card games, and other measures of talent
- vi. How do you think emotional problems in one part of my life interfere with other things in your life?
- vii. Do you think when you get anxious about doing well, you end up doing better?
- viii. How is it important to you when you perform better than other students?
Why?
- ix. How well do accomplish challenging tasks? Do you think this is important?

Semi-Structured Interview for Self Esteem

- i. When you compare your abilities with those of your course mates, do you think you are better than them?
- ii. What are your weaknesses that make you feel like you are a failure?
- iii. Do feel you have much to be proud of? Why?
- iv. How often do you feel you are of no value?
- v. To what extent do you associate your achievements with your attitude?

APPENDIX D

Authorization Letter



KENYATTA UNIVERSITY

ETHICS REVIEW COMMITTEE

Fax: 8711242/8711575

P. O. Box 43844,

Email: kuerc.chairman@ku.ac.ke

Nairobi,00100

Tel:

8710901/12

Website: www.ku.ac.ke

Our Ref: **KU/ERC/APPROVAL/VOL.1**

Date: 27/8/ 2020

Name James Njuguna Njoroge

P.O Box 43844-00100

NAIROBI

Dear James

**RE: APPLICATION NUMBER: PKU/2119/I1264 BIG FIVE PERSONALITY
TRAITS AND ACADEMIC GOAL ORIENTATIONS AS PREDICTORS OF**

**ACADEMIC SELF-HANDICAPPING AMONG UNDERGRADUATE STUDENTS
OF KENYATTA UNIVERSITY**

This is to inform you that ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** has reviewed and approved your above research proposal. Your application approval number is **PKU/2119/I1264** The approval period is ***27/8/2020 to 27/8/2021***. This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE***.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.

- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE***. Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely



Prof. Judith Kimiywe

CHAIRPERSON- KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE.

APPENDIX F

Graphs of Diagnostic Tests

Figure F 1

Histogram for the Academic Goal Orientations Scores

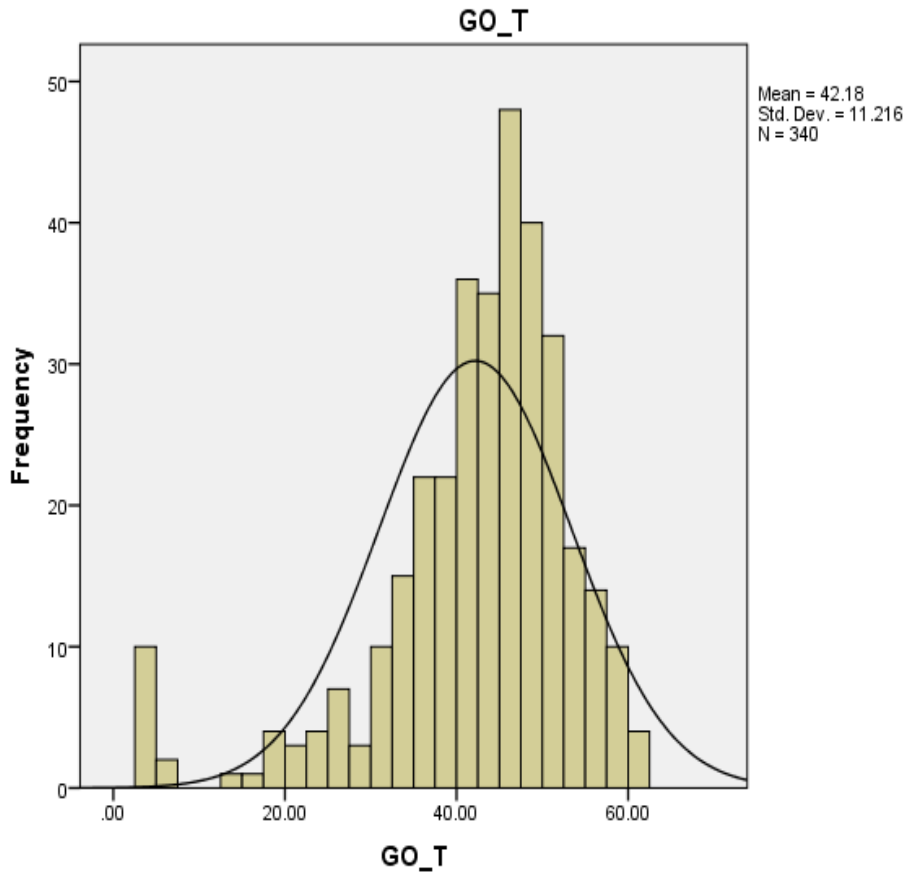


Figure F2

Histogram for the BFPT Scores

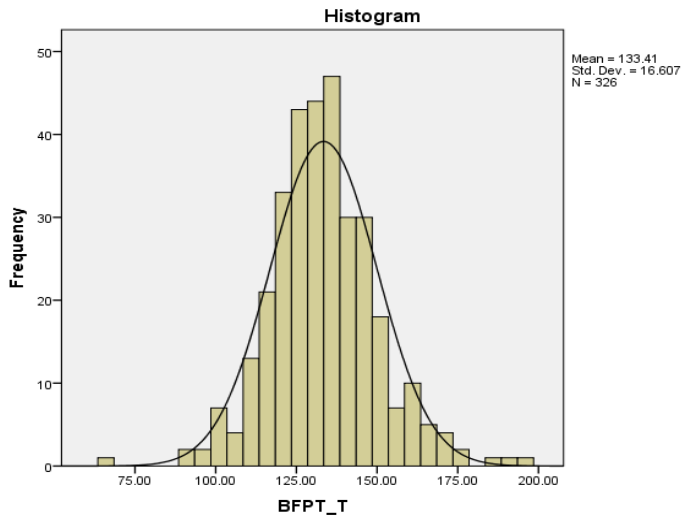
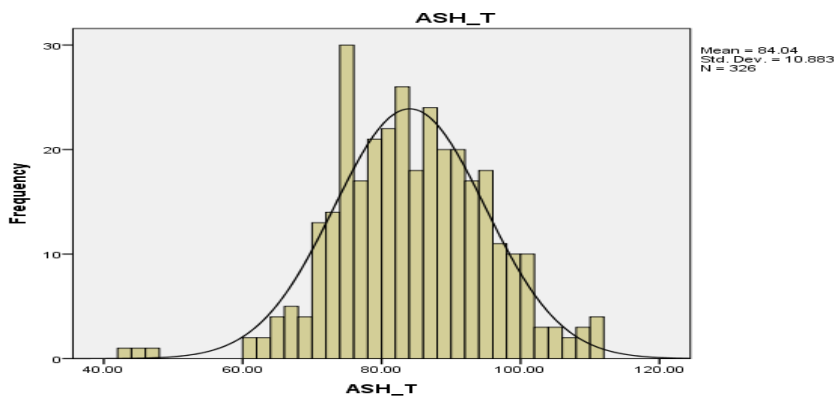


Figure F3

Histogram for the ASH Scores



Appendix G1

Descriptive Statistics the Scores of the Study Variables

Table G.1.
Descriptive Statistics of the BFPT

Item	SD	D	U	A	SA
1.	92(28.2%)	64(19.6%)	80(24.5%)	69(21.2%)	21(6.4%)
2.	96(29.4%)	90(27.6%)	46(14.1%)	68(20.9%)	26(8.0%)
3.	17(5.2%)	51(15.6%)	69(21.2%)	125(38.3%)	64(19.6%)
4.	39(12.0%)	101(31.0%)	56(17.2%)	87(26.7%)	43(13.2%)
5.	13(4.0%)	45(13.8%)	93(28.5%)	114(35.0%)	61(18.7%)
6.	28(8.6%)	44(13.5%)	59(18.1%)	124(38.0%)	71(21.8%)
7.	26(8.0%)	27(8.3%)	142(43.6%)	98(30.1%)	33(10.1%)
8.	93(28.5%)	91(27.9%)	98(30.1%)	33(10.1%)	11(3.4%)
9.	47(14.4%)	70(21.5%)	119(36.5%)	67(20.6%)	23(7.1%)
10.	57(17.5%)	96(29.4%)	121(37.1%)	38(11.7%)	14(4.3%)
11.	16(4.9%)	30(9.2%)	123(37.7%)	105(32.2%)	52(16.0%)
12.	168(51.5%)	42(12.9%)	88(27.0%)	19(5.8%)	9(2.8%)
13.	23(7.1%)	24(7.4%)	69(21.2%)	116(35.6%)	94(28.8%)
14.	25(7.7%)	56(17.2%)	94(28.8%)	106(32.5%)	45(13.8%)
15.	31(9.5%)	35(10.7%)	102(31.3%)	102(31.3%)	56(17.2%)
16.	35(10.7%)	45(13.8%)	99(30.4%)	97(29.8%)	50(15.3%)
17.	22(6.7%)	35(10.7%)	59(18.1%)	122(37.4%)	88(27.0%)
18.	82(25.2%)	105(32.2%)	59(18.1%)	47(14.4%)	33(10.1%)
19.	50(15.3%)	74(22.7%)	129(39.6%)	49(15.0%)	24(7.4%)
20.	65(19.9%)	86(26.4%)	92(28.2%)	49(15.0%)	34(10.4%)
21.	35(10.7%)	60(18.4%)	91(27.9%)	105(32.2%)	35(10.7%)
22.	101(31.0%)	88(27.0%)	68(20.9%)	48(14.7%)	21(6.4%)
23.	36(11.0%)	41(12.6%)	76(23.3%)	118(36.2%)	55(16.9%)
24.	62(19.0%)	88(27.0%)	77(23.6%)	61(18.7%)	38(11.7%)
25.	24(7.4%)	24(7.4%)	89(27.3%)	124(38.0%)	65(19.9%)
26.	28(8.6%)	61(18.7%)	85(26.1%)	100(30.7%)	52(16.0%)
27.	28(8.6%)	39(12.0%)	73(22.4%)	109(33.4%)	77(23.6%)
28.	87(26.7%)	76(23.3%)	69(21.2%)	60(18.4%)	34(10.4%)
29.	66(20.2%)	73(22.4%)	71(21.8%)	78(23.9%)	38(11.7%)
30.	98(30.1%)	93(28.5%)	61(18.7%)	49(15.0%)	25(7.7%)
31.	76(23.3%)	73(22.4%)	80(24.5%)	56(17.2%)	41(12.6%)
32.	73(22.4%)	112(34.4%)	63(19.3%)	53(16.3%)	25(7.7%)
33.	20(6.1%)	30(9.2%)	71(21.8%)	106(32.5%)	99(30.4%)
34.	39(12.0%)	81(24.8%)	77(23.6%)	82(23.6%)	47(14.4%)
35.	19(5.8%)	28(8.6%)	68(20.9%)	134(41.1%)	77(23.6%)
36.	38(11.7%)	49(15.0%)	78(23.9%)	98(30.1%)	63(19.3%)
37.	25(7.7%)	62(19.0%)	62(19.0%)	110(33.7%)	67(20.6%)
38.	44(13.5%)	83(25.5%)	114(35.0%)	58(17.8%)	27(8.3%)
39.	74(22.7%)	92(28.2%)	73(22.4%)	54(16.6%)	33(10.1%)
40.	64(19.6%)	95(29.1%)	78(23.9%)	63(19.3%)	26(8.0%)
41.	68(20.9%)	78(23.9%)	76(23.3%)	62(19.0%)	42(12.9%)
42.	14(4.3%)	28(8.6%)	69(21.2%)	143(43.9%)	72(22.1%)
43.	17(5.2%)	32(9.8%)	68(20.9%)	125(38.3%)	84(25.8%)
44.	66(20.2%)	80(24.5%)	65(19.9%)	72(22.1%)	43(13.2%)

Table G.2*Descriptive Statistics for the Item Scores of Academic Goal Orientations*

Item	1	2	3	4	5	<i>M</i>	<i>SD</i>
1	26 (8.0%)	30 (9.2%)	32 (9.8%)	136 (41.7%)	102 (31.3%)	3.79	1.21
2	29 (8.9%)	42 (12.9%)	53 (16.3%)	118 (36.2%)	84 (25.8%)	3.57	1.25
3	12 (3.7%)	17 (5.2%)	40 (12.3%)	111 (34.0%)	146 (44.8%)	4.11	1.05
4	17 (5.2%)	39 (12.0%)	61 (18.7%)	136 (41.7%)	73 (22.4%)	3.64	1.11
5	48 (14.7%)	46 (14.1%)	56 (17.2%)	96 (29.4%)	80 (24.5%)	3.35	1.37
6	21 (6.4%)	48 (14.7%)	48 (14.7%)	128 (39.3%)	81 (24.8%)	3.61	1.19
7	21 (6.4%)	34 (10.4%)	42 (12.9%)	124 (38.0%)	105 (32.2%)	3.79	1.19
8	23 (7.1%)	44 (13.5%)	60 (18.4%)	128 (39.3%)	71 (21.8%)	3.55	1.17
9	43 (13.2%)	50 (15.3%)	46 (14.1%)	117 (35.9%)	70 (21.5%)	3.37	1.33
10	33 (10.1%)	44 (13.5%)	59 (18.1%)	115 (35.3%)	75 (23.0%)	3.48	1.26
11	13 (4.0%)	30 (9.2%)	56 (17.2%)	122 (37.4%)	105 (32.2%)	3.85	1.09
12	21 (6.4%)	47 (14.4%)	67 (20.6%)	122 (37.4%)	69 (21.2%)	3.52	1.16

Table G.3*Descriptive Statistics of the Item Scores on Self-Esteem Scale*

Statement	1	2	3	4	<i>M</i>	<i>SD</i>
1	18 (5.9%)	33(10.1%)	163(50.0%)	112(34.4%)	3.13	0.81
2	11(3.4%)	27(8.3%)	152(46.6%)	136(41.7%)	3.27	0.75
3	133(40.8%)	79(24.2%)	70(21.5%)	44(13.5%)	2.06	1.07
4	17(5.2%)	30(9.2%)	183(56.1%)	96(29.4%)	3.10	0.77
5	85(26.1%)	84(25.8%)	114(35.0%)	44(13.5%)	2.34	1.01
6	11(3.4%)	33(10.1%)	136(41.7%)	145(44.5%)	3.27	0.79
7	11(3.4%)	43(13.2%)	145(44.5%)	127(38.9%)	3.19	0.79
8	38(11.7%)	73(22.4%)	141(43.3%)	74(22.7%)	2.76	0.93
9	91(27.9%)	76(23.3%)	114(35.0%)	45(13.8%)	2.34	1.03
10	95(29.1%)	77(23.6%)	103(31.6%)	51(15.6%)	2.33	1.06
Overall mean self-esteem					2.78	0.40

Table G.4*Principal Components of the AGO Scale*

	Component			
	1	2	3	4
B1	.589	-.505	-.153	.172
B2	.683	-.132	-.227	-.266
B3	.656	-.424	.005	.065
B4	.723	-.132	-.062	-.353
B5	.460	.088	.698	-.046
B6	.668	.319	.025	-.311
B7	.641	-.337	.026	-.028
B8	.655	.234	-.047	-.348
B9	.402	.058	.712	.221
B10	.611	.449	-.270	.318
B11	.593	-.118	-.114	.620
B12	.569	.604	-.159	.208

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Table G.5*KMO and Bartlett's Test for BFPT Questionnaire*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.74
	Approx. Chi-Square	3551.89
Bartlett's Test of Sphericity	df	946
	Sig.	.00

Table G. 6*KMO and Bartlett's Test for ASH Questionnaire*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.73
	Approx. Chi-Square	1478.056
Bartlett's Test of Sphericity	df	300
	Sig.	.00

Table G. 7*KMO and Bartlett's Test for SE Questionnaire*

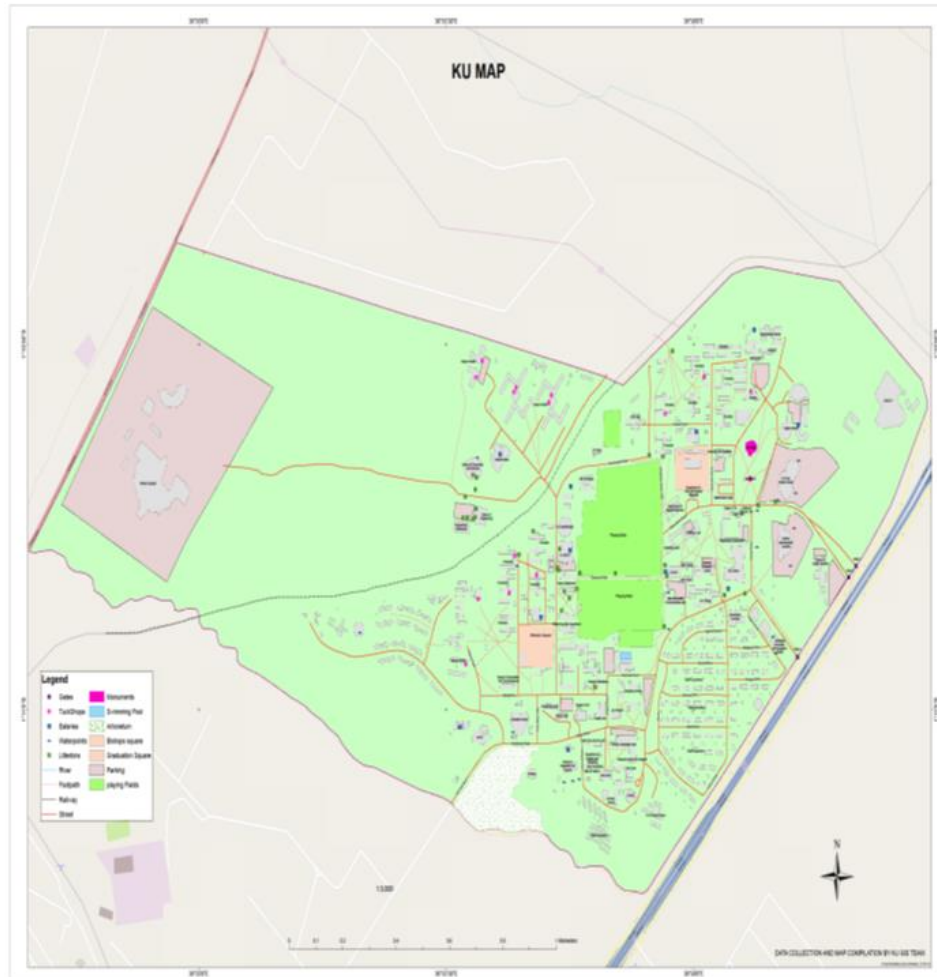
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.72
	Approx. Chi-Square	603.308
Bartlett's Test of Sphericity	df	45
	Sig.	.00

APPENDIX H

Map of Kenyatta University

Figure H.1

Map of Kenyatta University



Source: Google maps (2019)