

**LEARNING ENVIRONMENT AND EXPECTATIONS AS ANTECEDENTS  
OF ACADEMIC SELF- SABOTAGING BEHAVIOUR AMONG FORM TWO  
STUDENTS IN MERU COUNTY, KENYA**

**JUDITH KAMATHI KABIRA**

**E83/37457/2016**

**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY OF EDUCATION (EDUCATIONAL  
PSYCHOLOGY) IN THE SCHOOL OF EDUCATION AND LIFE LONG  
LEARNING, KENYATTA UNIVERSITY**

**NOVEMBER, 2025**

## DECLARATION

I declare that this research thesis is my original work and has not been presented in any other university /institution for consideration. This research thesis has been completed 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 in line with anti-plagiarism regulations.

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**Signature**

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**Date**

Judith Kamathi Kabira

E83/37457/2016

Department of Educational Psychology

This thesis has been submitted for review with our approval as the University Supervisors

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**Signature**

---

**Date**

Dr. Doyne K. Mugambi

Department of Educational Psychology

Kenyatta University

---

**Signature**

---

**Date**

Dr. Chrispus K. Wawire

Department of Educational Psychology

Kenyatta University

## **DEDICATION**

This thesis is lovingly dedicated to my family for their love and support that helped me to complete this research. I also dedicate this thesis to my parents for being my constant source of inspiration through their encouragement and strong belief in me.

## ACKNOWLEDGEMENT

First and foremost, I would like to thank the almighty God for his guidance and strength throughout this research and its successful completion. I would also like to express my deepest gratitude to my supervisors, Dr. Doyne Mugambi and Dr. Chrispus Wawire for their continued support, motivation and cosmic knowledge. Their critical questions and invaluable suggestions carried me through all the stages as I wrote my thesis which made this work possible.

My appreciation also goes to my proposal readers Dr. Josphine Mutua and Dr. Peter Mwaura for their insightful suggestions and critical comments that sharpened my thinking and brought deeper insights to my work. I give special thanks to Dr. Anthony Ileri for his assistance in data analysis which made the process smooth hence enjoyable. I also wish to thank other members in the Department of Educational Psychology who in one way or the other contributed to the success of my work.

Special thanks to my sisters, Lilian Kinya, Jemimah Gacheri, Joy Muthoni and Fidelis Kageni for always supporting me physically and emotionally when I felt worn out. Their presence and contributions helped me to successfully finish my work. I also extend my sincere appreciation to the principals and teachers of the schools where I collected data for the support they accorded me, and to the students for willingly participating in this study. Special thanks go to Mr. Joseph Ndungu, Madam Gikonyo, Mrs. Racheal Mwangi, and all the other teachers at Nguthuru secondary school who supported me in several ways.

Finally, I would like to thank my dear friend Dr. Naomi Kariga for all her prayers, motivation and intellectual support that she gave me towards finishing this tremendous academic work.

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## **ABBREVIATIONS AND ACRONYMS**

AESI	Academic Expectations Stress Inventory
BPNSFS	Basic Psychological Needs Satisfaction and Frustration Scale
FDSE	Free Day Secondary Education
KCSE	Kenya Certificate of Secondary Education
KNEC	Kenya National Examination Council
LMA	Learner Monitoring Assessment
MOE	Ministry of Education
MOEST	Ministry of Education, Science and Technology
NACOSTI	National Commission for Science, Technology and Innovation
NCES	National Center of Educational Statistics
SDT	Self-Determination Theory
SEM	Structural Equation Modelling
SPE	Students Perceived Effort
SPSS	Statistical Package for the Social Sciences
TPAS	Teachers' Perceived Autonomy Support
USA	United States America

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## ABSTRACT

Academic self-sabotaging behaviour is a prevalent problem among students in secondary schools in Kenya, with one in five engaging in academic procrastination, and more than half exhibiting disengagement. Evidence links this behaviour to lower academic achievement, academic anxiety, academic stress and poor mental health. Although existing research consistently associates learning environment and academic expectations with academic self-sabotaging behaviour, limited studies have explored these associations within the Kenyan context. Therefore, this study examined how learning environment and academic expectations relate to academic self-sabotaging behaviour as well as their joint predictive weights. Gender differences in academic self-sabotaging and how school type moderates the relationship between learning environment, academic expectations and academic self-sabotaging behaviour were also tested. The study was guided by self-determination theory and situated expectancy-value theory. A convergent parallel mixed-methods research design was used, targeting 2,734 form two students (boys = 1473, girls = 1261) in all public secondary schools in Meru County. Schools were randomly sampled from four strata: boys' boarding, girls' boarding, co-education day and co-education boarding. The quantitative phase involved 400 students (215 boys, 185 girls) selected through proportionate stratified and simple random sampling, while the qualitative phase involved 20 students purposively drawn from the quantitative phase. Data collection tools included a self-administered questionnaire and a face-to-face semi-structured interview schedule. Both instruments were piloted using 46 and 5 Form Two students respectively, from a school not included in the actual study to establish validity and reliability. Quantitative data were analyzed in SPSS version 20 using descriptive statistics and inferential statistics like Pearson Product Moment Correlation Coefficient, independent samples t-test and multiple regression. Qualitative data were analyzed thematically. The results revealed a weak, negative and statistically significant correlation between needs-supportive learning environment, and academic self-sabotaging behaviour ( $r(396) = -.14, p < .01$ ). Conversely, needs-frustrating learning environment had a weak, positive and significant correlation with academic self-sabotaging behaviour ( $r(396) = .19, p < .01$ ). The academic expectations of significant others ( $r(396) = -.23, p < .01$ ) and students ( $r(396) = -.23, p < .01$ ) had weak, negative and significant correlation with academic self-sabotaging behaviour. Both learning environment and academic expectations jointly and significantly predicted academic self-sabotaging behaviour ( $F(2, 395) = 23.73, p < .001$ ). Significant gender differences were observed in academic self-sabotaging behaviour in favour of girls ( $t(395.78) = -3.19, p = .002$ ). School type significantly moderated these relationships. Qualitative findings reinforced these results. The study recommends that schools should promote an autonomy-supportive school environment that meets students' basic psychological needs while minimizing practices that frustrate these needs. Significant others and students should maintain adaptive academic expectations. Teachers should identify and address gender-specific challenges to come up with solutions targeted at reducing academic self-sabotaging behaviour.

## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND TO THE STUDY**

#### **1.1 Introduction**

Chapter one outlines the background to the study, statement of the problem, the purpose of the study, study objectives, the research hypotheses, the significance of the study, assumptions of the study, limitations, and delimitations of the study. The theoretical framework, conceptual framework, and operational definition of terms are also described.

#### **1.2 Background to the Study**

Most researchers concede that optimal learning results from the dynamic interaction between individual and contextual factors (Bartholomew, 2018; Collie et al., 2019a; Earl et al., 2017; Goings & Shi, 2018). In principle, academic success requires students to be actively and constructively engaged in their learning and that the contextual factors should reinforce positive learning-related behaviours. In practice, however, this is not the case, as many students often engage in academic self-sabotaging behaviour that hinders them from achieving their academic goals (Collie et al., 2019a; Contasti, 2019). Operationalized as actions that destroy, undermine, and hinder students from achieving their academic goals (Collie et al., 2019a; Contasti, 2019; Daytona State College [DSC] Library, 2020), academic self-sabotaging behaviour has been linked to a range of adverse consequences including dismal academic achievement, academic stress, academic anxiety, depression, and high school dropout (Collie et al., 2019a; Macias & Nevarez, 2019; Ugur, 2017). These consequences underscore the importance of investigating,

factors that motivate students to engage in behaviours that compromise their academic success.

Typically, academic self-sabotaging behaviour manifests through maladaptive learning activities such as academic procrastination, and academic disengagement (Collie et al., 2019a). Evidence indicates that the challenge of self-sabotaging behaviours affects diverse educational systems. Studies from developed countries, for instance, reveal strikingly high rates of academic procrastination among high school students. In Australia, 86% of high school students report postponing their assignments, and 66% prefer last-minute, all-night study (Magoosh, 2020). Comparable patterns have been reported in other parts of the world: In Iran, unnecessary procrastination is widespread among secondary school students, and has been shown to negatively affect their academic functioning (Ghanad et al., 2017) while in Canada approximately 32% of Canadian high school students were classified as severe procrastinators, with negative consequences extending to their academic and social lives (Foster, 2020). This evidence points at a need to investigate why and how these patterns of self-sabotaging behaviour emerge in different educational contexts.

Academic disengagement, which is students' tendency to become withdrawn from their studies, is also a typical self-sabotaging behaviour among students (Desie & Tefera, 2017; Subban, 2016). For example, evidence from Australia shows that approximately 20% of the students' exhibit disengaged behaviours with rates increasing over school years (Subban, 2016). Academically disengaged students display negative academic-related behaviour such as spending limited time on studies, missing classes frequently, not attending nor completing class assignments.

These behaviours usually erode academic success and reinforce the cycle of self-sabotage.

Similarly, academic self-sabotaging behaviours have been documented in several African countries. For instance, studies from Mozambique and Nigeria (Bojuwoye, 2019; Fulano et al., 2018) report high levels of procrastination among secondary school students. In Ethiopia, Desie and Tefera (2020) found that more than a third (37.3%) of doctoral students were disengaged from their academics. Across these studies, researchers seem to agree that students who self-sabotage are at risk of dropping out of school and are more prone to problem behaviour such as bullying and noise making. The researchers cited academic pressure, anxiety, and stress as the key reasons students engage in such academic self-sabotaging behaviour, underscoring the need for more research on the factors that could mitigate the problem among students.

In Kenya, few researchers have documented the various forms of academic self-sabotaging behaviour among students. Jerono (2018) highlighted that university students often engage in self-sabotage by procrastinating on learning tasks and delaying assignments. Similarly, Otanga (2019) reported that secondary school students exhibit high levels of psychological disengagement from learning. These researchers further noted that such behaviours negatively affect student performance, leading to low grades and increased dropout rates. A similar trend is observed in Meru County, particularly in Igembe Central, where the situation is alarming. Research indicates high levels of academic procrastination and disengagement, with about 67% of students failing to complete assignments and 22% deliberately skipping school to avoid learning responsibilities (Marigu & Maitho, 2019).

Additionally, around 20% of students frequently procrastinate on academic tasks, while nearly half fail to attend class lessons (John, 2017; Nyaga, 2019). Muguna (2017) also found that self-sabotaging students often miss school without valid reasons, while Japheth (2020) reported that many engage in local business instead of attending school.

The widespread academic self-sabotaging behaviour in the region may partly explain the persistently low academic outcomes. For, instance, between 2019 and 2023, the County's mean KCSE grade consistently remained at a D, placing it among the lowest-performing counties (Meru County KCSE, 2023). Igembe Central Sub-County, in particular, has the lowest education attainment (9.1%), far below the county (17.5%) and national (22.8%) levels, and trails neighbouring constituencies such as Tigania West (12.1%) and North Imenti (31%). This behaviour may also contribute to the rising school dropout rates, with only 17.5% of Meru County's 1,205,470 residents having attained secondary education or higher (Meru County Government, 2023). Overall, the aforementioned studies demonstrate that academic self-sabotaging behaviour is strongly associated with negative schooling outcomes such as academic failure and dropout.

In response to the increased incidence of academic self-sabotaging behaviour and its dire consequences on learning and students, the Kenyan government has undertaken various initiatives to address the issue. Notably, among these initiatives are guidance and counselling programs and re-entry policy for school dropout (Ministry of Education, Science and Technology [MOEST], 2005; Ministry of Education [MOE], 2020). Ministry of Education introduced school guidance and counseling in 1970 to help students deal with personal and behavioural issues (MOEST, 2005).

However, as observed by the Ministry of Labour and Social Protection (Republic of Kenya, 2024), there has been a disproportionate focus on psychological counseling at the expense of career guidance. Yet, career guidance is crucial for helping students navigate the learning process smoothly, manage study time effectively and remain academically engaged.

To address the gap, the ministry further developed the National Policy Framework for Career Guidance in Kenya, aimed at offering career guidance to help students manage their studies and make right career choices. Despite this initiative, the ministry has noted that the effectiveness of career guidance remains weak due to lack of trained teachers and role ambiguity among those teachers designated to provide career counseling (Republic of Kenya 2024). Additionally, as noted by Manyasa and Karoga (2022), Free Day Secondary Education (FDSE) Programme was started in 2008 to retain students in school and minimize their academic disengagement. Furthermore, the Ministry of Education also regulates and ensures schools have structured timetables which specify hours for academic activities to ensure students manage study time effectively (Omondi, 2023). Moreover, government affirmative action programmes, such as re-entry for school dropout policy have been introduced to re-engage students who may have been academically disengaged, leading to ultimate school dropout due to various reasons (MOE, 2020). Despite these policies by the government of Kenya, empirical studies indicate that many students in Kenya continue to engage in academic self-sabotaging (Japheth, 2020; Jerono, 2018; Marigu & Maitho, 2019). This points out the need for more research to better understand and address the persistent issue of academic self-sabotaging behaviour and its consequences.

A bulk of research associate academic self-sabotaging behaviour to different variables among them being learning environment and academic expectations (Collie et al., 2019b; Mouratidis et al., 2018). Those studies that have focused on learning environment have solely examined it in terms of learning resources and physical conditions of a school ignoring its psychological dimension. Aligned with the self-determination theory (SDT) proposed by Ryan & Deci (2017), learning environment refers to satisfaction or frustration of basic psychological needs of students within the school context. As discussed by these scholars, SDT, endorses three basic psychological needs; autonomy, competence, and relatedness. They state that competence refers to the students' need to feel capable and confident in handling learning tasks. This can be seen in the students' ability to ask and answer questions confidently, organize their notes well, complete homework, design own extra work, participating in group discussion willingly and use information taught in class to tackle exam questions. On the other hand, autonomy refers to students' need to feel in control of one's own learning reflected in activities such as use of personal timetable, conducting individual studies, forming own group discussions and conducting peer teaching. Relatedness refers to students' need to feel connected to teachers and other students shown by students' willingness to consult on academic and personal problems.

From the SDT perspective, Ray and Deci (2017) conclude that learning environment can respond to students' psychological needs in two ways: by supporting or thwarting them. In a needs-supportive learning environment, the three basic psychological needs are satisfied while these needs are thwarted in needs-frustrating learning environment. In line with this, scholars such as Collie et al. (2019a), Collie

et al. (2019b) highlight that needs-supportive learning environment fosters optimum learning and positive learning outcomes. In such a learning environment, teachers empower learners by believing in their abilities, allowing them to ask questions, giving immediate feedback, and autonomy to choose learning activities and approaches. Moreover, students demonstrate increased control of their learning, focus, autonomy, and less academic anxiety. They are also more connected to both teachers and peers and exhibit less self-sabotaging behaviour and increased effort in learning pursuits (Hein et al., 2018).

In contrast, studies show that a needs-frustrating learning environment is marked by rigidity, academic pressure, and a lack of autonomy, all of which promote maladaptive learning outcomes (Bartholomew, 2018; Carol, 2018; Codina et al, 2018; Collie et al., 2019a). For instance, Collie et al. (2019a) discovered that when Australian students were driven to act and feel in a specific way, they felt less autonomous and engaged more in self-sabotaging behaviour. Furthermore, Collie et al. (2019b) stated that psychological controlling teaching practices such as attention/support withdrawal and expression of disappointment toward students when they fail to perform as expected cause anxiety, shame, and guilt in students, leading them to engage in self-sabotaging behaviour in order to protect their self-worth and excuse their perceived failures.

Similarly, a link has been shown between academic expectations and academic self-sabotaging behaviour. For example, when teachers express to students that they can perform better, students prefer to behave in ways that meet their teachers' expectations-a self-fulfilling prophesy. When students internalize their teachers' expectations, it affects their learning behaviors and academic achievement (Good et

al., 2018). Parents' academic expectations (AEs) are likewise linked to academic self-sabotaging behaviour. For example, greater parental expectations were linked to less academic procrastination among university students (Anwar & Qonita, 2019). Academic self-sabotaging behaviour differs substantially by gender, with male students being more inclined to self-sabotage than female students (Cangialosi & Lee, 2019). Similarly, school type has been shown to have a direct impact on students' academic self-sabotaging behaviour. However, it remains unclear how school type moderates the link between learning environment, academic expectations and academic self-sabotaging behaviour. The aforementioned studies reveal that academic self-sabotaging behaviour is the result of a dynamic interaction between motivation to effectively complete academic activities, perceived expectancies about the results, and the value of those academic tasks, according to both the SDT and situated expectancy value theory.

Research in Africa has related the physical learning environment and academic expectations to academic accomplishment (Baidoo-Anu, 2018; Elizabeth & Veronica, 2018) and self-sabotaging behaviour (Mulisa & Kassahun, 2019). However, such research has frequently overlooked the psychological side of the learning environment, focusing on academic accomplishment rather than academic self-sabotaging. In Kenya, few researchers have made attempt to investigate how aspects of learning environment (Mutisya, 2020) and academic expectations (Charity & Wangeri, 2018; Ngunu, 2019,) influence students' academic behaviour. For instance, according to Mutisya (2020) study in Machakos, it is clear that students' perceptions of teacher support are directly related to their academic engagement. On the other hand, Ngunu (2019) study in Kiambu reveal that students'

academic expectations influence academic achievement both negatively and positively. In the same vein, Charity and Wangeri (2018) found that perceived teacher expectations strongly impacted students' academic self-concept in Nairobi City County. These researchers, however, did not focus on how learning environment in terms of basic psychological needs cross-pollinates with academic expectations in relation to students' academic self-sabotaging behaviour, a gap that informed the current study.

Evidence from Meru County links contextual factors to students' academic behaviours and outcomes. For instance, Muyalo (2017) found a link between family characteristics and academic achievement. Earlier, Kalayu (2016) had reported that household problems, student discipline, teachers' teaching styles, and available learning resources were all linked to students' KCSE academic performance. Despite the findings of these studies, there is a lack of research linking the learning environment and academic expectations to academic self-sabotaging behaviour in Meru County. As a result, previous research has provided limited insights to educators and policy makers in their efforts aimed at addressing academic self-sabotaging behaviour among students in Meru County. To address this gap, the current study sought to investigate how the learning environment as well as academic expectations relate to academic self-sabotaging behaviour of Form Two students in Meru County, Kenya.

### **1.3 Statement of the Problem**

Despite efforts to ensure optimal learning, widespread academic self-sabotaging behaviour remains a significant challenge facing secondary school students in Kenya. In Meru County, specifically in Igembe Central Sub-County, the problem manifests

in high levels of academic procrastination (67%) and disengagement (20-50%). This pattern of academic self-sabotage has been linked with lower academic achievement which is reflected in the County's consistently low KCSE mean grade of D between 2019 and 2023 (KNEC, 2023). Moreover, the behaviour is associated with a higher risk of school dropout in the County, with only 17.5% of its 1,205,470 residents having attained secondary education or higher. As noted by County Government of Meru, this situation leaves a substantial number of youths without necessary skills to secure meaningful jobs. This limits their job prospects and contributes to high youth poverty, with more than half (54.8%) of the youths in Meru living poor in many ways (Meru County Government, 2023). As a result, Meru County struggles with significant economic setbacks, which underscores the need to examine the factors contributing to academic self-sabotaging behaviour.

Learning environments that meet students' basic psychological needs and adaptive academic expectations help students to avoid academic self-sabotaging behaviour (Opdenakker, 2021; Oram & Rogers, 2022). However, most studies have been conducted in Western contexts, while Kenyan research has largely focused on factors such as test anxiety, academic stress (Njuguna et al., 2022), academic self-concept (Otanga, 2019), parental influence (Muyalo, 2017), and affective factors (Wawire, 2010). Few have linked supportive learning environment, and academic expectations to student outcomes, with very little focus on academic self-sabotaging behaviour (Charity & Wangeri, 2017; Mutisya, 2020; Ngunu, 2019). The current study addressed this gap by examining these connections within the Kenyan context.

#### **1.4 Purpose of the Study**

This study aimed to establish the relationship between learning environment and academic self-sabotaging behaviour. It also examined how academic expectations relate to academic self-sabotaging behaviour. This is because the results and findings of this study could inform the changes necessary to improve learning environment and align academic expectations, thereby decreasing academic self-sabotaging behaviour among students.

#### **1.5 Objectives of the Study**

The following objectives guided this research:

- i. To determine the relationship between needs-supportive learning environment and academic self-sabotaging behaviour among Form Two students in Meru County.
- ii. To determine the relationship between needs-frustrating learning environment and academic self-sabotaging behaviour among Form Two students in Meru County.
- iii. To examine the relationship between significant others' academic expectations and academic self-sabotaging behaviour among Form Two students in Meru County.
- iv. To establish the relationship between students' academic expectations and academic self-sabotaging behaviour among Form Two students in Meru County.
- v. To test gender differences in academic self-sabotaging behaviour of Form Two students in Meru County.

- vi. To explore the predictive weights of learning environment and academic expectations on academic self-sabotaging behaviour among Form Two students in Meru County.
- vii. To test moderation effects of school type on the relationship between learning environment, academic expectations and academic self-sabotaging behaviour of Form Two students in Meru County.

### **1.6 Research Hypotheses**

The following hypotheses guided this research:

- H<sub>a1</sub>: There is a relationship between needs-supportive learning environment and academic self-sabotaging behaviour of Form Two students in Meru County.
- H<sub>a2</sub>: There is a relationship between needs-frustrating learning environment and academic self-sabotaging behaviour of Form Two students in Meru County.
- H<sub>a3</sub>: There is a relationship between significant others' academic expectations and academic self-sabotaging behaviour of Form Two students in Meru County.
- H<sub>a4</sub>: There is a relationship between student's academic expectations and academic self-sabotaging behaviour of Form Two students in Meru County.
- H<sub>a5</sub>: There are gender differences in academic self-sabotaging behaviour of Form Two students in Meru County.
- H<sub>a6</sub>: Learning environment and academic expectations predict academic self-sabotaging behaviour among Form Two students in Meru County.
- H<sub>a7</sub>: School type has moderation effects on the relationship between learning environment, academic expectations, and academic self-sabotaging behaviour among Form Two students in Meru County.

### **1.7 Significance of the Study**

The results of this research may be of worth to teachers, parents, students, school counselors, school managers, curriculum developers, board of management (BOM) and policy makers. Teachers may get motivated to create an autonomy-supportive classroom climate that meets students' basic psychological needs of autonomy, competence, and relatedness, while minimizing psychologically controlling practices that thwarts these needs to optimize student learning. They may also be informed on the significance of holding adaptive expectations for both high and low-achieving groups of students. Parents may be challenged to hold appropriate and adaptive academic expectations that are congruent with their children's abilities and their academic expectations to motivate them to engage in adaptive learning activities, thereby reducing self-sabotaging behaviour. Students may get insight that their own beliefs about their ability to learn and how far they want to go with education influence their subsequent learning behaviour and consequently their academic achievement. This may challenge them to adopt adaptive expectations leading to adaptive learning behaviour.

School counselors may be informed on the need to equip learners with effective strategies to manage study time and academic pressures, thereby cushioning them from self-sabotaging behaviour like procrastination. School managers may be equipped with strategies and tools to create learning environment that reinforces positive academic behaviour to minimize academic self-sabotage among students. The results of the current study may also challenge curriculum developers to integrate needs supportive strategies as they design curricula to create needs-supportive learning environment to reduce academic self-sabotaging. They

may also be informed on the need to develop curricula that incorporate flexible learning pathways to enable students learn at their own pace to reduce self-sabotaging behaviour like procrastination and disengagement. It may also enable the school board of management (BOM) to recognize the importance of providing and prioritizing psychological support to students. Policy makers may be sensitized to prioritize holistic educational policies that address not only academic needs but also psychological needs of students. They may also be encouraged to develop policies that promote gender-responsive teaching and learning styles. Finally, the results of this research extend the existing literature on how learning environment in terms of satisfaction or frustration of basic psychological needs and academic expectations (adaptive or maladaptive) relate to students' academic self-sabotaging behaviour.

## **1.8 Limitations and Delimitations of the Study**

### ***1.8.1 Limitations of the Study***

This study was unable to establish causal-effects relationships because the convergent parallel mixed research design employed does not involve any data manipulation, hence only suited for testing correlations between variables. Nevertheless, the study used the design for its strength to integrate both quantitative and qualitative data (Creswell & Clark, 2011). It was therefore, appropriate for this study for gaining an in-depth understanding of nuanced behaviour like academic self-sabotaging.

Self-report questionnaires were used to gather quantitative data, which may have limited the researcher from capturing the overall scope of responses from the students. As argued by Theofanidis and Antigoni (2019), questionnaires tend to limit

the scope of responses by forcing respondents to choose from a predetermined range of categories. However, to mitigate the issue and gain in-depth information on the research problem, the researcher triangulated data using semi-structured interview schedule.

This study was conducted solely among the Form Two students, thus limiting its ability to generalize the findings beyond this specific population. According to Scales et al. (2020) academic demands and developmental stages vary greatly across age and educational level. This implies that the behaviour trend of Form Two students may not be representative of students in other classes. Therefore, the results and findings of this study are contextually bound to this specific population and generalizing them to the wider population could lead to inaccurate conclusions.

### ***1.8.2 Delimitations of the Study***

This research was carried within the researcher's set boundaries. One such delineation regards the location of the study. This study was conducted in Meru County because of reported cases of self-sabotaging behaviour among secondary school students by earlier researchers. The variables of interest in this study included learning environment, academic expectations, and academic self-sabotaging behaviour with no attempt to investigate other relevant variables as they have been the focus of other local researchers in Meru County. This study considered academic procrastination and disengagement as the sole manifestations of academic self-sabotaging behaviour. Lastly, the study sample comprised only the Form Two students which was informed by earlier researchers' claim associating them with increased academic self-sabotage (Calderon & Yu, 2017; Fredricks et al., 2019).

Moreover, according to the KNEC assessment known as Learner Monitoring Assessment (LMA), about 70% of Form Two students display several learning problems and lack minimum competencies in most learning content, which pointed the need to interrogate the factors behind these phenomena.

### **1.9 Assumptions of the Study**

This research assumes that students form differentiated perceptions of their learning environment, influencing their subsequent learning behaviour at school. It is also assumed that teachers, students, and parents' expectations affect students' learning behaviour and actual performance. Supportive learning environment and adaptive academic expectations are expected to predict academic self-sabotaging behaviour. Finally, it was assumed that the respondents accurately and honestly responded to the research instruments.

### **1.10 Theoretical and Conceptual Framework**

#### ***1.10.1 Theoretical Framework***

This study was guided by Self-determination theory (SDT) by Ryan and Deci (2017) and the situated expectancy-value theory (SEVT) by Eccles and Wigfield (2020).

*1.10.1.1 Self-Determination Theory (SDT) (Ryan & Deci, 2017).* SDT posits that people have innate urge for growth and healthy development, which is dependent on fulfillment of basic psychological needs. SDT describes three basic psychological needs including; autonomy, competence, and relatedness that must be met for optimal functioning of individuals (Ryan & Deci, 2017). The theory emphasizes that the extent to which these needs are satisfied or frustrated predicts a person's behaviour, with needs satisfaction fostering growth potential and needs frustration eliciting problem behaviour.

Previous studies applying SDT suggest that satisfying/frustrating basic psychological needs can predict students' academic self-sabotaging behaviour. For instance, Codina et al. (2018) found that frustrating students' need for autonomy was associated with academic self-sabotaging behaviour such as procrastination. However, as Codina et al. (2020) found, a controlling and too demanding learning environment frustrated students' need for competence and was linked to more procrastination behaviour. Other researchers underscore the importance of relatedness support in reducing maladaptive learning behaviours like disengagement among students (Archambault et al., 2017; Burns et al., 2019; Xiang et al., 2017). Therefore, SDT provided a framework to understand how learning environment relates to students' academic self-sabotaging behaviour in this research. This study confirmed the universal claim of SDT, by demonstrating that satisfying or frustrating basic psychological needs for autonomy, competence, and relatedness greatly influences students' behaviour. Specifically, the study found that when need of relatedness and autonomy were satisfied in a learning environment students avoided academic self-defeating behaviours and vice versa. Contrary to SDT, satisfaction or frustration of competence need did not predict academic self-sabotaging behaviour. In the Kenyan context, this unexpected observation may stem from a school culture that emphasizes external success and obedience over intrinsic motivation (Yaa et al, 2025). Socioeconomic challenges and limited learning support may further weaken the impact of students' sense of competence on their behaviour (Saha & Cheboi, 2024). However, this model did not explicitly address the role of academic expectations in shaping students' behaviour, hence it was necessary to incorporate another theory to fully understand the multifaceted nature of students' behaviour.

**1.10.1.2 Situated Expectancy- Value Theory (SEVT) by Eccles and Wigfield (2020).** The theory states that expectancies for success and values attached to a task are vital determinants of individuals' behaviour and performance. These beliefs are situated within and shaped by the immediate learning environment, including teachers, peers, and cultural context. The expectancy tenet of the model entails individuals' disposition of how well they can do a task. The value tenet refers to the interpretation of the importance of a particular task. Expectancy beliefs can predict students' engagement with learning activities and also their subsequent learning behaviour. Consistent with the expectancy concept of SEVT, students will engage in particular academic-related behaviour and tasks because they expect to do well and avoid the tasks they expect to perform poorly. Thus, students who desire to do well at school are most likely to display appropriate learning behaviour like increased effort and engagement to realize their academic goals.

The SEVT model goes beyond its immediate concepts to explain the reasons why individuals may have particular expectancies. For instance, social agents may affect individuals' behavior and performance by creating and altering their expectancies and values. In this regard, beliefs, behaviours, and feedback from teachers and parents can affect students' expectations, and in turn, this affects how they behave and perform in future academic-related tasks.

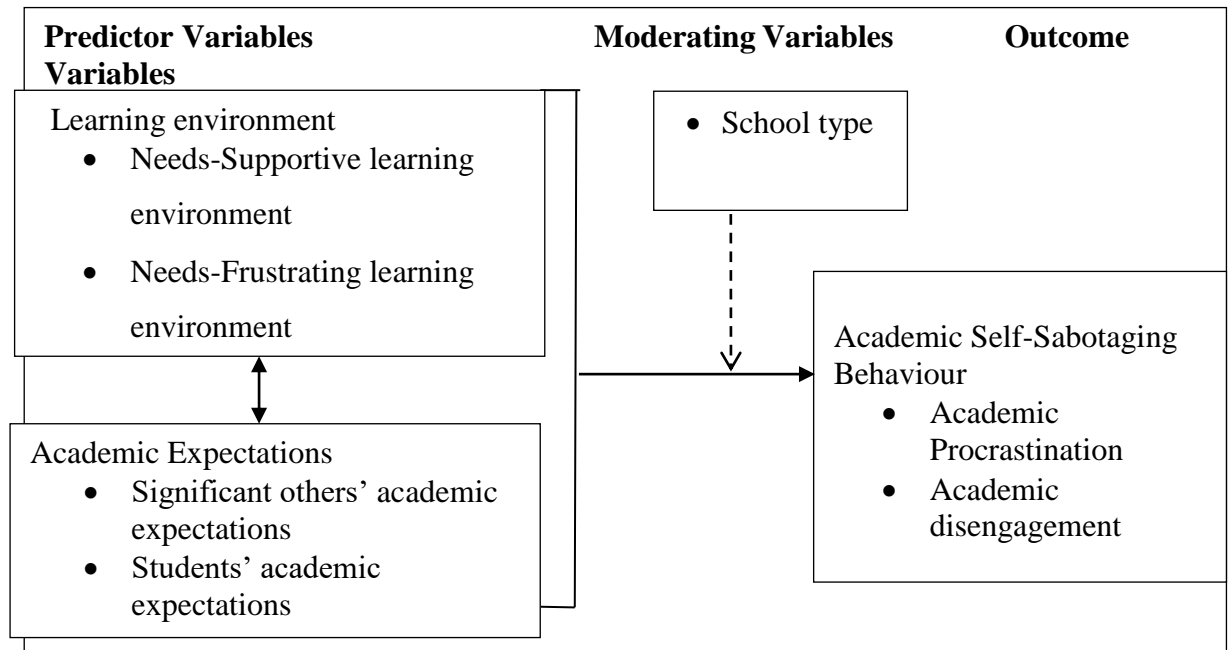
Previous studies in support of the SEVT model propose that expectancy for success and values of a task predict students' actual choices and students' learning outcomes such as procrastinating reading for the exam, disengagement with class assignments, and performance in particular tasks (Galand et al., 2019; Ngunu, 2019; Scheunemann et al., 2021). The model provides the framework for examining how

teachers, students, and parents' academic expectations relate to academic self-sabotaging behaviour. SEVT model posits that students' perception and interpretation of academic-related experiences can be affected by others. Students' characteristics such as previous experiences and aptitude can also influence how they interpret academic-related experiences. This, in turn, influences their subsequent learning behaviours. The study supported the theory by showing that students with adaptive academic expectations were less likely to engage in self-sabotaging behaviour. However, girls who felt less confident about their success due to gender stereotypes or competing responsibilities tended to self-sabotage more. When studies seemed less valuable than cultural roles, they also showed higher levels of procrastination.

### 1.10.2 Conceptual Framework

**Figure 1.1**

*The Hypothesized Model Linking the Variables of Study*



Note. —→ Anticipated relationship; - - - - - → Moderation effects.

Figure 1.1 show that learning environment and academic expectations were expected to relate to students' academic self-sabotaging behaviour directly. Needs-supportive learning environment was anticipated to relate to less academic self-sabotaging behaviour. Needs-frustrating learning environment was expected to associate with increased academic self-sabotaging behaviour. Adaptive academic expectations from significant others, and students was expected to relate to less academic self-sabotaging behaviour. School type was anticipated to act as moderating variable.

### **1.11 Operational Definition of Terms**

**Academic Disengagement:** Refers to students' tendency to deliberately avoid participating in learning activities as indicated by a score on academic disengagement sub-scale of Academic Self-Sabotaging Instrument (ASSI).

**Academic Expectations:** Refers to students' anticipated academic experience such as class attendance, completing classwork, putting effort to study and attain good grades. This is measured using Academic Expectations Stress Inventory (AESI).

**Academic Procrastination:** Refers to students' tendency to postpone completing class assignments, and studying for exams, as indicated by a score on academic procrastination sub-scale of ASSI.

**Academic Self-Sabotaging Behaviour:** Refers to students' tendency to postpone completing class assignments, preparing for exams, and deliberately avoid participating in learning activities, as indicated by a score on ASSI.

**Autonomy:** Refers to students' self-directed learning behaviours and activities such as following a personal timetable and forming own group discussions at school as reflected by score on the autonomy need sub-scale of Basic Psychological Needs Satisfaction and Frustration Scale (BPNSFS).

**Competence:** Refers to students' confidence in handling assignments, asking and answering questions in class, as measured by competence need sub-scale of BPNSFS.

**Learning Environment:** Refers to satisfaction or frustration of the basic psychological needs captured in BPNSFS.

**Needs-Frustrating Learning Environment:** Learning environment where the students' needs of competence, autonomy and relatedness are thwarted.

These needs are measured using need frustration sub-scale of BPNSFS.

**Needs-Supportive Learning Environment:** Refers to learning environment where students' needs of competence, autonomy and relatedness needs are satisfied as measured by need satisfaction sub-scale of BPNSFS.

**Parents' Academic Expectations:** This refers to how students perceive parents' anticipations regarding their academic behaviours, which include consistent attendance of class, timely completion of classwork and effort they put into learning and attainment of good grades. This is shown by a score on the teachers'/Parents' sub-scale of AESI.

**Relatedness:** Refers to the extent to which students interact and consult their teachers and peers on academic matters. This is captured by a score on relatedness need sub-scale of BPNSFS.

**Students' Academic Expectations:** Refers to students' understanding of their academic responsibilities including attending class, completing classwork, putting effort in studying and striving for good grades, as indicated by a score on the students' sub-scale of AESI.

**Teachers' Academic Expectations:** Refers to how students perceive teachers' anticipations of their academic behaviours, including attendance of classes, classwork completion, and effort put in studying and attainment of good grades. A score reflected this on the teachers'/parents' sub-scale of AESI.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

Chapter two presents the reviewed studies on the relationship between learning environment and academic self-sabotaging behaviour, academic expectations and academic self-sabotaging behaviour. Gender differences in academic self-sabotaging behaviour and predictive effects of learning environment and academic expectations on academic self-sabotaging behaviour was also reviewed. The review also focused on how school type moderated the relationships between variables. Lastly, the summary of the reviewed literature and the gaps identified was done.

#### **2.2 Relationship Between Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour**

Previous studies reveal that school learning experiences play a significant role on students' learning behaviour. For instance, Opdenakker (2021) investigated how needs-supportive teacher behaviour was related to students' academic self-sabotaging behaviour of procrastination. Longitudinally, 566 grade seven students ( $M_{\text{age}} = 12.19$  years) in Netherlands were studied. The students were drawn from three schools that were selected using stratified sampling methods. Data from these students were collected at two different points in time; at the beginning of school term and after two months. The results of multilevel analyses revealed that needs-supportive teacher behaviour was negatively related to students' procrastination behaviour. However, there is a population gap because Opdenakker's study focused primarily on grade seven learners, which makes it impractical to generalize results to form two students.

Previous studies have indicated that age influence students' learning behaviour such as motivation and how they perceive their teachers' characteristics (Drakulić, 2022). Therefore, it was important and worthwhile for the current study to investigate form two students to enhance the generalizability of the results. Building on this, the current study found that a needs-supportive learning environment significantly reduces academic self-sabotaging behaviour among Form Two students.

It is evident in the earlier studies that autonomy- supportive classroom can promote students' engagement with their studies by reducing self-defeating behaviour. Accordingly, using, a sample of 771 students from secondary schools in Australia, Collie et al. (2019b) examined the relation between students' perceptions of learning environment with academic self-handicapping and homework tasks disengagement. A case study involving three schools was used. The learning environment was perceived as either autonomy-supportive or controlling. Data was analyzed using Structural Equation Modelling (SEM). The results revealed that teacher's use of controlling practices was associated with more psychological needs frustration, which in turn predicted more self-sabotaging behaviour. This study presents a methodological gap as case study approach was used which according to Flyvbjerg (2006), limits the generalization of results to other population. Therefore, it was deemed necessary for the present study to triangulate the methods of data collection to corroborate these earlier findings. Indeed, the current study revealed that when students' basic psychological needs of competence, autonomy, and relatedness are met, academic self-sabotaging behaviour decreases.

Basic psychological needs satisfaction has been associated with low academic self-sabotaging behaviour. In line with this, a study in Canada by Oram and Rogers

(2022) examined university experience of basic psychological needs satisfaction (BPN) and its relation to academic self-sabotaging behaviour of procrastination. The study participants (N = 617) were selected using convenience sampling, particularly by placing advertisement posters around campus to invite them to participate. Then, data was collected from them online using BPNSF developed by Chen et al. (2015). The results indicated a negative significant prediction of academic procrastination from BPN satisfaction. Further, results indicated that satisfying undergraduates BPN influenced their academic motivation which in turn influenced the degree of procrastination. However, the current researcher identified two gaps in relation to Oram and Rogers' study. First, there was a methodological gap as the study used convenience sampling, which according to Emerson (2021) claims, prioritizes the selection of the participants based on the ease and willingness, resulting to non-representative sample and limited generalizability. Second, there was a population gap as the study solely focused on university students. University students compared to form two students have high self-regulation skills and more satisfied with their degree courses as indicated by van Rooij et al. (2018). Therefore, it was not feasible to generalize these earlier findings to the current population of students. Therefore, the current study considered using random sampling method to investigate the variables of interest among form two students which was important for extrapolation of the results. Extending this to a younger population, the current study found that meeting students' competence, autonomy, and relatedness needs in secondary school contexts is linked to lower self-sabotaging behaviour.

Earlier studies have also established that supportive relationships in the classrooms can help students cope with academic challenges. Accordingly, Burns et al. (2019)

examined whether classroom interpersonal support from teachers and peers could buffer the impacts of disengagement among female learners in Australia. Three hundred and two girls were studied longitudinally for a span of three years. The age of these students was from 12 to 16 years old. Data was analyzed via latent growth modeling. The findings revealed an increasing level of disengagement across the 3 years. As students advanced to higher levels, their disengagement level increased, and teacher support was related to declining upward disengagement among learners. However, the current study identified a methodological gap, since Burns' study used longitudinal data. According to Madhyastha et al. (2018), the results may be associated with environmental changes that could have occurred over time. This could have made it difficult to associate decreased disengagement level to relatedness support from teachers and peers. Therefore, it was important for the current study to collect data at one point in time to investigate the link between relatedness support and academic self-sabotaging behaviour among Form Two students in Meru County. Echoing this, the present study demonstrated that relatedness support from teachers and peers is negatively associated with academic self-sabotaging behaviour among Form Two students.

In African context, literature reveal that supporting BPN in a learning environment is related to many students' positive outcomes. As an illustration, Adelusi et al. (2023) study examined the predictive role of basic psychological needs on engagement to physical activity among university students in Nigeria. The study was guided by SDT theory. Using random sampling, 735 students (males = 408) were drawn from a private university to participate in the study. Correlation analysis revealed positive correlations between autonomy, competence and relatedness with

engagement in physical activity. Results of regression analysis showed that overall basic psychological needs significantly predicted the level of physical activity. Only autonomy and relatedness were significant predictors of physical activity. This study did not examine how needs-supportive learning environment connects to academic self-sabotaging behaviour. The present study filled this gap by showing that satisfaction of autonomy, competence, and relatedness needs within the learning environment is negatively related to academic self-sabotaging behaviour.

Other regional studies have only examined the predictors of BPN without considering how it relates to academic self-sabotaging behaviour. In support, Kalyegira (2022) conducted a qualitative study to establish the predictors of basic psychological needs satisfaction and frustration of refugees in Uganda. Focus Group Discussions were used to collect data from 54 participants. Data was analysed using thematic analysis. The findings showed that psychosocial support and peer support were among the factors that influenced basic psychological needs satisfaction and frustration. The current study established a knowledge gap as it did not shed light on how basic psychological needs relate to academic self-sabotaging behaviour. Therefore, it was necessary to investigate the relationship between needs-supportive learning environment and academic self-sabotaging behaviour.

Although, there is a scarcity of research focusing on how students perceived experiences regarding satisfaction of their basic psychological needs in learning environment is connected to academic self-sabotaging behaviour in Kenya, Mutisya (2020) investigated whether students' perception of teacher support was related to academic engagement among form three students in Machakos County. It was informed by SDT and expectancy-value theory. The research design employed was

correlational. Quantitative data only was collected via questionnaires. The researcher analyzed data via Pearson's Product Moment Correlation Coefficient, regression analysis, t-test for unrelated samples, and Analysis of Variance (ANOVA). The results showed that students' perception of autonomy and competence support from the teachers was moderately and positively related to academic engagement of students. However, the study considered Form Three students instead of form two students who were advanced in age. This could have confounded the results, hence the reason for undertaking the current study among the form two students to compare the results across the age. The current confirms Mutisya's study by demonstrating that these forms of support also relate to reductions in academic self-sabotaging behaviour among Form Two students.

Another study by Muthoni (2020) in Kiambu County links students' perception of relatedness support to students' academic motivation. SDT informed the research, and a descriptive research design was employed. Data only was obtained from 240 form three students using questionnaires. The results showed that satisfying students' psychological need of relatedness was associated with high levels of academic motivation. However, there is a knowledge gap as this study did not examine how satisfaction of specific psychological needs was related to academic self-sabotaging behaviour. Thus, it was crucial for the current study to investigate how satisfaction of these needs relate to academic self-sabotaging behaviour among form two students.

### **2.3 Relationship Between Needs-Frustrating Learning Environment and Academic Self-Sabotaging Behaviour**

In this section, the studies that have examined the frustration of basic psychological needs in relation to academic self-sabotaging behaviour are reviewed. They reveal that students often struggle when their psychological needs are unmet, which can affect their engagement and behaviour. For example, Collie et al. (2019a) investigated the role of psychological needs frustration on students' disengagement and self-sabotage in Australia. Online surveys were used to obtain information on 771 secondary school students. The results of the study found out that psychological needs frustration was associated with more disengagement and self-sabotaging behaviour. The study found that when students experienced pressure to act and feel in a dictated way, they felt less autonomous and engaged more in self-sabotaging behaviour. However, the study had a methodological limitation for solely relying on quantitative approach, which could only allow collection and analysis of numerical data. This approach does not capture the experiences and perspectives of the respondents but only report numerical trends and correlations, thereby, hindering broad understanding of the research problem. Therefore, to address this limitation, the current study employed mixed methods approach to address the research problem in depth.

Moreover, literature shows that learning environment can subtly shape how students approach their work, either motivating or hindering them. In line with this, Codina et al. (2018) looked at the connection between school contextual variables, needs satisfaction, and various forms of procrastination among students ( $N=672$ ) of Barcelona university in Spain. The questionnaires were used to obtain data, which

was analysed using bivariate correlation. The results revealed that controlling learning context was directly related to psychological needs frustration, positively predicting procrastination. However, the research focused on university students. Due to the fact that pathways to satisfy students' basic needs in a university may vary from those used in secondary schools, it may not be possible to extrapolate these results to secondary school setting. Therefore, the present study targeted its investigation among Form Two students to extend the generalizability to different population of students and school contexts.

Students' engagement is strongly influenced by whether their basic psychological needs are satisfied or frustrated. Accordingly, Zamarripa, et al. (2021) investigated the effects of fulfilling and thwarting basic psychological needs on engagement and disaffection among learners in grade five and six in Mexico. The age of learners was between 10 to 14 years ( $M = 10.56$  years). The analysis was done using SEM. The direct effects revealed a moderate positive and statistically significant correlation between BPNS and academic engagement but low negative correlation between BPNF and academic engagement. Students who perceived their needs satisfied experienced high autonomous and controlled motivation, less disaffection and less amotivation which explained their high academic engagement compared to those who perceived their BPN frustrated. However, these results can only be interpreted within the context of learners in grade five and six learners. This is because these learners' specific characteristics may differ from those in secondary schools. This may have confounded the results; hence, the current study was conducted to provide more conclusive results.

Autonomy in the classroom can make a critical difference in students' participation and motivation. In line with this, Cheon, et al. (2019) investigated the impact of autonomy dissatisfaction on students' classroom disengagement. Autonomy dissatisfaction was said to result when autonomy need was not met. The sample included 37 physical education (PE) teachers and 2,669 high school students in Korea. Since the study was experimental in nature, two groups of teachers were created. One group (N= 20) was trained to teach using autonomy-supportive methods and the control group was let to continue teaching using traditional way. Data on the variables of interest were collected using self-reports from the students. The results revealed that the group that was taught using traditional way reported an increase in autonomy dissatisfaction. On the other hand, a decrease in autonomy dissatisfaction was found for the group taught using autonomy-supportive methods, which led to lower students' disengagement. However, the results may be context specific meaning that they can only apply in Korea and not in Kenya. While Kenyan context may reflect challenges of autonomy and competence frustration, Korea may illustrate more external pressure producing maladaptive behaviours among students. On this note, it was necessary for the current study to investigate from two students to extrapolate these earlier findings.

Importantly, the overall school climate can shape how students perform academically. This is Supported by a study in Nigeria by Elizabeth and Veronica (2018) that examined whether school climate was associated with the academic performance of public secondary school students. School climate was defined as either open or controlled. The study was a descriptive survey in nature. The sample comprised 1455 teachers chosen via stratified random sampling technique. Data

collection was done via questionnaires and analyzed using Z-test and correlation analysis. The results showed a significant difference in academic performance in favour of students in an open school climate. However, teachers were the target group instead of students which made the current research more important to extend the generalization of results across populations.

Satisfaction of basic psychological needs is closely tied to students' psychological well-being. Peters (2020) study in Malawi further highlighted this connection showing that students with higher need satisfaction experienced greater psychological well-being. The study was quantitative and carried in the light of SDT theory, employing a correlational research design. The sample comprised of 804 undergraduate students aged between 18-35 years. Data was collected using survey items and analyzed using path analysis. However, the study did not establish how frustration of these needs was linked to students' academic self-sabotaging behaviour. As a result, the current study was important to advance knowledge regarding the relationship between basic psychological needs frustration and academic self-sabotaging behaviour among form two students in Kenya.

Despite international evidence, local research on this topic remains scarce. Reflecting this gap, it was important for the current study to investigate how needs-frustrating learning environment relate to academic self-sabotaging behaviour to advance knowledge on factors influencing students' learning behaviour.

## **2.4 Relationship Between Significant Others' Academic Expectations and Academic Self-Sabotaging Behaviour**

In this study, significant others' academic expectations are conceptualized in terms of expectations held by parents and teachers. Previous research on significant others' academic expectations have largely explored its association to academic achievement, and other students' behaviours such as motivation, academic self-concept and academic self-efficacy. However, there has been limited studies linking academic expectations from these two sources to academic self-sabotaging behaviour. Consequently, most of the studies reviewed in relation to this objective have primarily focused on teachers/parents' involvement as a basis for inferring their expectations.

Few studies have established the impact of significant others' academic expectations on students' academic self-sabotaging behaviour. For instance, one study in Spain by Tarabin et al., (2019) investigated the impact of teachers' expectations as a school contextual factor on students' disengagement with their studies. The researchers adopted a qualitative approach to conduct in-depth studies among lower secondary school students aged between 12 to 16 years. Grade seven to 10 students were selected from five public schools to participate. Data was collected using interviews and focus group discussion from teachers ( $N = 47$ ) and students ( $N = 54$ ). The data was then analysed thematically. The findings indicated that teachers had very low expectations on their students.

These teachers' maladaptive approach led many students to doubt their ability to learn and believed they were bad students who did not have any future in education journey. As results the students became behaviourally disengaged, which was

manifested through their absenteeism and passive participation in learning activities. However, it was worth noting the shortcomings inherent in a strictly qualitative study such as potentially low credibility of the results, and limit generalization to other contexts. Therefore, to address this methodological issue the current study used mixed method approach to gain in-depth insights into the study problem as well as allow extrapolation of the results. The current study's results established significant relationship between teachers' academic expectations and students' academic self-sabotaging behaviour. Specifically, if teachers' expectations were adaptive students engaged in less academic self-sabotaging behaviour such as academic disengagement.

Academic expectations may also manifest in the quality of significant others' involvement in the academic life of students. For example, Vollet et al. (2017) examined how teacher involvement affected changes in students' engagement in their first year of middle school in U.S. Data was collected from 366 grade six students using self-reports measures. The students age ranged from 11 to 13 years. The results of the study indicated that students who rated their teachers as being highly involved had highest engagement. On the other hand, students who perceived their teacher as less involved experienced low levels of engagement. The results underscore the importance of adaptive expectations, as indicated by high teacher involvement, and maladaptive expectations as reflected by low teacher involvement on students' level of engagement. The current study linked low expectations by teachers on students to high levels of academic self-sabotaging behaviour further confirming these findings.

Still, another study indicates that when significant others hold low academic expectations, they tend to provide students with less support for academic work. For example, Núñez et al. (2023) conducted a study to establish the connections between students' perception of their parents' support, their motivation and homework engagement in Spain. Six hundred and forty-three students in the seventh- and tenth-grade were surveyed. The results showed that when students perceived less support from their parents when doing homework, they engaged in more self-handicapping behaviours like spending less time and effort on homework, only partially doing the homework, and procrastinated more. These results imply that maladaptive expectations, manifested in perceived low parental support demotivates students and encourage them to engage more in academic self-sabotaging behaviour, consistent with the current study's results.

Some previous studies have also examined the impact of academic expectations on students' academic behaviours, albeit without a direct focus on academic self-sabotaging behaviour. In one study, Valdes et al. (2021) explored whether teachers' expectations significantly influenced students' expectations for success in mathematics among sixth graders in Northern California. These researchers surveyed 201 Latino students and 21 teachers at two different points in time at the first semester and end of second semester of the sixth grade. The results demonstrated that high teachers' expectations significantly contribute to high students' expectations for success in mathematics. However, since the study did not focus on academic self-sabotaging behaviour directly, a link between it and teachers' academic expectations could only be inferred. Therefore, it was necessary to conduct the current study to further expand this finding. The current study, indeed

established that adaptive teachers' academic expectations contributed to decrease in academic self-sabotaging behaviour.

Extensive research also relates significant others academic expectations to academic achievement. For instance, Park et al. (2019) did a study to examine the influence of group-level teacher expectations on overall school mathematics achievement. The study utilized secondary data derived from a 2009 longitudinal study among the high school students by NCES in the USA. The multilevel SEM was utilized to assess the relationship among the variables. The results reveal that group-level teachers' expectations had a great impact on students' achievement. However, the study did not investigate students' academic self-sabotaging behaviour. The study's results may also not be reliable for being obtained from secondary data. To address these shortfalls, present study used primary data collected using Liker-type scales and interviews. As a result, the current finding concerning the significant correlation between academic expectations and academic self-sabotaging can be considered reliable and credible.

In African context, earlier researchers have established the significant role of significant others' academic expectations on students' academic behaviours, though with little focus if any on academic self-sabotaging behaviour. In particular, a study by Mulisa and Kassahun (2019) examined the connection between teachers' expectations and their motivation to teach in Ethiopia. The investigation was quantitative-qualitative. The researchers used 368 secondary school teachers to obtain information on the variables of interest via questionnaires, focus group discussions, and interviews. They found that teachers had low academic expectations, which led to low motivation to teach. Further, results revealed that low

levels of academic expectations and teaching motivation were associated with low students' academic achievement. While this study reports on the effects of teachers' low academic expectations on teacher variables such as a motivation to teach, the present investigation focused on the link between significant others' academic expectations and students' academic self-sabotaging behaviour in Meru County, Kenya. The current results highlighted a clear link between significant others' academic expectations and students' academic self-sabotaging behaviour. In particular, interview findings showed that students who perceived low teachers' expectations reported higher levels of procrastination behaviour.

Additionally, Ndukwu et al. (2017) researched whether parents' academic expectations were related to students' academic self-efficacy in Nigeria. Standard five pupils (N=233) selected using simple random sampling participated in this research. Ex-post Facto research design was employed and the questionnaires were used to gather data from the participants. To analyze data, the researchers used mean, standard deviation and t-tests. The study found that expectations from the parents had a significant influence on pupils' self-efficacy. However, the study did not report on secondary school students' academic self-sabotaging behaviour in relation to parental academic expectations. Hence, the current research was conducted in response to these gaps in Meru County, and its results demonstrated a significant link between academic expectations and students' academic self-sabotaging behaviour.

David (2022) explored the interaction between decision making styles and life goals in influencing satisfaction and frustration of basic psychological needs of emerging adults in South Africa. SDT theory formed the theoretical basis for this study. A

cross-sectional research design was employed. Data was collected using an online survey from 1411 participants. Results of regression analysis revealed that maladaptive decision-making styles and life goals significantly predicted BPNS frustration. However, David's study focused on predictors of basic psychological needs frustration with no attempt to relate it to academic self-sabotaging behaviour, hence an objective of the current study.

In Kenya, Muthoni (2020) conducted a study in Kiambu County relating parental involvement to academic motivation of students. SDT informed the research, and a descriptive research design was employed. Data only was obtained from 240 form three students using questionnaires. The results showed that parents' high concern on studies of their children was associated with high levels of academic motivation. However, the current study identified a knowledge gap as Muthoni's study did not examine how parents' academic expectations relate to academic self-sabotaging behaviour. Thus, it was important for the current study to investigate how the two variables relate among form two students.

Another study by Charity and Wangeri (2018) sought to determine the prediction role of perceptions of teachers' expectations on pupils' academic self-concept in Nairobi County, Kenya. The ex-post-facto research design was used. Three hundred and sixty-seven pupils from 10 non-formal schools were selected via stratified, systematic, and purposive techniques. A questionnaire and academic self-concept ladders were used to obtain information from the participants. The results revealed that pupils' perceptions of teachers' expectations was a significant predictor of academic self-concept. However, the study did not investigate the relationship between teacher's academic expectation and academic self-sabotaging behaviour.

The study also relied solely on quantitative data which could have hindered deeper understanding of the study problem. Therefore, it was imperative to conduct the current research in Meru to address these gaps.

Other local researchers have linked parents-related variables to students' learning outcomes. This is evidenced by Muyalo's (2017) study that examined the connection between parents-related factors (income status, education qualification, parents' guidance, and occupation) and students' academic performance in KCSE in Meru County. The study was a descriptive survey. The data assembling tools, that is, questionnaires and interview schedules were used to obtain data from 960 students, 24 class teachers, and 12 principals. The findings show that all the aforesaid parents-related factors significantly influence students' academic performance. Although the study established a link between parents' factors and students' academic performance, it did not delve into the relationship between parental academic expectations and academic self-sabotaging behaviour. Therefore, the current study investigated this relationship and uncovered a significant connection between academic expectations and academic self-sabotaging behaviour among form two students in Meru County.

## **2.5 Relationship Between Students' Academic Expectations and Academic Self-Sabotaging Behaviour**

In this study, students' academic expectations are conceptualized as students' own expectations regarding their academic responsibilities and goals. Prior investigations on students' academic expectations are inclined towards their relationship with academic achievement, suggesting the potential for inferring how students' expectations might relate to their academic self-sabotaging behaviour.

Students' academic expectations are considered as a significant predictor of students' academic behaviours. A study carried among African American students, reveal that students' expectations were a significant predictor of educational attainment and degree completion (Goings & Shi, 2018). These researchers examined if expectations of students and parents predicted educational attainment, and degree completion. The researchers used secondary data from the Educational Longitudinal Study of 2002 (ELS: 2002). The sample consisted of 355 Black male students. Data were analyzed using regression analysis. The results reveal that only students' expectations were a significant predictor of educational attainment and degree completion. However, the study did not investigate the relation between students' academic expectations and academic self-sabotaging behaviour. However, the population of the study was college students and not secondary school students. The college students may have clearly defined goals compared to latter which may have influence the results obtained. Therefore, it was necessary to carry the current investigation to expand the findings on the significance of academic expectations to student's academic self-sabotaging behaviour.

Benett et al. (2016) examined the influence of grade expectations on academic performance of college students in Alabana, USA. The researchers collected data from a sample of 187 students. Data on grade expectations was collected at the beginning of the semester while for academic performance was collected at the end of semester. The results revealed that higher grade expectations predicted the higher academic performance. The study, however, is limited in terms of study sample that comprised college students, who possibly being in higher institutions would influence their expectations, hence confounding the results. The study also did not

focus on the academic self-sabotaging behaviour directly, thus its link with students' academic expectations could only be inferred. These gaps necessitated the need for the current study which clearly demonstrates that student's expectations are related to academic self-sabotaging behaviour.

Although there is relatively scanty research relating students' academic expectations to academic self-sabotaging in Africa, few researchers have however made an attempt to link it to other students' learning outcome. For instance, Zulu (2022) investigated the relationship between students' expectations and their satisfaction with library services among fourth year law students in South Africa. The study was quantitative in nature and an online questionnaire was employed to obtain data from 103 law undergraduates. The sample was based on convenience sampling. The study found a correlation between expectations and perceived satisfaction of library services. The study however, did not examine the connection between students' academic expectations and academic self-sabotaging behaviour, the knowledge gap the current study sought to fill.

Some researchers have also focused on gender differences on students' academic expectations, without investigating how it links with academic self-sabotaging behaviour. For example, Jasen et al. (2024) studied first year university students enrolled in accounting course in South Africa. A questionnaire was administered among 131 first-year students to assess their expectations on the amount of time required for their studies. Data was analysed using t-test. The results revealed that gender differences existed with females expecting to spend less hours than males on studies. Since this study did not relate students' academic expectations to academic

self-sabotaging, the current study was conducted to fill the identified knowledge gap.

In Kenya, few studies have considered students' academic expectations as an essential factor on students' academic achievement and academic self-concept. Taking Ngunu's (2019) study as an example, the researcher examined students' academic expectations in relation to their academic achievement in Kiambu County, Kenya. The expectancy value theory guided the researcher. The sample consisted of 600 Form Three students. Probability sampling techniques were used to recruit participants for the study. The academic expectancy scale was used to collect data and analyzed using ANOVA, Pearson's coefficient correlation, t-tests, and multiple regression analysis were used to analyse the data. The results showed a significant correlation between students' global academic expectations and academic achievement. Analysis of the dimensions of academic expectations showed that the positive academic expectations dimension was positively and significantly related to academic achievement. The negative academic expectations dimension was negatively and significantly related to academic achievement. Despite that the study was Kenyan-based; no attempts were made to link students' academic expectations to academic self-sabotaging behaviour, hence the need for the current study.

Still, other studies have looked at different predictors of academic self-sabotaging behaviour. For example, a study by Njuguna (2022) in Kiambu, investigated the prediction of academic self-sabotaging behaviour like procrastination from text anxiety and academic stress, without any focus on student's academic expectations. Employing a correlational research design, data on the two variables was collected from a random sample of 410 Form Three students. The questionnaire was the main

tool of data gathering. The collected data was analyzed to establish the correlations. The results revealed that positive correlations between predictors and academic self-sabotaging behaviour of procrastination. However, the study did not examine student's academic expectations in relation to academic self-sabotaging behaviour, a gap addressed in the present study. On this line, the present results highlight the significant role played by these expectations in shaping the cycle of academic self-sabotaging behaviour.

## **2.6 Gender Differences in Academic Self- Sabotaging Behaviour**

Previous research indicated mixed reactions regarding the influence of gender on academic self-sabotaging behaviour among students. Some studies have established significant differences in these behaviours on basis of gender, albeit among university students. For example, Alshammari et al. (2023) explored gender differences in students' self-sabotage behaviour such as procrastination among undergraduate students in Saudi Arabia. Convenience sampling was used to recruit 495 (male = 187, female = 305) students of all study years (internship to sixth-year) in the study. The students age ranged from 18 to 33 years with a mean of 20.89 (SD = 2.01). Data was collected using google forms that were distributed online through Whats-App, telegram and twitter. Student-t test analysis revealed that females scored significantly higher in procrastination compared to males. However, the use of convenience sampling could have resulted to a sample that was not representative of broader undergraduate students' population with certain groups being overrepresented or underrepresented. Additionally, selection bias was a potential threat if only students interested in the topic chose to participate. Consequently, the results may be less accurate and reliable if generalized to other groups of students.

Therefore, the current study used representative sampling methods such as simple random sampling to enhance the reliability and generalizability of the results.

Similarly, in U.S.A, Cangialosi and Lee (2019) looked at the effect of gender on academic self-sabotaging behaviour, specifically, focusing on procrastination of 124 university students. Using t-test to analyze data, males were found to engage more on self-sabotage through procrastinating their assignments compared to female students. However, the observed gender differences in students' procrastination could be attributed to factors unique to university contexts, such as the quality of learning environment, and greater level of autonomy afforded to students, which may differ from those of secondary school contexts. Additionally, the online mode of study allowed students freedom to finish the assignments at their own time, which may have affected their level of procrastination. This suggested the need for the current research to investigate the same variables in a traditional classroom set-up where students are supposed to finish the assignment at a stipulated time frame. This was expected to aid in understanding the impact of gender on academic self-sabotaging behaviour across different educational contexts.

Previous research has also demonstrated that males and females engage differently in academic self-sabotaging behaviour in emotionally intensive educational programs. This is illustrated by Neufeld and Malin (2021) who examined the effect of gender on the use of behavioural disengagement as coping strategies to stress among medical students in Saskatchewan university in Canada. This study utilized a cross-section sample of 400 medical students all the four years of the medical program and collected data from them using online surveys. The results indicated that female students used behavioural disengagement than their male counterparts.

However, these study's results may only be generalized to medical students. Therefore, there was need to investigate into similar variables among Form Two students to see if the same pattern exists.

Research has revealed that students at lower educational levels, like middle schools, may also engage in self-sabotaging behaviour like disengagement differently based on gender. Glaesser et al. (2024) explored the connection between classroom environment and students' disengagement among middle school students in Germany. The study was done in two phases; study one (N = 255) and study two (N = 287). Disengagement behaviour was assessed as students' truancy. The results revealed that students in higher grade engaged in more truancy behaviour. Additionally, males were associated with higher levels of disengagement, suggesting they skipped school more often than the females. These results highlight the significant contribution of gender on students' self-sabotaging behaviour. However, the results could only be interpreted within Germany education context. Therefore, there was need to investigate how gender contribute to student disengagement among Form Two students in Kenyan Contexts.

A few other researchers posit that gender may not have substantial influence on students' academic self-sabotaging behaviour. In particular, Sobia et al. (2021) conducted a study aiming to establish the differences in students' academic problematic behaviours such as academic procrastination among university students in Punjab. Two hundred and fifty students who were randomly selected from high-ranking universities filled the Procrastination Assessment Scale-Student questionnaire. The findings of the study showed no significant variations in academic procrastination on the basis of gender. However, only university students

were involved, and these could have limited generalizability of the results. This observed finding may be due to specific characteristics of university students including their age, maturity as well as greater level of autonomy, that might not reflect the experiences of Form Two students involved in the current study. Therefore, the present study, considered investigating the influence of gender on procrastination of Form Two students to establish if the results observed are consistent with the current population of students.

Another study in Nigeria found that gender had no main effects on students' academic self-sabotaging behaviour, such as procrastination (Chijioke et al., 2021). These researchers were interested in understanding the underlying factors behind students' self-sabotaging behaviour. Their main objective was to find out the effect of gender on academic procrastination. The study investigated 129 Senior Secondary II students. The findings revealed that the level of procrastination was the same across the gender. The study focused on secondary school students in Nigerian context. Since the learning context in Nigeria may differ from the Kenyan context, it was crucial to carry the present research to get reliable data on the effects of gender on academic self-sabotaging behaviour in different cultural setting.

Amoke (2021) examined the interaction effects of gender on academic procrastination among in-school adolescents. Using a quasi-experimental design, the study involved 129 SS II students in Nigeria selected using purposive sampling. Data was collected using Procrastination Assessment Scale for Students (PASS). The study found no significant gender differences in academic procrastination among the adolescents. This suggests that gender does not influence academic procrastination behaviour significantly in the studied population. However, the

results of this study were based on sample that was purposely sampled, and according to Nikolopoulou (2023) the method is associated with high research bias and limited generalization. Therefore, the current study sought to employ probability sampling methods to enhance the generalization of the results.

In Kenya, few studies have reported gender differences in students' learning outcomes without a specific focus on academic self-sabotaging behaviour. In line with this, Odongo (2021) explored gender differences in the relationship between psychological factors and academic performance among students in Kenya. Data was collected from a sample of 352 students using questionnaires and interviews. The results showed statistically significant gender differences in the relationship between the psychological variables and academic performance. The results suggested that boys and girls performed differently in exams, when they had negative attitudes towards learning, high test anxiety, low locus of control, or high self-concept. However, there is a methodological gap regarding gender differences in academic self-sabotaging behavior. Therefore, this study aimed to broaden research knowledge by investigating whether gender differences exist in academic self-sabotaging behavior among Form Two students.

Additionally, Mwaura (2020) conducted research in Kenya aimed at exploring the link between gender and academic self-efficacy among secondary school students. Using Social Cognitive Theory as a framework, the study sampled 397 students from Nairobi County through purposive, stratified, and simple sampling techniques. Data was collected from the students' using questionnaires and analyzed using both qualitative and quantitative techniques. The results showed no significant gender differences on academic self-efficacy. Mwaura's study examined gender differences

in regard to academic self-efficacy and not academic self-sabotaging behaviour. Therefore, the current study was significant to enhance the critical role played by gender on influencing students' academic behaviour such as academic self-sabotaging.

Research has also established gender differences on academic motivation among students in Kenyan secondary schools. This is supported by research conducted by Mwaura and Mwaura (2020), that explored gender differences in academic motivation among students in public secondary schools in Nairobi City County. Utilizing Self-Determination Theory by Ryan and Deci, these researchers collected data using questionnaires among 397 Form Four students from 12 schools. The study found significant gender differences, with girls showing higher academic motivation than boys. These results suggest that gender-specific interventions might be effective in enhancing academic motivation. However, since this study did not examine the effects of gender on academic self-sabotaging behaviour. Therefore, there was need for the current study, to update the knowledge regarding the role of gender in this student behaviour and to inform effective strategies to reduce it across the genders.

Mbiriri (2022) conducted a study in Kenya to examine gender and age differences in perceived stress levels among undergraduate psychology students. Using a descriptive survey design and data collected from the Perceived Stress Scale (PSS), the study found that female students reported significantly higher levels of perceived stress than male counterparts. These findings suggest that gender plays a crucial role in the stress experiences of students, with female students experiencing higher stress levels. However, a gap remains in understanding if there are gender-related

differences in academic self-sabotaging behaviour like academic procrastination and disengagement. The present study explored how gender might contribute to instances of academic self-sabotage among students.

### **2.7 Predictive Weights of Learning Environment and Academic Expectations on Academic Self-Sabotaging Behaviour**

A review of literature shows that most studies have examined academic expectations and the learning environment separately, with limited research on their combined effects on academic self-sabotaging behaviour. One line of empirical evidence continues to demonstrate that fulfillment of students' basic psychological needs shapes their learning behaviour. Ye et al. (2025) conducted a cross-sectional investigation to examine how basic psychological needs predict academic procrastination among university students in China. Grounded in Self-Determination Theory, the study involved 612 college students who provided their data through completing standardized self-report measures. Results indicated that satisfaction of basic psychological needs was a significant negative predictor of academic procrastination. These findings highlight the importance of need satisfaction in minimizing procrastinatory and self-sabotaging tendencies. Nevertheless, since the study focused on a college population, its findings may not fully denote the behavioural patterns of younger learners in secondary school contexts, where motivational and dynamics differ substantially. Therefore, it was necessary to investigate how learning environment in terms of how it meets the basic psychological needs of students predict academic self-sabotaging behaviour of form two students to compare the findings.

Svartdal et al. (2020) similarly highlighted how certain study environments can foster procrastination among students. They focused on university settings in Norway, Germany, and the United States. They reported that when learning context was characterized by procrastination-friendly conditions such as excessive autonomy and limited feedback, students are more likely to postpone tasks and disengage from academic activities. The study emphasized that procrastination is not solely a product of individual weaknesses but can also arise from contextual shortcomings within the educational setting. Consistent with this view, the present study found that students who perceived their learning environment as supportive and structured exhibited lower levels of academic self-sabotaging behaviour. This implies that a well-organized and encouraging environment can mitigate tendencies toward procrastination and disengagement.

Research also demonstrates that the nature of the learning environment shapes students' approach to their studies by either encouraging engagement or leading to avoidance. For example, Englund (2023) study looked at how the learning environment can lead students to develop unhelpful learning habits. It was a qualitative study involving 19 university students in Sweden. The research showed uncertainty in their environment characterized by limited support made learners to feel less autonomous, competent, and connected. To cope with this, many students adopted surface learning habits, doing only what was necessary to get by. This behaviour reflects a form of academic self-sabotage, where students disengage to protect themselves from failure or frustration. The findings suggest that when learning environments fail to meet students' basic psychological needs, they may unintentionally encourage avoidance and self-defeating behaviours. Building on

these insights, the current study examined how the learning environment predicts academic self-sabotaging behaviour among Form Two students in Kenya. The study found that a more supportive learning environment was associated with lower levels of academic self-sabotage.

Evidence also highlights the strong influence of parents' and teachers' expectations on students' educational progress. In a longitudinal study, Benner et al. (2021) analyzed data from 9,654 high school students who participated in the Education Longitudinal Study in USA. The aim was to explore how adult educational expectations relate to adolescents' academic outcomes. Their findings demonstrated that parents and math teachers' high educational expectations in Grade 10 were linked to students' higher mathematics scores in Grade 12. Although these findings affirm the importance of expectations in promoting achievement, the study emphasized academic performance outcomes rather than students' maladaptive learning behaviour. As a result, the present study sought to extend this line of inquiry by examining whether academic expectations from parents, teachers, and students themselves predict academic self-sabotaging behaviour among secondary school learners.

Similarly, Yin et al. (2025) examined parental educational expectations as predictors of adolescents' subjective well-being, with self-efficacy and learning engagement as mediators. Data were collected from 1,170 adolescents in four middle schools in Shandong Province, China (mean age = 13.91, SD = 0.78). Higher parental expectations predicted better well-being, and self-efficacy and engagement explained this effect. However, the study did not explore academic self-sabotaging behaviour or the influence of the learning environment. The current study examines

how academic expectations and support for basic psychological needs jointly relate to ASB. These findings provide a foundation for understanding how both external expectations and internal resources interact to influence students' academic behavior.

Stress stemming from academic expectations has also been identified as a trigger for self-sabotaging among learners. Dehban et al. (2024) found that higher academic expectation stress was associated with greater self-defeating behaviour among first-year secondary school girls in Roudbane City, Iran. Emotional self-awareness partly mediated this relationship, with students struggling to manage emotions being more prone to self-defeating actions. This study informs the current research by highlighting the role of academic expectation stress in self-sabotaging behaviour. The study did not investigate the combined effect of academic expectations and learning environment on self-sabotaging behaviour. Therefore, present study investigated how these expectations interact with basic psychological needs satisfaction to predict such self-harming behaviour among students in Kenyan setting.

Despite growing research in African contexts linking the learning environment to academic outcomes, few studies have examined academic self-sabotaging behaviour directly. Even fewer have explored the combined predictive role of academic expectations and the learning environment conceptualized through basic psychological needs satisfaction on self-sabotaging behaviour among students. Those directly focused on this area continue to show that the conditions within a learning environment play a central role in determining students' outcomes. In Ethiopia, Kassaw, and Demareva (2024) study examined predictors of achievement

among 362 university students. They used a survey design and logistic regression analysis. Results revealed that poor class environments negatively influenced students' engagement and academic outcomes. Similarly, students with poor academic self-perception which reflected low confidence and diminished expectations performed poorly. These findings illustrate how both environmental and psychological aspects of learning can foster disengagement and patterns resembling academic self-sabotage. However, the study focused mainly on academic achievement of university students rather than specific self-sabotaging behaviour such as procrastination or disengagement. It also did not assess how academic expectations and learning environment jointly impact such behaviour. Since the sample used was different in terms of developmental and contextual aspects, the current study shifted the focus to secondary school students in Kenya for more conclusive findings.

Other studies in Africa have examined stress as a by-product of maladaptive expectations and linked it to students' poor academic performance. To illustrate this association, a study in Nigeria by Akinduyo (2024) explored the effects of stress on academic performance among 400 secondary school students. The sample was drawn using both simple random and stratified sampling. Collection of data was done through a self-constructed and validated questionnaire. Findings indicated that stress impaired students' concentration, memory, and time management. Specifically, female, senior, and private school students reported higher stress effects. Despite these insights, the study examined stress and performance without addressing academic self-sabotaging behaviour. Moreover, the predictive role of academic expectations and learning environment were not examined. Hence, the

current study bridges this gap by integrating these predictors to explain self-sabotaging behaviour in Kenya setting.

Consequences of academic self-sabotaging behaviour have been the primary focus of some researchers in the African context. For example, in Egypt, Zayed (2025) investigated the predictive roles of academic self-handicapping on academic adjustment among 320 university students. The study employed correlation, ANOVA, and regression analyses to analyze the data. Results showed that self-handicapping negatively correlated with academic adjustment. Although insightful, this study treated self-handicapping as a predictor rather than as an outcome behaviour, and it did not focus on its possible predictors. Therefore, the current study addresses this gap by focusing directly on academic self-sabotaging behaviour and examining how contextual factors such as learning environment and academic expectations predict it.

Similarly, Aloka et al. (2022) explored the relationship between self-handicapping and academic buoyancy among 120 final-year secondary school students in Nigeria. The study used a cross-sectional design and applied the Self-Handicapping and Academic Buoyancy Scales, to collect data. Results showed a low, negative, and non-significant relationship between self-handicapping and academic buoyancy. Although this study focused on secondary students, it was limited to bivariate relationships and did not explore broader predictors such as academic expectations or learning environment. The present study builds upon these findings by integrating these predictors within a motivational framework to explain self-sabotaging behaviour.

Local studies in Kenya also support the role of the learning environment. For example, Maingi and Mwaura (2024) found that perceived academic anxiety and stress predicted increased procrastination. The study was conducted among 410 Form Three students in Gatundu South Subcounty, Kiambu County, Kenya. Using a correlational design, the study showed that higher anxiety and stress were associated with greater procrastination. This in turn negatively affected academic achievement. However, the study focused only on aspects of the learning environment and did not examine their joint effects with academic expectations. Therefore, the current study extended Maingi and Mwaura's findings by exploring how academic expectations and basic psychological needs satisfaction together predict academic self-sabotaging behaviour.

Other local studies, such as Njoroge et al. (2023), focused on personality traits as predictors of academic self-handicapping among 326 undergraduate students. The study found that neuroticism, openness, and conscientiousness positively predicted self-handicapping, while agreeableness was negatively related. Although this study deepened understanding of personality correlates of self-sabotage, it focused only on personality traits and a university sample. The current study expands this focus by examining contextual and motivational variables, specifically academic expectations and learning environment, among secondary school learners.

## **2.8 Moderation Effects of School Type on the Relationship Between Learning Environment, Academic Expectations and Academic Self-Sabotaging Behaviour of Form Two Students**

Clapper and Catherine (2021) investigated self-sabotaging behaviours of students who attended alternative high schools in California. The case study approach was

used and 14 students were interviewed to provide the information. The age of the students was between 18 and 25 years. The findings showed that students in alternative high schools experienced high levels of anxiety despite having good learning climate and structure. High anxiety served as a risk factor associated with alternative mode of schooling that led to more self-sabotaging behaviour among students. The present researcher investigated how school type (boys/girls boarding, co-education day, and co-education boarding) moderated the relationship between learning environment, academic expectations and academic self-sabotaging behaviour.

Sahin and Coban (2020) investigated the effects of school type on students' GPA among 981 students in high schools in Turkey. The mediation role of academic self-handicapping behaviours was also investigated. The findings revealed that students' GPA was greatly influenced by the school type. The study also found indirect effects of school environment on GPA through academic self-handicapping. Students in supportive school environment reported minimal self-handicapping behaviour and higher GPA. In the current study, the focus was on the moderation influence of school type on the relationship between learning environment, academic expectations and academic self-sabotaging behaviour.

Manzano-Sánchez (2021) investigated the relationship between future academic expectations and basic psychological needs. Nine hundred and eighty-four students from both elementary and secondary schools in Spain participated. The study was quantitative in nature, and data was collected using questionnaires. The analysis was done using t-test. The results revealed that the group that had highest future academic expectations reported highest satisfaction of basic psychological needs.

This shows that higher academic expectations are related to greater psychological needs satisfaction among students. This study stressed on the interrelationship between academic expectations and satisfaction of basic psychological needs, but did not examine their joint effects on the academic self-sabotaging behaviour. Therefore, the current study examined the interaction effects of the two variables and found that the contribution of each on academic self-sabotaging behaviour depend on the level of the other variable.

Özer (2021) did a study to compare the expectations and satisfaction of relatedness need among tourism undergraduate students in Turkey. Data was collected longitudinally within the span of two years. Data was analyzed using paired samples t-test. The study found out that the students had higher level of expectation compared to satisfaction. Students with different levels of expectations did not differ in terms of satisfaction. The study, however, did not examine the interrelationship between academic expectations and the basic psychological needs and their combined contribution to academic self-sabotaging behaviour.

In Mombasa, Otanga (2019) sought to establish the interaction effects of personal variables on the relationship between academic achievement and academic self-sabotaging behaviors of Form Three students. The researcher considered the effect of academic self-esteem on the relationship between academic achievement and psychological disengagement of 453 students. The age of students was between 15 and 19 years. Bootstrap procedure was used to test the hypothesis. Academic self- esteem was found to influence the relationship between academic achievement and psychological disengagement in a significant way. While the study focused on students' personal variable, the current study explored if school type influences the

relationship between learning environment and academic expectations with academic self-sabotaging behaviour of form two students in Meru County.

## **2.9 Summary of Literature Reviewed and Gap Identification**

The reviewed studies show that learning environment and academic expectations from teachers, students, and parents influence a myriad of students' learning behaviours and outcomes. Most of the studies on learning environment have concentrated on developed countries. Regional and local studies have mainly focused on physical aspects of the learning environment and its link to different criterion variables such as academic achievement.

Regarding academic expectations, existing studies have reported inconsistent results. In addition, most of these studies have predominately focused on western contexts like the U.S.A. Most studies done regionally and locally have focused on academic expectations intersect with different criterion variables such as teacher motivation, academic achievement and students' academic self-concept. Nevertheless, these studies are methodologically limited to quantitative data, which could have limited the scope of the study findings. In Kenya, little attention has been given on how academic expectations relate to academic self-sabotaging behaviour.

Studies on the influence of gender on academic self-sabotaging behaviour have reported heterogeneous results and most are based on developed countries. Although, few studies are done in the African context, like in Nigeria, they are methodologically limited to quantitative data. Few local studies have investigated the effects of gender on other students' learning outcomes than academic self-sabotaging behaviour. Hence, this study was carried to fill these gaps.

Studies show that both the learning environment and academic expectations are significant predictors of academic self-sabotaging behaviour. Yet, few have explored how these two variables work together in the current locality. In particular, limited research has viewed the learning environment through basic psychological needs satisfaction. This study addressed these gaps by examining how academic expectations and the learning environment jointly predict self-sabotaging behaviour. The aim was to deepen the understanding of what drives this behaviour among students.

Direct relationship between school type and academic self-sabotaging behaviour has been established in many studies. However, there is scarcity of studies on how school type moderates the relationship between learning environment, academic expectations and academic self-sabotaging behaviour. This was the area of focus on this investigation.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

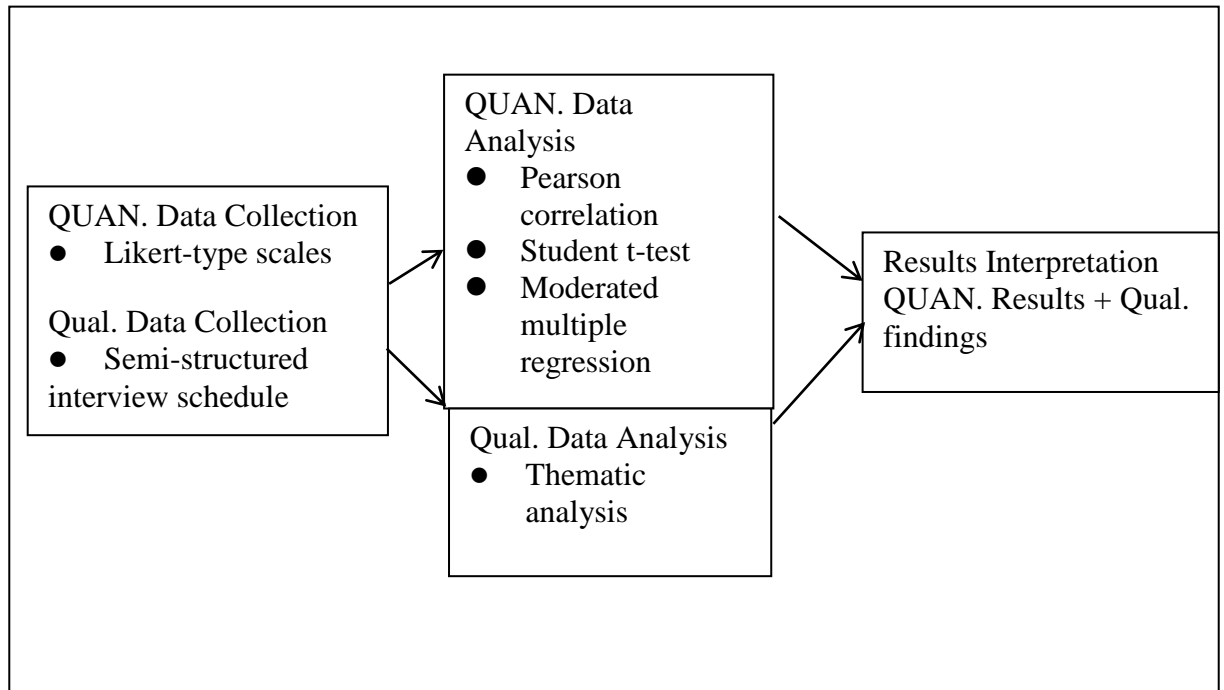
This chapter describes how the current study was conducted, starting with the research design, research methodology, study variables, study location, target population, sampling techniques, and sampling procedures. The sample size, piloting of the instrument, validity and reliability of the instrument, data collection, and analysis procedures are also described.

#### **3.2 Research Design**

This research was carried out using a convergent parallel mixed-methods research design. As described by Creswell and Creswell (2018), the design allows the collection of both qualitative and quantitative data in one single phase of the research process. The two methods (QUAN-qual) are given equal or unequal emphasize depending the purpose of the study. In this case, the primary purpose of using the design was to have an in-depth understanding of the research problem by bringing together results from the two data sources. In this study, quantitative data was given more emphasize to test the antecedent role of learning environment and academic expectations on academic self-sabotaging behaviour. The qualitative data served to complement and enrich the quantitative data to understand research problem better. Therefore, the design was used in this research, to allow the researcher to explore and understand the dynamics concerning learning environment and academic expectations in relation to academic self-sabotaging behaviour among Form Two students. Figure 3.1 shows the procedural presentation of mixed- method research design.

**Figure 3.1**

*Procedural Diagram for Mixed-Method Research Design*



*Note.* QUAN = Quantitative ; Qual = Qualitative.

Adapted from Creswell and Creswell (2018).

### **3.3 Research Methodology**

This research utilized a mixed-methods approach in which quantitative and qualitative data were collected simultaneously, separately analyzed, results merged and interpreted together. First, quantitative predetermined Likert-type scales and semi-structured interview schedule were used to collect quantitative and qualitative data, respectively. This was followed by analysis of the two data sets by using both quantitative and qualitative analytical methods. Specifically, quantitative data was analyzed using statistical tests such as Pearson Product Moment Correlation, student-t test, and moderated multiple regression. For qualitative data systematic thematic analysis was used.

### 3.4 Variables of the Study

Table 3.1 lists the variables used in this study, detailing their types and scale of measurement.

**Table 3.1**

*Variables of the Study*

Variable	Type of Variable	Scale of Measurement
Learning Environment	Predictor	Interval
Academic Expectations	Predictor	Interval
Academic Self-Sabotaging Behaviour	Predictor	Interval
School Type	Moderator	Nominal

As seen in Table 3.1, predictor variables were learning environment and academic expectations, and outcome variables was academic self-sabotaging behaviour. Learning environment was grouped into two levels: Needs-supportive learning environment and needs-frustrating learning environment. Academic expectations also had two levels: Significant others' academic expectations, and students' own academic expectations. The outcome variable was measured using two indicators, namely; academic procrastination and academic disengagement. The predictors and the outcome variable were measured at the interval scale of measurement. School type acted as moderating variables and was measured at nominal scale.

### 3.5 Locale of the Study

The study took place in Meru County, Kenya, specifically in Igembe Central Sub-County. Meru was chosen because it records high levels of academic self-sabotaging behaviour among students with 20- 67% exhibiting procrastination

and disengagement. According to Robson and McCartan (2016), an ideal study locale is one where the research problem is most observable and relevant and also allows meaningful data collection.

Meru County is a semi-rural area with a population of approximately 1,205,470, primarily engaged in an agrarian economy including the cultivation of Khat (Miraa) and other crops. The county's education levels are low, with only 17.5% of the population attaining secondary education or higher, 62% having primary education, and 21% having no formal education. The multidimensional poverty rate stands at 56.6%, driven by limited educational opportunities, economic hardships, and cultural practices. Within the county, Igembe Central has the lowest educational attainment, with only 9.1% completing secondary education or higher. The Sub-County also trails neighboring areas such as Tigania West (12.1%) and North Imenti (31%) (County Government of Meru, 2023). These unique characteristics of Meru County may create conditions that reinforce problem of academic self-sabotaging behaviour. Leavy (2017) notes that unique contextual factors can shape the manifestation of the problem under investigation, making Meru County an appropriate setting for this study.

Previous research in Meru have explained academic self-sabotaging tendencies among students largely through socio-economic and cultural factors (Muyalo, 2017; Thuba, 2019). Relatively, little attention has been given to psychological factors that could reduce this behaviour, such learning environment conceptualized as basic psychological needs satisfaction and academic expectations. In addition, the current research was also informed by previous studies which suggested examining these

psychological variables and their association to students' behaviour across different academic levels and contexts (Muyalo, 2017; Thuba, 2019; Zamarripa, et al., 2021).

### **3.6 Target Population**

All the form two students in all the 377 public secondary schools in Meru County constituted the target population in this research. Specifically, the accessible population for this study included the 2,734 form two students in 40 secondary schools in Igembe Central, Sub-County. The choice of Form Two was informed by earlier researchers' recommendations, who after studying this group found them highly vulnerable to behavioural and learning problems (Agure et al., 2019; Archambault et al., 2017; Martin & Collie, 2019; Li et al., 2020). This selection is further supported by KNEC's Learner Monitoring Assessment (LMA), which shows that around 70% of Form Two students exhibit learning difficulties and fail to meet minimum competencies. This highlights the need to conduct a study among Form Two students to explore factors contributing to these outcomes.

### **3.7 Sampling Techniques and Sample Size**

#### ***3.7.1 Sampling Techniques***

***3.7.1.1 Sampling Techniques for Quantitative Study.*** In this research, stratified and simple random sampling were used to select a quantitative study sample. Stratified random sampling was used to select schools. To obtain a stratified random sample, the researcher, first identified the stratification variable, in this case, the school type. Secondly, the entire school population was divided into homogenous strata using the predetermined stratification variable. Then, from each school stratum, the schools were chosen randomly using proportionate stratified sampling. As guided by Taherdoost (2016), the strategy ensured that every category

was adequately represented in the sample. Thus, the schools were stratified into four strata, including two boys' boarding, two girls' boarding, and five co-education day and one co-educational boarding. In total, 10 schools were selected. Selecting students for the quantitative study sample, simple random sampling, precisely the lottery method was used. This ensured equal inclusion in the sample as claimed by Taherdoost (2016).

**3.7.1.2 Sampling Techniques for Qualitative Study.** Purposive criterion sampling was used to select students who responded to semi-structured interview schedule. This was informed by Vasileiou et al.'s (2018) argument that a qualitative sample should be purposely selected to provide rich information relevant to the problem of interest. In this consideration, using teachers' referrals as criterion, the researcher selected a small group of students showing both academic problems and appropriate behaviours. Additionally, the students were required to have been enrolled in the school from Form One to be included in the qualitative study sample.

### 3.7.2 Sample Size

**3.7.2.1 Quantitative Study Sample Size.** In this research, the Yamane formula ( $n = \frac{N}{1 + N(e^2)}$ ) for sample size by Yamane (1967) and the proportionate stratified sampling formula ( $\frac{n_1}{N} \times n$ ) by Alam et al. (2019) were used to draw the sample size. The Yamane formula was used to obtain a sample size of 400 students (215 boys, 185 girls) from 10 secondary schools. Then, the proportionate stratified sampling was used to calculate the number of respondents from the four school strata. The final sample had the number of respondents proportional to the population size of each stratum. The overall sample size and sampling frame are indicated in Table 3.2.

**Table 3.2***Sample Size and Sampling Frame*

SS	TPS	TPFTS		Sample Size		
		Boys	Girls	Schools	Boys	Girls
BB	6	599	—	2	88(14.69)	—
GB	10	—	540	2	—	79(14.62)
Co-ed D	23	751	667	5	109 (14.51)	98(14.69)
Co-ed B	1	123	54	1	18(14.63)	8(14.81)
Sub-Total		1473	1261		215(14.59)	185(14.67)
Total			2734			400(14.63)
40			10			

*Note.* SS = school strata; TPS = total population of schools; TPFTS = total

population of form two students; BB = boys' boarding; GB = girls' boarding; Co-ed D = co-education day; Co-ed B = co-education boarding; parentheses = percentage.

**3.7.2.2 Qualitative Study Sample Size.** Based on the criteria outlined by Hennink et al. (2017) sample size for qualitative research should range between 16 and 24 to ensure data saturation for both code and meaning. As a result, 20 students were purposely selected using criterion sampling from the pool of 400 students in quantitative study sample to participate in the interviews.

### 3.8 Research Instruments

A questionnaire consisting of three adapted Likert-type scales and semi-structured interview schedule were used as the quantitative and qualitative data collection tools respectively.

#### 3.8.1 Questionnaire

According to Dalati and Marx (2018), questionnaires were considered useful in this study because they guarantee a wide response rate within a short period of time and

at minimal cost and are convenient to respondents to answer at their own pace and speed. In this study, the questionnaire used consisted of four sections, namely; the demographic data part, learning environment, academic expectations and academic self-sabotaging behaviour.

**3.8.1.1 Demographic Data.** A demographic part captured details regarding sex and age of the respondents. Data on school type which included girls' boarding, boys' boarding, co-education day and co-education boarding was also captured.

**3.8.1.2 Learning Environment Instrument.** Items to measure students' perception of learning environment were adapted from The Basic Psychological Needs Satisfaction and Frustration Scale (BPNSFS) (Chen et al., 2015). The scale comprises of 24 items that measure satisfaction or frustration of autonomy, competence, and relatedness need. The original scale had adequate reliability ranging from .64 to .89. Bean et al. (2016) also reported sufficient reliability ranging from .82 to .92. Using approximately 20 minutes, the respondents were required to rate themselves on a 5-point Likert scale ranging from one '*not at all true*' to five '*completely true*'. The highest and lowest range of scores for need satisfaction and frustration sub-scale were 12 and 60, respectively. The scale is shown in section two of Appendix B. The permission to use the scale from the developers is indicated in Appendix F.

**3.8.1.3 Academic Expectations Stress Inventory (Ang & Huan, 2006).** Items to assess academic expectations were adapted from the Academic Expectations Stress Inventory (AESI) by Ang and Huan (2006). The scale comprises nine items with two sub-scales. Significant others' academic expectations sub-scale consists of five items, while students' own academic expectations sub-scale has four

items. Adequate reliability (Cronbach alpha = .89) was reported for the global scale, with significant others' academic expectations sub-scale having .84 and student's own academic expectations having .85 (Ang & Huan, 2006). Similarly, subsequent studies have also demonstrated good internal consistency, reporting Cronbach's  $\alpha$  values of .89 (Asgarabad et al., 2021) and .91 (Cassidy & Boulos, 2023). The items are rated at 5-Likert-type from one (*never true*) to five (*almost always true*). The items were used to assess the extent to which expectations from parents, teachers, and self (students) were either adaptive or maladaptive among adolescent students. Significant others' academic expectations lowest score was five and the highest was 25. The students' own academic expectations had the lowest score of four (4) and the highest score of 20. The low score was indicative of adaptive expectations, with high score indicating maladaptive expectations. Responding to the scale items required approximately 20 minutes. The scale is shown in section two of Appendix B. The consent to adapt the scale was granted by the developers, as indicated in Appendix G.

**3.8.1.4 Academic Self-Sabotaging Behaviour Instrument.** Items to measure students' academic self-sabotaging behaviour were adapted from the Academic Self-Handicapping Scale by Midgley and Urdan (2001). The scale consists of six items rated on a 7-point Likert scale. The original version demonstrated acceptable reliability ( $\alpha = .84$ ), while later studies have reported strong internal consistency, with Cronbach's alpha reaching .92 (Gupta & Geetika, 2020). The scale was slightly modified to fit the context of the study and the filling took approximately 10 minutes. The high and low score for the global scale was seven and 42 respectively, while for the sub-scales was three and 21 respectively. A high score was indicative of a high level of that academic self-sabotaging behaviour. The

scale is shown in section three of Appendix B and the developers' consent is indicated in Appendix H.

### ***3.8.2 Semi-Structured Interview Schedule***

The researcher used both structured and unstructured open-ended questions to obtain qualitative data from the interviewees on learning environment, academic expectations, and academic self-sabotaging behaviour. The structured questions allowed the researcher to compare the interviewees' responses objectively and unstructured open-ended questions allowed in-depth understanding of interviewees' responses. The interview schedule form consisted of 8 structured questions and 11 probe questions. Approximately 30 minutes was used for interviewing. Refer to section five of Appendix B.

## **3.9 Pilot Study**

In this research, both the quantitative and qualitative research tools were piloted. Quantitative research tools were piloted with 46 form two students from one secondary school that was not included in the final study sample. Out of 46, five students were chosen to pilot the qualitative research tools. This was informed by Vasileiou et al.'s (2018) argument that qualitative sample size should be small if the aim is to enrich the quantitative data and analysis. Responses obtained during this pilot study helped in checking the reliability and validity of the research tools within the Kenyan context.

### ***3.9.1 Validity of the Research Instruments***

The content validity of the adapted questionnaires was determined through a panel of experts. University supervisors as the experts evaluated and ascertained the

relevance and adequacy of the scale items in relation to the study's objectives. Following their feedback, several scale' items and interview questions were modified to better reflect the school context and align with the study objectives. For instance, the item *“At school, I am stressed to do too many tasks”* was revised to *“At school, I am stressed to do too many assignments.”* Similarly, *“I feel that teachers and other students are unkind and withdrawn toward me”* was changed to *“I feel that teachers and other students are unkind and unfriendly towards me.”* The item *“I believe in my ability to tackle things at school”* was paraphrased as *“I believe in my ability to do assignments well at school,”* while *“I believe I do things at school skillfully”* was refined to *“I confidently believe in my ability to succeed in my studies.”* In addition, *“When I think of handling some tasks at school, I seriously doubt my ability”* was adjusted to *“When I think of handling some assignments for certain subjects at school, I seriously doubt my ability.”* Lastly, the statement *“When I do mistakes, I see myself as a failure”* was rewritten as *“When I perform poorly in my assignments and exams, I see myself as a failure.”*

### ***3.9.2 Reliability of the Research Instruments***

Internal consistency, particularly Cronbach's alpha coefficients was used to determine the reliability of the adapted scales. The questionnaire was administered to 46 students, to obtain data on learning environment, academic expectations and academic self-sabotaging behaviour. The quantitative data collected were then entered into SPSS version 20 and analysed using Cronbach's alpha statistic. A Cronbach's alpha coefficient of .70 or above meant strong internal consistency, suggesting that the scales' items were highly correlated, hence reliably measuring the same construct (Edmonds & Kennedy, 2017). Qualitative data was collected by

conducting interviews among five students. The audio-recorded data were transcribed with constant reference to the recordings and brief field notes to ensure accuracy and authenticity. Table 3.3 presents the Cronbach's alpha coefficient for the scales and their sub-scales.

**Table 3.3**

*Reliability Test of the Scales and Sub-Scales*

Scale/Subscales	Cronbach's Alpha	Number of Items
Basic psychological needs satisfaction	.72	12
Basic psychological needs frustration	.70	10
Academic expectations stress inventory	.83	9
Academic self-sabotaging behaviour	.82	6
Academic procrastination	.72	3
Academic disengagement	.77	3

Table 3.3 shows that all scales and sub-scales had adequate reliability as indicated by Cronbach's alpha values of .07 and above. This has implication that scales' items were measuring the same underlying constructs, according to Bonett and Wright (2015).

**3.10 Data Collection Techniques**

The questionnaires were self-administered. As outlined by Dalati and Marx (2018), this approach was considered appropriate because it is efficient and simple to administer, allowing the researcher to collect large amounts of data over a short period of time. The researcher gave the instructions on how to fill the questionnaires, and asked respondents to rate themselves on the questionnaires' items based on the

scale given. After completing the questionnaires, a few students were selected with the help of teachers for face-to-face semi-structured to obtain qualitative data. The respondents' audios were recorded, and brief notes written down. The process was carried after lessons during normal school days, taking around 30 to 35 minutes. The filled questionnaires, voice recording, and field notes were kept for the analysis.

### **3.11 Data Analysis Procedures**

The researcher used both quantitative and qualitative methods of analyses. Data were coded, cleaned, and processed using Statistical Package for Social Sciences (SPSS) for quantitative data, and thematically for qualitative data. The researcher performed both descriptive and inferential statistical procedures. Descriptive statistics like frequencies and percentages were used to describe the characteristics of the sample. In the description of study variables, statistics like mean, standard deviation, range, kurtosis, and skewness were used. Inferential statistics using Pearson Product Moment Correlation analysis, student t-test and moderated multiple regression analysis were conducted to test null hypotheses. An alpha of 0.5 was set for all the null hypotheses.

In this study learning environment was operationalized to include two levels; needs-supportive learning environment and needs-frustrating learning environment, therefore, two main null hypotheses were advanced:

*H*<sub>01</sub>: There is no significant relationship between needs-supportive learning environment and academic self-sabotaging behaviour among Form Two students (Pearson Product Moment Correlation).

*H<sub>02</sub>*: There is no significant relationship between needs-frustrating learning environment and academic self-sabotaging behaviour among Form Two students (Pearson Product Moment Correlation).

Academic expectations in this study had two aspects, which led to the formulation of two null hypotheses as follows:

*H<sub>03</sub>*: There is no significant relationship between significant others' academic expectations and academic self-sabotaging behaviour among Form Two students (Pearson Product Moment Correlation).

*H<sub>04</sub>*: There is no significant relationship between students' academic expectations and academic self-sabotaging behaviour Form Two students (Pearson Product Moment Correlation).

*H<sub>05</sub>*: There are no significant gender differences in academic self-sabotaging behaviour among Form Two students (Independent sample t-test).

*H<sub>06</sub>*: Learning environment and academic expectations do not significantly predict academic self-sabotaging behaviour among students.

To test the moderation effects of school type, two null hypotheses were advanced:

*H<sub>07a</sub>*: School type does not significantly moderate the relationship between learning environment and academic self-sabotaging behaviour (Moderated Multiple Regression).

*H<sub>07b</sub>*: School type does not significantly moderate the relationship between academic expectations and academic self-sabotaging behaviour (Moderated Multiple Regression).

In the qualitative data analysis, voice recording and notes were transcribed and coded for thematic analysis. The findings were presented using themes alongside the quotes from the respondents.

### **3.12 Logistical and Ethical Considerations**

#### ***3.12.1 Logistical Considerations***

Upon receiving approval from the Graduate School of Kenyatta University, the researcher applied and obtained a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). Afterwards, the research permit was presented to County Director of Education, then Ministry of Education in Meru County to be issued with research authorization to collect data in the County. Finally, an appointment was sought from the principals of selected schools before the researcher embarked on data collection.

#### ***3.12.2 Ethical Considerations***

During the research process, some ethical issues were put into consideration. For instance, explaining the purpose of the research and seeking consent from the respondents. Upon acceptance to participate, the respondents were presented with a consent form shown in Appendix A to sign. In addition, they were assured of anonymity and confidentiality of their responses and instructed not to write their names on the questionnaires. They were also assured that they will not be harmed in any way for participating in the study.

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## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents results and findings followed by their interpretations and discussion based on the study objectives and hypotheses. It begins by general information regarding the questionnaire and demographic data, followed by results of the quantitative analysis, including both descriptive and inferential statistics. Interpretations of quantitative and qualitative findings for each objective are then presented. Lastly, the chapter ends with the discussion of these results.

#### **4.2 General Information of the Questionnaires and Demographic Data of the Respondents**

This section reports general information regarding questionnaire return rate and demographic characteristics of the respondents.

##### ***4.2.1 Return Rate of the Questionnaires***

In this study, data was collected from 400 students. The researcher personally administered the questionnaires to the respondents which resulted in a remarkable 100 percent response rate. The return rate is indicated in Table 4.1.

**Table 4.1**

*Return Rate*

Questionnaires	<i>F</i>	%
Targeted	400	100
Complete	398	99.50
Incomplete	2	0.50

*Note.* F = frequency; % = percentage

As seen in Table 4.1, out of 400, two questionnaires constituting 0.5% were incomplete, hence were excluded in the analysis. Therefore, 398 well-completed questionnaires representing 99.5% response rate were used in the analysis process for this study. This response rate aligns with set criterion by Fowler (2013), who states that a minimum response rate of 75% is needed for the sample to match the characteristics of the larger population and also to produce reliable and valid results. Therefore, the response rate of 99.5% in this study was deemed sufficient to conduct statistical analysis, and also to enhance the credibility and reliability of the findings in this study.

**4.2.2 Demographic Data of the Respondents**

This section highlights the detailed breakdown of the demographic characteristics of the students, focusing on gender, school type, age, and students' absenteeism.

Analysis of gender distribution and school type are indicated in Table 4.2.

**Table 4.2***Students' Gender and School Type*

School Type	Gender of Students		Total
	Boy	Girl	
Girls' boarding	0(0.00)	77(42.10)	77(19.30)
Boys' boarding	88(40.90)	0(0.00)	88(22.10)
Co-education day	109(50.70)	98(53.60)	207(52.00)
Co-education boarding	18(8.4)	8(4.4)	26(6.5)

*Note.* N = 398; Parentheses = percentage.

Table 4.2 shows the proportion of students across the school types. Students from co-education day had the highest proportion, followed by boys' boarding, girls boarding, and the lowest was from coeducation boarding. Further analysis of gender distribution and age differences was done and reported in Table 4.3.

**Table 4.3***Students' Gender Distribution and Age Differences*

Variable	Categories	Age							Independent sample <i>t</i> -test
		<i>f</i>	%	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>	
Gender	Boy	215	54	14-20	16.08	.99	.61	1.27	<i>t</i> (396) =3.96, <i>p</i> < .01, 95% CI [0.19, 0.58]
	Girls	183	46	13-21	15.69	.93	.92	5.20	
		398	100	13-21	15.91	.98	.73	2.53	

*Note.* *F* = frequency; % = percentage; *SD* =standard deviation; *sk* = skewness; *kur* = kurtosis.

Data in Table 4.3 show that a slight majority of the respondents ( $N = 215$ ) representing 54% were boys, with girls ( $N = 183$ ) constituting 46% of the entire sample. The age range in years for boys was 14-20 while for girls was 13-21 years. Boys' mean age was higher 16.08 ( $SD = .99$ ) compared to that of girls which was 15.68 ( $SD = .93$ ). Age difference test revealed a statistically and significantly mean age difference in relation to gender ( $t(396) = 3.96, p < .01$ ) with a confidence interval of 95%  $CL$  [0.19, 0.58). The finding informs that students' age differences were statistically significant, with the boys being slightly the majority and on average older than girls. This pattern may be linked to school re-entry policies for adolescents, which allow boys who previously dropped out of school, often due to cultural or socioeconomic factors, to be readmitted at an older age than their peers who continued their studies without interruption (Henzan et al., 2021).

For exploratory purposes, an item in the questionnaire sought to examine the extent to which students engaged in academic self-sabotaging behaviour by missing school without any relevant reason and the results are given in Table 4.4.

**Table 4.4**

*Students' Absenteeism Across the School Types*

School Type	School absenteeism	
	YES	NO
BB	34(8.54)	54(13.57)
GB	33(8.29)	44(11.06)
Coed-D	114(28.65)	93(23.37)
Coed-B	11(2.76)	15(3.76)
Total	192(48.24)	206(51.76)

*Note.* N = 398; BB = Boys' boarding; GB = Girls' boarding; Coed-D = Co-education Day; Coed-B = Co-education boarding; Parentheses = percentage.

Table 4.4 indicates that nearly half of the students (48.24%) reported to have missed school days. More of these students were from co-education day ( $N = 114$ ), followed by the boarders ( $BB_N = 34$ ;  $GB_N = 33$ ) and only few students indicated to have missed school from Co-education boarding ( $N = 11$ ). These findings imply that students from co-education day engaged more in self-sabotaging behaviour, particularly by being disengaged from the school. During interviews, most students were unable to provide clear reasons for their absence, suggesting a notable level of academic self-sabotaging behaviour. Such behaviour not only hinders academic success but also raises questions about the underlying factors.

Given that nearly half of the students were reportedly absent from school, it was important to examine these attendance patterns further, particularly with regard to gender. This is captured in Table 4.5.

**Table 4.5**

*Students' Absenteeism by Gender*

Gender of Students	School absenteeism	
	Yes	No
Boys	95(44.20)	120(55.80)
Girls	97(53.00)	86(47.00)
Total	192(48.24)	206(51.76)

*Note.* N = 398; Boys  $N = 215$ ; girls'  $N = 18$ ; Parentheses = percentage

Table 4.5 indicates that girls (53.0%) reported being absent from school more often than boys (44.2%). This observation aligns with CAMFED (2021) which notes that

girls in many African contexts face barriers such as early marriage and household demands. Additionally, a regional news report highlights a sharp rise in teenage pregnancies in Meru County, particularly in Igembe Central (37.1%), which contributes to higher dropout and absenteeism among girls. These factors can limit school attendance and increase girls' tendencies to procrastinate or withdraw from learning.

### 4.3 Relationship Between Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour

#### 4.3.1 Description of Needs-Supportive Learning Environment

Needs-supportive learning environment was measured using needs satisfaction sub-scale of BPNSFS scale. The sub-scale assessed the extent to which students' basic psychological needs were satisfied within school learning environment. Students' responded by choosing on a 5-point Likert scale from one (*not at all true*) to five (*completely true*). A composite score was calculated by summing up the scores for all items. The obtained composite score was then used to compute descriptive statistics for needs-supportive learning environment, along with its specific components. Additionally, the sub-scale's reliability was also computed using all the 12 items. The ensuing results are presented in Table 4.6.

**Table 4.6**

*Descriptive Statistics and Reliability Alphas for Needs-Supportive Learning Environment Scale and its Sub-Scales*

Variables	Range	Mean	SD	Sk	Kur
Needs-supportive learning environment	18-60	45.47	7.70	-.66	.29
Autonomy need satisfaction	4-20	16.60	2.96	-1.06	1.12
Competence need satisfaction	4-20	14.13	3.70	-.41	-.31
Relatedness need satisfaction	4-20	14.72	3.49	-.46	-.37

$\alpha = .72$

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis;  $\alpha$  =

Cronbach's alpha.

Data in Table 4.6 indicates that needs-supportive learning environment scores had a range of 18-60, and a mean of 45.47 ( $SD = 7.70$ ). Further exploration on its components, shows that autonomy need satisfaction varied between 4-20, with a mean of 16.60 ( $SD = 2.96$ ). Competence need satisfaction had a range of 4-20, and a mean of 14.13 ( $SD = 3.70$ ) while relatedness need satisfaction ranged between 4-20, with a mean of 14.72 ( $SD = 3.49$ ). The skewness and kurtosis values were within the range of -2 to +2 for needs-supportive learning environment and its aspects. This demonstrates according to Demir (2022) that the scores fulfilled the assumption of normality. The sub-scale had adequate reliability, which indicated the consistency of items in measuring the underlying construct as reflected in Cronbach's alpha value ((Bonett & Wright, 2015). Thus, the scale was considered fit for this study's purpose. Further, needs-supportive learning environment was cross-tabulated with gender and the findings are as captured in Table 4.7.

**Table 4.7**

*Descriptive Statistics for Needs-Supportive Learning Environment by Gender*

Variables	Gender	Range	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Needs-supportive learning environment	Boys	18-60	45.23	8.33	-.63	.11
	Girls	21-60	45.74	6.90	-.66	.36
Autonomy need satisfaction	Boys	5-20	16.59	3.02	-1.00	.69
	Girls	4-20	16.62	2.89	-1.13	.178
Competence need satisfaction	Boys	4-20	13.79	3.99	-.38	-.47
	Girls	4-20	14.54	3.28	-.30	-.41
Relatedness need satisfaction	Boys	4-20	14.84	3.57	-.58	-.16
	Girls	6-20	14.57	3.40	-.32	-.61

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis.

Table 4.7 shows that both boys ( $M = 45.23$ ,  $SD = 8.33$ ) and girls ( $M = 45.74$ ,  $SD = 6.90$ ) reported moderately high scores on needs-supportive learning environment. This finding indicates that students generally perceived their school environment as supportive. Both genders also scored similarly across all dimensions of needs-supportive learning environment. This suggests that both perceived high competence, autonomy and relatedness need satisfaction. The distribution of scores was fairly uniform, with skewness and kurtosis within the acceptable range of -2 to +2 (Demir, 2020).

Since students' perceptions of learning environment may vary with school type, a cross-tabulation was performed as shown in Table 4.8.

**Table 4.8***Descriptive Statistics for Needs-Supportive Learning Environment by School Type*

Variables	School type	<i>N</i>	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>
NSLE	BB	88	24-60	44.18	8.92	-.41	-.34
	GB	77	21-59	45.66	7.82	-.81	.25
	Coed-B	26	29-59	49.34	8.02	-.86	.02
	Coed-D	207	18-60	45.45	6.90	-.77	.92
ANS	BB	88	7-20	15.06	3.73	-.56	-.77
	GB	77	6-20	14.26	3.97	-.36	-1.05
	Coed-B	26	10-19	15.61	2.86	-.18	-1.22
	Coed-D	207	4-20	14.63	3.26	-.43	.29
CNS	BB	88	9-20	16.54	2.89	-.74	-.18
	GB	77	4-20	16.89	2.99	-1.64	3.86
	Coed-B	26	5-20	17.84	3.06	.46	11.41
	Coed-D	207	7-20	16.37	2.92	-.79	.18
RNS	BB	88	4-20	12.57	4.18	-.09	-.57
	GB	77	4-20	14.51	3.56	-.49	-.35
	Coed-B	26	8-20	15.88	3.78	-.62	-.76
	Coed-D	207	5-20	14.45	3.32	-.38	-.16

*Note:* BB = Boys boarding; GB = Girls Boarding; Coed-B = Co-education boarding;

Coed-D = Co-education Day; NSLE = Needs-supportive learning environment;

ANS = Autonomy need satisfaction; CNS = Competence need satisfaction; RNS =

Relatedness need satisfaction; SD = standard deviation; sk = skewness; kur =

kurtosis.

Information in Table 4.8 shows that most students reported moderately high positive experiences in their learning environment across school types. In co-education boarding schools, students reported the strongest perception of a needs-supportive learning environment ( $M = 49.34$ ), followed by co-education day ( $M = 45.45$ ) and then girls boarding ( $M = 45.66$ ). In Boys boarding schools, students recorded the lowest mean ( $M = 44.18$ ).

Standard Deviation values were moderate while skewness and kurtosis values were low indicating so many students consistently rated needs-supportive leaning environment positively.

For specific needs, co-education boarding indicated highest perceived satisfaction of their competence, autonomy and relatedness needs ( $M = 15.61-17.84$ ). Co-education day, girls' boarding, and boys' boarding scored moderately ( $M = 12.57-16.89$ ), implying that they perceive their learning environment as less supportive of their basic psychological needs. The skewness and kurtosis scores across the schools show that all the variables were relatively normal.

#### ***4.3.2 Description of Academic Self-Sabotaging Behaviour***

Items to measure students' academic self-sabotaging behaviour were adapted from the academic self-handicapping scale. The scale had six items rated a 7-point Likert scale. It required students to indicate the degree to which the items described their academic behaviour by choosing one of the options between one (*very untrue of me*) to seven (*very true of me*). Specifically, the items were modified to assess academic procrastination and academic disengagement as two aspects of academic self-sabotaging behaviour. Moreover, to assess the reliability of the modified scale,

Cronbach's alpha was used. The descriptive statistics and reliability values are indicated in Table 4.9.

**Table 4.9**

*Descriptive Statistics and Reliability Alphas for Academic Self-Sabotaging Behaviour Scale*

Variables	Range	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
Academic self-sabotaging behaviour	6-42	25.33	9.45	-.41	-.67
Academic procrastination	3-21	12.09	5.20	-.19	-1.07
Academic disengagement	3-21	10.91	5.45	.08	-1.19

$\alpha = .82$

*Note.* N = 398; *SD* = standard deviation; sk = skewness; kur = kurtosis;  $\alpha$  =

Cronbach's alpha.

Table 4.9 demonstrates that academic self-sabotaging behaviour scores had a range of 6-42 and a mean of 25.33 (*SD* =9.45). Focusing at its aspects, academic procrastination exhibited a range of 3-21 and a mean of 12.09 (*SD* = 5.20) while academic disengagement ranged between 3-21 with an average score of 10.91 (*SD* = 5.45). The skewness and kurtosis values for overall academic self-sabotaging behaviour and its aspects were within the range of -2 to +2 suggesting normal distribution as argued by Demir (2020). The scale had adequate reliability, suggesting that the items were all measuring the same underlying construct as indicated by Cronbach's alpha value.

Since gender may influence how students engage in academic self-sabotaging behaviour, a cross-tabulation analysis was performed, and the results are displayed in Table 4.10.

**Table 4.10**

*Descriptive Statistics for Academic Self-Sabotaging Behaviour by Gender of Students*

Variables	Gender	Range	Mean	SD	Sk	Kur
Academic self-sabotaging behaviour	Boys	6-42	23.97	10.09	-.30	-.97
	Girls	6-42	26.92	8.38	-.42	-.36
Academic procrastination	Boys	3-21	13.35	5.66	-.52	-.99
	Girls	3-21	15.45	4.46	-.97	.26
Academic disengagement	Boys	3-21	10.44	5.51	.17	-1.21
	Girls	3-21	11.47	5.33	-.01	-1.14

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis.

Table 4.10 indicates that girls reported slightly higher levels of global academic self-sabotaging behaviour, procrastination, and disengagement compared to boys. For self-sabotaging behaviour, girls had a higher mean ( $M = 26.92$ ;  $SD = 8.38$ ) than boys ( $M = 23.97$ ;  $SD = 10.09$ ). A similar pattern was observed for academic procrastination, where girls ( $M = 15.45$ ,  $SD = 4.46$ ) scored higher than boys ( $M = 13.35$ ,  $SD = 5.66$ ). In academic disengagement, girls again recorded a slightly higher mean ( $M = 11.47$ ,  $SD = 5.33$ ) compared to boys ( $M = 10.44$ ,  $SD = 5.51$ ). Low values of skewness and kurtosis reflect a normal distribution for all the variables.

Additionally, analysis of academic self-sabotaging behaviour across the school types was conducted and the outcomes are shown in Table 4.11.

**Table 4.11***Descriptive Statistics for Academic Self-Sabotaging Behaviour by School Type*

Variables	School type	<i>N</i>	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>
Academic self-sabotaging behaviour	BB	88	6-42	21.67	11.14	.02	-1.32
	GB	77	7-42	26.71	8.29	-.33	-.38
	Coed-B	26	6-39	18.65	10.09	.21	-.96
	Coed-D	207	6-42	27.20	8.14	-.45	-.36
Academic procrastination	BB	88	3-21	11.80	5.90	-.17	-1.40
	GB	77	4-21	16.13	4.23	-1.13	.61
	Coed-B	26	3-21	11.57	6.21	-.15	-1.44
	Coed-D	207	3-21	15.23	4.58	-.81	-.11
Academic disengagement	BB	88	3-21	9.86	5.86	.28	-1.29
	GB	77	3-21	10.58	5.44	.24	-1.19
	Coed-B	26	3-20	7.07	5.10	1.23	.83
	Coed-D	207	3-21	11.96	5.01	-.09	-1.03

*Note.* BB = Boys boarding; GB = Girls Boarding; Coed-B = Co-education boarding;

Coed-D = Co-education Day; *SD* = standard deviation; *sk* = skewness; *kur* =

kurtosis

From Table 4.9, academic self-sabotaging behaviour varied by school type. Students in co-education day ( $M = 27.20$ ,  $SD = 8.14$ ) and girls' boarding ( $M = 26.71$ ,  $SD = 8.29$ ) reported the highest levels, while co-education boarding ( $M = 18.65$ ,  $SD = 8.01$ ) and boys' boarding ( $M = 21.67$ ,  $SD = 7.92$ ) showed lower levels.

A similar trend was observed for procrastination, with co-education day ( $M = 15.23$ ,  $SD = 4.23$ ) and girls' boarding ( $M = 16.13$ ,  $SD = 4.58$ ) scoring higher than boys' boarding ( $M = 11.80$ ,  $SD = 3.97$ ) and co-education boarding ( $M = 11.57$ ,  $SD = 3.65$ ). For disengagement, co-education day schools again recorded the highest mean ( $M = 11.96$ ) and co-education boarding the lowest ( $M = 7.07$ ). For the distribution, the scores for all variables fell within the normal range (-2 to +2 for skewness and kurtosis), indicating a generally normal distribution.

These findings reveal that students in girls' boarding and co-education day show greater tendencies toward academic self-sabotaging, procrastination, and disengagement.

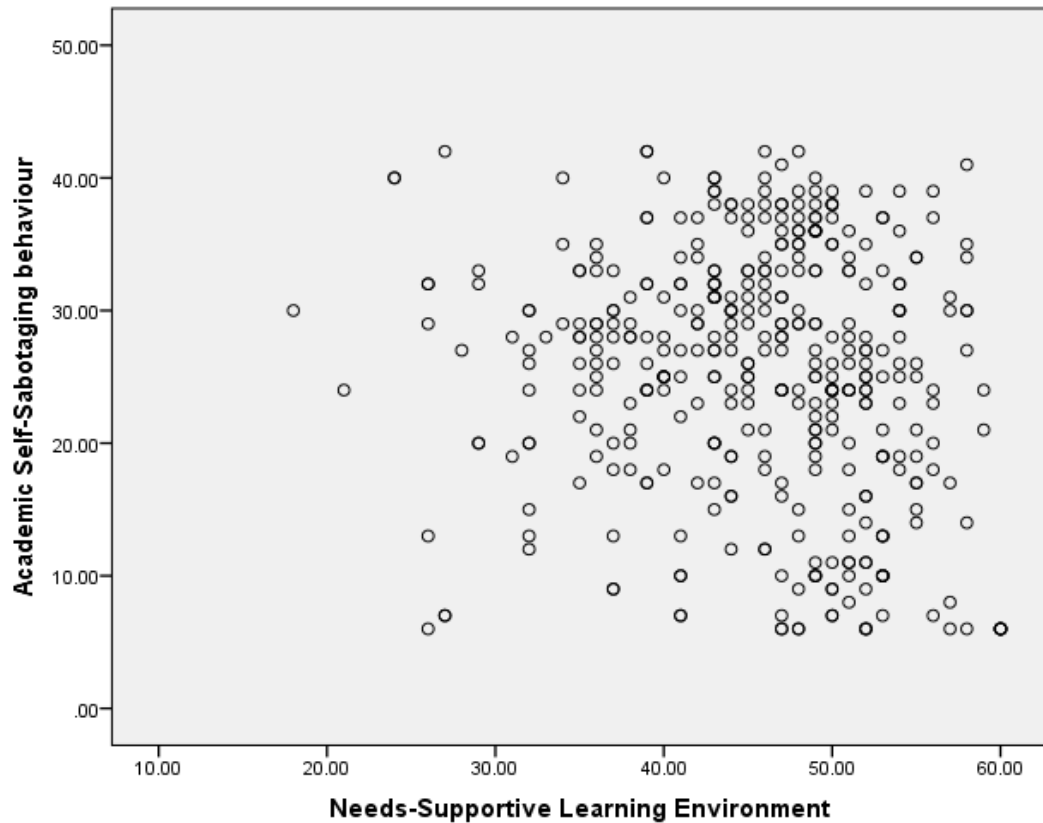
#### ***4.3.3 Assumption Testing for Pearson Correlation***

The assumptions related to Pearson Correlation were checked to ensure the results obtained were valid and reliable. The first assumption that the data must be continuous was met as both variables were measured at interval scale and not categorical.

Secondly, the requirement that the two variables should have a linear relationship was examined using a scatter plot as shown in Figure 4.1.

**Figure 4.1**

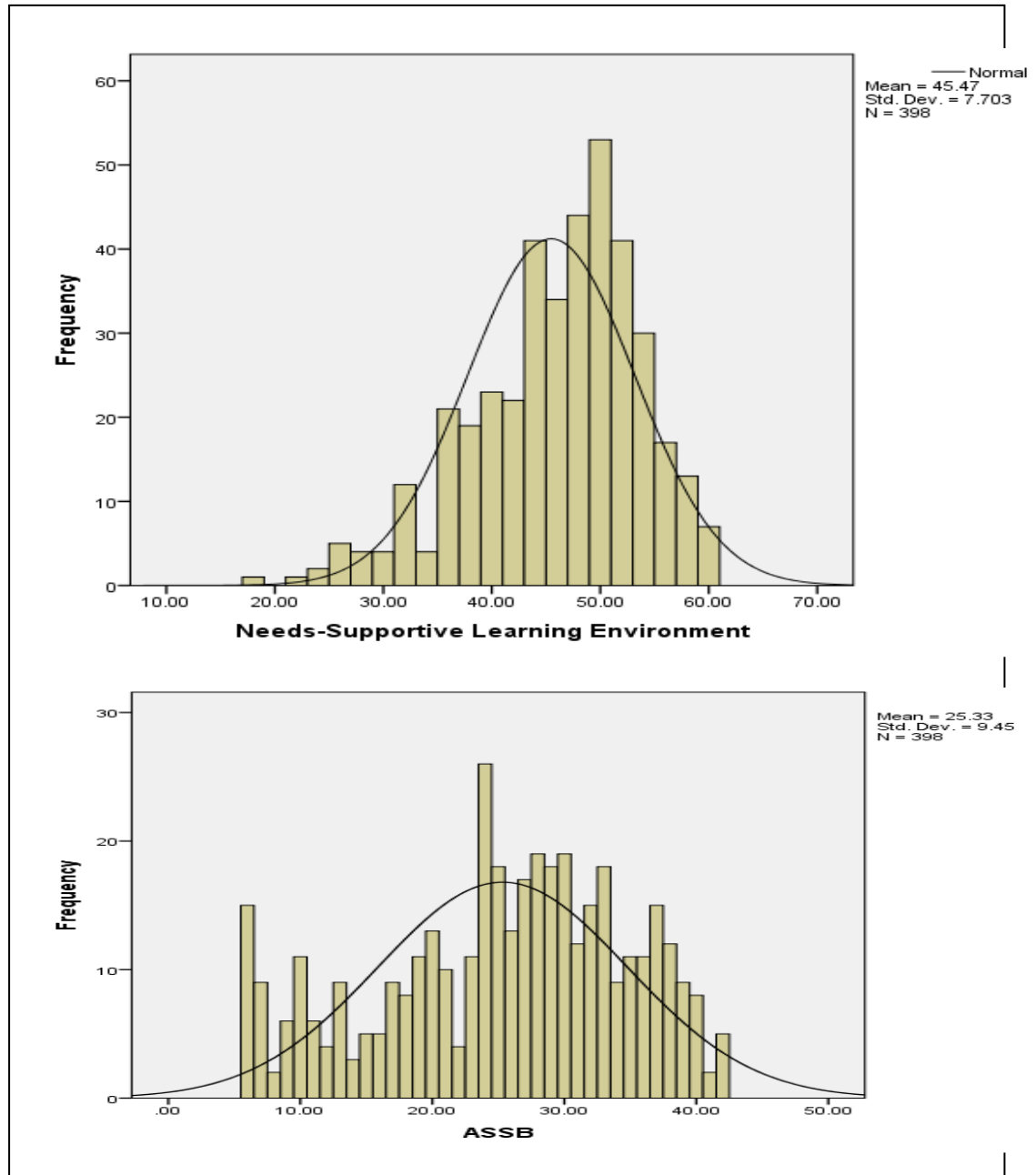
*Scatter-Plot for Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour*



In Figure 4.1, the scatter plot shows that the data points are somewhat scattered but generally display a weak linear pattern. This suggests that the needs-supportive learning environment and academic self-sabotaging behaviour have a weak linear relationship. The trend aligns with the criterion for linearity advanced by Esborne and Waters (2019). According to Schober et al. (2018), mild deviations from linearity do not invalidate the use of Pearson's  $r$ , therefore, the test was applied to examine the relationship between the two variables. Moreover, the data from the two variables were assessed for normality using histogram, the findings are depicted in Figure 4.2.

**Figure 4.2**

*Histogram for Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour*



*Note.* ASSB = Academic self-sabotaging behaviour.

Information presented in Figure 4.2 unveils a histogram illustrating the distribution of the data points for needs-supportive learning environment and academic self-sabotaging behaviour scores, which nearly fits in a bell curve.

This demonstrates normally distributed data responses as per stipulations by Gauss (1809), as cited in Bhandari (2023). Since both needs-supportive learning environment and academic self-sabotaging behaviour variables were normally distributed and they had a linear relationship, the hypothesis testing was conducted using Pearson Correlation.

#### ***4.3.4 Testing for the Relationship Between Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour***

In the first objective, this study aimed to examine if needs-supportive learning environment is related to academic self-sabotaging behaviour. The following null hypothesis was stated:

$H_{01}$ : There is no significant relationship between needs-supportive learning environment and academic self-sabotaging behaviour.

Since needs-supportive learning environment involved satisfaction of three needs, the following three supplementary null hypotheses were set:

$H_{01a}$ : There is no significant relationship between autonomy need satisfaction and academic self-sabotaging behaviour.

$H_{01b}$ : There is no significant relationship between competence need satisfaction and academic self-sabotaging behaviour.

$H_{01c}$ : There is no significant relationship between relatedness needs satisfaction and academic self-sabotaging behaviour.

Pearson correlation was conducted to test  $H_{01}$ ,  $H_{01a}$ ,  $H_{01b}$  and  $H_{01c}$ . The results are given in Table 4.12.

**Table 4.12**

*Intercorrelations Between Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour*

	1.	2.	3.	4.	5.
NSLE	-				
CNS	.708**	-			
RNS	.790**	.354**	-		
ANS	.768**	.341**	.383**	-	
ASSB	-.138**	-.057	-.144**	-.103*	-

*Note.* N = 398; NSLE = Needs-supportive learning environment; CNS = Competence need satisfaction; RNS = Relatedness need satisfaction; ANS = Autonomy need satisfaction; ASSB = Academic self-sabotaging behaviour; \*\* $p < .01$ ; \* $p < .05$

As depicted in Table 4.12, there is a weak negative and statistically significant correlation between needs-supportive learning environment and academic self-sabotaging behaviour ( $r(396) = -.14, p < .01$ ). Hence,  $H_{01}$  was rejected. This finding suggests that a higher level of needs-supportive learning environment is linked to a reduction in academic self-sabotaging behaviour among students.

Turning to the aspects of needs-supportive learning environment, competence need satisfaction had a marginally insignificant correlation with academic self-sabotaging behaviour ( $r(396) = -.06, p > .05$ ). Consequently, there was not enough evidence to reject  $H_{01a}$ , indicating that competence need satisfaction was not significantly related to academic self-sabotaging behaviour.

Relatedness need satisfaction had weak, negative and significant correlation with academic self-sabotaging behaviour ( $r(396) = -.14, p < .01$ ). Therefore,  $H_{01b}$  was rejected, suggesting that increase in relatedness need satisfaction would be associated with decrease in academic self-sabotaging behaviour. Autonomy need satisfaction had a weak negative, significant correlation with academic self-sabotaging behaviour ( $r(396) = -.10, p < .05$ ). As a result, the  $H_{01c}$  was also rejected, indicating a significant relationship in which academic self-sabotaging behaviour would reduce with increase in autonomy need satisfaction.

#### ***4.3.5 Qualitative Findings on the Relationship Between Needs-Supportive Learning Environment and Academic Self-Sabotaging Behaviour***

To gain in-depth understanding of how students' experiences of having their basic psychological needs satisfied in a learning environment relate with their academic self-sabotaging behaviour, qualitative analysis was conducted. Qualitative data was collected via semi-structured interview schedule. Systematic thematic analysis was done using steps outlined by Naeem et al. (2023).

The first step is familiarization of the data. The researcher read the data from the interviews thoroughly followed by transcribing it into textual form, which involved selection of respondent's relevant quotations and writing them down. Second step is identification of keywords. The researcher took note of the recurring words and phrases and they were identified as keywords to capture students' experiences and perceptions. Coding is the third step which involves assigning short labels to data segments to understand the patterns. The fourth step is development of themes. Here, the codes were grouped into broader categories to create themes. In the fifth step which is conceptualization, the researcher interpreted the codes which led to the

identification of patterns and relationships for deeper insights into the study problem.

Table 4.13 presents the codebook for needs-supportive learning environment.

**Table 4.13**

*Code-Book for Needs-Supportive Learning Environment*

Priori Themes	Codes
Autonomy need satisfaction	Students' engagement in learning activities such as independent reading, personal timetable, self-initiated learning schedules, study schedules adjustments and self-initiated group discussions.
Competence need satisfaction	Students' responses reflecting activities such as self-quizzing, learning task engagement, help-seeking, asking questions during lessons and completing assignment independently.
Relatedness need satisfaction	Students' responses indicating positive interaction with teachers/students and willingness to consult teachers and other students.

As indicated in Table 4.13, three predetermined themes namely autonomy, competence, and relatedness need satisfaction were used to frame research questions. Repeated phrases and patterns were identified and used as key indicators to group students' experiences of needs satisfaction in the learning environment. The themes were derived through exploration of students' quotations, to gain insights into how students' basic psychological needs were met in the learning environment. To gain diverse perspectives on research problem, interviews involved students exhibiting both appropriate and problematic academic behaviours.

**Autonomy Need Satisfaction**

According to SDT, autonomy need refers to students' need to feel in control of their learning process (Ryan & Deci, 2017). In this study, autonomy need was perceived supported if students' responses during the interview indicated their engagement in

activities such as use of personal timetable, independent reading, self-initiated study schedules, self-initiated discussions and study schedules adjustments.

Student A: *“I do my assignments and study for exams without needing reminders.”* When probed how she conducts her study, she said, *“Most of us make our own timetable.”*

This student demonstrated a very strong sense of self-direction and control over her learning process. This is seen in the initiative taken by the student to organize her study through making own reading timetable and voluntarily completing assignments. This reflects high level of autonomy satisfaction. This finding agrees with Oram et al. (2020) who stated that satisfying students basic needs increased their motivation which in turn increased their adaptive learning behaviours.

Students B: *“During free time you can freely choose what you want to learn. For instance, you can read a subject like Life Skills.”*

This student acknowledgement of freedom to make own choices regarding what to learn reflect autonomy need satisfaction in the learning environment.

Student D: *“I read without being told to; I make sure I read all my notes so that I can do well in exams.”* When asked if she has ever been pushed to attend her learning activities, she said, *“No. I read to better my life. I do my personal studies very early in the morning; like I wake up at 4.00 a.m. and read before I come to school.”*

This learning environment is characterized by high self-drive to learning, reflected in student’s internal motivation to read all the notes; proactive approach to learning through conducting self-directed studies; and the ability to adapt and creates time to study despite the constraints within the school, for example, tight school timetable. This student demonstrates very high sense of autonomy need satisfaction.

## **Competence Need Satisfaction**

In view of SDT, the need of competence refers to students' need to feel capable and confidence in handling learning tasks (Ryan & Deci, 2017). In this study, students' responses that demonstrated confidence in their ability to ask and answer questions during lesson, completing assignment independently, help-seeking on difficult learning tasks, and engaging in self-quiz, indicated competence need satisfaction.

Student H: *“I like assignment and exams. I answer questions in class. Sometimes I give myself assignment on some subjects, and sometimes I do self-quizzes.”* Another student added, *“When one fails the exam, first they are assigned either a bright student or a teacher to assist them.”* (Student A). Still another student said, *“Some students ask questions in class.”* (Student G)

These findings reveal a high level of competence through students' eagerness to participate in learning activities such as assignment and exams which demonstrate their confidence in their ability. Moreover, students' readiness and active participation in learning discussions show a high level of competence. Student engagement in self-directed learning activities like giving themselves assignment and self-quizzing reflect confidence in one's own ability to manage their learning independently. This finding also reveals that effort is accorded to struggling students through bright peer assistant as a way of enhancing students' competence.

Additionally, some students actively ask questions in class suggesting their desire to gain better understanding of the learning material, a behaviour that supports competence need.

### **Relatedness Need Satisfaction**

The relatedness refers to students' need to feel connected to teachers and other students. In this study, relatedness need support is reflected in students' willingness to consult teachers on academic and personal problems and also to interact with them without fear. It is also reflected in students' acts of frequently consulting other students.

When one student was asked to describe the quality of relationships between teachers and students, the response was,

*“The students are free with teachers, even at evening many go to consult them on academic matters.”* (Student A)

When asked what else they consult about, student B said,

*“They consult on personal issues, though I have never asked anything personal from teachers. I consult teachers too if I don't understand what am reading.”* On the same note, student C said, *“Few students do follow teachers in the staffroom to ask questions, specifically, students ask questions that are academic related. On personal matters, students only go to discuss with deputy.”*

These quotes show that teachers are accessible to students for consultation on academic matters. Moreover, they provide an approachable environment which enhances students' trust to consult even on personal related matters. This suggests a supportive relationship that foster high sense of relatedness between teachers and students. The quotes also reveal low interaction between teachers and low-performing students who seem to have accepted their fate which can be indicative of feeling of relatedness need frustration.

Regarding the same, another student said,

*“We have a good relationship with teachers and other students, seen in the manner in which students follow teachers outside classroom and in the staffroom to ask on difficult areas, though it is not a common thing. High performers are more likely to consult the teachers. Teachers treat both low and high performers the same. Students consult others on academic matters, and mostly the average students consult. Most of low performers don’t consult from both teachers nor students.”* (Student D)

These findings reveal a high level of competence through student eagerness to participate in learning activities such as assignment and exams which demonstrate their confidence in their ability. Moreover, student readiness and active participation in learning discussions show a high level of competence. The quote indicates that the student has a positive and good relationship with teachers and other students which is reflected in the increased engagement in consultation for help with difficult tasks. This suggests a supportive learning environment with high sense of connection, which fulfills the need of relatedness. Additionally, frequent consultation among students, suggests a high sense of peer support which contributes positively to their need of relatedness. Another student also responded,

*“Only few students consult teachers when faced with difficult learning tasks like mathematics and physics. I seek help from my teachers on other matters not academic only, like I may not be having soap to wash my clothes. Also, other few students share personal issues with the teachers. Teachers treat both bright and dull students equally.”* (Student F)

These findings reveal a high level of competence, reflected in students’ eagerness to participate in learning activities such as assignments and exams. This demonstrates

their confidence in their abilities. Moreover, student readiness and active participation in learning discussions show a high level of competence. The quote indicates that the student has a positive and good relationship with teachers and other students which is reflected in the increased engagement in consultation for help with difficult tasks. This suggests a supportive learning environment with high sense of connection, which fulfills the need of relatedness. Additionally, frequent consultation among students, suggests a high sense of peer support which contributes positively to their need of relatedness. The quote, reveal that few students seek help behold academic matters and teachers treat students equally regardless of their academic performance. These positive aspects present a learning environment that is inclusive and supportive, thus fostering a sense of connection between teachers and students.

#### ***4.3.6 Discussion of the Results***

The current study aimed at uncovering if satisfying basic psychological needs identified in SDT in a learning environment was associated with less or increased academic self-sabotaging behaviour. The results indicated a negative and statistically significant relationship between needs-supportive learning environment and academic self-sabotaging behaviour. Qualitative findings also confirmed this relationship with students reporting that they completed assignments and studied for exams without reminders, received support from teachers or peers when struggling, and felt free to interact openly with teachers.

These results are in the line with SDT by Ryan and Deci (2017) which claims that satisfying the basic psychological needs - competence, relatedness and autonomy- of students will promote their health functioning and intrinsically motivate them to

engage in positive learning behaviours. Students who perceived positive experiences about their learning environment also reported avoiding academic self-sabotaging tendencies.

The current study's results that need-supportive learning environment relate negatively and significantly with academic self-sabotaging behaviour are consistent with those of previous studies (Collie et al., 2019b; Opdenakker, 2021; Oram & Rogers, 2022). For instance, Collie et al. (2019b) study linked satisfaction of basic psychological needs in a learning environment to less self-sabotaging behavior. Specifically, the study revealed that use of autonomy-supportive motivational strategies by teachers was associated with less homework disengagement and self-handicapping.

Similar findings are reported by Oram and Rogers (2022) who examined the experiences of university students in regard to their basic psychological needs and their relation to academic self-sabotaging behaviour, and found that satisfaction of these needs as perceived by students significantly predicted low levels self-sabotaging behaviour like academic procrastination.

The current study also corroborates Opdenakker (2021) results that revealed a negative correlation between need-supportive teacher behaviour and students' procrastination behaviour. These results implied that when student perceive teacher behaviours in a school learning environment as fulfilling in regard to their needs, they engage more in adaptive learning behaviours such as academic engagement.

This claim is echoed in Zamarripa et al.'s (2021) study that found a moderate positive and statistically significant correlation between basic psychological needs

satisfaction and academic engagement. These results further revealed students who perceived their needs satisfied experienced high autonomous and controlled motivation, less disaffection and amotivation which explained their high academic engagement.

Same results are reported by Mutisya (2020) who investigated whether students' perception of teacher support was related to academic engagement. The study showed that students' perception of autonomy and competence support from the teachers was moderately and positively related to academic engagement of students. These results suggest that creating a learning environment that supports students' needs will lead to high level of adaptive behaviours and less maladaptive behaviours such as academic disengagement.

In congruent with the current study's results, Burns et al. (2019) examined whether classroom interpersonal support from teachers and peers could buffer the impacts of disengagement among female learners in Australia. The findings revealed an increasing level of disengagement across the three years. As students advanced to the next level their disengagement level increased and teacher support was related to declining upward disengagement among learners.

#### **4.4 Relationship Between Needs-Frustrating Learning Environment and Academic Self-Sabotaging Behaviour**

##### ***4.4.1 Description of Needs-Frustrating Learning Environment***

Needs-frustrating learning environment was measured using items on the need frustration sub-scale of BPNSFS. The sub-scale assessed the extent to which students' basic psychological needs were frustrated within school learning

environment. Students' responded by choosing on a 5-point Likert scale from one (*not at all true*) to five (*completely true*). A composite score was calculated by summing up the scores of ten items. The obtained score was then used to compute descriptive statistics for needs-frustrating learning environment, along with its specific components. Additionally, the inter-item reliability was also computed using 12 items and two items; item 8( $r = .09$ ) and 22 ( $r = .07$ ) indicated low inter-item reliability. According to Bonett and Wright (2015) the items that show low inter-item reliability should be statistically excluded. Therefore, scale reliability was also computed using only 10 items. The statistics for measures of central tendency, variability, symmetry and Cronbach alpha are presented in Table 4.14.

**Table 4.14**

*Descriptive Statistics for Needs-Frustrating Learning Environment*

Variables	Range	Mean	SD	Sk	Kur
Needs-frustrating learning environment	12-52	29.59	7.68	.070	-.56
Autonomy need frustration	3-15	6.91	2.91	.41	-.53
Competence need frustration	3-15	8.01	3.16	.08	-.91
Relatedness need frustration	4-20	8.23	3.68	.68	-.39
$\alpha = .70$					

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis;  $\alpha$  = Cronbach's alpha

Data in Table 4.14 indicate that the scores for needs-frustrating learning environment had a range of 12 to 52, and a mean of 29.59 ( $SD = 7.68$ ). Further exploration on its components, shows that autonomy need frustration ranged between 3-15, with a mean of 6.91 ( $SD = 2.91$ ). Competence need frustration had a range of 3-15 and a mean of 8.01 ( $SD = 3.16$ ) while relatedness need frustration ranged between 4-20, with a mean of 8.23 ( $SD = 3.68$ ). Needs-frustrating learning

environment had a higher value of standard deviation, suggesting greater variability in responses from the average. The skewness and kurtosis values were within the range of -2 to +2 for needs-frustrating learning environment and its aspects. This demonstrates according to Demir (2022) that the scores fulfilled the assumption of normality.

Analysis on how gender may influence how students' perception of their learning environment was conducted as displayed in Table 4.15

**Table 4.15**

*Descriptive Statistics for Needs-Frustrating Learning Environment by Gender*

Variables	Gender	Range	Mean	SD	Sk	Kur
Needs-frustrating learning environment	Boys	12-52	29.01	7.70	.07	-.35
	Girls	13-47	30.17	7.63	.07	-.81
Autonomy need frustration	Boys	3-15	8.03	3.18	.07	-.88
	Girls	3-15	7.09	3.02	.40	-.69
Competence need frustration	Boys	3-15	7.91	3.61	.87	.04
	Girls	3-25	7.98	3.15	.11	-.95
Relatedness need frustration	Boys	4-20	6.74	2.82	.39	-.39
	Girls	4-18	8.60	3.74	.48	-.71

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis.

As observed in Table 4.15, girls on average perceived higher levels of needs frustration in their learning environment ( $M = 30.17$ ,  $SD = 7.63$ ) than boys ( $M = 29.01$ ,  $SD = 7.70$ ). For autonomy frustration, boys scored higher ( $M = 8.03$ ) than girls ( $M = 7.09$ ). This imply that boys felt marginally more undermined in their autonomy. Competence frustration is similar for both genders. Frustration of relatedness need was higher among girls ( $M = 8.60$ ,  $SD = 3.74$ ) than boys ( $M = 6.74$ ,  $SD = 2.82$ ),

indicating that girls felt less connected or supported by peers and teachers. Skew and kurtosis values were so small, reflecting that distributions were symmetrical.

Students' experiences of needs frustration were also analyzed across school types as indicated in Table 4.16.

**Table 4.16**

*Descriptive Statistics of Needs-Frustrating Learning Environment by School Type*

Variables	School type	N	Range	Mean	SD	sk	kur
NFLE	BB	88	13-42	20.02	7.24	.01	-.62
	GB	77	13-46	28.73	7.13	-.06	-.72
	Coed-B	26	12-39	25.80	7.21	.11	-.62
	Coed-D	207	12-52	31.04	7.81	.05	-.60
ANF	BB	88	3-12	6.79	2.39	.09	-.82
	GB	77	3-15	6.63	2.98	.64	-.09
	Coed-B	26	3-10	5.19	2.28	.55	-.92
	Coed-D	207	3-15	7.26	3.09	.31	-.75
CNF	BB	88	3-15	8.52	3.28	-.02	-.85
	GB	77	3-14	7.60	3.18	.41	-.85
	Coed-B	26	3-13	8.23	2.92	-.37	-1.19
	Coed-D	207	3-15	7.92	3.12	.04	-.88
RNF	BB	88	4-15	6.66	2.95	1.39	1.15
	GB	77	4-18	8.44	.60	.27	.54
	Coed-B	26	4-14	6.92	3.17	.99	-.04
	Coed-D	207	4-20	8.98	3.78	.45	-.54

*Note:* BB = Boys boarding; GB = Girls boarding; B = Co-education boarding; Coed-D = Co-education day; NFLE = Needs-frustrating learning environment; ANF = Autonomy need frustration; CNF = Competence need frustration; RNF = Relatedness need frustration; SD = standard deviation; sk = skewness; kur = kurtosis.

In general, data in Table 4.16 indicate that students' experiences of needs frustration in their learning environments were different across the school types. For

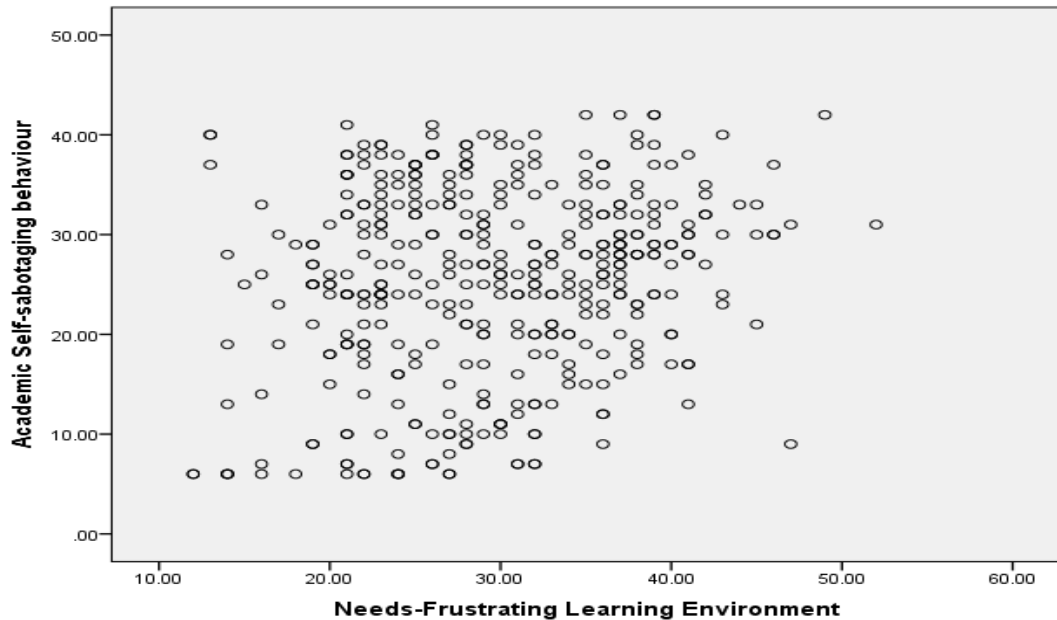
coeducation day, students reported the highest level of needs frustration ( $M = 31.04$ ,  $SD = 7.81$ ), followed by girls' boarding ( $M = 28.73$ ,  $SD = 7.13$ ) and coeducation boarding ( $M = 25.80$ ,  $SD = 7.21$ ). Boys' boarding had the lowest mean ( $M = 20.02$ ,  $SD = 7.24$ ). This suggests that students in coeducation day and girls' boarding perceive their school environment as more need-frustrating. For autonomy frustration, coeducation day had the highest level ( $M = 7.26$ ), with co-education boarding having the lowest mean score ( $M = 5.19$ ). This indicates that autonomy is most thwarted in co-educational day schools. All schools reported almost the same level of competence need frustration. Regarding relatedness, students in coeducation day schools reported the highest frustration of this need ( $M = 8.98$ ) and girls' boarding ( $M = 8.44$ ) than those in boys' boarding and coeducation boarding schools. This finding show that students in coeducation day and girls' boarding schools feel less socially connected. All variables across the school types had roughly symmetrical distributions as reflected in small values of skewness and kurtosis.

#### ***4.4.2 Assumption Testing for Pearson Correlation***

Pearson Correlation requirement that the two variables should have a linear relationship was examined using a scatter-plot. The results are presented in Figure 4.3.

**Figure 4.3**

*Scatter-Plot for Needs-Frustrating Learning Environment and Academic Self-Sabotaging Behaviour*

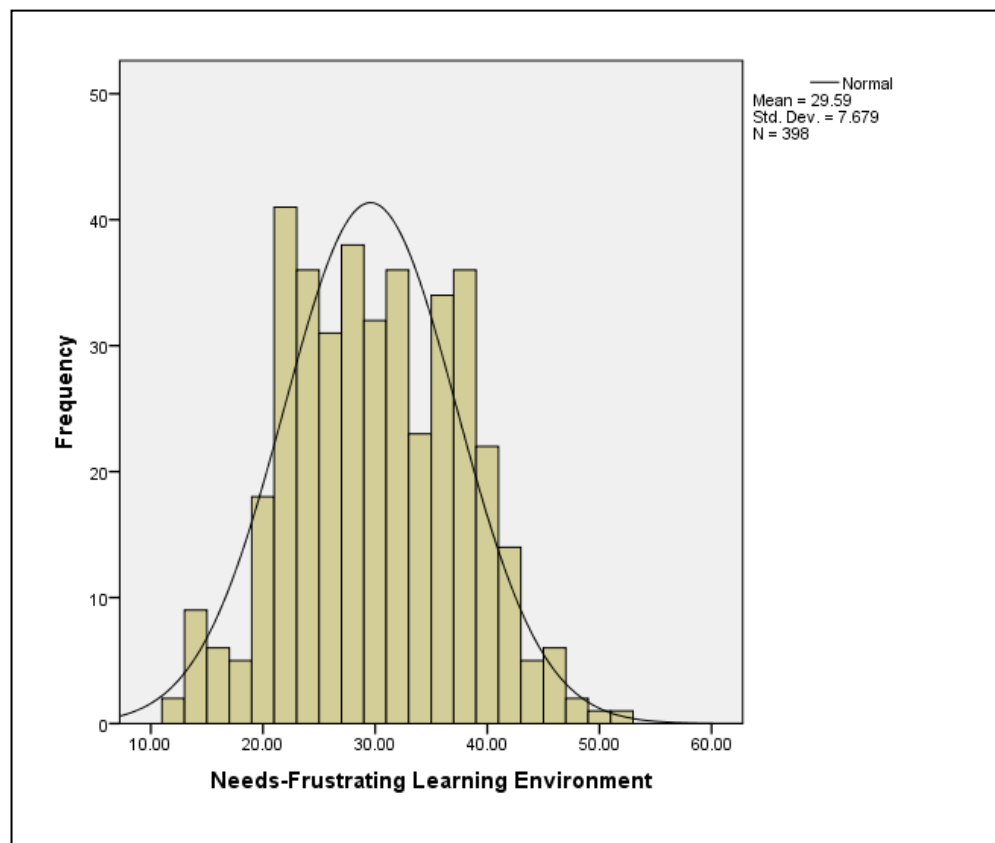


As presented in Figure 4.3, the scatter plot illustrates a generally linear trend among most data points, though with mild deviations. This suggests a weak linear relationship between needs-frustrating learning environment and academic self-sabotaging behaviour, consistent with the criterion advanced by Esborne and Waters (2019). According to Schober et al. (2018), Pearson Correlation is robust to mild violations when the sample size is large. Therefore, the test was used to examine the relationship between the two variables.

Moreover, the data from needs-frustrating learning environment was assessed for normality using histogram, the findings are depicted in Figure 4.4.

**Figure 4.4**

*Histogram for Needs-Frustrating Learning Environment*



Information presented in Figure 4.4 unveils a histogram illustrating the distribution of the data points for needs-frustrating learning environment which nearly fits in a bell curve. This demonstrates a normally distributed data responses as per stipulations by Gauss (1809) as cited in Bhandari (2023). Since both needs-frustrating learning environment and academic self-sabotaging behaviour (refer to Figure 4.2) were normally distributed and had a linear relationship, the hypothesis testing was conducted using Pearson Correlation.

#### ***4.4.3 Testing for the Relationship Between Needs-Frustrating Learning***

##### ***Environment and Academic Self-Sabotaging Behaviour***

In the second objective, this study sought to examine the potential relationship between needs-frustrating learning environment and academic self-sabotaging behaviour. Within this goal, the  $H_{02}$  was stated as follows:

$H_{02}$ : There is no significant relationship between needs-frustrating learning environment and academic self-sabotaging behaviour.

Further, to test all the aspects of needs-frustrating learning environment, three supplementary null hypotheses were formulated as follows:

$H_{02a}$ : There is no significant relationship between autonomy need frustration and academic self-sabotaging behaviour.

$H_{02b}$ : There is no significant relationship between competence need frustration and academic self-sabotaging behaviour.

$H_{02c}$ : There is no significant relationship between relatedness need frustration and academic self-sabotaging behaviour.

Bivariate correlation using Pearson correlation was conducted to test the relationship between needs-frustrating learning environment and academic self-sabotaging behaviour and the results are captured in Table 4.17.

**Table 4.17***Inter-correlations Between Needs-Frustrating Learning Environment and Academic Self-Sabotaging Behaviour*

	1.	2.	3.	4.	5.
NFLE	-				
ANF	.682**	-			
CNF	.640**	.252**	-		
RNF	.758**	.358**	.281**	-	
ASSB	.191**	.167**	-.071	.144**	-

*Note.* NFLE = needs-frustrating learning environment; ANF = autonomy need frustration; CNF = competence need frustration; RNF = relatedness need frustration; ASSB = academic self-sabotaging behaviour.

\*\* $p < .01$ .

\* $p < .05$ .

As presented in Table 4.17, there is a weak positive and statistically significant correlation between needs-frustrating learning environment and academic self-sabotaging behaviour ( $r(396) = .19, p < .01$ ). Hence,  $H_{02}$  was rejected, and an alternative hypothesis that needs-frustrating learning environment is related to academic self-sabotaging behaviour adopted. This finding suggests that an increase in frustration of basic psychological needs would be associated with increase in academic self-sabotaging behaviour.

Turning to correlations between the aspects of NFLE; Autonomy need frustration had a weak positive significant correlation with academic self-sabotaging behaviour ( $r(396) = .17, p < .01$ ). As a result, the  $H_{02a}$  was also rejected, indicating a significant relationship in which academic self-sabotaging behaviour increased with increase in autonomy need frustration.

Competence need frustration had a non-significant correlation with ASSB ( $r(396) = -.07, p > .05$ ). Consequently, there were not enough evidences to reject  $H_{02b}$ . This indicates that competence needs frustration is not correlated with academic self-sabotaging behaviour. On the other hand, relatedness needs frustration had weak positive significant correlation with academic self-sabotaging behaviour ( $r(396) = .14, p < .01$ ). Therefore,  $H_{02c}$  was rejected, suggesting that increase in relatedness need frustration would be associated with increase in academic self-sabotaging behaviour.

#### ***4.4.4 Qualitative Findings on the Relationship Between Needs-Frustrating Learning Environment and Academic Self-Sabotaging Behaviour***

To gain in-depth understanding of how students' experiences of having their basic psychological needs frustrated in a learning environment relate with their academic self-sabotaging behaviour, qualitative analysis was conducted. Qualitative data was collected via semi-structured interview schedule. Systematic thematic analysis was done using steps outlined by Naeem et al. (2023). Table 4.18 presents the codebook for needs-frustrating learning environment.

**Table 4.18***Code-Book for Needs-Frustrating Learning Environment*

Priori Themes	Codes
Autonomy needs frustration	Students' responses lacking learning activities such as independent reading, personal timetable, self-initiated learning schedules, study schedule adjustments and self-initiated group discussions.
Competence needs frustration	Students' responses indicating avoidance of self-quizzing, disengagement in learning task, help-seeking avoidance, hesitation to ask questions during lessons and avoiding completing assignment.
Relatedness needs frustration	Students' responses indicating poor students' interaction with teachers, limited interaction with other students and reluctance to consult teachers and other students.

As indicated in Table 4.18, three preset themes namely autonomy, competence, and relatedness need frustration were used to frame research questions. Repeated phrases and patterns were identified and used as key indicators to group students' experiences of needs frustration in the learning environment. The themes were derived through exploration of student quotations, to gain insights into how students' basic psychological needs were thwarted in the learning environment. To gain diverse perspectives on research problem, interviews involved students exhibiting both appropriate and problematic academic behaviours. The findings on the themes identified alongside students' quotes are presented.

### **Autonomy Need Frustration**

According to SDT, autonomy needs frustration refers to the extent to which students feel not in control over their learning activities (Ryan & Deci, 2017). In this study, students' responses devoid of self-directed learning behaviours such as use of personal timetable, independent reading, self-initiated study schedules and self-initiated discussions suggested that the need for autonomy was not supported.

Student A: *“Only two or three students have no timetables, they must be pushed around to read and they also like sleeping in class.”*

This quote demonstrates a learning environment characterized by lack of self-directed learning behaviours among students. This is seen in the absence of personal timetables which suggest students' lack of control over their learning schedules. In addition, lack voluntarily reading and low interest as reflected in their tendency to sleep rather than to participate in class activities, reflect high level of autonomy need frustration.

Students B: *“Few students wait to be pushed by teachers to read. Sometime we fail exams because the teachers set from topics we haven't revised; we keep ignoring them because they were taught long time ago, thinking teachers won't set them.”*

This quote reveal that some students wait for teachers' prompt to start reading, which point to lack of autonomy. In addition, lack of guidance on where to read in preparation for their exams lead to frustration of autonomy needs.

Student C: *“I spend my free time chatting with friends, and even though I carry books at home I don't read them; I carry them back and forth from home to school the next day”*. When asked why he does that he said, *“I am never interested. I don't read during free time and I don't have a personal*

*timetable, though am considering making one.”* When asked if he belongs to any group discussion he replied, *“I don’t belong to any group discussion.”*

This student’s quote reflects lack of self-initiated learning behaviours and lack of engagement with learning activities. These behaviours are indicative of autonomy need frustration in a learning environment.

Student D: When asked how other students conduct their studies, he said:  
*“Though some students are pushed to do assignment, for example, some come to do the assignment at school so that they can copy from others. Some never finish holiday assignment.”*

These findings show that students are not self-directed in their learning, evidenced in their inability to manage their learning independently. Moreover, they rely on their peers to complete assignment and engage in procrastination which lead to incomplete holiday assignments. This behaviour demonstrates a significance level of autonomy need frustration.

### **Competence Need Frustration**

In this study, students’ responses that demonstrated lack of confidence in their ability to handle learning tasks indicated that competence need was frustrated.

Student H: *“Students who fail exam are sent home for parents.”*

This student’s response reveals some potential barriers to satisfaction of competence need among the peers which include sending them home for their parents. This punitive approach to exam failure creates fear and feeling of incompetence among students.

Students A: *“Few students dislike exams “If the student fails the exam next time they are punished and teachers are very friendly to bright students and*

*the interact minimally with low performance; teachers tend to engage the bright students, they call them often, they laugh with them and it is a different case with low achievers”*

From these quotes, several hindrances to competence need development are noted such as punishing student due to repeated failures which create fear and discouragement instead of enhancing positive growth. Differentiated teacher-students’ interaction where teachers tend to be more friendly to bright students compared low performers. This creates feeling of inadequacy and incompetence among the low performers, hence perceiving themselves as less capable. This low interaction between teacher and a student who is a lower performer can make the struggling students feel ignored and fail to develop their competence. This in turn may lead to low motivation and academic disengagement. These factors suggest high frustration of competence need in the learning environment.

*Student C: “I never ask questions in class but only listen. For some subjects like physics, due to a lot of calculations, I sleep. When given assignments, I don’t do. However, when I come to school, I copy from others because teachers punish those who fail to do the assignment.”*

From these responses, the student exhibited passive learning behaviours such as lack of active participation to learning which implies lack of confidence in their ability to engage with the learning tasks. Avoidance behaviours, especially, when dealing with a challenging task demonstrated through sleeping during subjects with complex concept was indicative of doubt in their ability to handle the material. Student also admitted having tendencies of copying assignment from others due to fear of punishment, which reveal lack of competence. The noted behaviours reflect significant frustration of competence need in the learning environment.

Students F: When asked if some students show negative attitude towards exams, the student said, “Yes.” The students also said, “*Students who fail exams are asked for parents, and given a punishment*”. *I do self-quiz but I don’t take it to teachers. Some teachers give up on some students and label them failures. Some students sleep in class and teachers just ignore them and continue teaching others*”.

It was noted from this quotation that the student proactively engaged in self-quizzing, but did not let the teachers see the work. Failure to share the self-quiz may hinder students from fully benefiting through valuable feedback from the teacher, potentially hindering development of competence need. Also, negative attitude towards exams may stem from student feeling of ineffectiveness in a learning context. This attitude suggests an underlying lack of confidence in one’s ability which could potentially indicate that students’ competence need was partially or not met. In addition, giving punishment as a consequence of failure may create pressure and stress, further undermining the needs of competence. This is an indicative of needs-frustrating learning environment.

Student G: “*Some students ask questions in class. Some students view assignment like a bother, so many copy from others. Student do not do self-quiz. Myself- I have never done self-quiz. When students fail, nothing is done to them but it depends on what class teachers decides.*”

The finding reveals that negative attitudes toward assignments, not doing self-quizzing, and inconsistent approaches to failure hinder the development of competence need among students. This suggests a learning environment that frustrates the need of competence

### **Relatedness Need Frustration**

In this study, relatedness need frustration is reflected in students' lack of connection with teachers and peers. Students' responses indicating reluctance to consult teachers and peers on academic or personal problems as well as low or lack of interaction will mean frustration of this need.

When students were asked to describe how teachers interact with both bright and low performers, the response from one student was,

*“Teachers are friendly more to bright students. The bright students consult more because they are interested, but the low performers appear to have accepted their fate.”* (Student B)

Finding from this student quote reveal low interaction between teachers and low-performing students who seem to have accepted their fate, which is an indication of relatedness need frustration.

Regarding teacher-students' relationship, student C said,

*“I don't relate well with teachers because of my misbehavior. Some teachers are not happy, others are indifferent and others little friendly. Few students do follow teachers in the staffroom to ask questions; specifically, students ask questions that are academic related. On personal matters students only go to discuss with deputy. Teachers are not very friendly to low performance; teachers love students who perform well and to some extent they even pardon them when on the wrong for example, they don't punish them for vernacular speaking. I don't ask difficult questions from other students. I don't ask questions because I really don't care.”*

The quote presents a student who is experiencing relatedness need frustration resulting from limited teacher-student interaction, perceived teacher bias, lack of

support for low performing students, and infrequent student-initiated interactions. Further, student indifference towards learning, as seen in lack of interest to consult on difficult questions creates a feeling of disconnection, further frustrating their relatedness needs. This agrees with Adigun et al. (2023) study that argued that negative teacher-student interaction leads to increased academic self-sabotaging behaviour such as student disengagement. Regarding the same, another student said,

*“Students follow teachers outside classroom and in the staffroom to ask on difficult areas; though it is not a common thing. High performers are more likely consult the teachers. Most of low performers don’t consult from either teacher nor students.”* (Student D)

From the quote, it is also worth noting the element of uneven consultation among students with low performing students engaging in less consultations with their teachers and peers. This low engagement potentially indicates lack of perceived support, hence a potential area thwarting the sense of relatedness in the learning environment. Another student responded,

*“Not all students relate freely with teachers. They don’t like to be close to teachers and when they fail a certain subject, they claim it is because they don’t like teachers.”* (Student F)

From the quote, it is also noted that many students experience difficulties in relating to teachers, avoid closeness with teachers and engage in limited consultation, which hinders the development of strong, and supportive connections between students and teachers. This demonstrates a learning environment that does not support students’ need of relatedness.

#### ***4.4.5 Discussion of the Results***

The second objective sought to establish if frustrating basic psychological needs in a learning environment was associated with academic self-sabotaging behaviour. The results revealed a weak, positive and statistically significant correlation between needs-frustrating learning environment and academic self-sabotaging behaviour. These results agree with SDT by demonstrating how frustrating students' basic psychological needs in a learning environment is related to academic self-sabotaging behaviour. SDT posits that frustration of these needs lead to reduced motivation, which further predict individual problem behaviour (Ryan & Deci, 2017). Therefore, thwarting students' needs by making them feel excluded, controlled, and pressured to act against their will in a learning environment, can trigger maladaptive behaviour such as procrastination and disengagement.

The current results linking needs-thwarting learning environment to increased academic self-sabotaging behaviour confirm those obtained by Opdenakker (2021) who revealed a positive correlation between need-thwarting teacher behaviour and students' procrastination behaviour. These results implied that when student perceive teacher behaviours in a school learning environment as frustrating in regard to their needs, they engage in more self-damaging learning behaviours like academic disengagement and procrastination.

Similarly, Collie et al. (2019a) study that found a significant relationship between basic needs frustration and students' self-sabotaging behaviour such as academic disengagement. Precisely, results demonstrated that learning environment that frustrates students' needs of autonomy by pressuring them to act and feel in a dictated way contributed to more self-sabotaging behaviour.

In another study, Collie et al. (2019b) also found that use of controlling practices by the teachers was associated with psychological needs frustration, which in turn predicted more self-sabotaging and self-handicapping behaviors. Coincidentally, Codina et al. (2018) supported the same idea by directly linking controlling school contextual variables to psychological needs frustration, which positively predicted procrastination.

The current study's extends Elizabeth and Veronica (2018) findings that demonstrated significant influence of open school climate in improving academic achievement, by linking psychological dimension of school environment to academic self-sabotaging behaviour. However, teachers were the target group instead of students which made the current research more important to extend the generalization of results.

A coincidence is also seen between the current study and Zamarripa, et al. (2021) results that revealed negative low correlation between BPNF and academic engagement. Students who perceived their needs thwarted experienced high amotivation which explained their less academic engagement.

#### **4.5 Relationship Between Significant Others' Academic Expectations and Academic Self-Sabotaging Behaviour**

##### ***4.5.1 Description of Significant Others' Academic Expectations***

In this study, a nine-item Academic Expectations Stress Inventory (AESI) was used to assess academic expectations. Specifically, five items on the significant others' expectations sub-scale were used to assess academic expectations from parents and teachers. The sub-scale was used to assess whether expectations from the two

sources were adaptive or maladaptive. Students responded to the scale by choosing from one (*never*) to five (*always*). Students' responses were summed up to generate a single score for significant others' expectations sub-scale (5 items) which was used in the analysis. Descriptive analysis was conducted to obtain range, mean, standard deviation, skewness, kurtosis and Cronbach's alphas as displayed in Table 4.19.

**Table 4.19**

*Descriptive Statistics for Significant Others' Academic Expectations*

Variable	Statistic	Value
Significant Others' Academic Expectations	Range	7-25
	Mean	20.32
	<i>SD</i>	3.70
	<i>sk</i>	-.85
	<i>kur</i>	.20
	$\alpha$	.71

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis;  $\alpha$  = cronbach's alpha.

Data presented in Table 4.19 indicate that significant others' academic expectations scores spanned from seven to 25, with a mean of 20.32 (*SD* = 3.70). Notably, both skewness and kurtosis values were within the range of -2 to +2 for the sub-scale, demonstrating a normal distribution of scores as highlighted by Demir (2022).

Additionally, the relationship between significant others' academic expectations and gender was examined and the results are presented in Table 4.20.

**Table 4.20***Descriptive Statistics for Significant Others' Academic Expectations by Gender*

Variables	Gender	Range	Mean	SD	Sk	Kur
Significant others' academic expectations	Boys	9-25	21.07	3.45	-1.07	.85
	Girls	7-25	19.45	3.79	-.65	-.16

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis

From Table 4.20, boys reported slightly higher levels of academic expectations from significant others ( $M = 21.07$ ,  $SD = 3.45$ ) compared to girls ( $M = 19.45$ ,  $SD = 3.79$ ). This means that boys feel more pressure to meet academic standards from parents and teachers. Skewness and kurtosis values indicate that both genders' responses were closer to a normal distribution. The analysis assessed how significant others' academic expectations varied by school type, and the findings are presented in Table 4.21.

**Table 4.21***Descriptive Statistics for Significant Others' Academic Expectations by School**Type*

Variables	School	<i>N</i>	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>	
	type							
Significant	others'	BB	88	11-25	22.57	2.39	1.17	5.11
academic expectations		GB	77	7-25	19.41	3.98	-.95	.54
		Coed-B	26	17-25	22.76	2.18	-.81	.32
		Coed-D	207	9-25	19.40	3.66	-.48	-.57

*Note.* *N* = 398; *SD* = standard deviation; *sk* = skewness; *kur* = kurtosis

As indicated in Table 4.21, students' perceptions of significant others' academic expectations differed by school types. Co-education boarding ( $M = 22.76$ ,  $SD = 2.18$ ) and boys' boarding ( $M = 22.57$ ,  $SD = 2.39$ ) reported the highest expectations, indicating that students in these settings feel more pressure from parents and teachers. Girls' boarding ( $M = 19.41$ ,  $SD = 3.98$ ) and co-education day ( $M = 19.40$ ,  $SD = 3.66$ ) reported lower expectations. Skewness and kurtosis values reveal that the distribution of scores that was fairly flat.

#### **4.5.2 Assumption Testing for Pearson Correlation**

The assumption of linearity that indicate that the two variables should have a linear relationship for Pearson Correlation to be conducted was examined using a scatter plot. The results are presented in Figure 4.5.

**Figure 4.5**

*Scatter-Plot for Significant Others' Academic Expectations and Academic Self-Sabotaging Behaviour*

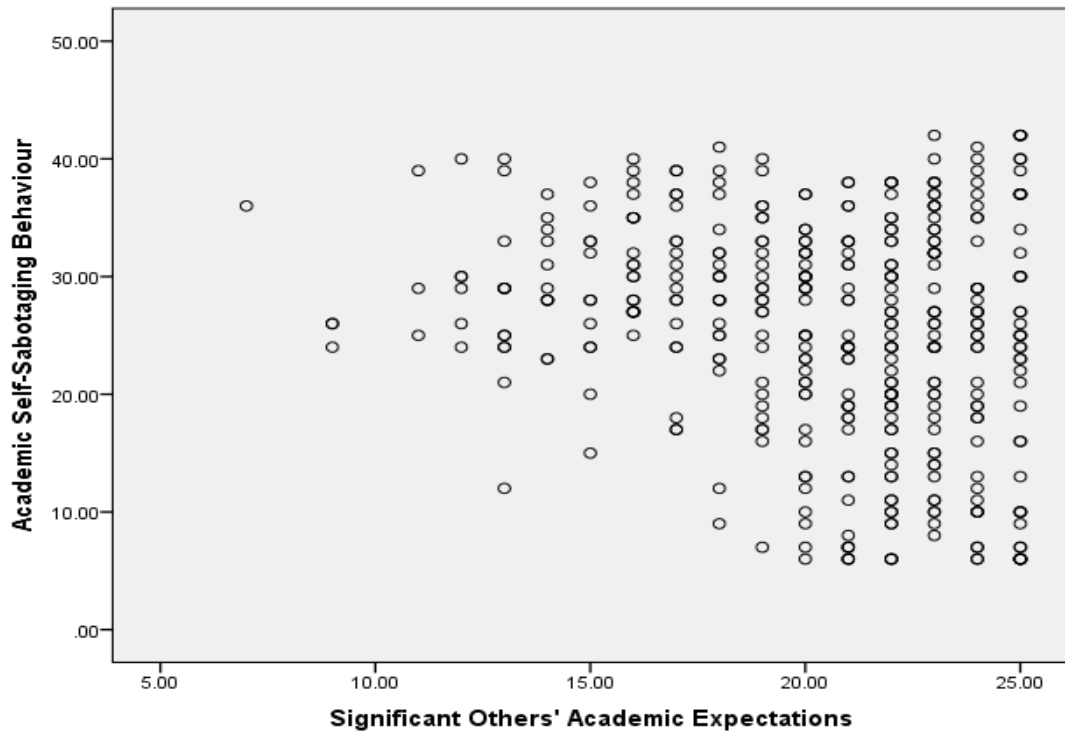
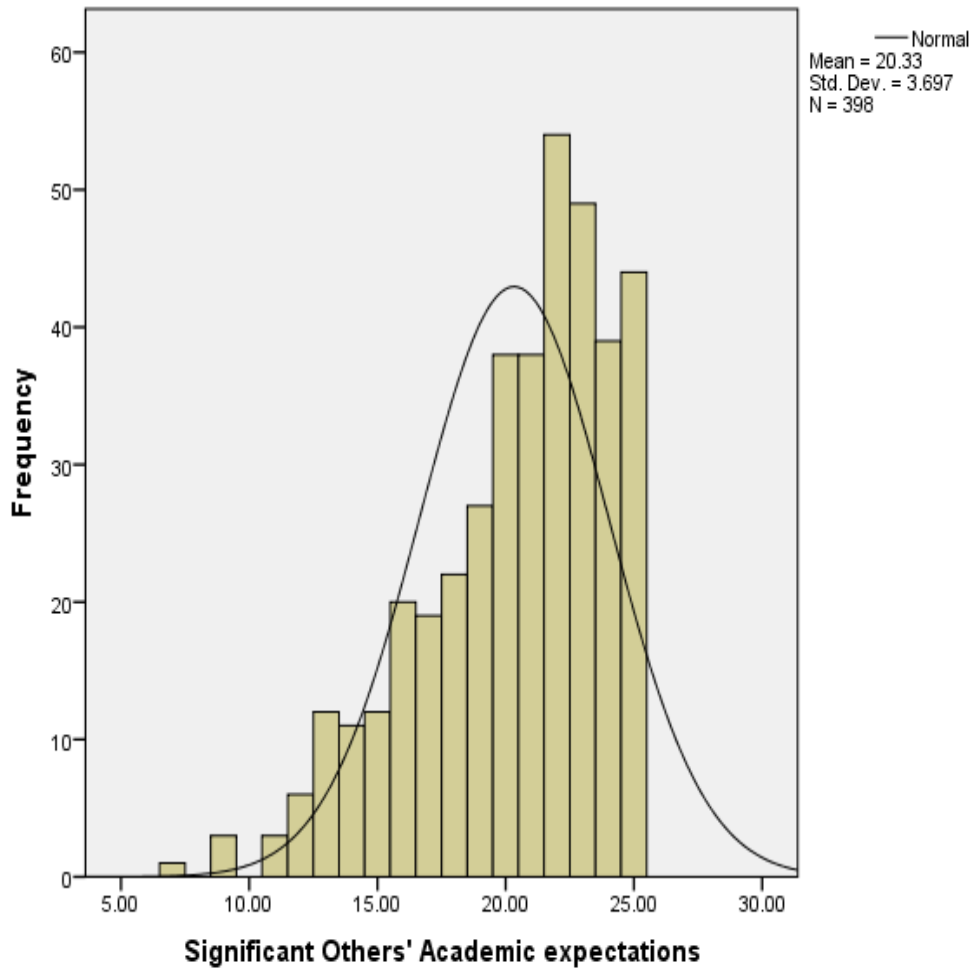


Figure 4.5 shows a scatter-plot illustrating data points that are approximate a linear trend but with minor deviations. This pattern demonstrated a weak linear association between significant others' academic expectations and academic self-sabotaging behaviour, as indicated by the de Winter et al. (2024). Additionally, the data responses from significant others' academic expectations were examined for normality using histogram and the findings are depicted in Figure 4.6.

**Figure 4.6**

*Histogram for Significant Others' Academic Expectations Scores*



In Figure 4.6, the histogram illustrates the distribution of significant others' academic expectations which nearly fits a bell curve with minor skewness. This indicates that the scores were approximately normally distributed, as highlighted by Gauss (1809), cited in Bhandari (2023). Given this near-normal distribution and the large sample size, Pearson's correlation was therefore appropriate, as it is robust to slight deviations from normality (Schober et al., 2018).

**4.5.3 Testing for Relationship Between Significant Others' Academic Expectations and Academic Self-Sabotaging Behaviour**

The third objective sought to examine the likely correlation between significant others' academic expectations and academic self-sabotaging behaviour. To achieve this goal, the H<sub>03</sub> was formulated as follows:

*H<sub>03</sub>*: There is no significant relationship between significant others' academic expectations and academic self-sabotaging behaviour.

Bivariate correlation using Pearson correlation was conducted to test the relationship between significant others' academic expectations and academic self-sabotaging behaviour and the results are captured in Table 4.22.

**Table 4.22**

*Inter-correlation Between Significant Others' Academic Expectations and Academic Self-Sabotaging Behaviour*

	1.	2.
1. SOAE	-	
2. ASB	-.230**	-

*Note.* N = 398; SOAE = significant others' academic expectations; ASB = Academic self-sabotaging behaviour; \*\*p <.01.

Table 4.22 indicates that significant others' academic expectations exhibited a weak, negative and significant correlation with academic self-sabotaging behaviour ( $r(396) = -.23, p < .01$ ). Hence, H<sub>03</sub> stating that there is no significant relationship between significant others' academic expectations and academic self-sabotaging behaviour was rejected. Consequently, an alternative hypothesis was accepted, demonstrating that significant others' academic expectations is related to academic self-sabotaging

behaviour of students. This finding suggests that adoption of adaptive academic expectations by parents and teachers would be associated with decrease in academic self-sabotaging behaviour.

#### ***4.5.4 Qualitative Findings on the Relationship Between Significant Others’***

##### ***Academic Expectations and Academic Self-Sabotaging Behaviour***

The third objective examined the relationship between significant others’ academic expectations and academic self-sabotaging behaviour. To complement the quantitative results, the researcher collected qualitative data using semi-structured interview schedule. The aim was to gain an in-depth understanding of whether significant others’ academic expectations were adaptive or maladaptive and how these expectations are connected to academic self-sabotaging behaviour.

Qualitative data was analysed thematically following steps advanced by Naeem et al. (2023). Table 4.23 shows the code-book for academic expectations.

**Table 4.23**

*Code-Book for Significant Others’ Academic Expectations*

Predetermined Codes themes		
SOAE	High and clear expectations aligning with students’ abilities and personal goals.	Adaptive significant others’ expectations
	Overly high or low and rigid expectations associated with academic stress	Maladaptive significant others’ expectations

*Note.* SOAE = Significant others’ academic expectations

According to Table 4.23, if students’ responses indicated that significant others had high and clear expectations aligning with students’ abilities and personal goals, the

expectations were said to be adaptive. Student responses from the interviews were analyzed and several themes identified.

*Student A:* What do the teachers expect of you at school? *“Teachers expect so highly of me; they expect me to get grade A.”* How does that make you feel? The student said, *“Because teachers hold very high expectations, I work hard to meet their expectations. When I know teacher expects much from me, I put more effort.”* The question on what do your parents expect, the response was, *“My parents expect me to get grade B.”* Do your parents’ expectations agree with yours? Students said, *“Yes, I expect same grade as my parents.”* Regarding academic self-sabotaging behaviour, students said, *“In my case, I start reading for the exam early. I don’t like reading at the last minutes because I will only rush through the notes in case I have many exams in a day. Reading early helps me understand better. Do you engage in other activities at the expense of your studies? “NO.” When I go home, I may not even see my friends before I finish my assignments.”*

These responses reveal that teachers and parents held high expectations on this student which acted as a motivation to put more effort to attain academic success ‘grade A’. Additionally, the quote highlights that parents’ expectations align with students’ goals, suggesting realistic expectations and a shared goal, thus cushioning students from undue pressure. This suggests that significant others’ expectations were viewed by student as adaptive because they served as a motivation to work hard to achieve their goals.

Regarding academic self-sabotaging behaviour, the quote shows that the student had strong focus on academic responsibilities seen in proactive preparation, willingness to engage in assignment, last-minute studying avoidance and prioritizing academic

works. These findings suggest that, when students perceive academic expectations from significant others as adaptive, they display less academic self-sabotaging behaviour.

Another student was asked about their teachers and parents' expectations and said, "*My teachers expect me to do well.*" The student was asked if he meets their expectations. The response was, "*Sometimes I score lower than their expectations. My teachers use the chance to warn me which makes me rethink my reading habits. My parents expect me to get a C(plus) and above so that I can go to a university of my choice and I think I can meet their expectations.*" Concerning academic self-sabotaging behaviour, the student said, "*No benefits for reading the last minutes. No distracting activities and I love reading so much that I don't even attend the games.*" (Student B)

This quote reveals that teachers had high expectations which motivated them to continue offering constructive guidance to students even when they scored below their expectations. This approach was adaptive as viewed by the students because it assisted them to adjust their learning habits in order to achieve their academic goals. This agrees with Dragojević and Letić-Lungulov (2022) assertion that high expectations of teachers can lead to increased students' motivation to learn.

Moreover, students admit they can meet expectations set by their parents, suggesting these expectations were realistic and attainable, hence adaptive. This positively influenced students' confidence and motivation to work hard towards their set academic goals. The findings also revealed that the student seemed aware of the dangers of procrastinating on academic work until the last-minute reading. The

student also demonstrated a strong focus on studying by avoiding distracting activities at all cost. This finding shows that adaptive expectations may influence students' behaviour positively leading to lesser academic self-sabotaging behaviour. On the contrary, qualitative findings show that maladaptive expectations from significant others can impede development of students' positive behaviour. Indeed, a student said,

*“Teachers expect me to be disciplined, perform well, and to attend school every day, but I miss several days. Even on mild sickness, my parents lie to my teachers that my absence is due to sickness.”* (Student C)

From the quote, parents' deceptive support may reinforce students' tendency to miss school, negatively affecting their academic growth. This may also hinder teachers from offering the appropriate support to help students realize their full academic potential. Another student added,

*“My parents have no clue on what is an assignment; they don't ask me about it. Even when I miss school, they are not concerned and they never ask me the reason why I missed.”* (Student E)

From the quote, it can be noted that parents had no interest in their children's academic activities. This signals low academic expectations which can have several negative effects on their academic life such as decreased motivation, disengagement and decreased performance. When students perceive that their parents do not value their studies, they may feel less motivated which can contribute to low academic engagement.

Students may also not see the importance of studying, leading to internalization of lower academic expectations. On the side of the parents, they may miss the opportunity to offer early intervention especially to their struggling children.

Findings also revealed that overly high significant others' expectations that the students cannot meet can create stress and pressure for students. One student said,

*“My parents expect me to do good and they always complain because am performing below their expectations, but I don't worry because what can I do now?”* Regarding reading habits, the student said, *“I read for exams during the exam week.”* (Student I)

As seen from the quote, parents have very high expectations that the student is unable to meet and as a result parents constantly complain. This can negatively affect the student by creating stress and a feeling of inadequacy. Students may also doubt their abilities and feel a sense of helplessness as seen in the phrase, *“What can I do now?”* This perceived lack of urgency and effort may further perpetuate students' disengagement with academic activities as indicated by the phrase, *“I don't worry.”* Regarding academic self-sabotaging, the student indicated having to wait until the exam week to start studying, indicating a tendency to procrastinate exam preparation until the last minute.

Therefore, it can be inferred from the finding that maladaptive expectations such as overly high expectations can lead to increased academic self-sabotaging behaviour among students. This is because when students feel their efforts are not enough to meet their parents' expectations, they lose motivation which prevents them from working harder on their academic tasks.

## **Themes Development**

From the foregoing interviews discussion, the following themes were identified:

### **High Expectations from Significant Others is Associated with Positive Academic Behaviours**

Findings from qualitative analysis revealed that adaptive expectations from the significant others guide the students on the use of effective study habits, setting of clear achievable academic goals, and efforts adjustment in their academic journey. This minimizes academic self-sabotaging behaviour.

### **Influence of Expectations on Motivation**

Setting of adaptive expectations by teachers and parents can motivate students to work hard and adopt positive academic behaviours such as self-discipline, focused effort, proactive planning, and self-regulation which may decrease academic procrastination and disengagement.

### **Academic Stress and Learned Helplessness Are Linked to Overly High Expectations**

Overly high expectations from significant others can lead to pressure and academic stress, especially when students overwork themselves not to disappoint others. They also feel a sense of helplessness which further perpetuates the cycle of academic self-sabotaging behaviour.

#### ***4.5.5 Discussion of Results***

The third objective examined the relationship between significant others' academic expectations and academic self-sabotaging behaviour. The results revealed that significant others' academic expectations had a weak, negative and statistically significant correlation with academic self-sabotaging behaviour. This finding

suggests that adoption of adaptive academic expectations by parents and teachers would be associated with a decrease in academic self-sabotaging behaviour. On the other hand, maladaptive expectations, including overly high or low expectations, and misaligned significant others-students' expectations would lead to an increase in academic self-sabotaging behaviour.

These results support SEVT by Eccles and Wigfield (2020) by showing that adaptive academic expectations held by teachers and parents are related to reduced academic self-sabotaging behaviour. SEVT state that expectancies, including those held by social agents, affect individual's behaviour and performance by creating and altering their expectancies and values.

In this regard, beliefs, behaviours, and feedback from teachers and parents can affect students' expectations and motivation, and in turn, this affects how they behave and perform in their studies.

These current results match those obtained by Tarabin et al.'s (2019) study that investigated the impact of teachers' expectations as a school contextual factor on students' academic self-sabotaging behaviour such as disengagement with their studies. The findings indicated a significant connection between teachers' expectations and students' behavioural academic disengagement. In particular, the study found that teachers had very low expectations on their students. This was a maladaptive approach that led many students to doubt their ability to learn and believed that they were bad students who did not have any future in education journey. As a result, the students became behaviourally disengaged which was manifested through their absenteeism and passive participation in learning activities.

Similar results to the current study are reported by Yau et al. (2022) who found that high parental expectations reflected in more parental support was associated with lower disengagement. Based on the current study interview findings, parents' high expectations motivated students to put more effort to attain academic success. This suggests that if significant others' expectations are viewed by student as adaptive, they may serve as a motivation to work hard to achieve their goals. Consequently, student will display less academic self-sabotaging behaviour and demonstrate a strong focus on academic responsibilities.

The present results are consistent with Vollet et al. (2017) study that found that adaptive expectations, as indicated by high teacher involvement, and maladaptive expectations as reflected by low teacher involvement significantly affected students' level of engagement. Specifically, the results indicated that students who rated their teachers as being highly involved had highest engagement, while those who perceived their teacher as less involved experienced high levels of disengagement. According to these results, significant others' academic expectations as manifested in the quality of involvement in students' academic life can significantly contribute to less or more academic self-sabotaging behaviour like disengagement with their studies.

In harmony with the present findings is the study by Núñez et al. (2023) who found a noteworthy connection between students' perception of their parents' support, their motivation and homework engagement. The study indicated that when significant others hold low academic expectations, they provided students with less support for academic work. Consequently, the study found that when students perceived less support from their parents when doing homework, they engaged in

more self-handicapping behaviours. For example, spending less time and effort on homework, partially completing the homework, and procrastinating more. These results imply that maladaptive expectations, manifested in perceived low parental support demotivates students and encourage them to engaging in more academic self-sabotaging behaviour.

The current study also supports previous studies that emphasized the critical role of academic expectations in shaping students' academic behaviours. Valdes et al.'s (2021) study, as a case point, illustrates that teachers' expectations significantly influenced students' expectations for success in mathematics. These researchers demonstrated that high teachers' expectations significantly contributed to high students' expectations for success in mathematics. Similarly, Ndukwu et al. (2017) found that expectations from the parents had a significant influence on pupils' self-efficacy, while Charity and Wangeri (2018) revealed that pupils' perceptions of teachers' expectations was a significant predictor of academic self-concept.

Although, these studies did not directly focus on academic self-sabotaging behaviour, they implied a link between this behaviour and teachers' academic expectations. Taken together, the results suggest that constructive academic expectations from teachers or parents may lead to positive outcomes like high students' expectations, self-efficacy and self-concept which further could decrease academic self-sabotaging behaviour.

In the same vein, this study reinforces the earlier research findings on the significant contribution of academic expectations to students' academic achievement. For instance, Park et al. (2019) study found that group-level teachers' expectations had a

great impact on students' achievement. Similarly, Mulisa and Kassahun (2019) found that teachers had low academic expectations which led to low students' academic achievement. Goings and Shi (2018) also found that students' expectations were a significant predictor of educational attainment and degree completion.

The current finding that maladaptive parents' expectations, as indicated by lack of interest in their children's academic activities, are associated with high academic self-sabotaging behaviour which is incompatible with results from Yau et al., (2023). The study demonstrated that perceived parental psychological control was not linked to students' disengagement behaviour. This discrepancy in the results may be due to different ways parental expectations were measured. The current study focused on perceived parental anticipation of their children's academic experience while Yau et al.'s study measured parental support in terms of time spent together with children and parents' warmth.

#### **4.6 Relationship Between Students' Academic Expectations and Academic Self-Sabotaging Behaviour**

##### ***4.6.1 Description of Students' Academic Expectations***

In this study, students' academic expectations were assessed using four items on sub-scale of expectations from self (students) of AESI. The items were used to assess whether expectations from the students were adaptive or maladaptive. Students responded to the scale by choosing from one (*never*) to five (*always*). Students' responses were summed up to generate a single score which was used in the analysis. Descriptive analysis was conducted to obtain range, mean, standard deviation, skewness, kurtosis and Cronbach's alphas as displayed in Table 4.24.

**Table 4.24***Descriptive Statistics for Students' Academic Expectations*

Variable	Statistic	Value
Students' Academic Expectations	Range	4-20
	Mean	14.34
	<i>SD</i>	3.40
	<i>Sk</i>	-.24
	<i>kur</i>	-.86
	<i>A</i>	.75

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis;  $\alpha$  = cronbach's alpha

Data presented in Table 4.24 indicate that students' academic expectations responses fell within the range of four to 20, exhibiting a mean of 14.34 (SD = 3.40). Notably, as claimed by Demir (2022), the scores were normally distributed because both skewness and kurtosis values were within the range of -2 to +2 for the sub-scale.

Additionally, academic expectations were analyzed in relation to gender and the outcomes are shown in Table 4.25.

**Table 4.25***Descriptive Statistics of Students' Academic Expectations by Gender*

Variables	Gender	<i>N</i>	Range	Mean	<i>SD</i>	<i>Sk</i>	<i>Kur</i>
<i>Students' academic expectations</i>	Boys	215	4-20	15.04	3.44	-.66	-.27
	Girls	183	6-20	13.51	3.27	.21	-.91

*Note.* N = 398; SD = standard deviation; sk = skewness; kur = kurtosis

As observed in Table 4.25, boys reported higher level of academic expectations ( $M = 15.04$ ) than girls ( $M = 13.51$ ). Both boys and girls had flat distributions as

indicated by values of skewness and kurtosis which were within the range of -2 to +2 (Demir, 2020).

Since academic expectations may be influenced by the type of school, analysis was conducted involving the two variables and the findings are indicated in Table 4.26.

**Table 4.26**

*Descriptive Statistics of Students' Academic Expectations by School Type*

Variables	School type	<i>N</i>	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>
Students' academic expectations	BB	88	8-20	16.67	2.29	-.86	1.88
	GB	77	6-20	13.40	3.43	.24	-.86
	Coed-B	26	6-20	15.46	3.79	-1.21	.36
	Coed-D	207	4-20	13.55	3.34	.04	-.79

*Note.* *N* = 398; *SD* = standard deviation; *sk* = skewness; *kur* = kurtosis

Data in Table 4.26 show that boys' boarding ( $M = 16.67$ ,  $SD = 2.29$ ) and co-education boarding ( $M = 15.46$ ,  $SD = 3.79$ ) reported the highest expectations. This indicates that students in boarding schools tend to set higher academic expectations. Girls' boarding ( $M = 13.40$ ,  $SD = 3.43$ ) and co-education day schools ( $M = 13.55$ ,  $SD = 3.34$ ) reported lower expectations. Skewness and kurtosis showed a near-normal spread of scores.

#### **4.6.2 Assumption Testing for Pearson Correlation**

The Pearson Correlation requirement that the two variables should have a linear relationship was examined using a scatter-plot. The results are presented in Figure 4.7.

**Figure 4.7**

*Scatter-plot for Students' Academic Expectations and Academic Self-Sabotaging Behaviour*

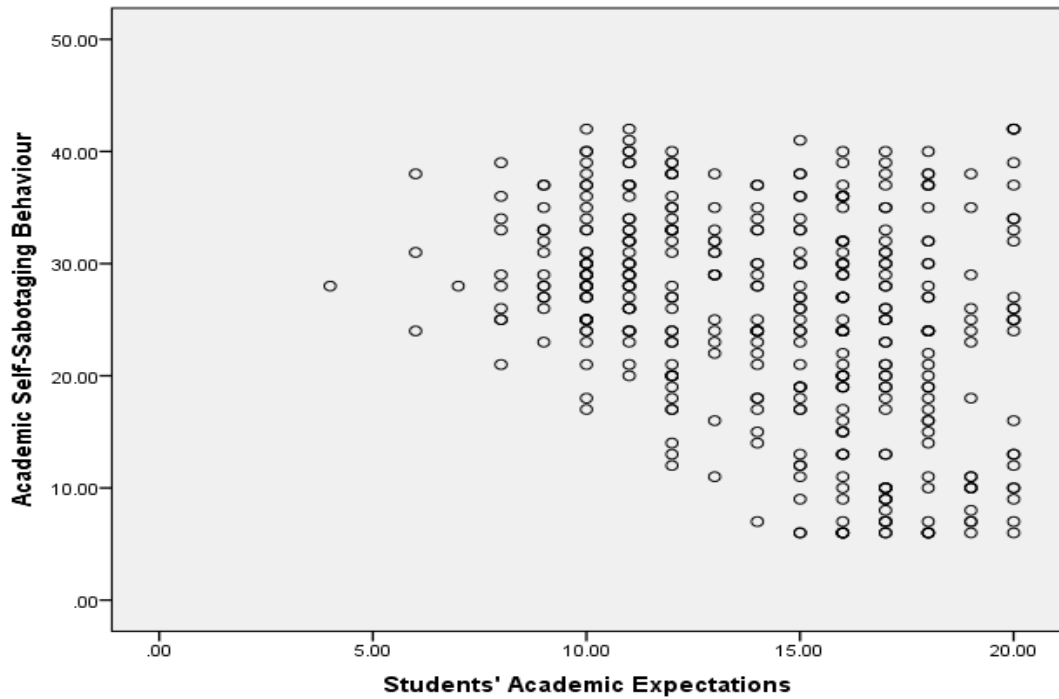


Figure 4.7 shows a scatter-plot illustrating a mild spread of data points. This points out to a weak linear association between students' academic expectations and academic self-sabotaging behaviour as advocated by Osborne and Waters (2019). In addition, the data responses from students' academic expectations were examined for normality using a histogram, and the findings are depicted in Figure 4.8.

**Figure 4.8**

*Histogram for Students' Academic Expectations Scores*

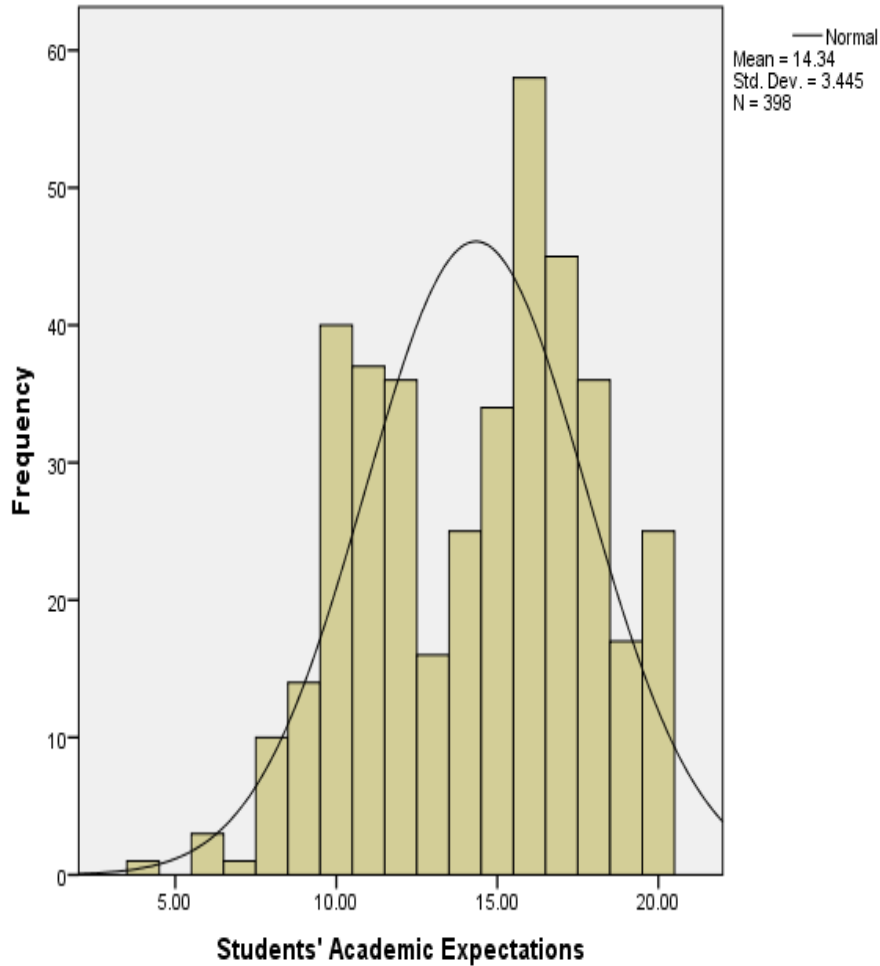


Figure 4.8 reveals a histogram illustrating the distribution of the data points for students' academic expectations which nearly fits in a bell curve. This demonstrates that students' academic expectation scores were normally distributed as highlighted by Gauss (1809), as cited in Bhandari (2023). Since the basic assumptions were met for all the variables, hypothesis testing was conducted using Pearson Correlation.

#### ***4.6.3 Testing for Relationship Between Students' Academic Expectations and Academic Self-Sabotaging Behaviour***

The fourth objective of this study sought to examine the correlation between students' academic expectations and academic self-sabotaging behaviour. To achieve this goal, the  $H_{04}$  was posited as follows:

$H_{04}$ : There is no significant relationship between students' academic expectations and academic self-sabotaging behaviour.

Bivariate correlation using Pearson correlation was conducted to test  $H_{04}$ , and the results are captured in Table 4.27.

**Table 4.27**

*Correlation Between Students' Academic Expectations and Academic Self-Sabotaging Behaviour*

	1.	2.
1. SAE	-	
2. ASB	-.338**	-

*Note.*  $N = 398$ ; SAE = Students' academic expectations; ASB = Academic self-sabotaging behaviour.

\*\* $p < .01$ .

From Table 4.27, it was also noted that students' academic expectations exhibited a weak negative and significant correlation with academic self-sabotaging behaviour ( $r(396) = -.34, p < .01$ ). Consequently, this finding presented enough evidence to reject  $H_{04}$ . Thus, a suggestion was made that adaptive academic expectations by students would be associated with decreased academic self-sabotaging behaviour.

**4.6.4 Qualitative Findings on the Relationship Between Students’ Own Academic Expectations and Academic Self-Sabotaging Behaviour**

To complement the quantitative results, the researcher collected qualitative data using semi-structured interview schedule. The aim was to complement quantitative data by providing in-depth information on students’ expectations whether adaptive or maladaptive and how they relate to academic self-sabotaging behaviour. Qualitative data collected was analysed thematically following steps advanced by Naeem et al. (2023). Table 4.28 shows the code-book for students’ academic expectations.

**Table 4.28**

*Code-Book for Students ’ Own Academic Expectations*

Priori themes	Codes
Student’s academic expectations	Expectations that are realistic and flexible to allow students respond constructively based on their goals, abilities, past and present performance.
	Overly high/ low and unrealistic expectations that was linked to academic stress
	Adaptive student’s expectations
	Maladaptive student’s expectations

According to Table 4.28, students’ responses that reflected expectations that were realistic, flexible and gave room for adjusting set goals and learning behaviours based on abilities, past and present performance, were termed as adaptive. Student responses from the interviews were analyzed and several themes identified.

Students' own academic expectations can also influence their learning behaviours leading to less or increased academic self-sabotaging behaviour. For instance, when students were asked what was expected of them to succeed in their studies, one student said,

*“I should be disciplined, consult teachers, choose good friends, read hard, utilize my extra time, make summary notes. I have summary notes for few subjects. My expected grade at end of Form Two grade is B or A. In Form Four I expect a C grade.”* (Student B)

The findings reveal that student had set clear goals such as consulting teachers, and managing study time needed to succeed in academics. These expectations can be seen as adaptive as they reflect a strong sense of proactive planning and self-regulation by the student. Conversely, less adaptive expectations are expressed as student progresses academically, as seen in lower grade anticipated at Form Four and higher grade at Form Two. Also, there is lack of consistency in students' academic strategies like lack of summary notes across all the subjects. This approach is maladaptive because it is associated with inconsistency in efforts and decreasing motivation as student climbs the academic ladder. Another student said,

*“I don't read so hard for some subjects because I will certainly drop them. My teachers expect me to get a B but I don't really care. I'm ok with a grade D. After school I want to be a soldier. I know I should be disciplined in class to pass.”* On academic self-sabotaging behaviour, the student said, *“I never give the exam for marking, I throw them away. I do my assignment next day morning and my holiday assignment when we open so that I can copy from others. I read for my exam two minutes before the exam so that I*

*can easily retrieve. I normally fake sickness during exam time.”* (Student C).

According to this quote, student’s acceptance of lower grade and the act of ignoring teachers’ high expectations, indicate low expectations. As a result, the student displays low motivation and effort as seen in the phrase *“I don’t really care”* which limits student from achieving his/her full potential. Due to low expectations, the students did not see the value of good grades. Thus, they invested less effort in academics, engaged in avoidance strategies like not taking exams, and read for exams briefly before taking them. Students also lacked accountability for their academic work by throwing away exams and using sickness as an excuse. All these aspects reflect high level of academic self-sabotaging behaviour which may act as a barrier to the achievement of their future academic goals *“becoming a soldier”*. This supports Callingham (2016) claim that teachers’ low expectations as perceived by students can steer them towards low-skilled academic pathways which further reduces their motivation to put more effort in academic activities and subsequent disengagement.

### **Themes Development**

From the analysis of students’ quotes from the interviews, the following themes emerged:

#### **Shared Expectations Between Students and Significant Others**

Findings reveal that when students share the same expectations with significant others, they feel motivated to engage proactively with academic activities resulting in less self-sabotaging behaviour.

### **Alignment Between Academic Expectations and Career Aspirations**

When academic expectations held by students align with their future goals like attending higher institution, or getting a higher grade, student are likely to focus on their academic responsibilities thus decreasing academic self-sabotaging behaviour.

### **Academic Stress from Expectations**

Overly high expectations from students can lead to pressure and academic stress especially when student overwork themselves not to disappoint others. This further perpetuates the cycle of academic self-sabotaging behaviour.

#### ***4.6.5 Discussion of Results***

The fourth objective explored the relationship between students' academic expectations and academic self-sabotaging behaviour. The results revealed a weak, negative and significant correlations between students own academic expectations and academic self-sabotaging behaviour. This finding suggests that adoption of adaptive academic expectations by students would be associated with decrease in academic self-sabotaging behaviour.

The current study's results are consistent with the expectancy and value concept of SEVT advance by Eccles and Wigfield (2020). According to SEVT, students will engage in particular academic-related behaviour and tasks because they value and expect to do well. On the other hand, they will avoid those tasks they expect to perform poorly. Thus, students who adopt adaptive academic expectations, for example, expectations for success will display appropriate learning behaviour like increased effort and engagement to realize their academic goals and show less academic self-sabotage.

The current study supports previous studies that emphasize on the positive benefits of students' academic expectations in shaping their academic behaviours. For example, Benett et al. (2016) study illustrates that grade expectations positively and significantly influenced students' academic performance. Therefore, the current study extends this finding to conclude that adaptive students' academic expectations not only lead to good academic performance but also reduces less academic self-sabotaging behaviour.

The current finding supports Goings and Shi (2018) study that link students' expectations to myriads of positive academic behaviours. The findings indicated a significant connection between students' academic expectations with educational attainment and degree completion. In particular, the study found that high expectations predicted high education attainment and degree completion. Similarly, on the basis of the current findings, adaptive students' academic expectations could lead to less academic self-sabotaging behaviour.

Ngunu's (2019) study further illustrates that students' global academic expectations are connected to their academic achievement. Specifically, the researcher established that positive academic expectations dimension was positively and significantly related to academic achievement while the dimension related negatively and significantly related to academic achievement. From these results, a link between teachers' academic expectations and academic self-sabotaging behaviour was inferred. The current study anticipated that academic expectations could relate with academic self-sabotaging behaviour, a claim that was confirmed.

In the same vein, this study reinforces the earlier research findings on the significant contribution of academic expectations to students' academic achievement. For instance, Goings and Shi (2018) also found that students' expectations were a significant predictor of educational attainment and degree completion.

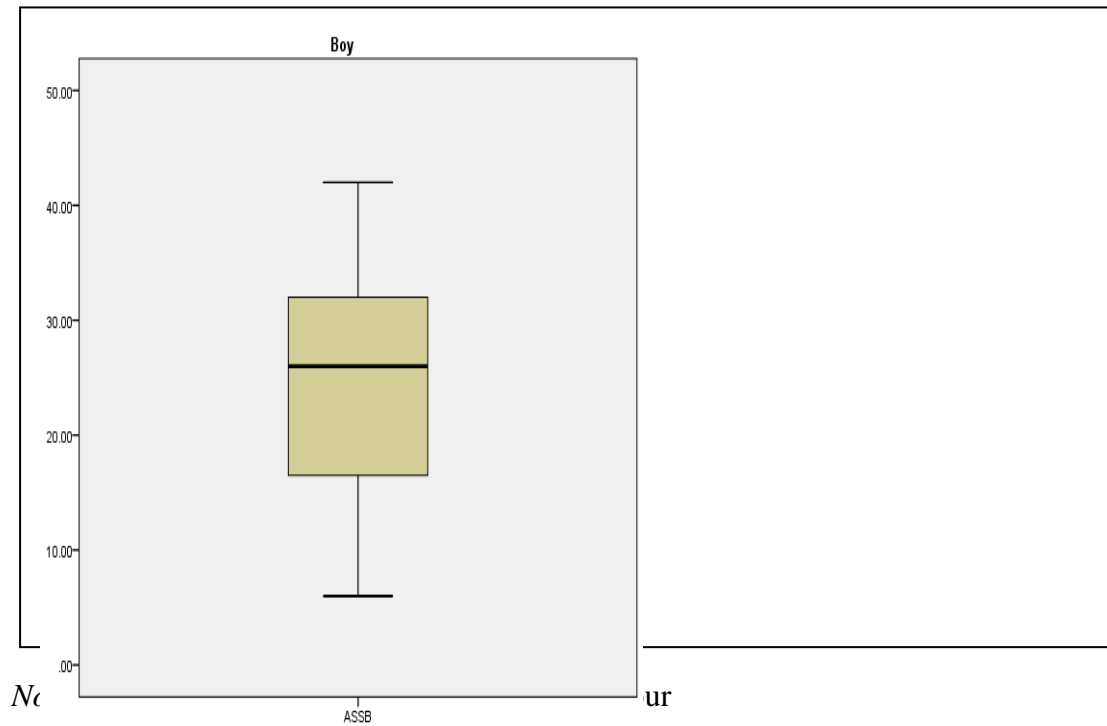
## **4.7 Gender Differences in Academic Self-Sabotaging Behaviour**

### ***4.7.1 Testing Assumptions for Independent Sample t-test***

Assumptions related to independent sample t-test were checked before the analysis was conducted. The first assumption which require the dependent variable to be continuous was ascertained because academic self-sabotaging behaviour was measured at interval scale. Secondly, the assumption regarding the independence of observations was also established as there were two independent groups (boys and girls) that were being compared. Thirdly, data was checked for the presence of outliers using box-plot and the outcomes are shown in Figure 4.9.

**Figure 4.9**

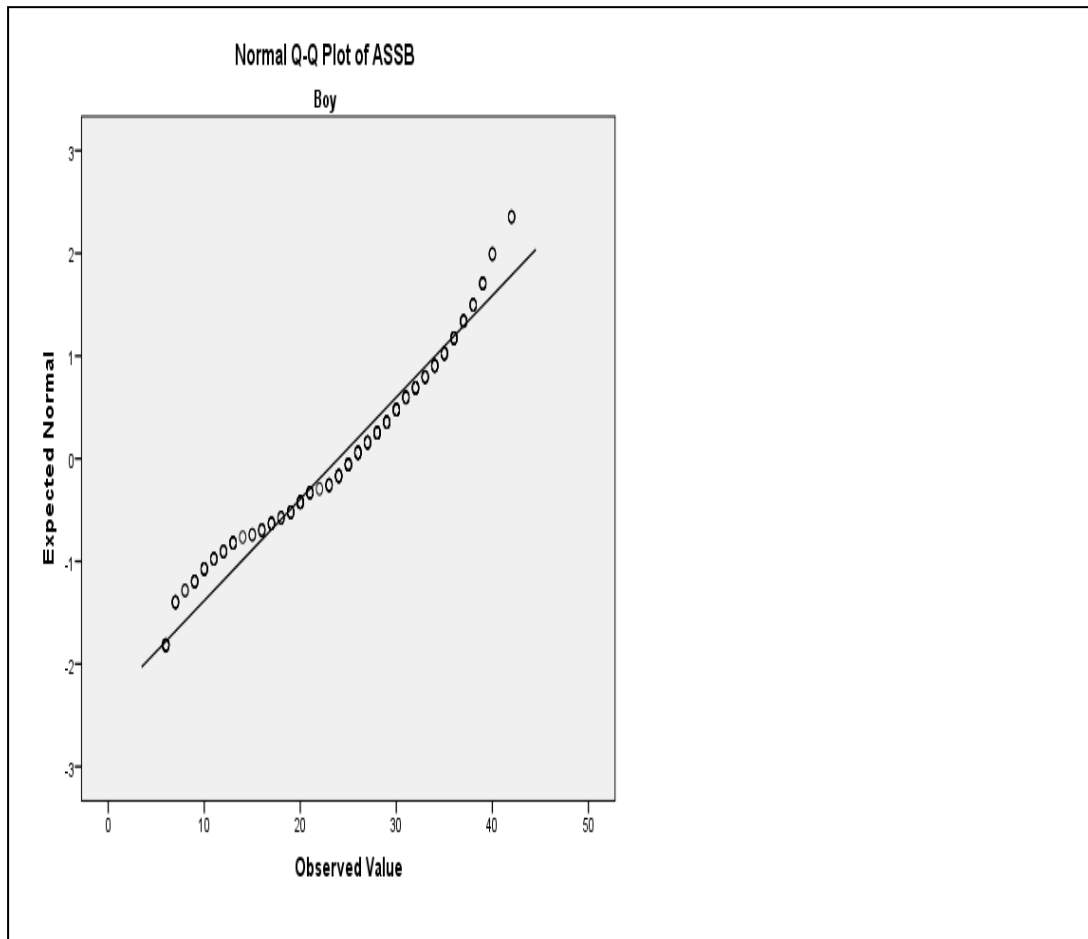
*Box-plots for Academic Self-Sabotaging Behaviour Scores by Gender*



Inspection of box-plots in Figure 4.9 reveal that there were no extreme outliers in the data from the two groups. Fourthly, the assumptions that require dependent variable for each group to fit approximately normal distribution was also checked using normal Q-Q plot. Normal Q-Q plot was preferred due to its robustness in detecting normality on larger sample size ( $N > 50$ ) according to Mishra et al. (2019) stipulations. The findings are as given in Figure 4.10.

**Figure 4.10**

*Normal Q-Q Plot for Academic Self-Sabotaging Behaviour by Gender*



*Note.* ASSB = Academic self-sabotaging behaviour.

As observed in Figure 4.10, data points for dependent variable (academic self-sabotaging behaviour) for boys and girls fall roughly along a 45-degree reference line with minor deviations. According to Mishra et al. (2019), this suggests that the dependent variable for each group was very close to a normal distribution, thus, the assumption was met.

Further, to test the assumption of homogeneity/equality of the variances, Levene's test was conducted to establish the difference in variances in academic self-sabotaging behaviour and its aspects for both boys and girls. With Levene's test,

the null hypothesis( $H_0$ ) that group variances are equal was tested and the findings are shown in Table 4.29.

**Table 4.29**

*Test for Equality of Group Variances*

Variables	Levene's Test for Equality of Variances	
	Equal variances assumed	
	<i>F</i>	<i>Sig</i>
Academic Self-sabotaging behaviour	10.53	.001
Academic Procrastination	20.91	.000
Academic Disengagement	.63	.43

*Note.*  $N = 398$ ,  $F$  = test statistics for Levene's test;  $sig$  = p-value.

As observed in Table 4.29, the significance values for global academic self-sabotaging behaviour ( $P \leq .001$ ) and academic procrastination ( $P \leq .001$ ) were less than .05, indicating that the variances were statistically different across the groups (boys and girls). Thus,  $H_0$  that variances were equal across groups was rejected and concluded that variance in boys' group was significantly different from variance in girls' group. This meant that the homogeneity of variances assumption was violated. As a consequence, Welch's t-test/unequal variance t-test instead of student's t-test was used to test the hypothesis. Welch's t-test can give valid results when homogeneity of variances is violated according to Bevans (2023). The significance value for academic disengagement ( $p \geq .05$ ) was greater than .05, hence, the assumption holds and general independent sample t-test was conducted.

#### ***4.7.2 Testing for Gender Differences in Academic Self-Sabotaging Behaviour and its Dimensions***

To test whether mean for boys was different from mean for girls in academic self-sabotaging behaviour and its dimensions, three null hypotheses were set:

$H_{05}$ : There are no significant gender differences in academic self-sabotaging behaviour among Form Two students.

$H_{05a}$ : There are no significant gender differences in academic procrastination among Form Two students.

$H_{05b}$ : There are no significant gender differences in academic disengagement among Form Two students.

Welch's t-test was conducted to test gender differences in academic self-sabotaging behaviour and academic procrastination because the homogeneity of variances was violated. On the other hand, academic disengagement met all the assumptions required to conduct the t-test, hence it was conducted. The results for Welch's t-test and general independent sample t-test are shown in Table 4.30.

**Table 4.30**

*Differences Between Boys and Girls on Academic Self-Sabotaging Behaviour and its Dimensions*

Variable	Groups		Descriptive		t-test					
	Statistics									
	Boys		Girls							
	mean	SD	mean	SD	<i>t</i>	<i>df</i>	<i>p</i>	<i>SE</i>	95% <i>CI</i>	
									<i>Lb</i>	<i>Ub</i>
ASSB	23.97	10.09	26.92	8.38	-3.19*	395.78	.002	0.52	-2.95	-.91
AP	13.53	5.66	15.45	4.47	-3.79*	393.82	.000	.51	-2.93	-.93
AD	10.44	5.51	11.47	5.33	-1.88	396	.060	0.55	-2.10	.05

*Note.*  $N_{\text{boys}} = 215$ ;  $N_{\text{girls}} = 183$ ; ASSB = Academic self-sabotaging behaviour; AP = Academic procrastination; AD = Academic disengagement; *Lb* = Lower bound; *Ub* = Upper bound

\* Leven's test is significant ( $P < .05$ ) indicating the violation of equality of variances

Table 4.30 provides mean scores for boys and girls in global academic self-sabotaging behaviour (mean<sub>boys</sub> = 23.97, *SD* = 10.09; mean<sub>girls</sub> = 26.92, *SD* = 8.38) academic procrastination (mean<sub>boys</sub> = 13.53, *SD* = 5.66; mean<sub>girls</sub> = 15.45, *SD* = 4.47) and academic disengagement (mean<sub>boys</sub> = 10.44, *SD* = 5.51; mean<sub>girls</sub> = 11.47, *SD* = 5.33). Mean for girls was larger than the mean for boys in all the variables. The mean differences were statistically significant in global academic self-sabotaging behaviour ( $p \leq .001$ ) and one of its dimensions which is academic procrastination ( $p \leq .001$ ) but non-significant for academic disengagement ( $p \geq .05$ ).

Results of Welch's t-test in Table 4.30 show significant gender differences in global academic self-sabotaging behaviour in favour of girls ( $t(395.78) = -3.19, P \leq .001$ ),

and academic procrastination ( $t(393.82) = -3.79, p \leq .001$ ). These results provide strong ground to reject null hypotheses ( $H_{05}$  and  $H_{05a}$ ), and conclude that girls engaged more in academic self-sabotaging behaviour, such as academic procrastination than boys did.

Independent t-test analysis, on the other hand, revealed non-significant gender differences in academic disengagement ( $t(396) = -1.88, p \geq .05$ ). Therefore, the null hypothesis that, there are no significant gender differences in academic disengagement among form two students was retained. This finding lead to a conclusion that there is no difference in academic disengagement for both boys and girls.

#### ***4.7.3 Discussion of the Results***

The fifth hypothesis examined gender differences in academic self-sabotaging behaviour. The results revealed significant gender differences in global academic self-sabotaging behaviour in favour of girls. Supplementary analyses revealed that significant gender differences in academic procrastination, with girls exhibiting higher levels of procrastination than boys. However, levels of academic disengagement were consistent across gender.

These present results are consistent with previous studies which have established significant effects of gender on academic self-sabotaging behaviour. Some of these studies have demonstrated that female students are prone to engage in this behaviour than their male counterparts. In line with this, recent research by Alshammari et al. (2023) explored gender differences in undergraduate students' self-sabotaging

behaviour such as procrastination. The study found that female students scored significantly higher in procrastination compared to male students.

This is also illustrated by Neufeld and Malin (2021) who examined the effect of gender behavioural disengagement among medical students in Saskatchewan university in Canada, and found that female students used behavioural disengagement than the male students. These results stress the importance of paying attention on the influence of gender-specific processes for students' academic self-sabotage tendencies.

Other researchers have also established noteworthy gender effects on academic self-sabotaging behaviour in favour of males. This is exemplified by research conducted by Cangialosi and Lee (2019), which looked into the effects of gender on academic self-sabotaging behaviour, specifically, focusing on procrastination among university students. The study reported that male students were found to engage more on self-sabotage through procrastinating their assignments than female students.

In the same vein, Glaesser et al. (2024) explored the connection between classroom environment and students' disengagement (truancy) among middle school students in Germany. These results highlight the significance contribution of gender on students' disengagement. Male students were associated with higher levels of disengagement, suggesting they skipped school more often than the females.

The current study results are not in agreement with the previous findings that gender may not have substantial influence on students' academic self-sabotaging behaviour. Sobia et al. (2021) conducted a study aiming to establish the differences in students'

academic problematic behaviours such as academic procrastination among university students in Punjab. The findings of the study showed no significant variations in academic procrastination on the basis of gender.

Another study in Nigeria found that gender had no main effects on students' academic self-sabotaging behaviour, such as procrastination (Chijioke et al., 2021). These researchers were interested in understanding the underlying factors behind students' self-sabotaging behaviour. Their findings revealed that the level of procrastination was the same across the gender.

#### **4.8 Predictive Weights of Learning Environment and Academic Expectations on Academic Self-Sabotaging Behaviour**

The sixth objective sought to establish the predictive weights of learning environment and academic expectations on academic self-sabotaging behaviour. The analysis of this objective began with descriptive statistics of the main variables.

##### ***4.8.1 Description of Learning Environment, Academic Expectations and Academic Self-Sabotaging Behaviour***

Descriptive analysis was conducted on learning environment, academic expectations and academic self-sabotaging to obtain their means and standard deviations. The findings are captured in Table 4.31.

**Table 4.31**

*Descriptive Statistics for Learning Environment, Academic Expectations and Academic Self-Sabotaging Behaviour*

Variables	Mean	Standard deviation
Learning environment	87.88	12.89
Academic expectations	34.66	6.5
Academic self-sabotaging behaviour	25.32	9.44

*Note.*  $N = 398$ .

As seen in Table 4.31, the findings indicate a relatively high mean score on the learning environment ( $M = 87.88$ ,  $SD = 12.89$ ). This implies that most students viewed their school environment as largely meeting their basic psychological needs. For academic expectations variable, a mean of 34.66 ( $SD = 6.50$ ) was recorded, reflecting that students generally held a moderate level of academic expectations. Academic self-sabotaging behaviour variable yielded a mean of 25.32 ( $SD = 9.44$ ). This suggested a moderate level of this self-defeating academic behaviour among the students.

#### **4.8.2 Assumptions Testing for Regression Analysis**

Before estimating regression equation for academic self-sabotaging behaviour from learning environment and academic expectations various assumptions were examined. First multicollinearity was checked using correlational matrix in conjunction with Tolerance and Variance Inflation Factor (VIF) statistics. Second, the independence of residuals was checked using Durbin Watson. The outcomes are indicated in Table 4.32.

**Table 4.32***Correlations and Multicollinearity Values Among Study Variables*

Variables	1.	2.	3.	Collinearity	
				Tolerance	VIF
1.Learning environment	-			.907	1.10
2.Academic expectations	.30***	-		.907	1.10
3.Academic self-sabotaging behaviour	-.20***	-.31***	-	-	-
Durbin Watson	1.73				

*Note:*  $N = 398$ ; \*\*\* =  $p \leq .001$ .

Table 4.32 shows the intercorrelations among the key study variables, together with tolerance and VIF values used to assess multicollinearity. The findings show that learning environment was positively and significantly correlated with academic expectations ( $r = .30, p \leq .001$ ). The correlations between learning environment ( $r = -.20, p \leq .001$ ) and academic expectations ( $r = -.31, p \leq .001$ ) with academic self-sabotaging behaviour were both negative and significant. These intercorrelations between study variables indicate that none of the independent variables were highly correlated ( $r \leq .80$ ). This suggests absence of multicollinearity among predictors according to Hair et al. (2022).

Further, the tolerance values for the independent variables were .907, while the corresponding VIF values were 1.10. According to stipulations by Fidel (2020), Tolerance value exceeding .20 and VIF values less than five (5) confirms that multicollinearity was not a concern in this study. This suggests that each predictor variable contributed uniquely to the prediction model.

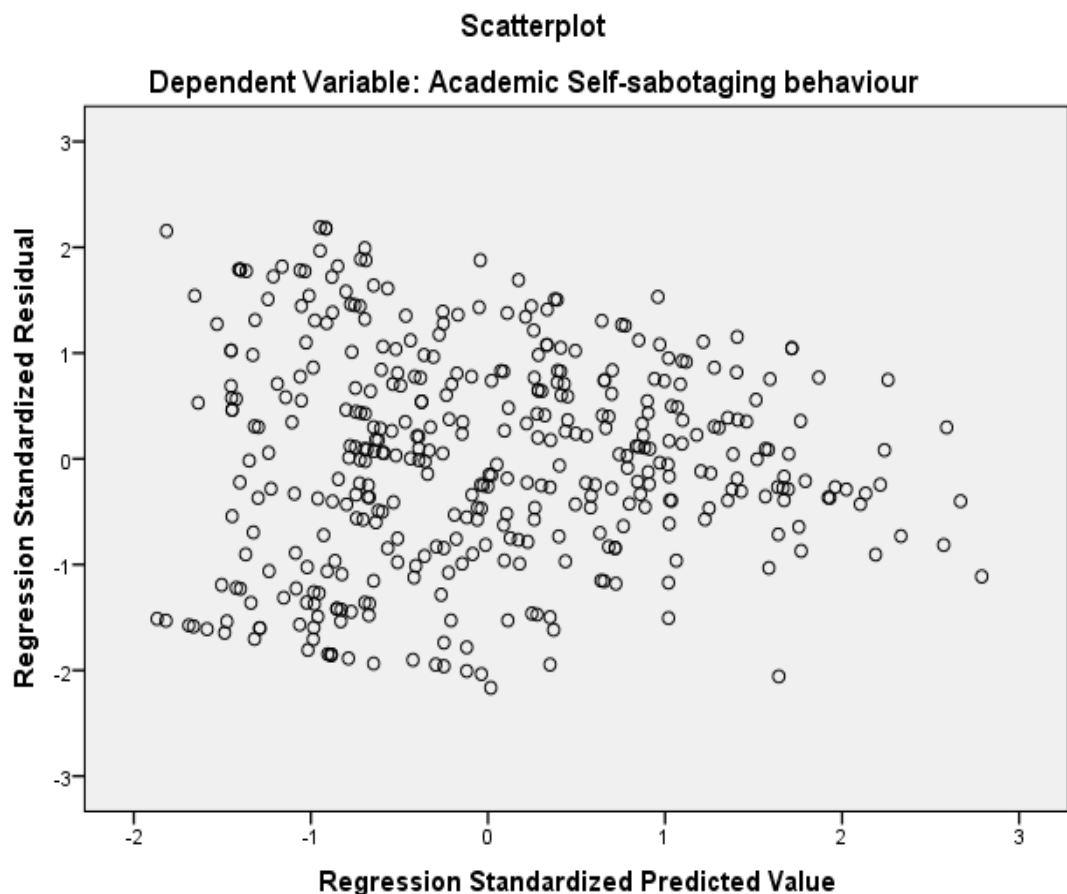
The independence of errors assumption tested using Durbin–Watson statistic recorded a value of 1.73, which falls within the acceptable range of 1.5–2.5. Therefore, the autocorrelation was not present and the residuals were independent indicating that the independence of errors assumption was met (Field, 2020).

Thirdly, the assumption for linearity and homoscedasticity were examined using visual inspection of scatterplot, while that of normality was assessed using P-P plots.

Figure 4.9 shows the results.

**Figure 4.11**

*Scatterplot for Regression Standardized Residuals*



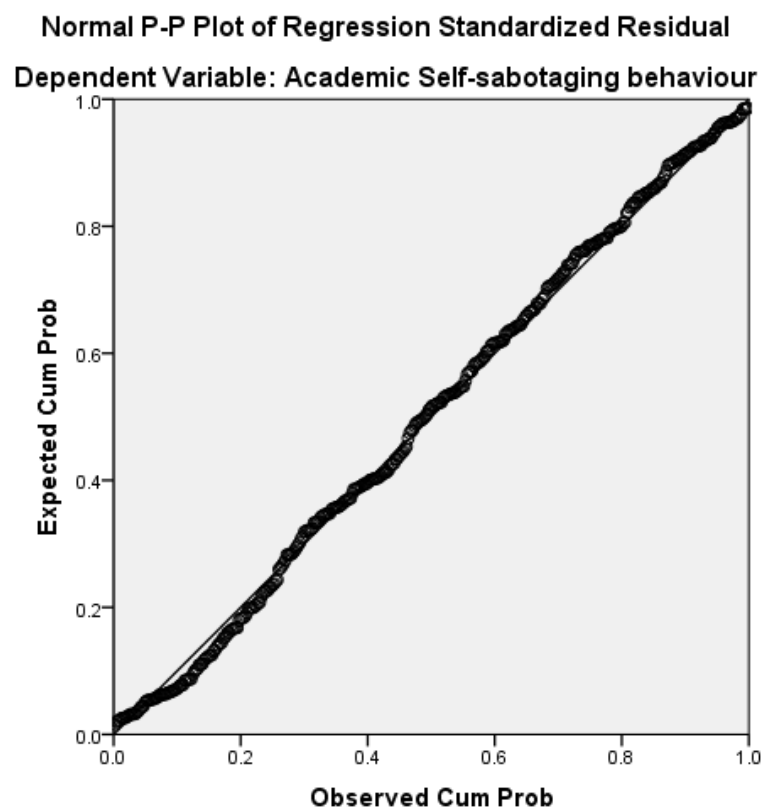
As can be seen in Figure 4.9, the points are randomly distributed, indicating that the linearity and homoscedasticity assumptions were met. This meant that the

relationship between predictor and outcome variables was linear and also the variance of the residuals was consistent across all the predicted values.

To ascertain if residuals followed a normal distribution, p-p plot was used as indicated in Figure 4.10.

**Figure 4.12**

*Normal P–P Plot for Regression Standardized Residuals*



In this plot, most points lie close to the diagonal line. This indicates that the residuals closely follow a normal distribution. This confirms that the assumption of normality was reasonably satisfied (Field, 2020).

### ***4.8.3 Testing for Prediction of Academic Self-Sabotaging Behaviour From Learning Environment and Academic expectations***

After verifying that the assumptions for multiple regression were adequately met, a multiple regression analysis was conducted. The reason was to determine whether the learning environment and academic expectations significantly predicted academic self-sabotaging behaviour among Form Two students. The null hypothesis tested was:

$H_0$ : Learning environment and academic expectations do not significantly predict academic self-sabotaging behaviour of among Form Two students. The model summary of the results is given in Table 4.33.

**Table 4.33***Summary of Multiple Regression Model Predicting Academic Self-Sabotaging**Behaviour*

Summary output	<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	<i>p</i>			
	.33	.11	.10	***			
<i>ANOVA</i>	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>		
Regression	2	3801.96	1900.98	23.72	***		
Residual	395	31649.57	80.12				
Total	397	35451.53				95% CL	
Regression							
Coefficients	<i>B</i>	$\beta$	<i>SE</i>	<i>t</i>	<i>p</i>	Lower	Upper
Intercept	46.39		3.45	13.43	***	39.60	53.17
Learning environment	-.08	-.112	.037	-2.23	**	-.15	-.01
Academic expectations	-.40	-.27	.072	-5.52	***	-.54	-.25

*Note.* *N* = 398; *B* = Unstandardized Coefficients;  $\beta$  = Standardized Coefficients; \*\*\* =  $P \leq .001$ ; \*\* =  $P \leq .05$ ; CL = Confidence level; Predictors: Learning environment and academic expectations; Dependent variable: Academic self-sabotaging behaviour.

Table 4.33 presents the regression results indicating that the model for predicting academic self-sabotaging behaviour from learning environment and academic expectations was statistically significant ( $F(2, 395) = 23.72, p < .001$ ). The two variables jointly accounted for 11% change in academic self-sabotaging behaviour ( $r^2 = .11$ ) among learners. Notably, both had significant negative predictive weights, with academic expectations ( $B = -.40; P \leq .001$ ) making a slightly larger contribution than learning environment ( $B = -.08; P \leq .05$ ) on academic

self-sabotaging behaviour. These results suggest that students' perceptions of their learning environment and their academic expectations significantly influence the likelihood of engaging in academic self-sabotaging behaviour. The resultant regression equation was:

$$\hat{Y} = 46.39 - .08 (LE) - .40 (AE) + 3.45 (e) \quad \text{equation 1}$$

Where:

$\hat{Y}$  = predicted academic self-sabotaging behaviour; LE = Learning environment; AE = Academic expectations; e = error term.

In essence, this means that a one-unit increase in the perceived learning environment score was associated with a 0.08-point decrease in academic self-sabotaging behaviour, whereas a one-unit rise in academic expectations corresponded to a 0.40-point decrease in academic self-sabotaging behaviour. This shows that academic expectations had a comparatively stronger negative predictive effect.

The above findings made it necessary to run a model including the respective predictive weights of each facet of the learning environment and academic expectations as presented in Table 4.34.

**Table 4.34**

*Model for Predicting Academic Self-Sabotaging Behaviour From Facets of Learning Environment and Academic Expectations*

Summary output	<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	<i>p</i>			
	.36	.13	.12	***			
<i>ANOVA</i>	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>		
Regression	4	4576.92	1144.23	14.56	***		
Residual	393	30874.60	78.56				
Total	397	35451.53					
<i>95% CL</i>							
Coefficients	<i>B</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	Lower	Upper
Intercept	36.31		4.86	7.47	***	26.76	45.87
NSLE	-.06	-.05	.06	-1.04	≥.05	-.19	.05
NFLE	.11	.09	.06	1.79	≥.05	-.01	.24
SOAE	.05	.02	.16	.30	≥.05	-.26	.38
SAE	-.88	-.32	.17	-5.09	***	-1.22	-.54

*Note.* N = 398; *B* = Unstandardized Coefficients;  $\beta$  = Standardized Coefficients; \*\*\* =  $P \leq .001$ ; \*\* =  $P \leq .05$ ; CL = Confidence level; Predictors: NSLE= Needs-supportive learning environment; NFLE= Needs-frustrating learning environment; SOAE= Significant others' academic expectations; SAE= Students' Academic expectations; Dependent variable: Academic self-sabotaging behaviour.

Collectively, as indicated in Table 4.34, the facets of the predictor variables significantly accounted for a 13% variation in students' scores in academic self-sabotaging behaviour ( $F(4, 393) = 14.56, p < .001$ ). Regarding learning environment, none of the levels made a significant contribution. Looking at individual coefficients, increase in needs-supportive environment behaviour ( $B = -.06; P \geq .05$ ) was matched by a decrease in academic self-sabotaging while increase

in needs-frustrating environment ( $B = .11$ ;  $P \geq .05$ ) was matched by increase in academic self-sabotaging behaviour.

Under academic expectations, only students' academic expectations facet was a significant predictor ( $B = -.88$ ;  $p \leq .001$ ) of academic self-sabotaging behaviour. This indicates that the students' academic expectations were associated with significant decrease in academic self-sabotaging behaviour. Significant others' academic expectations were associated with increase, although not significant in academic self-sabotaging behaviour ( $B = -.05$ ;  $P \geq .05$ ).

From the findings, the most robust equation for predicting academic self-sabotaging behaviour from the learning environment and academic expectations facets was:

$$\hat{Y} = 36.32 -.88 (\text{SAE}) + 0.17 (e) \quad \text{Equation 2}$$

Where:

$\hat{Y}$  = predicted academic self-sabotaging behaviour; SAE = Students' academic expectations; e = error term.

This indicates that holding other variables constant, one-unit rise in students' academic expectations was associated with a 0.88-point decrease in academic self-sabotaging behaviour.

#### ***4.8.4 Discussion of the Prediction Results***

Findings from the analysis of objective six show that academic self-sabotaging behavior was significantly and negatively predicted by both learning environment and academic expectations. Academic expectations had a comparatively stronger negative predictive effect. These results are echoed in qualitative findings which revealed that students perceived their learning environment as meeting their basic psychological needs. This was demonstrated through engagement in peer support

and having the freedom to make learning choices which contributed to a reduction in academic self-sabotaging behaviour. Additionally, upon the analysis of the facets of the predictor variables, it was found that none of the learning environment levels made a significant contribution. However, although not significant, increase in needs-supportive learning environment was associated with decrease in academic self-sabotaging while increase in needs-frustrating learning environment was linked to increase in the behaviour. For academic expectations, only students' academic expectations facet was a significant predictor, with its increase being linked to reduced academic self-sabotaging behaviour.

These findings on learning environment's predictive behaviour on academic self-sabotaging behaviour, although not significant, were consistent with the theory. In SDT Theory, it is conceptualized that learning environment that support students' basic psychological needs of autonomy, competence, and relatedness encourage adaptive learning behaviours and reduce maladaptive behaviours (Ryan & Deci, 2017). Thus, the present study found that when the learning environment is supportive of learners' needs, it reduces the chances of academic self-sabotaging behaviour, and vice versa.

Similar predictive patterns of learning environment are reported by earlier studies. For instance, Ye et al. (2025) reported that satisfaction of basic psychological needs significantly and negatively predicted academic procrastination among college students. Consistent with SDT, both studies emphasize the importance of nurturing school environments that support students' psychological needs of competence, relatedness and autonomy to minimize maladaptive academic tendencies.

Englund (2023) also showed that unsupportive learning environments can lead students to avoid effort and adopt surface learning habits. Similarly, the current study found that students who viewed their learning environment as more supportive reported fewer self-sabotaging behaviours. Both studies suggest that when students feel understood, capable, and connected, they are more likely to stay engaged and less likely to hold back their effort.

The current study found that learning environment that supports learners' needs is associated with less self-defeating behaviour. This is in harmony with Svartdal et al. (2020) who showed that the learning environment can either encourage or discourage procrastination. Their work found that when classrooms lack structure, guidance, and feedback, students are more likely to delay tasks and lose focus. In the same way, this study found that learning environment that was characterized by punitive approach to exam failure and differentiated teacher-students' interaction encouraged students to engage more in self-sabotaging behaviour. These findings highlight the need to create a positive learning climate to help students stay motivated, take responsibility, and keep working toward their goals instead of avoiding them.

The current findings partly agree with Kassaw and Demareva (2024) who found that classroom conditions and students' self-perception influence academic outcomes among Ethiopian university students. Similarly, this study shows that a supportive learning environment that meets students' basic psychological needs reduces academic self-sabotaging behaviour. However, unlike their focus on achievement, the present study goes further by linking psychological need satisfaction to academic self-sabotaging patterns among secondary school students in Kenya.

The current results corroborate and expand the findings by Maingi and Mwaura (2024). Like Maingi and Mwaura, this study found that frustrating conditions in the learning environment such as anxiety and stress are linked to maladaptive academic behaviour. For example, students who reported having been punished for repeated exam failure showed higher self-defeating academic behaviour. However, the current study expands these findings by examining how academic expectations, in combination with the learning environment jointly predict academic self-sabotaging behaviour.

In this study, students' academic expectations were associated with significant decreases in academic self-sabotaging behaviour. These findings are consistent with situated expectancy theory which conceptualizes academic expectations as markers of both the perceived likelihood of success and the value a student places on academic tasks (Eccles & Wigfield, 2020). When expectations are realistic, they enhance motivation and engagement, whereas unrealistic expectations may be perceived as stressful. In this study, students' realistic self-expectations appear to have nurtured intrinsic motivation which may explain the negative association with academic self-sabotaging behaviour.

This finding is echoed in a study by Benner et al. (2021) that showed that high students expectations improve students' outcomes such as academic performance. In this study, academic expectations also shaped students' behaviour. It revealed that students with positive expectations were less likely to procrastinate or give up. Encouraging adaptive expectations at home and in school can, therefore, reduce avoidance habits and support better learning attitudes. In the present study, significant others' academic expectations were associated with increases in

academic self-sabotaging behaviour, although this effect was not statistically significant.

This is in congruence with situated expectancy theory which posits that expectations of others may be experienced by students as academic stressors, contributing to higher maladaptive academic behaviour. Academic stressors are linked higher self-defeating behaviours among learners (Dehban et al., 2024; Maingi' & Mwaura, 2024).

This pattern aligns well with Yin et al. (2025) idea by showing that expectations are key predictors of students' outcomes. While Yin et al. found that parental educational expectations influenced adolescents' well-being through self-efficacy and engagement. The current study indicated that academic expectations predict academic self-sabotaging behaviour. Although the outcome variable differs, both studies highlight the important role of academic expectations in shaping students' learning experiences.

The findings of Dehban et al. (2024) strengthen the understanding that stress arising from academic expectations can drive students toward self-defeating behaviour. In the current study, academic expectations similarly emerged as a significant predictor of ASB. For example, students who perceived excessive pressure from their parents or teachers procrastinated more. This reinforces the notion that pressure to meet academic standards can directly influence students' engagement in behaviour that undermine their own learning goals. Moreover, by also examining basic psychological needs satisfaction, the present study extends this line of research by showing that academic self-sabotaging behaviour is not solely a product of

expectations, but also shaped by the extent to which students feel competent, autonomous, and connected within their learning environment.

The current findings are partly consistent with those of Zayed (2025) who demonstrated that self-handicapping negatively affects students' academic adjustment. Similarly, Aloka et al. (2022) study affirms that self-sabotaging behaviour weakens students' academic buoyancy.

However, while these two studies focused on the effects of academic self-sabotaging behaviour, the present study extends this understanding by examining its predictors, specifically academic expectations and the learning environment.

Partially in agreement with Njoroge et al. (2023), the current study also recognizes that both internal and external factors contribute to self-sabotage. Njoroge et al found that personality traits such as neuroticism and conscientiousness predicted self-handicapping among university students. While that study emphasized dispositional traits, the present research expands the focus by showing that environmental conditions and unrealistic expectations can elicit similar patterns among secondary learners.

#### **4.9 Moderation Effects of School Type on the Relationship Between Learning Environment, Academic Expectations and Academic Self-Sabotaging Behaviour**

##### ***4.9.1 Description of School Type as a Moderator Variable***

In this study, schools were stratified into four categories including boys boarding, girls boarding, co-education day and co-educational boarding. This indicates that school type was a categorical variable and cannot be entered into multiple regression

analysis without converting it. Therefore, school type was converted into four dummy variables. Regression analysis between dummy categorical variables and a continuous variable requires centering of continuous variable (Cohen, 2008). Therefore, data from both learning environment and academic expectations was centered by subtracting their means from each score.

#### ***4.9.2 Testing for Moderation Effects of School Type***

To test whether relationships between learning environment, academic expectations and academic self-sabotaging behaviour were moderated by school type, two supplementary hypotheses were set as follows:

$H_{07a}$ : The school type does not significantly moderate the relationship between learning environment and academic self-sabotaging behaviour.

$H_{07b}$ : The school type does not significantly moderate the relationship between academic expectations and academic self-sabotaging behaviour among form two students.

To test  $H_{07a}$ , a moderated multiple regression analysis was conducted. First, the centered learning environment and academic self-sabotaging behaviour were entered into a regression model. Afterwards, the interaction terms; boy boarding\*learning environment centered, girls boarding\* learning environment centered, co-education day\*learning environment centered and co-education boarding\* learning environment centered were entered in the regression model. Table 4.35 shows the regression summary models for main and interaction effects.

**Table 4.35**

*Regression Model Summary and Coefficients for Learning Environment and Interaction Effects*

Model	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	<i>Df1</i>	<i>Df2</i>	<i>P</i>
1	.196	.038	.038	15.80	1	396	.00
2	.285	.081	.043	6.09	3	393	.00

	Variable	Unstandardized coefficient		Standardized coefficient	<i>t</i>	<i>P</i>
		<i>B</i>	<i>SE</i>	$\beta$		
1	Constant	25.33	.47		54.46	.00
	LES_C	-.14	.04	-.20	-3.98	.00
2	Constant	25.62	.46		55.44	.00
	LES_C	-.04	.05	-.05	-.77	.44
	Interaction <sup>a</sup>	-.17	.09	-.11	-1.92	.06
	Interaction <sup>b</sup>	-.08	.10	-.05	-.80	.42
	Interaction <sup>c</sup>	-.52	.13	-.22	-4.15	.00

*Note.* *N* = 398; *R* = correlation coefficient; *R*<sup>2</sup> = Coefficient of determination;  $\Delta R^2$  = *R*<sup>2</sup> change;  $\Delta F$  = *F*-statistic change

a. Outcome Variable: Academic self-sabotaging behaviour

LES\_C = Learning Environment Centered

Interaction<sup>a</sup> = Boys boarding\* learning environment centered

Interaction<sup>b</sup> = Girls boarding\* learning environment centered

Interaction<sup>c</sup> = Coeducation boarding\* learning environment centered

Reference group = Coeducation Day, which was dummy code = 0

Table 4.35 reveals that the model for predicting academic self-sabotaging behaviour from learning environment was significant and explained 3.8% of the variance (*R*<sup>2</sup> = .038, *F* (1,396) =15.80, *p* ≤ .001). The unstandardized coefficient for learning environment in Model 1 (*B* = -0.14, *SE* = 0.04, *p* < .001) indicates that higher

satisfaction of basic psychological needs in a learning environment contribute significantly to decrease in academic self-sabotaging behaviour. This implies that a one-unit increase in the learning-environment score is associated with a 0.14-point decrease in academic self-sabotaging behaviour.

After adding the interaction terms in Model 2, the prediction model significantly improved,  $\Delta R^2 = .043$ ,  $\Delta F(3, 393) = 6.09$ ,  $P \leq .001$ . The main effect of learning environment for co-educational day schools was negative but not statistically significant ( $B = -0.04$ ,  $SE = 0.05$ ,  $p \geq .05$ ). Similarly, the interaction between learning environment and boys' boarding schools ( $B = -0.17$ ,  $SE = 0.09$ ,  $p \geq .05$ ) and that with girls' boarding schools ( $B = -0.08$ ,  $SE = 0.10$ ,  $p \geq .05$ ) were not significant. However, the interaction for co-educational boarding schools was negative and statistically significant ( $B = -0.52$ ,  $SE = 0.13$ ,  $p < .001$ ). Therefore, the null hypothesis was rejected. From these results, the study concluded that in co-educational boarding schools, the link between a supportive learning environment and reduced academic self-sabotaging behaviour is stronger. In other words, when students in these schools feel that their basic psychological needs are well supported, their chances to engage in self-sabotaging behaviour is lower compared to students in co-educational day schools. For single-sex schools, the positive effect of a supportive learning environment seems to influence students in a similar way.

Similarly, to test  $H_{06b}$ , moderated multiple regression analysis was conducted involving academic expectations as a predictor, academic self-sabotaging behaviour as an outcome and school type as a moderator. First, the academic expectations and academic self-sabotaging behaviour were entered into a regression model. Afterwards,

the interaction terms; boy boarding\*academic expectations centered, girls boarding\*academic expectations centered, co-education day\*academic expectations centered and co-education boarding\*academic expectations centered were entered into the regression model. Table 4.36 shows the model summary for main effect and interaction effects.

**Table 4.36**

*Regression Model Summary and Coefficients for Academic Expectations and Interaction Effects*

Model	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	<i>Df1</i>	<i>Df2</i>	<i>P</i>
1	.31	.10	.10	42.00	1	396	.00
2	.35	.12	.02	3.39	3	393	.01

	Variable	Unstandardized coefficient		Standardized coefficient		<i>t</i>	<i>P</i>
		<i>B</i>	<i>SE</i>	$\beta$			
1	Constant	25.33	.45			56.17	.00
	AES_C	-.45	.07	-.31		-6.48	.00
2	Constant	25.50	.50			51.17	.00
	AES_C	-.43	.10	-.30		-4.44	.00
	Interaction <sup>a</sup>	.08	.20	.02		.41	.68
	Interaction <sup>b</sup>	.06	.17	.02		.32	.75
	Interaction <sup>c</sup>	-.97	.33	-.15		-2.94	.00

*Note.* *N* = 398; *R* = correlation coefficient; *R*<sup>2</sup> = Coefficient of determination;  $\Delta R^2$  = *R*<sup>2</sup> change;  $\Delta F$  = *F*-statistic change

a. Outcome Variable: Academic self-sabotaging behaviour

AES\_C = academic expectations centered

Interaction<sup>a</sup> = Boys boarding\* academic expectations centered

Interaction<sup>b</sup> = Girls boarding\* academic expectations centered

Interaction<sup>c</sup> = Co-education boarding\*academic expectations centered

Reference group =Co-education Day

In Table 4.36, model 1 reveals a significant moderate relationship between academic expectations and academic self-sabotaging behaviour,  $R(396) = .31, p = .00$ , with  $R^2 = .10$ . This suggests that academic expectations explained 10% of variance in academic self-sabotaging behaviour. The model was also a good fit for the data ( $F(1,396) = 42.00, p \leq .001$ ). Academic expectations contributed significantly to the decrease in academic self-sabotaging behaviour ( $B = -.45, SE = .07, P \leq .001$ ). This suggests that for each unit increase in academic expectations, there is a decrease in academic self-sabotaging behaviour by 0.45 points.

Model 2 indicates that relationship between academic expectations and academic self-sabotaging behaviour was significantly moderated by the type of school,  $\Delta R^2 = .02, \Delta F(3,393) = 3.39, p \leq .01$ . This shows that the addition of academic expectations\*school type interaction terms, the model fit improved slightly by 2%. The change in the model fit was significant, indicating the school type provided an additional explanatory value to relationship between predictor and outcome variable.

The main effect of academic expectations for co-education day was negative and significant ( $B = -0.43, SE = 0.10, t = -4.44, p < .001$ ). Similarly, interaction effects for coeducation boarding were negative and statistically significant ( $B = -.97, SE = .33, P \leq .001$ ). However, there were no significant interaction effects for boys boarding ( $B = .08, SE = .07, P \geq .05$ ) and girls boarding ( $B = .06, SE = .17, P \geq .05$ ). The null hypothesis was rejected. The results indicate that in co-educational boarding schools, the link between adaptive academic expectations and reduced academic self-sabotaging behaviour is stronger compared to co-educational day. This could be due to factors such as gender dynamics, residential aspect, and different support offered to students' needs in this school setting. However, for boys

and girls boarding schools, the beneficial influence of realistic academic expectations on reducing academic self-sabotaging did not differ significantly.

#### ***4.9.3 Discussion of the Results***

The sixth objective examined how school type moderated the relationship between learning environment, and academic expectations with academic self-sabotaging behaviour. Learning environment and academic expectations were established as significant predictors of academic self-sabotaging behaviour. Upon interaction with the school type, the predictive weights of these variables on academic self-sabotaging behaviour were weakened, especially in a coeducation boarding context. The present results are consistent with Clapper and Catherine's (2021) study that investigated self-sabotaging behaviour of students who attended alternative high schools in California. The findings showed that students in alternative high schools experienced high levels of anxiety despite having good learning climate and structure. High anxiety served as a risk factor associated with alternative mode of schooling that led to more self-sabotaging behaviours among students. The present researcher investigated how school type (boys/girls boarding, co-education day, and co-education boarding) moderated the relationship between learning environment, academic expectations and academic self-sabotaging behaviours and found a significant moderation effects of school type.

In harmony with the present study are the results from Sahin and Coban (2020) study that investigated the effects of school type on students' GPA among 981 students in high schools in Turkey. The study the found indirect effects of school environment on GPA through academic self-handicapping. Students in supportive school environment reported minimal self-handicapping behaviour and higher GPA.

In the current study, the focus was on the moderation influence of school type on the relationship between learning environment, academic expectations and academic self-sabotaging behaviour. Indeed, school type was found to influence the effects learning environment and academic expectations had on academic self-sabotaging behaviour.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the results, conclusions based on the key findings, recommendations for education related practices, and lastly, suggestions for potential areas of research.

#### 5.2 Summary

The purpose of this study was to examine the relationship between learning environment, academic expectations and academic self-sabotaging behaviour. Specifically, the study explored how needs-supportive and needs-frustrating learning environment relate to academic self-sabotaging behaviour. In addition, the study examined how both significant others' academic expectations and students' own academic expectations are associated with academic self-sabotaging behaviour. The study also considered gender differences in academic self-sabotaging behaviour. Beyond examining these relationships, the study further examined the predictive weights of learning environment and academic expectations on academic self-sabotaging behaviour and how school type moderates these relationships.

The first objective examined the relationship between needs-supportive learning environment and academic self-sabotaging behaviour. Results revealed that needs-supportive learning environment was negatively and significantly related to academic self-sabotaging behaviour. Thematic analysis of qualitative data further revealed that learning environment that is characterized by a very strong sense of autonomy (students' internal motivation to read all the notes and conducting self-directed studies), high level of competence (students' eagerness to participate in

learning activities such as assignment and exams) and a high sense of connection is related to less academic self-sabotaging behaviour.

The second objective sought to establish how needs-frustrating learning environment was associated with academic self-sabotaging behaviour. It was found that needs-frustrating learning environment had a weak, positive and statistically significant correlation with academic self-sabotaging behaviour. In support of this, qualitative findings demonstrated that failure to fulfil students' needs in a learning environment was associated with increased academic self-sabotaging behaviour. For instance, learning environment characterized by high level of autonomy need frustration indicated in students' learning behaviours like absence of personal timetables, low interest in learning, and waiting for teachers' prompt to start reading was associated with many students engaging in academic self-sabotaging behaviour. Similarly, presence of some potential barriers to satisfaction of competence need like punishing and sending students home for their parents due to exam failure created fear and feeling of incompetence, leading to more academic self-sabotaging behaviour.

The third objective examined the relationship between academic expectations from significant others and academic self-sabotaging behaviour. The results revealed that significant others' academic expectations had a weak, negative and statistically significant correlation with academic self-sabotaging behaviour. Analysis of the interviews showed that when students viewed significant others' expectations as adaptive, they were motivated to work hard to achieve their goals. Adaptive expectations also cushioned them from undue pressure, thereby reducing academic self-sabotaging behaviour. Teachers who had high expectations were motivated to

continue offering constructive guidance to students even when they scored below their expectations, which decreased the self-sabotaging behaviour.

The fourth objective aimed to determine whether students own academic expectations was linked to academic self-sabotaging behaviour. The results revealed that academic expectations from students exhibited weak, negative and significant correlation with academic self-sabotaging behaviour. This implies that students who had adaptive academic expectations were less likely to engage in academic self-sabotaging behaviour. This is echoed in the qualitative findings indicating that students who had set clear goals such as consulting teachers, and managing study time, displayed positive academic behaviour. On the other hand, less adaptive expectations such as students' acceptance of lower grade, lack of accountability for their academic work by throwing away exams and using sickness as an excuse to miss school, were associated with increased academic self-sabotaging behaviour.

In regard to the fifth objective, the results highlight that gender has significant effects on students' academic self-sabotaging behaviour. Specifically, girls showed higher levels of academic self-sabotaging behaviour compared to boys, with a greater propensity for academic procrastination. On the contrary, there were no significant gender differences regarding students' academic disengagement. These outcomes show that the effects of gender vary across different types of academic self-sabotaging behaviour.

The sixth objective examined the predictive weights of learning environment and academic expectations on academic self-sabotaging behaviour. The results revealed academic self-sabotaging behavior was significantly and negatively predicted by

both learning environment and academic expectations. Academic expectations had a comparatively stronger negative predictive effect. Analysis of the facets of these predictor variables revealed that none of the learning environment levels made a significant contribution. For academic expectations, only students' academic expectations facet was a significant predictor, with its increase being linked to reduced academic self-sabotaging behaviour.

Lastly, the seventh objective examined how school type moderates the relationship between learning environment, and academic expectations with academic self-sabotaging behaviour. Upon, inclusion of interaction term, the school type significantly moderated the relationship between these variables and academic self-sabotaging behaviour.

### **5.3 Conclusions**

This study resulted into the following conclusions: Based on the finding that needs-supportive learning environment is negatively related to academic self-sabotaging behaviour, it is concluded that fulfilling students' basic psychological needs in a school environment motivates and promotes positive academic behaviours. This in turn protects them from engaging in academic self-sabotaging behaviour.

Depending on the outcome that needs- frustrating learning environment is positively related to academic self-sabotaging behaviour, it is logical to conclude that if basic psychological needs are not adequately met within the school environment, students may engage more in academic self-sabotaging behaviour. This implies that the presence of barriers such as teachers' low interaction with the struggling students,

inconsistent approaches to failure, giving punishment as a consequence of failure may create pressure, stress, low motivation and make students' feel ignored, hence increased academic self-sabotaging behaviour.

Given that a negative association was found between significant others' academic expectations and academic self-sabotaging behaviour, the study concluded that when teachers and parents hold constructive, supportive and realistic expectations that are aligned to students' abilities, students are likely to display lower levels of academic self-sabotaging behaviour. This suggests that adaptive significant others' academic expectations may protect students from undue academic pressure, reduce the fear of failure, motivate, and promote effective study habits, hence, diminishing the tendencies of procrastination and disengagement.

In addition, having found a weak negative relationship between students' academic expectations and academic self-sabotaging behaviour, the study concludes that students who hold realistic expectations are associated with less academic self-sabotage. Alternatively, counterproductive academic expectations whether too high or too low, are associated with students engaging more in academic self-sabotaging behaviour.

Moreover, it is evident from this study that significant gender differences exist in academic self-sabotaging behaviour. This evidence leads to a conclusion that boys and girls exhibit different levels of academic self-sabotaging behaviour, suggesting the need to consider gender-specific needs to diminish this behaviour for both girls and boys.

Following the finding that both the learning environment and academic expectations significantly and negatively predicted academic self-sabotaging behaviour, this study concludes that promoting realistic academic expectations and maintaining supportive learning environments are essential in reducing students' academic self-sabotaging behaviour.

Lastly, the study concludes that school type determines how learning environment and academic expectations relate to academic self-sabotaging behaviour of Form Two students. This evidence suggests that experiences in single sex boarding schools may vary from those of mixed boarding as well as mixed day schools, hence, the need to factor in the dynamics of these school environments in addressing the problem of academic self-sabotaging.

#### **5.4 Recommendations**

Based on this study's results, recommendations for education related practices and potential directions for subsequent researchers were advanced.

##### ***5.4.1 Recommendations for Education Practice***

Based on the key findings of this study, several practical implications arise for education practice:

- i. This study found that the learning environment, conceptualized as basic psychological needs, is significantly related to academic self-sabotaging behaviour. When the learning environment fulfills these needs, students engage in less academic self-sabotaging behaviour. Therefore, there is a great need for teachers to promote an autonomy-supportive school environment that meets students' needs of autonomy, competence, and relatedness. To achieve this,

teachers may use strategies such as allowing students a sense of direction and control over their learning process by helping them to create self-initiated study schedules (autonomy), and encouraging them to proactively ask questions in class (competence). Moreover, teachers should cultivate an approachable environment which enhances students' trust to consult for academic and personal related matters. This reduces the tendencies to engage in academic self-sabotaging behaviour such as procrastination and disengagement from studies.

- ii. The current study also found that when students perceived frustration of their basic psychological needs within the learning environment, they engaged more in academic self-sabotaging behaviour. Therefore, teachers should shun practices such as punishing students for repeated failure, using inconsistent approaches to failure, limited teacher-student interactions, and lack of support for academically struggling students. Since these practices can frustrate students' needs of autonomy, competence and relatedness, minimizing them can help decrease academic self-sabotaging behaviour among students. Board of management (BOM) and school managers should also prioritize and support school programs aimed at promoting psychological needs of students.
- iii. The study indicated that adaptive and constructive academic expectations from significant others, such as teachers and parents greatly reduce academic self-sabotaging behaviour like procrastination. Conversely, maladaptive and unrealistic expectations from these significant others lead students to engage more in this behaviour. These findings suggest that significant others such as parents and teachers should aim to exhibit academic expectations that align with

students' abilities, past and present performance, as well as with their future academic goals. This approach will motivate and buffer students from undue pressure and anxiety, thereby reducing academic self-sabotaging behaviour. Additionally, they should offer targeted guidance and feedback to serve as early intervention to deter students from engaging in activities that undermine their academic goals.

- iv. This study also found that realistic academic expectations from students that were not too high nor too low were associated with less academic self-sabotaging behaviour. Therefore, students being aware of negative effects of their maladaptive beliefs and expectations on their studies may be challenged to believe in their ability and adopt adaptive expectations leading to less academic self-sabotaging behaviour. School counselors should also guide students to re-evaluate their expectations based on parameters such as their abilities, current performance, and future academic goals. This can help students avoid holding onto maladaptive and unrealistic expectations, that may increase the tendencies to engage in academic self-sabotaging behaviour. Curriculum developers should design curricula that incorporate flexible learning pathways to enable students learn at their own pace and cushion them from undue academic pressure to reduce self-sabotaging actions.
- v. Given the significant effects of gender on students' self-sabotaging behaviour, schools are recommended to develop interventions and support systems that take in consideration of gender-specific differences within a learning environment. This will help to identify unique challenges and tendencies that girls and boys undergo, and provide solutions targeted to address their distinct needs, thus

reducing self-sabotaging behaviour. They may also be encouraged to develop policies that promote gender-responsive teaching and learning styles.

- vi. Lastly, policy makers should also develop tailored programs to address specific needs of students in different types of schools. This will ensure psychological needs of students are adequately met and also the expectations set are realistic for each type of school. School counselors should consider contextual factors such as gender dynamics, residential aspect and heightened peer influence to offer targeted support to students in different educational context to address the problem of academic self-sabotaging behaviour.

#### ***5.4.2 Recommendations for Future Research***

This study has some limitations, suggesting further investigation by the future researchers. These limitations include:

- i. The respondents in this study consisted solely of Form Two students which limits the external validity of the current results. Therefore, it is necessary for future studies to take into consideration students of different levels to reinforce and extend the findings on the observed relationship between the study variables. Conducting investigation using students in Form One, Three and Four, may enhance the robustness of the research conclusions and also confirm whether the identified patterns is consistent across different educational levels.
- ii. In this study, causal interactions among the learning environment, academic expectations and academic self-sabotaging behaviour cannot be inferred from the findings. As a result, it is suggested that future research should utilize

longitudinal approach to explore the causal relationship between the study variables.

- iii. The current study was conducted in Meru County, which limits the generalizability of the results and findings across other counties in Kenya. This is because Meru County, with its specific regional characteristics such as semi-rural setting and an agrarian economy, may not be a representative of other counties in Kenya. Therefore, conducting similar studies in counties that are in urban settings and other rural areas will allow for comparison of findings and results. This will help in understanding the influence of regional variations and commonalities on academic self-sabotaging behaviour. Therefore, enhance generalizability of the results.
- iv. This study adopted a convergent parallel mixed method with a greater emphasize on quantitative data collection and analysis. This limited the richness of understanding that could be achieved from qualitative data, especially the complexities of the students' experiences regarding the variables of interest. Future studies should consider a mixed method approach that balances the two methodologies such as sequential explanatory mixed research design. This allows for detailed understanding of statistical trends observed, thus providing richer and more contextualized view of the research problem.
- v. This study used semi-structured interview schedule to get in-depth information that could not be achieved through quantitative data. However, there was a challenge of reaching data saturation. This suggest that future studies may

consider including varied qualitative methods of data collection like focus group discussions to capture broader students' experiences.

- vi. A wide range of factors may be responsible for academic self-sabotaging behaviour among the students. However, the current study only focused on learning environment and academic expectations. Future studies can broaden the focus by investigating other factors like personality, emotional intelligence, motivational variables, academic anxiety, self-image among others to yield valuable insights on how they relate with academic self-sabotaging behaviour and suggest more effective interventions.
- vii. Academic self-sabotaging behaviour was narrowly defined to include academic procrastination and disengagement. Further research should include additional forms of academic self-sabotaging behaviour such as fear of failure, self-doubt, perfectionism among others to provide detailed understanding of this behaviour.
- viii. Unexpectedly, this study found that, contrary to SDT, satisfaction or frustration of the competence need did not predict academic self-sabotaging behaviour. Future researchers should further investigate this relationship using more diverse samples in different contexts to explore how students interpret and experience competence within their school contexts.

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## APPENDICES

### Appendix A: Informed Consent Letter

Dear Respondent,

I am a postgraduate student pursuing a Doctor of Philosophy (PhD) in Education (Educational Psychology) at Kenyatta University. I am conducting research on learning environment and academic expectations as antecedents of academic self-sabotaging behaviour.

Your participation in this study is vital for the successful completion of this research. I kindly request that you respond truthfully to the questions provided. Please be assured that all information you provide will be treated with strict confidentiality and will be used solely for the purposes of this study.

Participation is entirely voluntary, and you may withdraw at any time if you feel uncomfortable answering any question. If you agree to participate, kindly append your signature in the space provided.

\_\_\_\_\_  
Students' signature

\_\_\_\_\_  
Date

Thank you for your time and contribution to this study.

\_\_\_\_\_  
Researcher signature

\_\_\_\_\_  
Date

Judith Kamath Kabira

Student, Phd. (Education psychology), Kenyatta University

## Appendix B: Data Collection Instruments

### Section One: Demographic Data

Please respond to the given questions regarding your experience at school by putting a tick and filling the gap where applicable

1. Sex: Boy [  ] Girl [  ]
2. Age: \_\_\_\_\_
3. School type: Boys' boarding [  ] Girls' boarding [  ] Co-education day [  ] Co-education boarding [  ]
4. Last term exam grade \_\_\_\_\_
5. Do you ever miss school without a valid reason? Yes [  ] No [  ]

### Section Two: Learning Environment Instrument

Please indicate how true each of the following statement suits you given your experiences at school. Please use the following scale in responding to the items through picking only one answer by ticking or circling.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Not at All True</b>	<b>Slightly True</b>	<b>About Halfway True</b>	<b>Mostly True</b>	<b>Completely True</b>

	Autonomy Support	1	2	3	4	5
1.	I freely decide the activities i engage at school.					
2.	Decisions I make are in agreement with the things I desire at school.					
3.	Choices I make at school communicate who I really am.					
4.	Whatever I have been doing at school is of interests to me					
5.	I feel that I am compelled to do almost everything at school.					
6.	I am forced to do almost everything that I wouldn't have wished to do at school					
7.	At school, I am stressed to do too many assignments					
8.	I feel obliged to routinely attend to some activities at school					
	Relatedness Support					

9.	Teachers and students care about me the same way as I do						
10.	I share a strong and close connection with my teachers and other students						
11.	I share a close relation with my teachers and other students						
12.	I share a warm relationship with teachers and I like spending time with them.						
13.	I don't feel like I fit in any group in my school						
14.	I feel that teachers and other students are unkind and unfriendly						
15.	I feel like teachers dislike me.						
16.	I feel like I have a very weak connection with my teachers						
	Competence Support						
17.	I believe in my ability to do assignments well at school.						
18.	I believe I do things at school skillfully.						
19.	I confidently believe in my ability to succeed in my studies.						
20.	I am able to complete challenging tasks well						
21.	When I think of handling some tasks at school, I seriously doubts my ability						
22.	I am dissatisfied with how I perform at school						
23.	I am uncertain about my abilities						
24.	When I do mistakes, I see myself as failure.						

### Section Three: Academic Expectations Stress Inventory

Please indicate how the following statements apply to you by ticking one answer as guided by the given scale.

1 = never true	2= rarely true	3= sometimes true	4=often true,	5= almost always true
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<b>Expectations of Parents/Teachers</b>	1	2	3	4	5
1. When I feel like I am not attending classes, doing assignments and putting efforts in my studies as my parents expect, I always blame myself					
2. When I fail to do well at school always feel like I have let down my teachers					
3. When I fail to do well at school always feel like I have let down my parents.					
4. I worry a lot when I see my parents are dissatisfied in my exam results					
5. I feel useless when I cannot meet the expectations my teachers have on me					

<b>Students Expectations</b>				
6. I worry a lot when I fail to meet my own expectations at school				
7. When I fail to live up to my own expectations, I feel I am not good enough.				
8. Failing to meet my goals makes me worry a lot and lack sleep.				
9. When I fail to do well as I expected in my exams I get really stressed.				

#### **Section Four: Academic Self-Sabotaging Behaviour Instrument**

Please indicate how the behaviour described below fit you by ticking one answer guided by the scale given

1	2	3	4	5	6	7
Very untrue of me	Untrue of me	Somewhat untrue of me	Neutral	Somewhat true of me	True of me	Very true of me

<b>Academic tasks procrastination</b>							
	1	2	3	4	5	6	7
Some students delay doing their class assignments until the last minute so that they have an excuse in case they fail. How true is this of you?							
Some students engage in other activities with their classmate which distracts them from doing their assignment, preparing and reading for exams in time. When they achieve below their expectations, they can say friends kept them from working. How true is this of you?							
Some students wait to read for an exam the night before a test so that if they don't do well, they can say that is the reason. How true is this of you?							
<b>Academic disengagement</b>							
Some students deliberately refuse to participate in class							

learning activities so that if they don't do well, they can say it is because they didn't participate. How true is this of you?							
Some students intentionally refuse to engage in academic tasks but instead engage in lots of other activities or absent themselves from school. When they fail to achieve as hoped, they can say it is because they are involved with other things. How true is this of you?							
Some students keep off from studying by giving excuses like they are sick or they are given a lot of out- of- class work or home chores. When they fail to do well in school they give this as the reason. How true is this of you?							

**Section Five: Interview Schedule**

**Basic Psychological Needs Satisfaction and Frustration Scale**

**Autonomy support**

**Main question**

Q1. How involved are you in learning activities at school in terms of choosing tasks, and deciding how and when to complete them?

**Probe questions**

Are students allowed to plan their own learning activities, and do they show interest and curiosity during lessons?

Do teachers provide answers before students have had a chance to reflect on the problem?

**Competence support**

**Main questions**

Q2. How manageable are the learning tasks assigned by your teachers; easy or difficult?

**Probe questions**

Is there support for low-achieving students at your school?

Is pressure applied in case of low performance?

Are students scolded, negatively evaluated, or denied attention if they perform poorly?

### **Relatedness support**

#### **Main question**

Q3. How would you describe the teacher–student relationship at your school?

#### **Probe questions**

Do teachers maintain equally positive relationships with all students?

Are some students treated unfairly, especially if they do not meet teachers' expectations?

### **Academic Expectations**

Please answer the following question to the best of your knowledge

#### **Q4. About your teachers:**

a) How far do you think your teachers expect you to progress in your studies?

\_\_\_\_\_

b) Do their expectations align with your own? \_\_\_\_\_

c) What grade do you expect to achieve at the end of the term? \_\_\_\_\_

d) Does their expected grade match your expected grade? \_\_\_\_\_

#### **Q5 About your parents:**

a) How far do you think your parents expect you to progress in your studies?

\_\_\_\_\_

b) Do their expectations align with your own? \_\_\_\_\_

c) What grade do you think your parents expect you to achieve? \_\_\_\_\_

d) Does their expected grade match your expected grade? \_\_\_\_\_

#### **Q6. About yourself:**

a) What grade do you expect at the end of the year? \_\_\_\_\_

b) What grade do you expect at KCSE? \_\_\_\_\_

### **Academic Self-Sabotaging Behaviour**

#### **Academic tasks procrastination**

##### **Main questions**

Q7. Have you ever completed assignments at the last minute? \_\_\_\_\_

**Probe questions**

When is the best time for you to start preparing or studying for exams?

Some students prefer completing tasks or studying at the last minute. What is your view on this?

**Behavioural academic disengagement**

**Main questions**

Q8. Do you engage in leisure activities at the expense of studying?

**Probe questions**

Have you ever avoided assignments or exams if given the option?

Are there activities that interest you more than studying? Name three:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

Q9. Do you think some students deliberately miss school during exam? \_\_\_\_\_

**THANK YOU**

## Appendix C: Research Authorization From Meru County



**REPUBLIC OF KENYA  
MINISTRY OF EDUCATION**

State Department of Early learning and Basic Education

Email.cdmerucounty@gmail.com  
Telegrams: "ELIMU" Meru  
When Replying please quote  
MERU

County Director of Education  
Meru County  
P.O. BOX 61

Ref: MRU/C/EDU/11/1/305

6<sup>th</sup> March, 2024

TO WHOM IT MAY CONCERN

**RE: RESEARCH AUTHORIZATION – MS JUDITH KAMATHI KABIRA**

Reference is made to letter Ref.NO.NACOSTI/P/23/31652dated 9<sup>th</sup> December, 2023.

Authority is hereby granted to **Ms. Judith Kamathi Kabira** to carry out research on the topic:  
**"LEARNING ENVIRONMENT AND EXPECTATIONS AS ANTECEDENTS OF SELF-SABOTAGING BEHAVIOUS AMONG FORM TWO STUDENTS IN MERU COUNTY, KENYA,** for the period ending 9<sup>th</sup> December, 2024.

Kindly accord her the necessary assistance.

FOR: COUNTY DIRECTOR OF EDUCATION  
MERU COUNTY  
P. O. BOX 61- 80200  
Tel: 064-32372 MERU  
  
**P. J. MUINDE**  
**For: County Director of Education**  
**MERU COUNTY**

## Appendix D: Research Authorization From the Ministry of Education



OFFICE OF THE PRESIDENT  
MINISTRY OF INTERIOR AND NATIONAL ADMINISTRATION  
STATE DEPARTMENT FOR INTERNAL SECURITY AND  
NATIONAL ADMINISTRATION

Telegrams:  
Telephone:  
Email: [ccmeru@yahoo.com](mailto:ccmeru@yahoo.com)  
Fax:

COUNTY COMMISSIONER  
MERU COUNTY  
P.O. BOX 703-60200  
MERU

When replying please quote  
Ref:EDU.12/3 VOL IV (126)  
and Date:

6<sup>th</sup> March, 2024

TO WHOM IT MAY CONCERN

**RE: RESEARCH AUTHORIZATION**

This is to inform you that Judith Kamathi Kabira of Kenyatta University has reported to this office as directed by the National Commission for Science, Technology and Innovation and will carry out research on **“Learning Environment and Expectations as Antecedents of Self-Sabotaging Behaviours among Form Two Students”** in Meru County.

Since the authority has been granted by the said commission, and the above named person has reported to this office. She can embark on her research project for a period ending 9<sup>th</sup> December 2024.

Kindly accord her the necessary assistance she may require.

**BERNARD K. NJENGA**  
**FOR: COUNTY COMMISSIONER**  
**MERU COUNTY**

## Appendix E: NACOSTI Permit

  
REPUBLIC OF KENYA

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **858804** Date of Issue: **09/December/2023**

**RESEARCH LICENSE**



**This is to Certify that Ms. Judith kamathi Kabira of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Meru on the topic: LEARNING ENVIRONMENT AND EXPECTATIONS AS ANTECEDENTS OF SELF- SABOTAGING BEHAVIOURS AMONG FORM TWO STUDENTS IN MERU COUNTY, KENYA for the period ending : 09/December/2024.**

License No: **NACOSTI/P/23/31652**

**858804**  
Applicant Identification Number

  
Director General  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



**NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.**

**See overleaf for conditions**

## Appendix F: Basic Psychological Needs Satisfaction and Frustration Scale

### Consent

**From** Maarten Vansteenkiste • Maarten.Vansteenkiste@ugent.be  
**To** judith kamathi • judithkamathi@gmail.com  
**Date** 7 Sep 2021, 19:39  
 Standard encryption (TLS).  
[See security details](#)

You are welcome to use the scale for academic purposes!

Maarten

[Hide quoted text](#)

**From:** judith kamathi <judithkamathi@gmail.com>  
**Sent:** Tuesday, September 7, 2021 6:10 PM  
**To:** Maarten Vansteenkiste <Maarten.Vansteenkiste@UGent.be>  
**Subject:**

My name is Judith a student at Kenyatta University, undertaking PhD in education psychology. I am kindly requesting permission to use BPNSFS scale to collect data among the adolescent students in Kenyan context. Thanks.

## Appendix G: Academic Expectations Questionnaire Permission

From Ang Pei-Hui Rebecca (Prof) •  
rebecca.ang@nie.edu.sg  
To judith kamathi • judithkamathi@gmail.com  
Date 8 Sep 2021, 04:23  
 Standard encryption (TLS).  
[See security details](#)

Dear Judith,

Please find the AESI scale and scoring instructions/guide attached as requested.

Regards,

Rebecca

[Hide quoted text](#)

---

**From:** judith kamathi <[judithkamathi@gmail.com](mailto:judithkamathi@gmail.com)>  
**Sent:** Wednesday, September 8, 2021 12:25 AM  
**To:** Ang Pei-Hui Rebecca (Prof)  
<[rebecca.ang@nie.edu.sg](mailto:rebecca.ang@nie.edu.sg)>  
**Subject:** Request for permission to use academic expectations stress inventory

## Appendix H: Academic Self-Sabotaging Behaviours Scale Permission

From Tim Urdan • turdan@scu.edu  
To judith kamathi • judithkamathi@gmail.com  
Date 6 Sep 2021, 21:11  
 Standard encryption (TLS).  
[See security details](#)

Hello, Judith. You have my permission to use this scale. Please just cite the source of your scale in any scholarly publications or presentations.

Best wishes,

Tim

[Hide quoted text](#)

On Mon, Sep 6, 2021 at 10:34 AM judith kamathi <judithkamathi@gmail.com> wrote:

My name is Judith, a student at Kenyatta University, undertaking PhD in education psychology. I am kindly requesting permission to use academic self-handcapping scale among the adolescent students in Kenyan students. I will highly appreciate your consideration. Thanks.

--

Tim Urdan, Ph.D.  
Department of Psychology  
202 Alumni Science Building  
Santa Clara University

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