

**ACADEMIC ENGAGEMENT AS A PREDICTOR OF SCHOOL COMPLETION  
INTENTION OF PUPILS IN UPPER CLASSES IN PRIMARY SCHOOLS IN  
THARAKA NITHI COUNTY, KENYA**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE  
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**MAY, 2024**

## DECLARATION

I declare that this research project is my original work and has not been presented in any other university /institution for consideration. This research project 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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## **DEDICATION**

I dedicate this research paper to my husband, and my children for their unwavering support and love. Also, to all my friends who encouraged and supported me during my studies.

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## **ABBREVIATIONS AND ACRONYMS**

FCUBE	Free Compulsory Basic Education Program
FPE	Free Primary Education
KBNS	Kenya National Bureau of Statistics
KCPE	Kenya Certificate of Primary Education
NCES	National Center of Educational Statistics
SCT	Social Cognitive Theory
SEO	Sub County Education Office
SESQ	Student Engagement in Schools Questionnaire
STEM	Science, Technology, Engineering, and Mathematics
TPB	Theory of Planned Behavior
VIF	Variance Inflation Factor
UNICEF	United Nations Children's Education Fund
USA	United State of America

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## ABSTRACT

Despite increased enrollment following FPE, primary school education has continued to face the challenge of many pupils not completing school in Kenya. In Tharaka Nithi, particularly, Tharaka North Sub County, the issue of pupils not completing school is worrisome as reflected by educational statistics from area. Failure to complete school poses a considerable challenge not only to the individual pupil but also to the Kenyan society at large. Academic engagement is becoming an increasingly debated concept for conceptualizing learners' educational success. Relevant studies that have concentrated on pupils' characteristics such as academic engagement and its connection to pupils' decision to quit school are particularly scarce. Therefore, this study aimed to investigate the link between academic engagement and intention to complete school among primary school pupils in Tharaka Nithi County. Guided by social cognitive theory and using correlational design this study targeted all the 12,250 pupils in the 63 primary schools in Tharaka North Sub-County. A stratified sample of 295 pupils in class six, seven and eight filled the questionnaires. Research instruments were piloted using a sample of 60 pupils from one school that was exempted during the actual data collection period. Data were analyzed using both descriptive and inferential techniques. The results revealed a significant positive moderate correlations between cognitive academic engagement ( $r(285) = 0.50, p < 0.01$ ), behavioural academic engagement ( $r(285) = 0.40, p > 0.01$ ), emotional academic engagement ( $r(285) = .39, p < .01$ ) and school completion intention of pupils in upper classes. Regression analysis revealed that cognitive, behavioral and emotional dimensions of academic engagement significantly predicted school completion intention ( $F(3, 281) = 38.60, P = .00$ ), and they jointly accounted for 29% of variability in school completion intention. Cognitive academic engagement had the greatest weight followed by behavioural academic engagement and with emotional academic engagement having a non-significant contribution to school completion intention. It was concluded that pupils' academic engagement is significant in explaining and predicting primary school pupils' intention to leave school. Therefore, schools and stakeholders in general should come up with interventions targeted at improving pupils' academic engagement so as to raise their intention to complete school.

## **CHAPTER ONE**

### **INTRODUCTION AND CONCEPTUALIZATION OF THE STUDY**

#### **1.1 Introduction**

This chapter describes the background to the study, statement of the problem, purpose of the study, study objectives and research questions. It also highlights significance of the study, assumptions of the study, limitations, and delimitations of the study. Theoretical framework, conceptual framework and operational definition of terms are also described.

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

In today's competitive, globalized and knowledge economy, it is paramount for every country to make sure that all young people gain knowledge and skills needed to participate successfully and innovatively in the employment sector and in society at large (Gatsi, 2018; Pilotti et al., 2017). Therefore, having pupils join school and complete education and knowing the factors that influence their intention to complete school is of great concern to all educators. To realize this crucial goal, each country has made remarkable investment in education to ensure quality education for all by striving for successful and hundred percent completion of education by learners from primary school level to tertiary level. United Nations also declared education a human right and pivotal in the pursuit of development, economic and social transformation (UNICEF, 2007). Despite all these efforts, lower school completion rates in primary education remain a persistent challenge. According to a UNESCO education report of 2019, worldwide primary school completion rate is 84%, with developed countries like USA registering rates of 98.1%. In contrast, primary school completion rates in Sub-Saharan countries are significantly low averaging round 63% (UNESCO Institute for Statistics, 2019). In Kenya, the scenario is even worse with completion rates in primary schools standing at about 49.8% (Cowling, 2023).

To address the issue of low completion rate financing of education was made a nation's duty to ensure all children are able to access and complete school. For instance, according to NCES (2015), the government of USA is in charge of financing the education of more than 90% of all children in elementary and secondary schools. Similarly, Ghana government introduced free compulsory basic education programme (FCUBE) in 1995 (Osifunke & Ekunday, 2018). As Roser and Ortiz-Ospina (2020) points out, making primary education compulsory is important for a number of reasons such as to enable children to learn fundamental literacy and numeracy skills, develop their understanding of the world, equip them with basic life skills, foster socialization, critical thinking, and lastly to end the despair of students dropping from school before they complete their primary school education for lack of fees.

Despite, the nation's financing education; the issue of not completing school by pupils continues to remain a persistent concern. Therefore, as part of the solution the educators and educational psychologists have focused their research on the factors contributing to low pupils' intention to complete school (Mastrorilli, 2016; Robinson, 2016; Rouse, 2019). Intention to leave or not to complete school is viewed as an ultimate stage in a cumulative process of disengagement (Rumberger et al., 2017; Archambault & Dupéré, 2017; Rumberger & Rotermund, 2012). Literature shows that individual factors such as academic engagement on pupils' intention to complete school (Mastrorilli, 2016; Robinson, 2016; Rouse, 2019).

Extant literature defines academic engagement as learner's participation and investment in their learning experiences, which encompasses three aspects, that is, behavioral academic engagement, cognitive academic engagement and emotional/psychological academic engagement (Burnette, 2017; Robinson, 2016, Truta et al., 2018). Behavioral academic engagement focuses on the practices and actions directed towards school and school

experiences. According to previous studies students with high level of behavioural academic engagement exhibit behaviours such as regular school attendance, participation in class activities, completing class assignments on time and constantly engage with teachers seeking for help. Students with such behaviours show high intention to complete school (Robnison, 2016; Liinamaa, 2022). Cognitive academic engagement entails learner's mental investments to academic activities. Researchers show that students who cognitively engage with their learning are more motivated, set clear academic goals, approach problems in creative in a creative way, and are curious and eager to explore new ideas regarding their subjects (Onzi et al., 2023; Masila, 2022; Wara et al., 2018). By doing so, these learners enhance their connection to their learning process, which in turn raises their intention of staying in school until completion (Onzi et al., 2023; Masila, 2022; Wara et al., 2018). Emotional academic engagement refers to positive affective reaction towards school experiences including teachers and peers (Burnette, 2017; Robinson, 2016, Truta et al., 2018). Existing literature, depict a learner who is emotionally engaged as having positive attitude towards schooling, a strong sense of connection with the school, and positive relationships with teachers and other learners. Such behaviours help learners to persist with their education and see it through completion (Passeggia et al., 2023; Truta et al., 2018).

In Europe, Rouse's (2019) study identified academic disinterest/disengagement among other factors like teacher connection and a sense of hopelessness as potential push and pull factors influencing school children's verdict to leave high school early. However, the study was focused mainly on high school learners in a developed country. Since the age of learners in high school and culture could have influenced the results, the present researcher concentrated on class six, seven and eight pupils in Kenyan context to compare the results across age and culture. Another research in Southeastern Virginia by Robinson (2016) also links behavioral

engagement to high school learners' intention to leave school. Behavioral was assessed in terms of reasons for attending school, participation within the class and involvement with teachers. From these results, it can be inferred that students' with high score in participation and involvement with school experiences have also high intention to complete school. Based on these results, the current study was undertaken to investigate intention to complete school under the phenomenon academic engagement.

Regionally, Gatsi's (2018) study in Zimbabwe stated that learners drop out of school due to personal factors. To understand the issue of school dropout he sought first-hand information from the dropout themselves. The study, however, did not shed light on which personal factors. Therefore, objective of this study was to examine academic engagement as one of the personal factors influencing pupils' intention to leave school early.

Kenya government also started offering free and compulsory education in 2003 to facilitate students who were at-risk of leaving school early to complete their basic primary education (Education System Kenya, 2012). However, despite the Kenyan government effort to implement free and compulsory education thousands of children are still not completing primary education (Kenya National Bureau of Statistics (KBNS) (2013-2019). The KBNS (2013-2019) statistics shows that despite the improving completion rate, still some students fail to sit for KCPE. The data is shown in Table 1.1.

Table 1.1

*Statistics on non-completion of primary education in Kenya*

KCPE Year	Percentage(%) of students who failed to sit for KCPE
2014	33%
2015	30%
2016	28%
2017	32%
2018	30%
2019	30%

Note; Source, KNBS, 2013-2019

The statistics in Table 1.1 show that over years slightly above 30 percent of primary school candidature fail to sit for KCPE. These statistics indicated the need to investigate into factors contributing to high or low completion rate among pupils in primary schools. As part of solution a number of studies have investigated student-related variables such as student engagement in relation to educational outcomes in Kenya. Wara et al. (2018a) study, for instance, found students' cognitive engagement to be a significant predictor of academic achievement of secondary school students in Kenya. The study was done in a different location and using form four students as a sample and with a different outcome variable. Since different location may have implications on learners' socialization and how they perceive schooling process, the current study focused on pupils in Tharaka Nithi County for more informative results. Still, the use of form four students who are older than primary schools pupils may have influenced the results. Hence, the current study sought to use

primary school pupils to compare academic engagement across age and how it relates to intention to complete school.

Ayub's (2018) linked the causes of low girls' completion rates in primary schools to economic, social-cultural and school environment factors. The study was done Mogotio Sub County, Baringo County in Kenya. However, the study did not look into the pupils personal variables such as pupils' academic engagement (cognitive, behavioral, or emotional) and its connection to intention to complete school, that was the center of attention in the present inquiry. In Tharaka Nithi, particularly, Tharaka North Sub-County, the issue of students not completing school is worrisome as reflected by educational statistics from Sub County Education Office (Sub- County Director, Tharaka North Sub County, 2020). The Table 1.2 shows enrollment, completion and non- completion rate of primary schools pupils in Tharaka North Sub-County in the last years.

Table 1.2

*Data on Enrollment, Completion and Non- completion Rate of Primary Schools in Tharaka North Sub County from 2016-2019*

Year of enrolment	Enrolment		Year of Completion	Completion Rate		Completion Rate (%)		Non-completion rate		Non completion Rate (%)	
	B	G		B	G	B	G	B	G	B	G
2009	1272	1195	2016	513	520	40%	44%	759	675	60%	56%
2010	1175	1151	2017	523	549	45%	49%	652	602	55%	51%
2011	1201	1178	2018	704	540	59%	46%	497	638	41%	54%
2012	1154	1101	2019	649	639	56%	58%	505	462	44%	42%

Note. B = Boys; G = Girls; Source, Tharaka North Sub County Education Office, 2020

The information in Table 1.2 shows that the escalating rates of school non-completion in primary schools in Tharaka Nithi Sub-county. According to Table 1.2 759 out of 1272 boys (60%) and 675 girls out of 1195 girls (56%) of pupils who enrolled in class one in 2009 did not sit for KCPE in 2016. In the year 2017, 55% of 1175 boys and 51% of 1151 girls did not complete primary education. In the year 2018, though there was a slight improvement in completion, 41% of 1201 boys and 54% of 1178 girls registered non-completion. In year 2019, the proportion of pupils who registered in class one but failed to sit for KCPE was 44% out of 1154 boys and 42% out of 1101 girls.

A number of studies have tried to investigate factors influencing educational outcomes such as grade retention (Humprey, 2018; Njue, 2014) and academic achievement (Nkirote, 2019), with no attempt to investigate the role of students related variables in regard to their intention to complete school. Therefore, the present study was undertaken to unravel some of the pupil-based predictors of school non-completion in Tharaka Nithi County.

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

Primary school education has continued to face the challenge of many pupils not completing school (Ministry of Education, Sessional Paper No. 1 of 2019). According to KNBS (2013-2019) statistics, 3 out of 10, that is, 30% of students who enroll in class one fail to sit for KCPE. Specifically, Tharaka Nithi registered dismal completion rate for the period between 2016 and 2019 (Tharaka North, Sub county Education Office, 2020). Students' failure to complete school poses a considerable challenge not only to the individual dropout but also to the Kenyan society at large. Individuals who leave school early before sitting for KCPE face a number of prominent negative consequences such as economic deprived future due to their

poor job prospects, are more likely to make a lesser income compared to their more educated peers on average and tend to have more criminal behaviors (Injendi, 2014). The country suffers a huge loss of investment as a result of students leaving school early. This is because over hundreds millions of government expenditure on education, the largest share is spent on primary sub-sector (Ministry of Education, Sessional Paper No. 1 of 2019). Therefore, understanding variables influencing students' educational outcomes, specifically with respect to intention to complete school and increasing completion rate is a crucial factor to educational stakeholders.

A number of studies done with respect to dropout phenomenon posit that strengthening students' intention to complete school is prevention to early school leaving (Archambault & Dupéré, 2017; Haugan, et al., 2019; Mastroilli, 2016). According to these studies increasing students' engagement, is one of the key student-related variable to reduce cases of students leaving school early. However, most of these studies are done internationally and regionally and some focused on different population other than primary school pupils. Few studies done in Kenya have made an attempt to investigate related educational outcomes such as students' retention (Njue, 2014); school dropouts (Injendi, 2014); and academic performance (Nkirote, 2019). Moreover, most of these studies are done within the context of secondary schools. In Tharaka Nithi, researchers have focused on other educational outcomes such as academic performance and school dropout. There is paucity of studies that have directly investigated pupils' academic engagement and intention to complete school. Therefore, the current study was undertaken to unravel the pupil-based predictors of school non completion among pupils in Tharaka Nithi County.

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

This research aimed to examine whether academic engagement was related to intention to complete school among primary school pupils in Tharaka Nithi County. Since academic engagement is amenable to change, the yields of this study could be useful to education sector in positively influencing pupils' intention to complete school and consequently increasing completion rate.

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

The researcher was guided by the following objectives:

- I. To determine the relationship between cognitive academic engagement and school completion intention of pupils in upper classes in primary schools in Tharaka Nithi County.
- II. To establish the relationship between behavioral academic engagement and school completion intention of pupils in upper classes in primary schools in Tharaka Nithi County.
- III. To examine the relationship between emotional academic engagement and school completion intention of pupils in upper classes in primary schools in Tharaka Nithi County.
- IV. To establish the predictive formula of cognitive academic engagement, behavioral academic engagement, emotional academic engagement on school completion intention of pupils in upper classes in primary schools in Tharaka Nithi County.

## **1.6 Research Hypotheses**

In this study, the researcher sought to respond to the following research hypotheses:

Ha1: There is a relationship between cognitive academic engagement and school completion intention of pupils in upper classes in primary schools.

Ha2: There is a relationship between behavioral academic engagement and school completion intention of pupils in upper classes in primary schools.

Ha3: There is a relationship between emotional academic engagement and pupil's school completion intention of pupils in upper classes in primary schools.

Ha4: There is a significant predictive equation for cognitive, behavioral and emotional academic engagement on school completion intention of pupils in upper classes in primary schools.

## **1.7 Assumption of the Study**

This study made a number of assumptions. First the study assumed that pupils engage in different school activities for distinct reasons. Secondly, intention towards school completion was assumed to vary among pupils. Thirdly, it was assumed that pupils portray different levels of academic engagement. Still the study assumed that the variability in pupils' intention to complete school can be explained by pupils' academic engagement.

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

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

This researcher cautions the reader that the study was correlational and could not prove cause-effect relationships. Another limitation is that the use of questionnaires to obtain information may have resulted in response bias, with only the respondents with interest in the research topic choosing to participate. This self-selection bias may could results to skewed

results. In addition, use of purposive sampling technique limits the study results from being extrapolated to other populations. However, the results provided the researcher with the justification to make generalization but only to the respective population of the study.

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

In this study, the sample was delimited to pupils in upper classes in public primary schools, and no attempt was made to investigate the lower classes. This is because learners in upper classes tend to exhibit reduced levels of school engagement compared to those in lower classes (Archambault and Dupéré, 2017). In addition, the current study was carried in Tharaka Nithi County and not any other county due to the alarming poor school completion rate (Tharaka North Sub-County Education Office, 2020). Pupil-related variables, particularly, school engagement was investigated because a number of other studies in Tharaka Nithi County have investigated different variables, principally, situational variables (Njue, 2014; Nkirote, 2019).

### **1.9 Significance of the Study**

The results of the current study may be of benefit to pupils, teachers, parents, school administrators and policy makers. Pupils may be informed on the importance of being connected to school, teachers and fellow students and having positive attitude towards school. Additionally, they may also learn the importance of participation within school encompassing several positive conducts such completing assignment, coming to school every day which may increase their chances of completing school.

Teachers may devise pedagogical strategies that may help pupils to increase their engagement in school. More so teachers may be able to develop the most effective strategies to be able to

tap on all the dimension of school engagement; behavioral, cognitive and emotional engagement to reduce pupils' intention to leave school early before graduating primary education.

Parents also may learn the importance of pupils' engagement in school and with school experiences and device ways to instill engagement to and with school experiences to reduce case of many pupils failing to complete school. In addition, school administrators may get insight from these research findings, that pupils are engaged in and with school differently, some are more and others less engaged. Based on this they may be able to come up with ways to increase pupils' academic engagement in school accordingly.

Education policy makers may get informed of the intervention programs to put in place to increase engagement of pupils' in school in order to reduce high non completion rate.

Finally, the investigation may add to the existing literature on the worth of pupils' engagement as a crucial concept in understanding, predicting, and preventing intention to leave school early or dropout behavior, thus increasing school completion among primary school pupils. It was assumed that this study may add to the knowledge and understanding of how academic engagement influence pupils' intention to complete school.

## **1.10 Theoretical and Conceptual Framework**

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

#### **a) Social Cognitive Theory (Bandura, 1977)**

This study was grounded on Bandura's social cognitive theory (SCT) (Bandura, 1977). SCT contends reciprocal interaction among personal, behavioral and environmental factors. In this reciprocal interaction, the internal personal factors such as cognitive and affective, behavioral

patterns and environmental events interact to influence each other bidirectionally. The theory was used to assess levels of pupils' academic engagement which include the cognitive, affective (emotional) and behavioral. Bandura states that humans endeavor to be in charge in their lives through motivational process namely goals, self-evaluation of progress, outcome expectations, values, social comparisons and self-efficacy (Schunk & Usher, 2012). In this study, SCT was used to assess pupils' intention to complete school via self-efficacy and expectations of outcome.

Self-efficacy plays a critical role to alter pupils' motivation which in turn affects their subsequent behaviours (Schunk & Ellen, 2012). The theory relates one's cognitive state to effective behavioral outcome. That is, if the pupil believes in their ability to attend to school demands in relation to their goal which in this case, may be to complete school, then they will be motivated to continue schooling to their completion.

Outcome expectancy is the anticipation that upon the task completion the desired outcome is attained. That way, if pupils believe that completing school is of benefit to them, then they will engage in school –related tasks. This engagement will ultimately affect their intention regarding school completion. Outcome expectation will also influence student intention behavior indirectly through expectation of significant others. If pupils understand that teachers and parents, for instance, expect them to complete school then they will be more driven to act and engage in activities that will enable them complete school to confirm the significant others' initial expectations.

SCT has been selected to explain the relationship between school engagement and pupils' intention to complete school. The outcome variable- intention to complete school- was

chosen because of copious studies that have indicated that intentions account for a considerable proportion of variance in performance of various actual behaviors ( Baier et al., 2016; Ifinedo, 2017a; Malmstrong & Ogvist, 2018; Robinson, 2016).

Social cognitive theory has been utilized in a number of researches to explain the connections and predictive impact of self-efficacy and outcome expectancy on a wide variety of learners' behavior (Baier et al., 2016; Ifinedo, 2017a; Malmstrong & Ogvist, 2018; Robinson, 2016). Baier et al.(2016) explored the influence of social cognitive factors such as self-efficacy on freshman's intent to persist in college and highlighted that self-efficacy was a strong predictor for intentions to carry on in college. Additionally, Van Houtte, and Demanet (2016) found that teacher shared expectations of students was related with learners' intention to drop out of school.

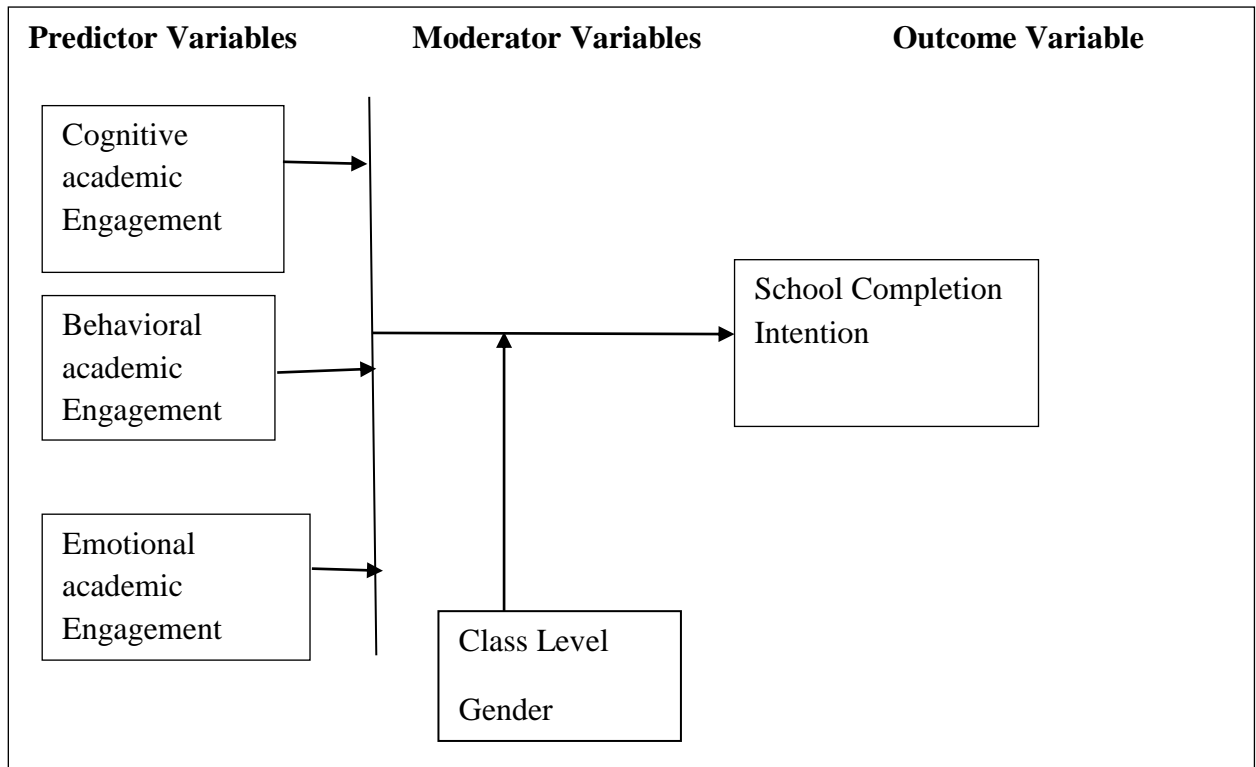
The outcomes of these studies back up the argument that the SCT can be useful to predict pupil's intention to complete school. Therefore, the current investigation confirms SCT accounted for a notable portion of variance in pupils' intention to complete school.

### 1.10.2 Conceptual Framework

Figure 1.1 shows the expected relationship between the criterion and the outcome variable.

**Figure 1.1**

*Hypothesized Relationship Among Study Variables*



*Note.* —————> Expected relationship

According to figure 1.1 levels of pupil's academic engagement; behavioral, cognitive and emotional were anticipated to correlate with intention to complete school. Principally, high score on each level of engagement was expected to correlate to high score in pupils' intention to complete school and the opposite was also true. Class level and gender were anticipated to moderate the relationship between pupils' academic engagement and the intention to complete school.

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

Behavioral Academic Engagement	Refers to pupils' practices and actions directed towards school and school experiences as indicated by a score in Student Engagement in School Questionnaire (SESQ).
Cognitive Academic Engagement	Refers to pupil's mental investments to academic activities revealed by a score in Student Engagement in School Questionnaire (SESQ).
Emotional Academic Engagement	Refers to positive affective reaction to school experiences indicated by a score in Student Engagement in School Questionnaire (SESQ).
Intention to Complete School	An indication of a pupil's readiness to complete school as indicated by a score on Graduation Intention Survey Questionnaire.
Student Academic Engagement	Refers to pupils' behavioral, emotional and cognitive connection to their learning indicated by a global score in Student Engagement in School Questionnaire (SESQ).

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

This chapter gives a description of reviewed studies based on the objectives of this study. Aligned to the first objective, this study reviewed the literature on the relationship between cognitive academic engagement and school completion intention. In the second objective, studies focusing on behavioral academic engagement and school completion intention were reviewed. Empirical studies on emotional academic engagement and school completion intention were also reviewed in the third objective. The fourth objective sought to determine the prediction equation cognitive, behavioural and emotional engagement on school intention. Finally, the summary of the studies reviewed and identification of gaps was done.

#### **2.2 Relationship Between Cognitive Academic Engagement and School Completion Intention**

Most researchers focused on global academic engagement from which findings related to cognitive academic engagement and school completion intention will be inferred. For instance, Mastrorilli (2016) examined the Educational Longitudinal Study of 2002 (ELS:2002) data, to establish the predictive relation between students' engagement and drop-out of students in the tenth grade in New York. The results indicated that global cognitive engagement was not a significant predictor of dropping out of school. However, further analysis of specific dimensions of cognitive engagement showed that persistence and mental effort were significant predictors of dropping out of school. Therefore, these findings imply that supporting students to develop positive cognitive engagement will reduce the intention to drop out and in turn increase students' intention to complete school which is the objective of the current study. Mastrorilli's study was done among high school students which may imply

that age could have influenced the results. Therefore, to get more informative results the present study investigated the same variables among the upper class pupils in primary schools and established that a relationship exist between them.

Similarly, Marôco et al. (2020) conducted a study to explore the prediction of dropout intentions based on students' engagement levels. The sample comprised 4,061 university students from developed countries, including Portugal, United Kingdom and the USA. Data - gathering was done through administration of online questionnaires and analyzed using SEM. The results indicated a noteworthy relationship, and student engagement emerged a significant variable in predicting dropout intentions. The findings suggested that student engagement should be considered as a key factor in enhancing students' commitment to completion of their studies. However, it was worth noting the study focused on university students who are older than current study's sample. This difference in age could have introduced biases in the results, given that engagement can be greatly influenced by age (Liinamaa et al., 2022). The study also did not report on the dimensions of the academic engagement. Thus, the current study was necessary to establish how cognitive academic engagement relates with school completion intention among pupils in Kenyan schools.

In a different setting, Pilotti et al. (2017) aimed to establish the connection among behavioral, cognitive, and emotional engagement, student performance, and properties of the online classroom in England. The study involved a large sample consisting of 4,639 students and 304 lecturers from Ashford University. The properties of online classroom examined were the class size and depth of discussion prompts. Students' performance was conceptualized as the class completion and discussion forums' grades. The study reported a direct link between students' cognitive engagement and the depth of discussion prompts. It was also revealed that

students behavioral and cognitive engagement reduced as the class size increased. Further, an observation was made that students' level of academic engagement significantly shaped the amount of time they spent engaging in learning task, which in turn affected task completion rate. Prompted by Pilotti et al's findings, the current research sought to establish whether cognitive academic engagement was related to intention to complete school among pupils' in upper classes in Tharaka Nithi County, Kenya.

In general, some researchers have established a link between personal factors and school dropout intention without outlining the specific factor. For example, Gatsi (2018) conducted a study investigate the effects of personal variables on dropping out of school in Zimbabwe. The researcher collected the first hand information from early school leavers to understand the issue of school dropout. The study employed a qualitative case study design. The research was anchored on Bronfenbrenner's Bioecological Theory of Human Development and Ajzen's Theory of Planned Behaviour (TPB). Purposive sampling method was used to select 22 early school leavers. To obtain data from them they were subjected to focus group discussions where they gave stories concerning their early school dropout. Also, the researcher engaged in face-to-face interview and recorded the explanations given by the interviewees. Lastly, documented life stories were obtained and used constructs the explanation behind dropping out of school. Findings of the study revealed that process of dropping out was more as result of personal factors. The study, however, did not shed light on which personal factors. Thus, it was of importance to examine pupils' cognitive academic engagement as one of the personal attributes connected to pupils' intention not to complete school in the present study.

Moreover, some researchers have made efforts linking different teaching approaches to student engagement, without any attempt to latter to students' academic outcomes. In support to this is a study conducted by Onzi et al. (2023) in Uganda to investigate the relationship between student engagement and teaching strategies. In order to assess this relationship, questionnaires were given to 341 students to obtain their information. The findings of the study demonstrated that student-centred strategies enhanced student engagement while teacher-centred strategies reduced it. However, this study did not investigate how student engagement relates to school completion, an objective addressed in the present study.

In Kenya, previous researchers have placed emphasis on academic engagement and academic achievement with little focus on school completion intention. In one study, Masila (2022) investigated the connection between academic engagement and academic achievement among Form Three students. Masila selected 417 students using random sampling and had them fill in the questionnaires to assess their academic engagement levels. Additionally, they were requested to disclose their academic mean scores as a measure of academic achievement. The study found a significant positive correlation between cognitive academic engagement and academic achievement. This outcome emphasized the importance of mental involvement on influencing students' academic outcomes. However, it is did not investigate how cognitive academic engagement relates to pupils' intention to complete school which was the primary aim for the current research.

Further research by Wara et al. (2018a) also established that cognitive engagement is a crucial antecedent of learners' academic achievement. The study was conducted among secondary school students in Manga Sub County, Nyamira County in Kenya. They employed quantitative-qualitative method approach. Concurrent triangulation design was also adopted.

They targeted form four students ( $N=1750$ ), principals ( $N=35$ ) and guidance and counseling teachers ( $N=35$ ). A random sample of 312 students was used to fill in the questionnaires. Results of analysis revealed that cognitive engagement significantly predicted academic achievement. However, the study did not link the cognitive engagement to school completion which was the objective of the current study. The current results further confirmed that cognitive engagement influence students to persist in their studies until completion.

Still in Kenya, some researchers have focused on variables related to school completion intention such as low rate of completion. For instance, Ayub (2018) study was interested at finding out the causes of low rates of completion especially among girls in primary schools. The study was done in Baringo County, Kenya. Researcher employed descriptive research design. Purposive, stratified and simple random sampling techniques were used to select schools, teachers and households respectively. Methods of data collection used included questionnaires and interview guide. The results of the study indicated higher completion rate in favour of boys. Additionally, the investigator noted that girl's primary school completion rates were impacted by factors external to the individual students such economic status of the parents, school-related variables, and cultural as well as social factors. The current study examined the association between pupils' personal variables such as cognitive academic engagement and its connection to intention to complete school.

### **2.3 Relationship between Behavioral Academic Engagement and School Completion**

#### **Intention**

Most researchers have emphasized the critical role played by behavioural academic engagement on influencing school completion intention. In one study, Robinson (2016) researched on the relation between students' behavioral, engagement and their school dropout

intention. The respondents comprised of 11<sup>th</sup> and 12<sup>th</sup> grade students ( $N=431$ ) drawn from two economically underprivileged urban high schools in southeastern Virginia. In this study the researcher examined the reasons for attending school, participation within the class and involvement with teachers as dimension tapping on behavioral engagement and how it relates to students' school dropout intention. The outcome of analysis highlighted a notable connection between behavioral engagement and students' plan to leave school early. In regard to these results, students' who reported high participation and involvement with school experiences also showed high intention to complete school. However, the location of the school may also have confounded the results. This could be explained by the contextual differences such variations in support systems which can influence learners' engagement and their intention to complete school. The current results further confirm that behavioral academic engagement positively influence pupils' intention to complete school in Kenyan context.

Some researchers have focused on the link between global academic engagement and school completion, yet there has been little focus on how specific aspects of academic engagement, such as behavioural engagement, relate to school completion intention. For example, Liinamaa et al. (2022) examined the association between adolescent engagement with their studies and their dropout intentions in upper secondary schools in Finland. To get the information, they administered questionnaires to 885 students twice, first at the end of grade nine and again at the beginning of upper secondary. Upon analysis, it was noted that school engagement was lower among grade ninth students, and this was associated with increased dropout intentions. The outcomes of the study showed similar trend among the upper secondary students at the onset of their studies; that is, as decrease in school engagement was linked to increase in the school dropout intentions. Nevertheless, it crucial to note that the

study was longitudinal and data was collected at different points in time and this could have introduced some bias in the results because of the loss of respondents. Thus, the current researcher collected data at a single time point to avoid such shortcomings and to obtain more reliable findings. This study further established a positive association between behavioral academic engagement and school completion.

Lerdpornkulrat et al. (2018) examined personal factors, such as engagement, and their association with college students' intentions to complete their degree in Thailand. Data was gathered from 1778 first year students at one institution, and a case study research design was utilized. The results showed that students' engagement was associated with their intentions to complete college. However, since the study took the case study approach, the obtained results could have been influenced by researchers' biases, which may have led to lack of accuracy. The present study opted to use randomly selected sample to address this shortfall.

The impact of behavioural engagement has also been explored among different populations of students such as its effect college students' intentions to complete their internship. A study by Hong et al. (2021) explored the connection between students' behavioural engagement with their school or firm and their internship participation in Taiwan. These researchers chose 332 students majoring in hospitality to complete online questionnaires. The study demonstrated that students' engagement with their school did not significantly impact on their intention to continue participating in the internships. However, behavioural engagement with the firm was positively associated with internship through perceived usefulness of internships. Though, these results suggest that engagement may have potential impact on intentions to persist in doing internship among college students, this may not be the case to their desire to complete school. As a consequence, the current researcher sought to

investigate how engagement links to pupils' contemplation to complete school in Kenyan contexts.

Research also highlights the significance of school participation as an indicator of behavioural engagement on intention to complete school. This is seen in Sripan, and Sujivorakul (2020) study that investigated into how school participation is linked to students' intention to continue their vocational education in Thailand. These researchers chose 277 students using convenient sampling and had them fill self-report surveys. These learners were 15 years old. The results showed that school participation had a positive impact on students' intention to persist in vocational education to the end. The study, however, relied on a convenient sample which may have made the obtained results unreliable. Therefore, the current study used scientifically sound techniques such as simple random sampling to select the respondents, thus enhancing the dependability of the results.

In Kenya, most studies examining completion intention have limitedly focused on socio-contextual factors, with few if any exploring the psychological variables such as behavioural engagement. In one study, Ndegwa (2019) investigated home, school, and social factors in relation to completion rate of boys in public day secondary schools in Embu County. The researcher targeted all day secondary schools with a total number of 2590 students, 25 principals and 220 teachers. Simple random and purposive sampling was used. Correlation research design was used as the research was relational in nature. Questionnaires and interview were the main methods of data collection used to collect data. Sample comprised of 208 students, 10 principals and 120 teachers ( $N=338$ ). The findings indicated that some of students did not complete secondary education, though; there was improvement in completion rate. While this study focused on home, school and social factors the current

study focused on student-related factors, academic engagement, in relation to intention to complete school.

Additionally, Muli (2014) did a study aiming to link school based factors and home based factors to students' school completion in Kitui County, Kenya. These researchers' designed a descriptive survey to collect information from the students. The sample was made up of twenty percent of the targeted population. The findings indicated that home based factors such poverty/ lack of fees, child labour, early marriages, lack of role models, illicit brew, motor bike bodaboda business and non-supportive parents were associated with reduced school completion. In regard to these findings, school based factors such as students' indiscipline, lack of guidance and counseling and poor performance did not foster school completion. In the study no attempt was made to investigate students' based variables in relation to school completion intention. Therefore, the current study sought to fill this gap by investigating pupils' related factors such as behavioral academic engagement in relation to school completion intention.

Still, Cherotich et al.(2019) conducted research to determine if repeating classes was contributing to rising wastage in education among girls in public secondary schools in West Pokot County, Kenya. The investigation was descriptive survey in nature. The questionnaires and interview schedules were utilized to gather data from the participants. The study revealed that class repetition had significant influence on girls' completion rates. These researchers focused on retention in relation to girls' completion rate. No attempt was made to investigate students' engagement in relation to intention to complete school, a key objective in the present inquiry.

## **2.4 Relationship between Emotional Academic Engagement and School Completion**

### **Intention**

Truta et al. (2018) reported a significant prediction model between emotional academic engagement and student's intention to leave school early among first year undergraduate in Romania, Europe. These researchers purported to establish the connection between academic engagement and intention to leave school early among the first year undergraduate. A total of 1063 students made up the sample of the study. The average age for the sample was 19.22. Two questionnaires were used to obtain information on academic engagement and intention to leave school early. In regard to this investigation, the extent to which students feel part of the school, or feels connected to other students relates to their intention to drop or not to drop out school. Despite these positive results the study was done among university students in European context. Since the study location and the level of students may have contributed to the obtained results, the present study was done in Tharaka Nithi County and within the context of primary school pupils to compare the results.

Schwab (2018) did a research to highlight the factors that could predict why students intend to leave school early in Austria.. The researcher focused on both special need students as well as those from regular classes in primary and secondary schools. The study aimed to establish whether any connection existed between positive student-teacher relationship and students' intention to end schooling early. The data was obtained from 4<sup>th</sup> to 7<sup>th</sup> grade students. The age range of students was 9-11 and 12-14. Data was analyzed using multiple regression analysis. Results of analysis showed that positive relation between student and teacher, a dimension of emotional engagement, was associated with reduced intention to abscond schooling early. Despite the fact that the positive results were reported it may be difficult to rule out the effects of context. To address this, the current research was done

within the context of Tharaka Nithi among primary school pupils for more informative results.

Van Houtte, and Demanet (2016) directed their research on the role of students' perception of their teachers' beliefs on intention to abscond school early. A large sample ( $N= 11,844$ ) comprising of students from 84 Flemish secondary schools was recruited. The results showed that teachers' beliefs and expectations about students influence their intention to quit. Therefore, students' knowledge of how they are perceived by the teacher plays a very important role on students' intention to quit school early. The current study investigated whether pupils' emotional academic engagement was related to pupils' intention to complete school in primary schools.

Some studies have focused on the prediction of intention to complete school from the global academic engagement, thus providing indirect insights into the link between emotional engagement and completion intention. For instance a study by Passeggia, et al. (2023) examined the connection between academic engagement and intention to dropout of school among university students in Italy. Five hundred and fifty six first year undergraduate majoring in science-related courses were conveniently selected to participate in the research. The results showed a direct link between engagement and dropout intentions of university students. The study stresses on the importance of engagement in reducing intentions to dropout of University students. However, the sample was conveniently selected hence not a true reflection of the population targeted. This sampling bias could have affected the results and reduced their reliability. Therefore, it was deemed crucial to investigate the link between emotional academic engagement and school completion intention using a random sample.

Other researchers have focused on the mediating role of emotional engagement rather than treating it a direct antecedent of school completion intention. This is reflected in a study by Tvedt, et al. (2021) who examined the impact of emotional engagement as a mediator in the relationship between teacher support and students' intentions to quit school in upper secondary in Norway. A large sample consisting of 1379 students were surveyed. The results demonstrated that teacher support was connected to students' intention to quit through emotional engagement, with a relationship when teacher supported and encouraged students' emotional engagement. Unlike the present study, the study did not investigate the direct relationship between emotional engagement and school completion intention.

Just like cognitive engagement, Wara et al. (2018b) links emotional engagement to learners' academic achievement in a study that was done in Nyamira County, Kenya. The study employed quantitative-qualitative method approach a way of triangulating data. Concurrent triangulation design was also employed. The study targeted form four students ( $N = 1750$ ), principals ( $N = 35$ ) and guidance and counseling teachers ( $N = 35$ ). A sample of the study consisted of 11 students' leaders, 11 principals and 11 guidance and counseling teachers. Results of analysis revealed a moderate, positive and significant correlation coefficient between the two variables. However, the study investigated emotional level of student engagement among form four students in a marginalized locale and not pupils in upper classes. Therefore, since the age of form four students may have confounded the results, it was necessary to conduct as study using primary school pupils as a sample of the study to be able to come up with more conclusive results.

## **2.5 Predictive Equation of Cognitive, Behavioral , Emotional Academic Engagement on School Completion Intention**

Examining the prediction role academic engagement aspects and their connection with students' intention to drop out school has been an area interest to many educational researchers. Truta et.al (2018) analyzed academic engagement in relation to intent of dropping out of school among first-year university students in Romania. The research sought to examine the various aspects of academic engagement as predictors of early intentions to dropout in Romania. A correlation research design was used. Questionnaires were administered to a sample of 1063 first-year students. The results revealed that only emotional academic engagement was a significant predictor of early dropout. Since these results may have been due to the population targeted it was paramount to consider conducting a similar study focusing on primary school pupils to get more informative results.

Similarly, Robinson (2016) investigated behavioral, emotional, and cognitive engagement as predictors of school dropout intentions. The respondents comprised of 11th and 12th grade students ( $N = 431$ ) drawn from two economically underprivileged urban high schools in southeastern Virginia. In this study the researcher measured behavioral engagement in terms of reasons for attending school. Emotional engagement was measured based on the students' attitudes towards their colleagues, teachers and the school, while cognitive engagement was measured on the basis of students' preference for engaging instructions as opposed to teacher lectures. The results showed that both cognitive engagement and emotional engagement are strong predictors of the intention to drop out of school. Behavioral engagement did not significantly predict school dropout intentions. However, the interpretation of these results is limited in context to high school students in Virginia. The current study analyzed whether the

three aspects of academic engagement would significantly predict the intent to complete school among primary school pupils in Kenyan context.

Locally, Masila (2022) conducted a study to investigate the predictive role of academic engagement on academic achievement among Form Three students in Kenya. Masila selected 417 students using random sampling and had them fill in the questionnaires to assess their academic engagement levels. Additionally, they were requested to disclose their academic mean scores as a measure of academic achievement. The regression analysis indicated that cognitive and emotional engagement moderately predicted academic achievement, suggesting that fostering these two dimensions of academic engagement can improve students' academic achievement. However, this may not be necessarily the case on students' school completion and this prompted the present researcher to investigate the predictive role of cognitive, behavioural and emotional academic engagement on pupils' intention to complete school.

Additionally, various researchers in Kenya have evaluated different predictors of the intention to complete school, such as home, school, and social factors (Muli, 2014; Nkirete, 2019). Other researchers have looked at one level of academic engagement in relation to other educational outcomes such as academic achievement as opposed to pupils' intention to complete school (Wara, et al. 2018a, Ayub, 2018). There is scarcity of studies focusing on the three dimensions of academic engagement as predictors of intention to complete school. Therefore, the current study looked into behavioral, emotional, and cognitive academic engagement as predictors of school completion intent using primary school pupils in Tharaka Nithi County.

## **2.6 Summary of Reviewed Literature**

Plentiful studies have documented the importance of students' academic engagement to students' success in education as indicated by among them increased retention, increased completion rates and better academic achievement. Some studies have focused on global student engagement and others have considered specific facets of student engagement and their connection to students' outcomes.

Specifically, relationship between student's cognitive academic engagement and intention to complete school has been a subject of study among many researchers. However, they have reported conflicting findings. More so, most of the studies are done among secondary schools and university students. Still, other studies that have considered primary school pupils in different grade such as grade ten. Additionally, mostly studied are done in developed countries in western contexts such in New York City, United States, Portugal and England. Studies done in African countries like in Zimbabwe and Uganda have looked at factors influencing student engagement and not how it relates to school completion intention.

Some researchers have also paid attention to the relationship between students' behavioural academic engagement and their intention to complete school. These studies have reported inconsistent findings. While some studies have reported a link between these two variables, others have found no significant correlation. Another concern is diverse methodology used in these studies, such as longitudinal and case study approaches, which could have influenced their outcomes and the strength of the relationship observed. Also, use of convenient sampling may have introduced biases into the data by inadvertently selecting respondents who were more willing to participate. This may have resulted to skewed data as well as limiting the extrapolation of results to other populations. Furthermore, the different

populations involved in studies such as college students, 12th graders and 9th graders from developed countries, thus whatever hold true to them may not apply to pupils in primary school in Kenyan context. Studies done in African countries like in Zimbabwe and Uganda have looked at factors influencing student engagement and not how it relates to school completion intention.

Emotional academic engagement and its relationship to intention to complete school has also attracted attention of some researchers. However, the outcomes of their studies are inconsistent which could be attributed to different study populations, study contexts and non-scientific research methodologies. Locally, existing studies have predominantly concentrated on the relationship between emotional engagement and academic achievement with little focus paid to its association with students' intention to complete school.

Moreover, researchers have also given significant attention to the predictive role of student engagement on student-related outcomes. However, there is scarcity of studies investigating the predictive role of cognitive, behavioural and emotional academic engagement on intention complete school. Few studies, though, have established these dimensions as significant predictors of school completion intention in developed countries like Romania and Virginia. Conversely, Kenyan-based research has demonstrated dimensions of students' academic engagement as significant predictor of academic achievement rather than school completion intention. Therefore, to fill these mentioned gaps in literature, it was imperative to conduct the current study in Tharaka Nithi County, Kenya.

## CHAPTER THREE

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction

This chapter begins with the aspects of research design, the location of the study and variables of the study. The target population, sampling techniques and sampling procedures are also described. In addition, the Sample size, piloting, validation and reliability of the instrument, data collection and analysis procedures are presented.

#### 3.2 Research Design

This study used correlational research design. Correlational research design was used because the researcher wished to discover relationship among the variables. This is in accordance to Mat et al. (2020) who posit that the design involves measurement of two or more relevant variables for each member of a selected sample and assessing whether a relationship exists between or among the variables. The design also allowed the researcher to reveal any possible relationships between variables and test hypotheses about correlational relationships. Therefore, the design was deemed suitable for the current inquiry because the researcher was concerned with investigating the relationship between academic engagement and pupils' school completion intention.

##### 3.2.1 *Research Methodology*

The study employed quantitative approaches to solicit data from the respondents. Quantitative approaches facilitated the collection of numerical data and use of statistical methods in data analysis (Mat et al., 2020).

### 3.2.2 Study Variables

The study variables and their scale of measurement are shown on Table 3.1

**Table 3.1**

*Variables of the Study*

Variable Type	Variable	Scale of Measurement
Predictor	Cognitive academic engagement	Interval
Predictor	Behavioural academic engagement	Interval
Predictor	Emotional academic engagement	Interval
Outcome	School completion intention	Interval
Intervening	Class	Nominal
Intervening	Gender	Nominal

### 3.4 Target Population

The target population for the study was all pupils in the 63 primary schools in Tharaka North Sub County. The population was narrowly defined to include only upper classes; that is; class six, seven and eight as the key respondents ( $N = 12, 250$ ). This is in accordance with Archambault and Dupéré (2017) who found that students' engagement level reduced as they progressed in years and from one grade to another. McKellar et al.(2020) study revealed that teaching practices are associated to students' engagement. They opined that teaching methods used in upper classes entail whole-class instruction unlike lower classes which is personalized instruction. Consequently, pupils' engagement is likely to be impacted, the reason the current researcher considered only upper classes.

### 3.5 Sampling Techniques and Sample Size

#### 3.5.1 Sampling Techniques

Purposive sampling was employed to choose the County and also to select classes, specifically, class six, seven and eight. Simple random sampling was used to choose schools and pupils who involved in the study.

#### 3.5.2 Sample Size

Two hundred and ninety five pupils were sampled randomly from the four selected primary schools in Tharaka North Sub County to participate in the study. The number of schools was determined using the Yamane sample size formula (Yamane, 1967). On the other hand, the number of pupils from each school was determined following the guidelines provided by Krejcie and Morgan (1970) sample size determination table. An overall sample of 295 pupils was selected. The use of table requires no further calculation as long as the population is known. The sampling frame and pupil's sample size are shown on the Table 3.2.

**Table 3.2**

*Sampling Frame and Sample Size*

School Zone	Schools	Sample Schools	Population	Pupils' sample size
Zone A	21	1	80	70
Zone B	10	1	95	76
Zone C	9	1	75	63
Zone D	23	1	110	86
Totals	63	4	360	295

*Note.* Adapted from Tharaka North County Education Office, 2020

### **3.6 Research Instruments**

In this study, a questionnaire was the main data collection tool. The questionnaire had three parts, namely: Student Engagement in schools questionnaire (SESQ) to measures students' academic engagement and School completion Intention Questionnaire to measure pupils' intention to complete school and demographic data section. The questionnaire is described as follows:

#### **i. Demographic Data Part**

The respondents were required to indicate their gender by choosing male or female, their age in years and their zone by selecting between the four zones. Respondents were also be asked to indicate their respective class by selecting six, seven or eight.

#### **ii. Student Engagement in Schools Questionnaire (SESQ) (Hart et al., 2011)**

Items to measure pupils' academic engagement were adapted from student engagement in schools questionnaire (SESQ) developed by Hart et al. (2011). Originally, the scale consists of four sub-scales constructed based on a five Likert-Scale. Only composite of student engagement in schools consisting of 33 items was used to collect data regarding pupils' academic engagement. The items were rated on a 5-point-likert type scale ranging from 1 (never) to 5 (Always). The negative worded items were reversed before they were entered into the computer for analysis. The expected minimum and maximum score for the scale were 33 and 265 respectively. High score on each sub-scale was taken to mean pupil's high cognitive/behavioural/emotional academic engagement. A number of studies exhibit a range of acceptable alpha levels from alpha .60 to alpha .90 (Mastrorilli, 2016; Stewart & Shanel,

2011; Truta et al., 2018). The scale demonstrated an acceptable coefficient alpha 0.82 that deemed it suitable for gathering data for this study. The scale is shown on appendix B.

### **iii. School Completion Intention Questionnaire (SCIQ)**

Pupil's intention to complete school was measured using 8 items. Six items were adapted from the Graduation Intention Survey questionnaire by Sutter and Paulson (2017), one item was adapted from O'Connell and Freney (2011) study and the last one item was adapted from Truta et al., 2018). The items were then modified to suite the context of the study. The items were ranked from 1 representing *very strongly disagree* to 7 *very strongly agree*. The expected minimum and maximum score for the scale were 8 and 56 respectively. Very high score indicated high intention to complete school.

## **3.7 Pilot Study**

Prior to the actual investigation, a pilot study was carried out in one primary school involving a random sample of 60 pupils in Tharaka Nithi County. The school was not to be part of the school to be sampled for the actual study. The pilot study also aided in pretesting the research instruments to ensure clarity of items and determine their validity and reliability.

### **3.7.1 Validity of the Instruments**

Content validity was determined by expert judgment from university supervisor. Their comments and suggestions were considered in the formulation of the final copy. Further, the guidance from the supervisor was used to line up the instruments to ensure they addressed the study objectives.

### 3.7.2 Reliability of the Instruments

The researcher used internal consistency to obtain the reliability alpha coefficients. To do this the researcher administered the questionnaires at the same time. The filled questionnaires were entered in SPSS for analysis to obtain Cronbach's alpha. According to Ranjit (2019) a high value of alpha (0.6 or more) will indicate that items in the questionnaire are highly correlated while a low value of alpha low correlation between items. The results of pilot study demonstrated acceptable coefficient alphas for SESQ and SCIQ, confirming that the scales were suitable for use in this study. The reliability alphas are as captured in Table 3.3.

**Table 3.3**

*Reliability Analysis of the Scales*

Scale	Items	$\alpha$
SCIQ	8	.67
SESQ	32	.82
Emotional academic engagement	9	.70
Affective liking for learning	5	.52
Affective liking for school	4	.60
Behavioural academic engagement	12	.66
Effort and persistence	9	.60
Extra curricula	3	.61
Cognitive academic engagement	11	.61

Table 3.3 shows that school completion intention questionnaire (SCIQ) and students' engagement with the school questionnaire (SESQ) had reliability alpha of 0.67 and 0.82 respectively. It is worth noting that one item on the cognitive academic engagement sub-scale had inter-item correlation of below zero and the Cronbach's alpha exceeding the scale alpha when the item is deleted. Therefore as stipulated by Cronbach (1951) the item was dropped

and only 32 items were used in the reliability analysis of the SESQ scale. The pilot study also shows that all three sub-scales of SESQ had adequate reliability as indicated by alpha .70 for emotional academic engagement, .66 for behavioral academic engagement and 0.61 for cognitive academic engagement. Thus, the scales and sub-scales were deemed to have sufficient reliability as argued by Streiner (2003) that reliability alpha of above 0.5 is acceptable.

### **3.8 Data Collection Techniques**

The researcher used questionnaires to gather information from the pupils. The researcher administered the questionnaires during normal class hours. Filling of the questionnaires took 30-35 minutes. Then, the filled up questionnaires were collected and kept by the researcher for eventual data analysis.

### **3.9 Data Analysis Procedures**

The process started with coding and cleaning of data for statistical analysis. Descriptive statistical procedures were used to describe and summarize the collected data. Inferential statistical procedures were utilized to test the study hypotheses at an alpha of 0.5. The following null hypotheses were advanced:

H<sub>01</sub>: There is no significant relationship between cognitive academic engagement and pupil's school completion intention (Pearson Product-Moment Correlation (PPMC)).

H<sub>02</sub>: There is no significant relationship between behavioral academic engagement and pupil's school completion intention (PPMC).

H<sub>03</sub>: There is no significant relationship between emotional academic engagement and pupil's school completion intention (PPMC).

H<sub>04</sub>: There is no significant predictive equation of cognitive , behavioral, and emotional academic engagement on pupils' school completion intention. (Multiple regression analysis)

### **3.10 Logistical and Ethical Considerations**

#### **3.10.1 Logistical Considerations**

The investigator acquired clearance from Graduate School of Kenyatta University. Afterwards, the application and collection of research permit from the National Council for Science, Technology and Innovation was done. It was presented to Tharaka Nithi County Director of Education for issuance of research authorization. The obtained research authorization was taken to the Tharaka North Sub-County Director of Education for permission to visit the selected schools. Finally, the researcher booked an appointment from primary school heads in charge of those schools to ask for permission and arrange on the appropriate time to collect data from the pupils.

#### **3.10.2 Ethical Considerations**

The researcher thoroughly explained the goal of the research and sought the consent from the parent of every pupil to participate in the study. Specifically, pupils were given consent letters to take to home to their parents for approval. Parents were to sign the consent letters and send them back with their children to school. Further, the researcher sought consent from primary school heads of the selected schools and teachers through a letter stating the goal of the study. Parents or guardians of the children were requested to sign consent form if they allowed their children to participate. The assurance of anonymity and confidentiality of the responses were made clear to participants. The researcher assured pupils that they would face no harm as a result of participating in the study.

## **CHAPTER FOUR**

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

#### **4.1 Introduction**

This chapter presents the findings guided by objectives stated in this study. First, the findings concerning the relationship between cognitive academic engagement and school completion intention are presented. This is followed by the outcomes regarding the link between behavioral academic engagement and school completion intention. Then, the outcomes on the connection between emotional academic engagement and school completion intention are given. Lastly, results on the prediction model relating cognitive academic engagement, behavioral academic engagement, and emotional academic engagement on school completion intention are presented. Also, the interpretations and discussions of the results are given for every objective.

#### **4.2 General and Demographic Characteristics**

This part highlights the details on questionnaires and also describes some of selected personal characteristics of the respondents.

skewness

##### **4.2.1 Return Rate**

Two hundred ninety five respondents were given the questionnaires to fill. 96.61% of questionnaires were returned out of which 10 questionnaires (3.39%) were discarded because the respondents failed to answer one section of the questionnaire. Therefore, 93.22% of the questionnaires were used for the data analysis. The return rate is as presented in Table 4.1.

**Table 4.1***Return Rate*

Questionnaires	Frequency	Percentage
Targeted	295	100
Returned	285	96.61
Discarded	10	3.39

**4.2.2 Respondents' Demographic Characteristics**

Respondents were required to provide data regarding their gender, class and age. The outcomes are as captured in Table 4.2.

**Table 4.2***Demographic Characteristics*

Variable	Categories	Age							
		<i>f</i>	%	Range	Mean	<i>SD</i>	<i>sk</i>	<i>kur</i>	Difference test
Gender	Boy	137	48.1	11-19	14.01	1.51	0.45	0.18	$t(283)=5.37, p < .01,$ 95% CI [0.55, 1.20]
	Girl	148	51.9	11-17	13.14	1.23	0.44	0.07	
Class	6	125	43.9	11-16	12.90	1.30	0.90	0.53	$F(2, 282) = 42.76, p < .01.$ * $M8 > M7 > M6.$
	7	83	29.1	11-19	13.60	1.26	1.18	3.21	
	8	77	27.0	13-17	14.59	1.20	0.41	0.71	
Overall	-	285	100	11-19	13.56	1.44	0.56	0.14	

*Note.* *F* = Frequency; *SD* = Standard deviation; *sk* = skeweness; *kur* = kurtosis; \*Post hoc comparisons using Scheffe test.

It is apparent from Table 4.2, that slightly above half of the respondents ( $N = 148$ ) translating to 51.9% were girls while boys ( $N = 137$ ) accounted for 48.1%. In terms of age, boys had a range of 11-19 years while girls had 11-17 years. The mean age for boys was higher 14.01 ( $SD = 1.51$ ) than that of girls which was 13.14 ( $SD = 1.23$ ).

Anova test revealed that the age difference by gender was statistically significant ( $t(283) = 5.37, p < 0.01$ ) with a confidence interval of 95% CL [0.55, 1.20]. Further, as seen in Table 4.2 more respondents came from class six ( $N = 148$ ), followed by those in class seven ( $N = 83$ ) and the least were drawn from class eight ( $N = 77$ ). The mean age for class six was 12.90 ( $SD = 1.30$ ), class seven was 13.60 ( $SD = 13.60$ ) and class eight was 14.59 ( $SD = 1.20$ ). Post hoc comparison using scheffe test revealed that mean age for class 8 was statistically larger than class seven which was statistically larger than the class six ( $F(2, 282) = 42.76, P < .01$ ).

Afterwards the results of the study are reported. This commences by reporting descriptive values for each variable, hypotheses findings, interpretation and finally discussions of the results.

### **4.3 Relationship Between Cognitive Academic Engagement and School Completion**

#### **Intention**

#### ***4.3.2 Description of Cognitive Academic Engagement and School Completion Intention***

Descriptive analysis was conducted on cognitive academic engagement and school completion intention and the findings are as given out in Table 4.3.

**Table 4.3**

*Descriptive statistics for Cognitive Academic Engagement and School Completion Intention*

	Range	<i>M</i>	SD	Sk	kur
Cognitive engagement	24	45.95	4.92	-0.70	0.37
School completion intention	30	44.93	6.21	-0.20	-0.24

*Note.* *M* = Mean; *SD* = Standard deviation; *sk* = skewness; *kur* = kurtosis

As it can be seen from Table 4.3, the mean for cognitive academic engagement scores was 45.95 (*SD* = 4.92) and a range of 24. Also, cognitive academic engagement scores had a skewness of -.70 and kurtosis of 0.37. These values were below one indicating that they were normally distributed (Demir, 2022).

As the Table 4.3 illustrates, school completion intention scores had a range of 26-56 and a mean score of 44.93 (*SD* = 6.21). Just like the cognitive academic engagement the scores were normally distributed as indicated by skewness of -0.20 and a kurtosis of -0.24.

#### **4.3.3 Hypothesis Testing for $H_{01}$**

The first objective aimed to establish the relationship between cognitive academic engagement and school completion intention of pupils in upper classes in primary schools.

To test it, the following null hypothesis was stated:

$H_{01}$ : There is no significant relationship between cognitive academic engagement and school completion intention of pupils in upper classes in primary schools.

This hypothesis was tested using bivariate correlation analysis, specifically, the Pearson Product Moment Correlation (PPMC) and the output is given in Table 4.4.

**Table 4.4***Correlation Between Cognitive Academic Engagement and School Completion Intention*

	1	2
1. Cognitive academic engagement	-	
2. School completion intention	.50**	-

*Note.*  $N = 285$ .

\*\* $p < .01$

According to data presented in Table 4.4, there is a significant positive moderate correlation between cognitive academic engagement and school completion intention of pupils in upper classes ( $r(283) = .50, p < .001$ ). Therefore, null hypothesis was rejected and a conclusion made that cognitive academic engagement is associated with school completion intention. The results indicate that pupils with high cognitive academic engagement have high intention to complete school. Thus, strengthening pupils' cognitive academic engagement will raise their intention to complete school.

#### ***4.3.4 Discussion of the Results for Hypothesis One***

The first objective examined the relationship between cognitive academic engagement and school completion intention of pupils in upper classes. The results revealed that cognitive academic engagement was significantly and positively related to school completion intention of pupils in upper classes. The present results are in agreement with Mastrorilli (2016) who found that cognitive engagement significantly predicted school dropout intention among high school students. From these findings, an observation can be made that developing positive cognitive academic engagement will reduce school dropout intention of both secondary school students and pupils in upper classes.

The current results seem to match those of Pilotti et al. (2017) who reported direct link between students' cognitive engagement and the depth of discussion prompts in an online class. Students' cognitive engagement influenced the extent and the length of interaction with the learning task and whether or not they completed the task. Based on these results cognitive academic engagement is assumed to influence students' performance in an online class. In respect to the present study, cognitive academic engagement increase pupils' intention to complete school.

Consistent with the present results, Marôco et al. (2020) conducted a study exploring the prediction of dropout intentions based students' engagement levels. They found a noteworthy relationship, and student engagement emerged a significant predictive variable for dropout intention. These findings suggest the importance of considering student engagement as a key factor in enhancing students' commitment to complete their studies regardless of their age. The current study, however, was specific in studying the link between various dimensions of the academic engagement and school completion intentions. It found a close connection between cognitive academic engagement and school completion intention among pupils in Kenyan schools.

The current findings match those reported by Masila (2022) who conducted a study in Kenya to investigate the connection between cognitive engagement and academic achievement among Form Three students. The study found a significant positive correlation between cognitive academic engagement and academic achievement. This outcome emphasized the importance of mental involvement on enhancing students' academic outcomes.

In harmony with the present results, Gatsi (2018) study revealed that the learners drop out of school due to personal factors. While Gatsi did not specify which personal factors, the current results are very crucial as they link cognitive academic engagement as one of the personal attributes connected to pupils' intention to leave school early.

The present results support Wara et al. (2018a) study that demonstrated that students' cognitive academic engagement is very important in influencing learner- related outcomes such academic achievement. As pointed out in the current study, cognitive academic engagement has a positive connection to pupils' school completion intention. These results stress on the importance of training pupils on mental activities such as how to link the content to previously learned, using examples to understand important concepts and relating different contents learned at school. This will enhance the cognitive academic engagement which subsequently will increase their intention to complete school.

Ayub (2018) linked low completion rates of girls to external factors such as variables related to economic status of the parents, cultural setting and school related factors, and the present results identified pupil individual factors such as cognitive academic engagement as a significant predictor of pupils' school completion intention. Also, it was noted that cognitive academic engagement influenced school completion intention for both girls and boys.

## 4.4 Relationship Between Behavioral Academic Engagement and School Completion

### Intention

#### 4.4.1 Description of Behavioral Academic Engagement

In order to relate behavioural academic engagement to school pupils' school completion intention, the researcher first conducted descriptive analysis on these two variables. Table 4.5 presents the output on behavioral academic engagement.

As it can be seen from Table 4.5, behavioral academic engagement had range of 36 with a mean of 48.50 ( $SD = 6.56$ ). The overall sub-scale had a skewness and kurtosis of below one indicating that the scores were normally distributed.

**Table 4.5**

*Descriptive statistics for Behavioral Academic Engagement*

	Range	<i>M</i>	<i>SD</i>	<i>sk</i>	<i>kur</i>
Behavioural academic engagement	36	48.50	6.56	-0.69	0.93
Effort and persistence	26	35.58	5.71	-0.23	-0.54
Extracurricula	12	12.92	2.18	-1.68	3.94

*Note.* *SD* = Standard deviation; *sk* = skewness; *kur* = kurtosis

The sub-scale of effort and persistence had a range of 26 with a mean of 35.58 ( $SD = 5.71$ ). The scores on this sub-scale were normally distributed as shown by the skewness and kurtosis values which were within the range of 0-3 as argued by Griffin and Steinbrecher (2013).

Extracurricular sub-scale had a range of 12 and the mean of 12.92 ( $SD = 2.18$ ). The skewness value was below two (-1.68) and kurtosis below four (4). These values show that the scores had a shape of normal distribution as specified by Griffin and Steinbrecher (2013)

who postulate that skeweness values of between -3 to +3 and kurtosis values of -10 to +10 fall within the acceptable range.

#### ***4.4.2 Hypothesis Testing for Objective Two***

The second objective aimed to determine the relationship between behavioral academic engagement and school completion intention of pupils in upper classes in primary schools.

To realize it, the subsequent null hypothesis was set:

H<sub>02</sub>: There is no significant relationship between behavioral academic engagement and school completion intention of pupils in upper classes in primary schools.

Behavioral academic engagement had two aspects; effort and persistence, and extracurricular aspect which called for setting of two supplementary hypotheses:

H<sub>02a</sub>: There is no significant relationship between effort and persistence aspect of behavioral academic engagement and school completion intention of pupils in upper classes in primary schools.

H<sub>02b</sub>: There is no significant relationship between extracurricular aspect of behavioral academic engagement and school completion intention of pupils in upper classes in primary schools.

Bivariate correlation using PPMC was used to test the main and the supplementary hypotheses as given in Table 4.6.

Data in Table 4.6, shows that the sub-scales had moderate (0.53) to strong (0.95) correlations with the overall behavioral academic engagement scale. This means they were all testing the same construct.

**Table 4.6***Correlation Between Behavioral Academic Engagement and School Completion Intention*

Variable	1	2	3	4
1. Behavioural academic engagement	-			
2. Effort and persistence aspect	.95**	-		
3. Extra curricular aspect	.53**	.23**	-	
4. School completion intention	.40**	.41**	.12*	-

Note.  $N = 285$ .

\*\* $p > .01$ ; \* $p < .05$ .

It can also be noted that behavioural academic engagement had significant moderate positive correlation with school completion intention of pupils in upper classes ( $r(283) = .40$ ,  $p > .001$ ). This presented a strong ground for rejecting null hypothesis. Therefore, the alternative hypothesis was accepted that, the more pupils are engaged in learning activities, the higher their intention to complete school.

Similarly, effort and persistence aspect had a significant moderate positive correlation with school completion intention ( $r(283) = .41$ ,  $p > .001$ ). Also, a significant weak positive correlation was reported between extracurricular aspect and school completion intention ( $r(283) = .21$ ,  $p < .05$ ). Thus, the two supplementary null hypotheses were rejected. The results imply that the pupils who put more effort and are persistent in learning tasks as well as in extracurricular activities have higher intention to complete the school.

#### **4.4.3 Discussion of the Results for Hypothesis Two**

With respect to the second hypothesis, a significant moderate positive correlation was reported between behavioural academic engagement and school completion intention of

pupils in upper classes in primary schools in Tharaka Nithi County. The present results match Robinson (2016) who reported a significant relationship between behavioral engagement and students' intention to leave school early. In regard to these results, learners' who show high participation and involvement with school experiences have high intention to complete school.

The present results are also in agreement with Lerdpornkulrat, et al. (2018) study that demonstrated a significant association between student's engagement and their intention to continue college schooling. When students' level of participation with school activities increases the same happens to their intention to complete college degree.

In support of these findings, Hong et al., (2021) study highlighted an indirect link between students' behavioural engagement with school activities and the intention to complete internship. First, behavioural engagement increased students' perceived value for completing internship. This later enabled them to engage positively to learning activities which in turn motivated their intentions to continue with internship to the end.

In agreement to the present research is Liinamaa, et al.'s (2022) study that examined the association between adolescent engagement with their studies and their dropout intentions in upper secondary schools in Finland. These researchers reported that school engagement was lower among grade ninth students, and this was associated with increased dropout intentions. The outcomes of the study showed similar trend among the upper secondary students at the onset of their studies; that is, decrease in school engagement was linked to increase in the school dropout intentions.

Consistent with this research, Sripan, and Sujivorakul (2020) confirms that behavioural engagement has a significant relationship with students' intention to persist in vocational education. From these findings it can be argued that students who participate more in school activities are likely to have high intention to complete school.

An important issue addressed by the current findings, is that students-related factors such as behavioural academic engagement just like contextual factors highlighted in previous studies influence school completion intention and rate. For instance, Ndegwa (2019) linked home, school, and social factors to completion rate of boys in public day secondary schools in Mbeere South Sub County, Embu County. Yet another study by Muli (2014) indicated that home based factors such poverty/ lack of fees, child labour, early marriages, lack of role models, illicit brew, motor bike bodaboda business and non-supportive parents were associated with reduced school completion. Cherotich et al. (2019) revealed that class repetition had significant influence on girls' completion rates in public secondary schools in Pokot South Sub County, Kenya.

## **4.5 Relationship Between Emotional Academic Engagement and School Completion**

### **Intention**

#### ***4.5.1 Description of Emotional Academic Engagement***

For the purpose of relating emotional academic engagement to school completion intention, descriptive analysis was conducted on emotional academic engagement and its dimensions.

The outcomes were as displayed in Table 4.7.

**Table 4.7***Descriptive Statistics for Emotional Academic Engagement, and its Dimensions*

	Range	<i>M</i>	<i>SD</i>	<i>sk</i>	<i>kur</i>
Emotional academic engagement	32	34.43	4.15	-2.91	15.66
Affective liking for learning	16	17.07	2.22	-2.44	11.47
Affective liking for school	16	17.36	2.56	-2.01	6.88

*Note.* *N* =285; *SD* = Standard deviation; *sk* = skewness; *kur* = kurtosis.

As seen in Table 4.7, the data for emotional academic engagement was not normally distributed as reflected by the skewness and kurtosis values. The data were thus transformed using reflection and log 10 transformations. The transformed data were as presented in Table 4.8.

**Table 4.8**

*Descriptive Statistics for Transformed Emotional Academic Engagement and School Completion Intention Scores*

Variable	<i>M</i>	<i>SD</i>	<i>Sk</i>	<i>kur</i>
Emotional academic engagement	0.74	0.26	-0.54	1.11
Affective liking for school	0.47	0.29	-0.09	-0.62
School completion intention	0.99	0.35	-1.63	2.29

*Note.* *N* = 285; *SD* = Standard deviation; *sk* = skewness; *kur* = kurtosis.

Information displayed in Table 4.8, emotional academic engagement scores had a mean of 0.74 (*SD* = 0.26). The values of skewness and kurtosis were all below one for the overall scale. The sub-scale of affective liking for learning had a mean of 0.53 (*SD* = 0.24) with the

affective liking for school having a mean 0.47 ( $SD = 0.29$ ). The skewness and kurtosis values for the sub-scales were below one.

#### 4.5.2 Hypothesis Testing for Objective Three

In the third objective, the researcher aimed to link emotional academic engagement to school completion intention of pupils in upper classes in primary schools. To realize it, the following null hypothesis was set:

H<sub>03</sub> : There is no significant relationship between emotional academic engagement and school completion intention of pupils in upper classes in primary schools.

Emotional academic engagement consisted of two aspects; that is, affective liking for learning and affective liking for school. In order to test how they were connected to school completion intention two supplementary hypotheses were formulated:

H<sub>03a</sub> : There is no significant relationship between affective liking for learning and school completion intention of pupils in upper classes in primary schools.

H<sub>03b</sub> : There is no significant relationship between affective liking for school and school completion intention of pupils in upper classes in primary schools.

A bivariate correlation using Pearson Product Moment Correlation was computed to test the main and the supplementary hypotheses and the results were as presented in Table 4.9.

**Table 4.9**

*Correlations Between Emotional Academic Engagement, and School Completion Intention*

	1	2	3	4
1. Emotional academic engagement	-			
2. Affective liking for learning	.81**	-		
3. Affective liking for school	.80**	.35**	-	
4. School completion intention	.39**	.32**	.29**	-

Note. N= 285

\*\* $p < .01$ (2-tailed).

From the data in Table 4.9, there was a significant moderate positive correlation between emotional academic engagement and school completion intention ( $r(283) = .39, p < .001$ ). This provided strong ground to reject the null hypothesis, and support the idea that increase in emotional academic engagement, pupils' intention to complete school will also increase. Similarly, a significant moderate positive correlation was reported between affective liking for learning dimension of emotional academic engagement and school completion intention ( $r(283) = .32, p < .01$ ). Affective liking for school had a significant weak positive correlation with school completion intention ( $r(283) = .29, p < .01$ ). These correlations indicate that if affective liking for learning and school goes higher, pupils' intention to complete school will also go higher.

#### ***4.5.3 Discussion of the Results for Hypothesis Three***

The third objective explored the relationship between emotional academic engagement and school completion intention. First, Pearson Product Moment Correlation was conducted on overall emotional cognitive engagement and school completion intention. A significant moderate positive correlation between emotional academic engagement and school completion intention was found. Second, the correlation between school completion intention and the two dimension of emotional cognitive engagement, that is, affective liking for learning and affective liking for school was conducted. A notable positive correlation was found between the two dimensions and school completion intention.

These results are supported by Truta et al. (2018) who reported a significant prediction model between emotional academic engagement and student's intention to drop out of school among first year undergraduates in Romania in Europe. In regard to these results, the extent to which students feel part of the school, or feel connected to other students relates to their

intention to drop or not to drop out school. The fact that positive correlations were obtained among the sample of university students as well as among pupils in upper primary classes, indicate that emotional academic engagement is crucial in raising school completion intention across the categories of learners.

The present findings also match those of Schwab (2018) research that aimed to establish whether any connection existed between positive student-teacher relationship and students' intention. These outcomes imply that helping learners to be more emotionally engaged in the learning and other school activities may increase their intention to complete school across education contexts leave school early. Results of analysis showed that emotional engagement in terms of positive relation between student and teacher was associated with reduced intention to leave school early.

The current outcomes are confirmed by Passeggia et al. (2023) study that examined the connection between academic engagement and intention to dropout of school among university students in Italy. They reported a direct link between engagement and dropout intentions of university students. The study laid emphasis on the importance of increasing engagement in reducing students' inclination to consider dropping out of school.

The current findings are supported by Tvedt et al (2021) who examined the impact of emotional engagement as a mediator in the relationship between teacher support and students' intentions to quit school in upper secondary in Norway. They demonstrated that teacher support was connected to students' intention to quit through emotional engagement, with a strong relationship when teacher supported and encouraged students' emotional

engagement. While these researchers reported indirect relationship, the present study found direct relationship between emotional engagement and school completion intention.

Van Houtte, and Demanet (2016) also confirms the current findings through their research that found that teachers' positive beliefs and expectations concerning students was linked to reduced school dropout intention. The results pointed out that students' knowledge of how they are perceived by the teacher plays a very important role on students' intention to quit school early. Students' perception that they are liked by the teachers, increase their affection for learning as well as for school which makes them to persist and complete school.

The present results are in harmony with previous studies that demonstrated the importance of increasing emotional academic engagement on learners' academic outcomes. For example, Wara et al. (2018b) found an association between emotional engagement and academic achievement of secondary school students in Kenya. On the other hand, the current study found that increasing emotional academic engagement of pupils was associated with more intention to complete school. Therefore, it can be concluded that emotional academic engagement positively influences a range of academic related outcomes at different ages of learners.

#### **4.6 Predictive Equation of Cognitive, Behavioral and Emotional Academic Engagement on School Completion Intention**

##### ***4.6.1 Testing of Assumptions for Regression Analysis***

The fourth objective aimed to establish the prediction of school completion intention from cognitive academic engagement, behavioural academic engagement and emotional academic engagement.

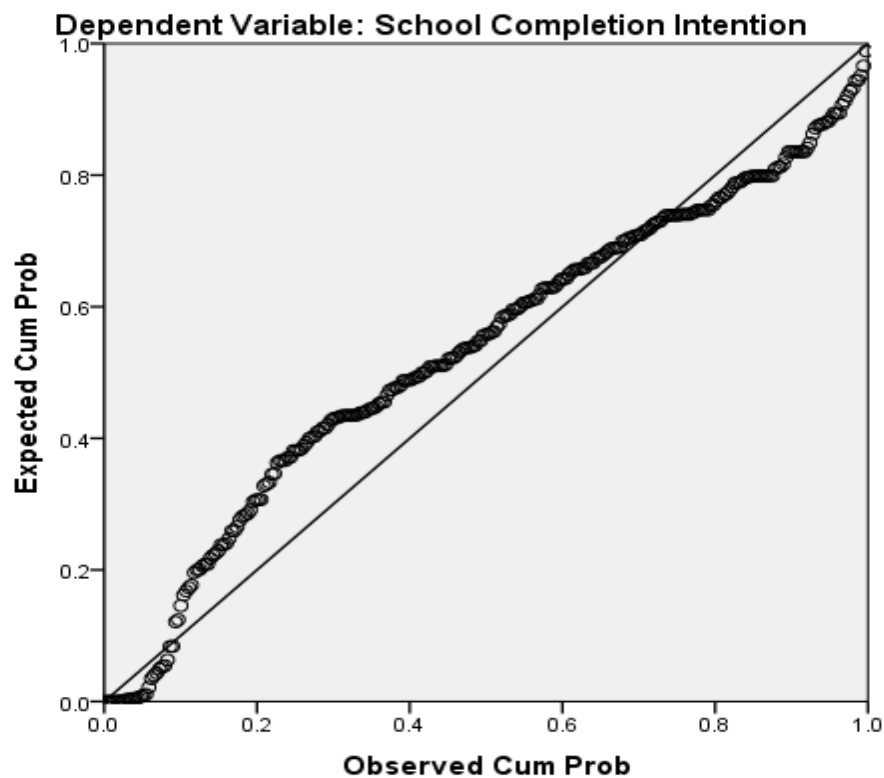
To analyze this objective, a multiple linear regression analysis was used. In this regard, the researcher began by addressing the assumptions that must be observed for this test. They included the assumption of normality, homoscedacity and multicollinearity.

First the assumption of normality was tested. This assumption was checked using normal probability plot (P-P plot). The purpose was to check whether data was normally distributed.

The results on normality are as given in Figure 4.1

**Figure 4.1**

*Normal P-P Plot for Standardized Residuals*

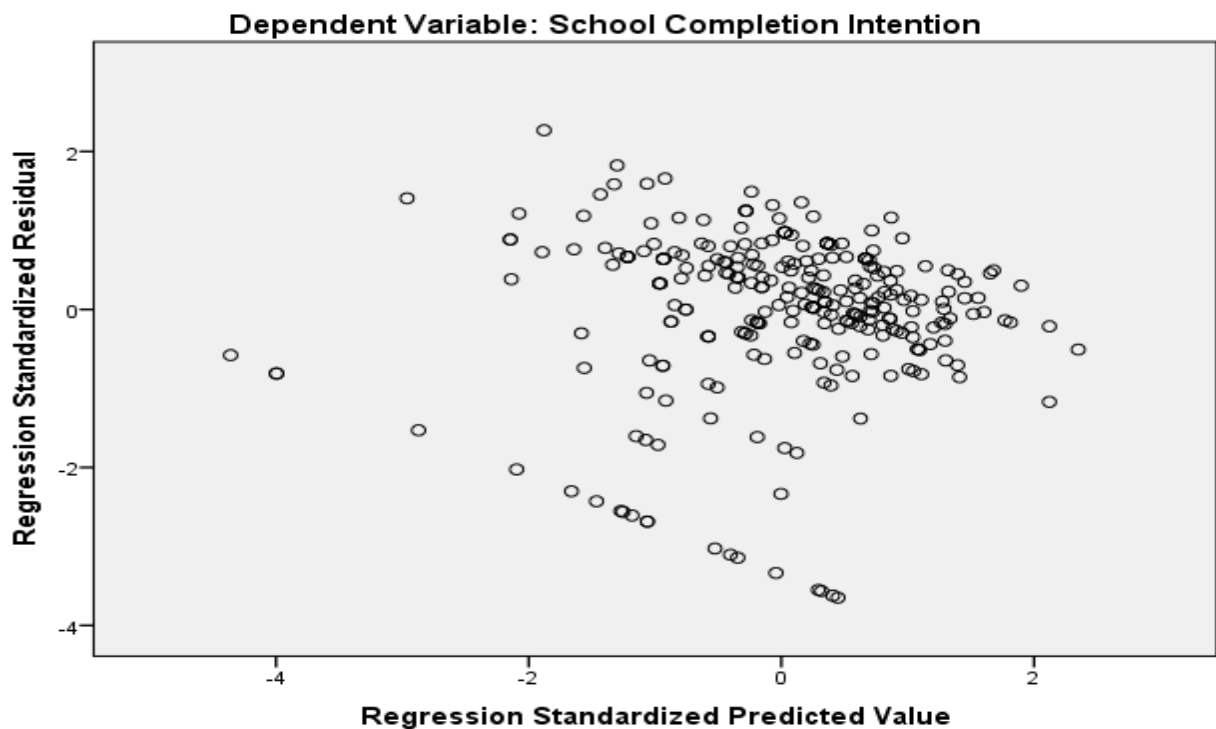


As observed in Figure 4.1, normal P-P plot for standardized residuals indicated that the data points were close to the diagonal line. This was an indicative of a normally distributed error terms, hence the assumption of normality was met.

Further, the researcher tested the assumption of homoscedacity. To check whether the residuals were equally distributed this assumption was tested. The results are as captured in Figure 4.2.

**Figure 4.2**

*Scatter Plot for Standardized Residuals*



As presented in Figure 4.2, the scatterplot of residuals show that the data are equally distributed which means that the assumption of homoscedacity was met. In addition, the assumption of multicollinearity was tested.

This assumption was tested using Variance Inflation Factor (VIF) values to ascertain that no predictor variable that was strongly correlated with the other. The results are as shown in Table 4.10.

**Table 4.10***Collinearity Test of the Predictor Variables*

	Collinearity Statistics	
	Tolerance	VIF
Cognitive academic engagement	.65	1.53
Emotional academic engagement	.60	1.66
Behavioural academic engagement	.78	1.27

As shown in Table 4.10, each VIF value is below 10.00 which indicate the predictor variables were not highly correlated. The results indicated an absence of multicollinearity among the predictor variables, hence the assumption was met (cognitive academic engagement, Tolerance = 0.65, VIF = 1.53, emotional academic engagement, Tolerance = 0.60, VIF = 1.66, behavioural academic engagement, Tolerance = 0.78, VIF = 1.27). High correlation between the predictors could make it difficult to associate the variance in the outcome variable to a specific predictor and also lead to inaccurate inferences.

**4.6.2 Hypothesis Testing for Objective Four**

To test the prediction of school completion intention based on cognitive academic engagement, behavioural academic engagement and emotional academic engagement, a multiple regression analysis was used. The regression model summary results are as displayed in Table 4.11.

**Table 4. 11***Model summary*

Model	<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	<i>SEE</i>
1	.54 <sup>a</sup>	.29	.28	.29

*Note.* *N* = 285. *SEE* = standard error of the estimate

The results presented in Table 4.11, indicate that there was a moderate positive correlation (*R* = .54) between the school completion intention and the three predictors, that is, cognitive academic engagement, behavioural academic engagement and emotional academic engagement. The data also shows that the variability of school completion intention accounted by the three predictors was only 29%. To establish the contribution of single predictor variable, analysis of variance test was conducted and the regression coefficients are given in Table 4.12.

**Table 4.12***Regression Coefficients for Cognitive, Behavioral and Emotional Academic Engagement*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
(Constant)	.17	.08		2.12	.03
1 Emotional academic engagement	.10	.09	.08	1.21	.23
Behavioural academic engagement	.23	.07	.18	3.22	.00
Cognitive academic engagement	.54	.09	.39	6.26	.00

*Note.* *N* = 285.

It is evident from Table 4.12 that cognitive academic engagement had the greatest weight (*B* = 0.54, *t* = 6.26, *p* = .00) followed by behavioural academic engagement (*B* = 0.23, *t* = 3.22, *p* = .00) and their contributions were statistically significant as reflected in their *p* values. Emotional academic engagement had the least and non-significant contribution to school completion intention (*B* = 0.10, *t* = 1.21, *p* = .23). Further, Anova was used to test whether the

regression model was significant, and the results of the prediction model are as captured in Table 4.13.

**Table 4. 13**

*ANOVA for the Prediction Model<sup>a</sup>*

Model		SS	df	MS	F	p
	Regression	9.98	3.00	3.33	38.60	.00 <sup>b</sup>
1	Residual	24.21	281.00	.09		
	Total	34.19	284.00			

*Note. N = 285.*

<sup>a</sup>Predictor variables: Cognitive Academic Engagement, Behavioural Academic Engagement, Emotional Academic Engagement,

Information in Table 4.13 indicate a statistically significant regression equation between dependent variable which was school completion intention and the three predictor variables which were cognitive academic engagement, behavioural academic engagement and emotional academic engagement ( $F(3, 281) = 38.60, P = .00$ ), with an  $R^2$  of .29. cognitive and behavioural academic engagement were found to be significant predictors of school completion intention. This gave a strong ground to reject the null hypothesis and conclude that at least two of the predictors had a significant influence on school completion intention.

#### **4.6.3 Discussion of the Results for Hypothesis Four**

The fourth hypothesis stated that there is no significant prediction of cognitive academic engagement, behavioral academic engagement and emotional academic engagement on pupils' school completion intention. This study revealed a statistically significant prediction

of school completion intention from cognitive, behavioural and emotional academic engagement. These results agree with Truta et.al. (2018) study that analyzed academic engagement in relation to intent of dropping out of school among first-year university students in Romania. The results revealed that only emotional academic engagement was a significant predictor of intention to drop out school early. In contrast, in the current research only cognitive and behavioural academic engagement were found to be significant predictors of school completion intention. The explanation could be due to different research instruments used to gather the data and the way the construct were operationalized.

The current findings also match those of Robinson (2016) who investigated behavioral, emotional, and cognitive engagement as predictors of school dropout intentions and found that both cognitive and emotional academic engagement are strong predictors of the intention to drop out of school. Behavioral academic engagement did not significantly predict school dropout intentions. In the Robinson's study, emotional engagement was measured as students' attitudes towards their peers, teachers and the school, while cognitive engagement was measured as students' preference for engaging instructions as opposed to teacher lectures. Behavioral engagement was conceptualized as reasons for attending school which differs from the current study that looked at it as pupils' practices and actions directed towards school and school experiences. This could explain the difference in results regarding behavioural academic engagement and school completion intention. These results imply that increment in aspects of academic engagement is associated with increased pupils intention to complete school.

This study is also supported by Guajardo-Leal et al. (2019) results that indicated a significant prediction of students' course completion from students' engagement. These researchers

measured students' engagement in terms of frequency of participation in forum and assignment exercise for behavioural engagement, satisfaction with the course for emotional engagement and strategies employed for course learning activities for cognitive engagement. A closer look at these results indicate that the more students are engaged with school experience the higher the chances that they have high intention to complete school.

The current findings are backed up by Masila (2022) who found out that cognitive and emotional engagement were moderate predictors, however, this time not of school completion intention but academic achievement. Similarly, Brallier (2020) explored the prediction of academic achievement from student's engagement among college students. The study reported that cognitive, behavioural and emotional engagement were significant predictors of academic grades. In the same vein, Delfino (2019) reported similar results that the three dimensions of student's engagement were significant predictors and contributed 1.8% of variance in academic engagement of university students. Both the earlier and current results confirm that academic engagement is very important for better academic grade as well as increasing pupils' intention to complete school.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter captures the summary and conclusions of results per objective, suggested recommendations for education related policies and lastly, the recommendation on possible future areas of research.

#### 5.2 Summary of the Study Results

The first objective of this study was set to determine the relationship between cognitive academic engagement and school completion intention of pupils in upper classes in Tharaka Nithi County. Cognitive academic engagement was found to have a statistically significant correlation with pupil's school completion intention. One important implication of this finding is that pupils who are more mentally invested in academic activities will demonstrate high school completion intention. This is because these pupils are more likely to employ effective cognitive strategies such as thinking of how applicable the information they learn is, writing main points while reading and linking the previous learned information to present. This in turn will be associated with positive outcomes that could raise their intention to complete schools.

The second objective of this research aimed to explore the link between behavioural academic engagement and school completion intention. It was identified that behavioural academic engagement was significantly correlated to school completion intention of pupils in upper classes. This finding suggests that pupils who participate more in school activities in terms of putting effort in reading for exams, doing class activities such as assignment and persisting in challenging tasks have higher probability of completing school.

The third objective tested whether emotional academic engagement was related to school completion intention of pupils in upper classes. The results indicated a positive significant correlation between emotional academic engagement and school completion intention. These results support the idea by earlier researchers that when learners feel connected to learning activities at school and school in general, they are likely to persist in school and demonstrate high intention to complete school. Emotionally engaged pupils are more likely to have a lot of interest in learning and school hence lower risk of wanting to drop out of school early.

The investigation on whether cognitive, behavioural and emotional academic engagement could predict school completion intention formed the fourth objective. It was identified from the analysis that the prediction model was a good fit for the data. Cognitive and behavioural academic engagement had significant contribution on pupil's intention to complete school. However, emotional academic engagement had insignificant contribution on school completion intention. Among the three dimensions of academic engagement, the best predictor was cognitive academic engagement followed by behavioural academic engagement. The least predictor was emotional academic engagement. Jointly the three predictors accounted for a very small variance (17%) on school completion intention. These observations call for teachers and school to come up with ways to increase pupils' academic engagement in order to reduce intentions to leave school early.

### **5.3 Conclusions**

Overall, this study found that academic engagement was statistically correlated with school completion intention of pupils in upper classes in Tharaka Nithi County. Relating individual dimensions of academic engagement to school completion intention a number of conclusions can be made.

The findings of the first objective revealed a significant correlation between cognitive academic engagement and school completion intention of pupils in upper classes in Tharaka Nithi County. This observation suggests that the more invested pupils are in learning the higher their intentions to complete school. Therefore, based on these findings, it can be concluded that it is crucial for teachers and school administrators to design interventions aimed at improving pupils' academic engagement. Such interventions can be scaffolding pupils in learning tasks, encouraging pupils' autonomy and control over their learning activities and also giving students tasks that tap to their interest and within their cognitive level.

Regarding the second objective, a significant positive relationship was reported between behavioral academic engagement and school completion intention of pupils in upper classes in Tharaka Nithi County. Similarly, both effort and persistence and extracurricular aspects of behavioral academic engagement had a significant positive correlation with school completion intention. Based on these results a conclusion can be made that the pupils' behavioral engagement in academic activities should be increased which in turn will raise their intention to complete school. This can be done by encouraging them to put more effort and persistent in learning tasks as well as in extracurricular activities. Teacher can do this by showing pupils they care about them, supporting them, teaching them social skills and setting

clear expectation regarding learning activities. Also, designing relevant and meaningful learning tasks to engage them may reduce the intention to leave school early.

The last objective demonstrated that very low variance (17%) in school completion intention was accounted by cognitive academic engagement, behavioural academic engagement, and emotional academic engagement. Cognitive academic engagement had the highest significant contribution hence the best predictor followed by behavioural academic engagement which was also a significant predictor. Emotional academic engagement had the least and insignificant contribution to pupils' school completion intention. Therefore, the study concluded that teachers and school in general should device ways to get pupils more engaged school activities which should entail cognitive, behavioural, and emotional engagement. As confirmed by previous studies, academic engagement plays a crucial role in shaping learners' school completion intention by affecting their academic, motivation to learn, well-being through reduction of stress and anxiety.

## **5.4 Recommendations**

This part presents suggested recommendations for education related policies and the recommendations on possible future areas of research.

### ***5.4.1 Suggested Recommendations for Education Based Practices***

The outcomes of this study have important implications for educational related policies:

- i. Overall, academic engagement was found to have well established connection with school completion intention of pupils. There is, therefore, a greater need for interventions targeted on improving pupils' academic engagement and subsequently high school completion intention. At classroom level, teachers can design interventions aimed at motivating and helping pupils become more autonomous which will increase their interest in learning

activities. It is expected that the more interested the learners are in the learning tasks, the more engaged they will be. This will motivate them to persist until they complete school.

- ii. High cognitive academic engagement was associated with high school completion intention. Therefore, classroom-based interventions such as training pupils on academic goal setting, giving timely feedback and scaffolding instruction should be put in place to encourage pupils' mental investments in learning activities and subsequently raise their intention to complete school.
- iii. The findings also suggest that increasing behavioural academic engagement could improve academic outcomes such as intention to complete school both directly and indirectly. Therefore, reasonable interventions such as increasing students' participation in group-designed projects, allowing students opportunity to engage in extracurricular activities and setting clear academic expectations are necessary. Teachers can also make use of positive reinforcement to encourage pupils engage in good academic related behavior thus enhancing their hope to complete school.
- iv. School-based interventions aimed at understanding how emotions related to academic develop and how they are managed should be identified in order to impact pupils' affective engagement and consequently reduce their desire to drop out of school before completing their primary education.

#### ***5.4.2 Recommendations on Possible Future Areas of Research***

Based on the study findings the following recommendations for further studies can be made:

- i. This study should be repeated using other categories of learners such as those in secondary schools, colleges and universities to provide more concrete conclusion regarding how academic engagement impacts learners' intention to complete school or a degree.
- ii. Further studies utilizing mixed-methods approach to data collection could produce rich findings relating pupils' academic engagement to school completion intention. Through qualitative data, it will be possible to know learner-based needs related to academic engagement which will be of great help in increasing their participation, affection towards learning as well as their mental investments.
- iii. Another study can assess the mediational relationship explaining the mechanisms through which academic engagement connects to school completion intention as this study only looked at direct connection between the two.
- iv. A study is also needed in regions other than Tharaka Nithi County to rule out the confounding effects resulting from different learning experiences in those regions.

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**Appendices**

**Appendix A**

**Informed Consent Letter**

Deborah M. Muthengi

Department of Educational Psychology

Kenyatta University

P.O Box, 43844,

Nairobi.

I am a student at Kenyatta University taking a master degree in Educational psychology. To complete my degree i am conducting a research on the relationship among academic engagement and pupils' intention to complete school in Tharaka Nithi County. Therefore, your child participation in this study is very crucial to complete this noble task. I would therefore kindly request you to help by allowing your child to participate in this study. You have the option to consent or deny your child from taking part in the study. If you agree, your child will be requested to provide information through the questionnaires. The responses obtained will only be used for the purpose of this study.

Kindly append signature in the space provided if you agree to allow your child participate in this study \_\_\_\_\_

Parent's signature

\_\_\_\_\_ Date

Thanks for your participation.

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

\_\_\_\_\_ Date

Deborah M. Muthengi

Student, M.E.D (PSY), Kenyatta University

## Appendix B

### Pupils' Questionnaire

#### Section One

##### Demographic Data Questionnaire

Below are questions seeking to capture your personal information. Please answer by either writing or putting a tick in only one box.

1. What is the name of your school? \_\_\_\_\_

2. What is your sex?  Boy  Girl

3. What is your age in years? \_\_\_\_\_

4. Indicate your class

Class 6

Class 7

Class 8

#### Section Two

##### Student Engagement in Schools Questionnaire (SESQ)

**Instructions:** Below is a list of statements that describes experience of engagement in school. For each item, please tick (V) in only one box that is true to you. Use the following key : 1 =Never; 2 = Occasionally; 3 = Fairly Many Times; 4 = Very Often; 5 = Always.

Statements	Mode response				
	1	2	3	4	5
<b>Affective Engagement: Liking for Learning</b>					
I am very interested in learning					

I think what we are learning in school is interesting.					
I like what I am learning in school.					
I enjoy learning new things in class.					
I think learning is boring.					
<b>Affective Engagement: Liking for School</b>					
I like my school					
I am proud to be at this school.					
Most mornings, I look forward to going to school.					
I am happy to be at this school.					
<b>Behavioral Engagement: Effort &amp; Persistence.</b>					
I try hard to do well in school					
In class, I work as hard as I can.					
When I'm in class, I participate in class activities.					
I pay attention in class.					
When I'm in class, I just pretend like I'm reading					
In school, I do just enough to get by.					
When I'm in class, my mind keeps thinking of other things.					
If I don't understand am reading, I reread until I understand it.					
When given difficult homework, I keep working at it until I get the answer.					
<b>Behavioral Engagement: Extracurricular</b>					
I like to participant in school activities such as sport day and school picnic.					
I like giving help with school activities such as sport day and parent day.					
I participate in games in my school.					
<b>Cognitive Engagement</b>					
When reading, I try to think of how to apply the information in the real world.					
When learning new information, I try to put the ideas in my own words.					
When reading, I try to link what I am learning with my own experiences.					
When reading I come up with examples to help me understand the important concepts I learn from school.					
Whatever I learn in school, I try to see how it fits together with what I already know.					
When learning content in this class I often try to associate it with what I learned in the previous classes about the same or similar content.					
I try to see the similarities and differences between content I am learning for school and what I already know.					
I try to see how the subject contents I learn in school fit together with each other.					
I try to relate what I already know with new things I am trying to learn for school.					
I try to think about topics and choose what most relevant to learn from them, instead of just reading them over.					
When reading, I try to combine different pieces of information from textbook and revision material.					

### Section Three

#### School completion Intention Questionnaire

The statements below represent your feeling regarding school completion. Kindly answer by putting a tick on one box that is true of you. There is no right or true answer.

Use the following key: 1 = Very Strongly disagree; 2 = Strongly Disagree ; 3 = Disagree; 4 = Undecided ; 5 = agree; 6 = Strongly agree; 7 = Very Strongly agree

STATEMENT	1	2	3	4	5	6	7
I intend to complete primary education							
I will try to complete primary education							
I plan to complete primary education							
I will make an effort to complete primary education							
I expect to complete primary education							
I intend to study in this school until I complete my KCPE							
I'm thinking on dropping out from this school							
I believe that what I study in this school will now be of use to me in the secondary school							

## Appendix C

### Sample Size Determination

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size; *S* is sample size.

## Appendix D

### Research Authorization



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

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Our Ref: E55/CE/26285/11

DATE: 31<sup>st</sup> August, 2022

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR DEBORAH M. MUTHENGI – REG. NO.  
E55/CE/26285/11.

I write to introduce Deborah M. Muthengi who is a Postgraduate Student of this University. The student is registered for M.Ed degree programme in the Department of Educational Psychology.

Purity intends to conduct research for a M.Ed Project Proposal entitled, “Academic Engagement and School Completion Intention of Pupils in Upper Classes in Primary Schools in Tharaka Nithi County, Kenya”.


Any assistance given will be highly appreciated.


Yours faithfully,

PROF. ELISHIBA KIMANI  
AG. DEAN, GRADUATE SCHOOL

EM/Inn


**Appendix E**  
**Research Permit**

  
**REPUBLIC OF KENYA**

  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**

**RefNo: 712687** **Date of Issue: 04/October/2022**


**RESEARCH LICENSE**




**This is to Certify that Ms. Deborah Mwikali Muthengi of Kenyatta University, has been licensed to conduct research in Tharaka-Nithi on the topic: ACADEMIC ENGAGEMENT AND SCHOOL COMPLETION INTENTION OF PUPILS IN UPPER CLASSES IN PRIMARY SCHOOLS IN THARAKA NITHI COUNTY, KENYA for the period ending : 04/October/2023.**

**License No: NACOSTI/P/22/20694**

**712687**  
**Applicant Identification Number**

  
**Director General**  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
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# Appendix H

## Map of TharakaNithi County

