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Social Comparison and Its Influence on the Academic Achievement and Motivation of High School Students

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Adviser's Approval

Under my guidance and knowledge, the researcher's thesis entitled **"**Social Comparison and Its Influence on the Academic Achievement and Motivation among High School Students at BNB High School, Hawassa " is completed. I evaluated the thesis and certify its submission for public defense.

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Abstract

Social comparison, the psychological process by which individuals evaluate their abilities relative to others, is a pervasive feature of academic life. Despite its significance, empirical research scrutinizing its influence on students in Ethiopian high schools remains scarce. This study examined the influence of social comparison on academic achievement and motivation among 220 high school students (Grades 9–11) at BNB High School, Hawassa, during the 2025/2026 academic year. A descriptive-correlational research design was employed. Data were collected using adapted versions of the Iowa-Netherlands Comparison Orientation Measure (INCOM) and the Academic Motivation Scale (AMS), alongside students' first-semester average grade scores. Data were analyzed using descriptive statistics, independent samples t-tests, one-way ANOVA, and Pearson correlations. Descriptive results revealed a moderate overall level of social comparison, with upward comparison (M = 3.42). Gender-based t-tests identified no significant differences in social comparison tendency. Pearson correlation analyses revealed no statistically significant relationship between social comparison and average grade scores, suggesting comparison orientation does not directly determine academic performance. This suggests that social comparison functions primarily as a motivational rather than a performance mechanism. It is recommended that educators redirect comparison behaviors toward effort-based, growth-oriented benchmarking.

*Key**words: Social Comparison, Academic Motivation, Academic Achievement, Upward Comparison, Downward Comparison.***

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LIST OF ABBRIVATIONS/SYMBOLS

AMS-Academic Motivation Scale

β-Beta coefficient (standardized regression coefficient)

BFLPE- Big-Fish-Little-Pond Effect

df- Degrees of freedom

E*M*-Extrinsic Motivation

F -*F*-statistic (from ANOVA)

I*M*- Intrinsic Motivation

INCO*M*-Iowa Netherlands Comparison Orientation Measure

M- Mean (arithmetic average)

MS –Mean Square

N-Total sample size

value (level of statistical significance)

R-Pearson correlation coefficient

SC -Social Comparison

SD=Standard Deviation

SS-Sum of squares

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Social Comparison is a psychological process to assess the ability and opinion of oneself against a target individuals or groups (Festinger, 1954). People have a innate needs to examine their opinions and abilities. Observation of others is a tool to evaluate their opinions. To measure the opinion and abilities, individuals compare themselves with other people when they do not have a mean to evaluate their stand.

When people do not have a means to examine their opinions and abilities, they will use other people to measure themselves (Festinger, 1954). According to Wood (1989) and Mussweiler and Strack (2000) ,the selection of comparison targets, the specific dimension of comparison (such as competence, attractiveness and success), the direction of comparison(upward or downward) and the motivational outcomes resulting from the comparison are the core elements of Social Comparison.

The selection of comparison targets is a vigorous element of the Social Comparison process. Several factors such as significance, likeness and perceived importance of the comparison are a key point for individuals to choose whom to compare themselves (Suls & Wheeler, 2000). Comparison more likely made with others who are similar in relevant traits because such comparisons are more informative and important (Festinger, 1954).The choice of target can affect emotional aspect and motivation; comparing oneself to a superior (upward comparison) or inferior (downward comparison) target can lead to various psychological consequence (Wills, 1981).

Downward Social Comparison occurs when an individual comparing one-self to others observed as less successful (Wills, 1981). This practice habitually increase self-esteem and provides guarantee, helping as psychological defense against disappointment or negative self-assessment (Wills, 1981).Conversely, studies show that frequent reliance on downward comparisons may lead to satisfaction or decrease motivation for self-improvement (Gibbons & Buunk, 1999).

Upward comparison happens when individuals compare themselves to others they consider better or more successful. This comparison can assist as a foundation of inspiration, raising motivation and self-improvement, mainly when individual believe that progress is promising (Tesser,1988).

Motivation can be affected by Social Comparison, according to Social cognitive theory (Bandura, 1986) the role of self-efficacy can determine the effect of comparison in motivation. When believes of the students are Positive for improvement, upward comparison enhance motivation; while their perception is fixed for improvement, the comparison is exposed to vulnerability.

Social Comparison can induce a variety of emotional responses that affect motivation and self-regulation. These emotional responses depend on the direction of comparison, the observed similarity to the comparison target and the situation in which the comparison occurs.

Emotional outcomes result in envy and frustration during upward comparison, when individuals perceive the target is unattainable, which can lead to frustration or inadequacy (Smith et al, 1996).Contrary, Upward comparison can also invoke pride or inspiration if the individual observed the achievement as possible and views the comparison as a motivational challenge (Tesser, 1988).

According to Festinger's (1954) comparing oneself opinions and abilities with others is a tool to evaluate oneself. Applying this comparison for Ethiopian high school students permits to scrutinize the contextual factors and culture that matters Social Comparison process and their effect on educational achievement and motivation (Smith & Mackie, 2007).

Understanding of how Social Comparison affects motivation and academic achievements can offer valuable insights for educators and policy makers. Such acquaintance can update development of instructional strategies and classroom environments that foster positive communications, enhance self-efficacy, and improve academic outcomes (Festinger, 1954; Schunk, 1993). Understanding with the role of Social Comparison can solve problems linked with student self-esteem, stress and peer influence, thereby endorsing student safety and engagement (Hattie & Timperley, 2007).

This study contributes to the existing body of literature by empirically scrutinizing Social Comparison theory with in Ethiopian educational context. According to Festinger's (1954) comparing oneself opinions and abilities with others is a tool to evaluate the position of self in the perceived target. Put on this stand for Ethiopian high school students permits to inspect the contextual factors and culture that matters Social Comparison process and their effect on educational achievement and motivation (Smith & Mackie, 2007). Such understanding can improve and adjust existing motivational theories to better fit diverse cultural settings.

From societal standpoint, the research addresses main issues related to educational equity and youth development by recognizing the impact of Social Comparison on academic motivation and achievement.

The finding can enhance policies designed to minimize educational achievements gap and promoting a broad and a motivating school environment (Organization for Economic

Cooperation and Development (OECD, 2010), Additionally, Considerate Social Comparison can support broader youth development initiatives, encouraging positive social communication and social cohesion within Ethiopian society.

Students' academic motivation and self-perception are highly affected by Social Comparison, definitely, in diverse educational settings such as found in Hawassa. In Ethiopian schools, the backgrounds of students are shaped by different economic background and multiple culture stands, the impact of Social Comparison can bring favorable and un-favorable academic outcomes.

According to Ministry of Education ((MoE), 2022) Academic performance, engagement and confidence are highly affected by socioeconomic inequality of the students across the regions including Sidama. In Hwassa some students may be motivated by upward comparison to improve, but those students with disadvantageous background face stress and frustration.

However, Social Comparison theory has been studied in different countries with different cultural contexts; there is noticeable lack of empirical research that studies its impact on student's motivation and academic achievement in Ethiopia high schools.

Western touch literatures based on western society are abundant, Social comparison Theory at the University of Minnesota (Festinger's,1954), The Educational Self=Concept Framework (Marsh,1987) and The Cognitive=Behavioral Framework (Schunk,1999 ;Suls & Wheeler, 2000) based on western society are abundant. There is a significant gap to overview the process of Social Comparison function in Ethiopian educational settings. Social Comparison differently affected by different socioeconomic and cultural settings (Festinger, 1954; Schunk, 1999). Therefore, the target of this study is to fill this gap by scrutinize the relationship between Social

Comparison, academically achievements and motivations among high school students at BNB, Hawassa, Ethiopia.

The location of this research is BNB High School, Hawassa, the capital city of Sidama Region which consists of diverse culture. BNB High School hosts diverse students from different socio economic backgrounds. It can represent to scrutinize social psychology factors that influence academic performance. As all Ethiopian school, it operates with in educational frame work of the country which prioritized moral development and academic achievement. Large class sizes and resource limitations are the common challenges that the school faces. The research settings provides a suitable environment to dig deep how Social Comparison process manifest among students by considering educational practices, values and local cultural norms that enable to affect student's motivation and achievement. The findings from this context are expected to contribute valuable insight in to the socio cultural dynamics that enable to affect student performance in high school.

Majority of studies have been conducted in Western settings, with narrow attention paid to non-Western, developing country contexts such as Ethiopia. Existing research in Ethiopia and similar setting remains scarce, and there is a lack of empirical evidence on how Social Comparison mechanisms operate within Ethiopian high schools, considering cultural, socio-economic, and educational system difference. Furthermore, while some studies ,The Influnce of Psychological Factors on Students Academic Performance at the Specific Secondary school level in Ethiopia (Kassaw,T.,Yimer, M..Tefera,B.(2024). Suggest that Social Comparison influences motivation and academic performance, the specific pathways and moderating factors in Ethiopian student are not well understood. This study will fill the existing gap in examining the relationship

between Social Comparison, motivation and academic achievements among high school students at BNB High School at Hawassa.

1.2 Statement of the Problem

In spite of the theoretical importance of Festinger's (1954) Social Comparison Theory, empirical studies scrutinizing the complex interplay between social comparison orientations, self-evaluation, and academic motivation remain scarce within the Ethiopian educational landscape. To date, the majority of local educational literature has predominantly focused on broad behavioral and environmental predictors of academic outcomes, such as academic engagement, fear of failure, and overt peer pressure (Belay, 2018; Teklemariam, 2021).

Crucially, very few local studies have explicitly operationalized social comparison using validated psychometric instruments, such as the Iowa-Netherlands Comparison Orientation Measure (INCOM), to investigate its direct relationship with student motivation and actual academic performance. Consequently, it remains conceptually blurred whether academic achievement in Ethiopian secondary schools is predominantly driven by cognitive comparison orientations, external peer-related pressures, or other distinct psychosocial factors.

To address this significant empirical gap, this study investigates the influence of social comparison on academic achievement and academic motivation among high school students at BNB High School in Hawassa. By examining how students process peer evaluation, distinguishing between upward and downward comparisons, this study seeks to clarify whether these cognitive habits serve as an unaddressed psychological determinant of student success in the secondary educational context.

1.3 Objectives

1.3.1 General Objectives

To examine the impact of Social Comparison on academic achievements and motivation of high school students at BNB High School, Hawassa.

1.3.2 Specific Research Questions**:**

1. What is the level of Social Comparison among High School Students at BNB High School?

2. What is the direction of Social Comparison among high school students at BNB High School?

3. Is there statistically significant relationship between Social Comparison, and students' academic performance?

4, Is there statistically significant relationship between Social Comparison, and students' academic motivation?

1.4 Limitations of the study

The following will be limitation of the study: Limited sample size, self-report bias, external factors, time constraint, and geographical restriction, subjectivity of motivation and lack of longitudinal data. Self-report bias can significantly affect the reliability and validity of the research findings.

1.5 Significance of the study

The persistence of the empirical gap regarding social comparison orientation is not merely a theoretical oversight; it deeply affects the psychological well-being of students, the pedagogical efficacy of educators, and the structural design of secondary school environments in Ethiopia. Exploring these dynamics at BNB High School in Hawassa is significant in the following dimensions:

For Students and Psychological Well-being

Without an empirical understanding of how high school students evaluate their abilities relative to their peers, the internal mechanisms driving student anxiety and motivation remain un=addressed. In highly competitive secondary school environments, the traditional, public disclosure of student ranks can foster maladaptive comparison behaviors.

If students predominantly engage in destructive upward comparisons without possessing the necessary self-evaluation tools, it can lead to acute academic anxiety, learned helplessness, and a severe drop in self-efficacy. Conversely, understanding these mechanisms will help cultivate adaptive peer-effort monitoring, offering a vital opportunity to leverage peer dynamics to boost intrinsic motivation and shield students from academic burnout and a fragmented academic identity.

For Pedagogical Practices and Counseling Interventions

School administrators and guidance counselors are forced to implement generic, disciplinary interventions. They lack localized, evidence-based frameworks to address the internal, cognitive appraisals that students make daily. This study will provide educators with data to distinguish

whether a student's drop in performance is due to a lack of academic engagement or a psychological defense mechanism against toxic peer comparison. By utilizing standardized measures like the INCOM and the Academic Motivation Scale (AMS) within this specific context, school counselors can design targeted interventions that foster healthy intrinsic dimensions rather than anxiety-induced extrinsic motivators .For Educational Policy and Institutional Evaluation Systems, At the systemic level, the lack of targeted research on social comparison reinforces a rigid, outcome-oriented school culture. Secondary education in Ethiopia historically emphasizes high-stakes testing and formal examinations. When empirical research fails to expose how outcome-focused comparison (e.g., comparing exam scores and ranks) impacts student motivation versus effort-focused comparison (e.g., monitoring peer study habits), educational practices remain stagnant. The empirical evidence generated by this study aims to challenge the harmful "rote and rank" culture, proving whether rank-focused comparison yields diminishing returns on actual academic performance, thereby guiding policymakers toward creating a growth-oriented student development ecosystem.

There is a significant gap in considerate the impact of Social Comparison in affecting academic achievement and motivation among high school students in Ethiopia. The findings of this study affords empirical suggestion on how Social Comparison practices impact student's motivational levels and academic achievement, which is crucial for developing effective educational strategies.

1.6 Operational Definition

Level of Social Comparison

The level of Social Comparison refers to the degree to which students engage in comparing their academic achievement with their peers. Social Comparison scale was serve to measure students' Social Comparison tendencies. The subscale will be upward Social Comparison and downward comparison. It is a standardize questioner such as the IOWA-Netherland comparison orientation measure.

Social Comparison

On academic achievement and motivation. Social Comparison can be referred as the tendency how high school student's compare their academic achievement against their peers or classmates. Structure questionnaire is used to assess the frequency, direction and effect of comparison

Academic motivation

Academic Motivation is defined as the internal willingness of students to engage in learning and academic activities. In this study, it will be measured using students' self-reported scores on motivation scales, focusing on goal orientation, effort, persistence, and interest in schoolwork. According to Tadesse and Gemechu (2021), Academic Motivational Scales (AMS) or locally adopted motivation questionnaires were used in the previous research.

Educational Achievement

Educational Achievement: It represents the quantifiable academic achievement of the students, such as grade. In this study it will be operationalized through students' average academic scores. Educational achievements was measured by the student average grade report obtained from school. Analyzing the first semester average grade with the tendency of their comparison give us a relation of comparison and educational achievement, The student grade was assigned in Likert scales from (Excellent, very good. good, fair average, and poor).Academic achievement measured by GPA, term marks, national exam scores, or teacher-made tests (Asmare, 2020).

CHAPTER TWO

LITERATURE REVIEW

2. THEORETICAL PERSPECTIVE

2.1. Conceptualization

To understand the psychological dynamics influencing secondary school students, it is fundamentally necessary to conceptualize the construct of social comparison. Social comparison is theoretically defined as an innate, evolutionary psychological drive through which individuals evaluate their own personal opinions, unique traits, cognitive abilities, and behavioral performances by benchmarking themselves against other individuals (Festinger, 1954). According to foundational social comparison theory, this cognitive process is triggered primarily in environments where objective, non-social, or physical standards of measurement are absent or ambiguous. In an academic context, this implies that in the absence of absolute criteria, students naturally turn to their peers as frames of reference to gauge their own intellectual standing.

Expanding on this definition, contemporary literature conceptualizes the construct through **Social Comparison Orientation (SCO)**. Gibbons and Buunk (1999) define SCO as the personality disposition or individual variance in the tendency to notice, process, and look for comparative information regarding how one's life circumstances, academic capabilities, and social standing match those of others. Rather than a simple, binary occurrence, social comparison is a multi-directional phenomenon that manifests in three structural trajectories:

1. **Upward Academic Comparison:** The cognitive and behavioral act of targeting individuals or peer groups who are perceived to be superior, higher-achieving, or more educationally advanced (Festinger, 1954).
2. **Downward Academic Comparison:** The ego-protective psychological practice of evaluating one's own standing against a target peer or group perceived to be lower-performing or educationally inferior (Wills, 1981).
3. **Lateral Academic Comparison:** The process of benchmarking one's abilities against peers who are perceived to possess highly similar or identical capabilities.

The Concept of Academic Motivation

Within educational psychology, academic motivation cannot be viewed merely as a static state of wanting to study; it is conceptually defined as an intricate, multi-faceted internal psychological state that energizes, directs, activates, and sustains goal-oriented scholastic behaviors over extended periods (Ames, 1992). It represents the psychological engine that determines the amount of cognitive energy, resilience, and focus a student invests when confronting rigorous secondary school tasks.

Grounded in self-determination frameworks and achievement goal theories (Dweck & Leggett, 1988), academic motivation is conceptualized as a spectrum ranging from intrinsic to extrinsic drives:

- Intrinsic Motivation: The internal drive to engage in learning tasks out of sheer curiosity, personal satisfaction, and an inherent desire for self-mastery.

- Extrinsic Motivation: The drive to perform academic actions to achieve separable outcomes, such as earning praise from teachers, achieving social status, securing high grades, or avoiding punitive measures from parents.

In competitive high school environments, the nature of a student's academic motivation is heavily influenced by their comparison orientation, as the desire to outperform others (performance-approach goals) or the fear of looking less capable (performance-avoidance goals) alters their cognitive engagement.

The Concept of Academic Self-Concept

Crucial to the interaction between comparison and motivation is **academic self-concept**. This variable is conceptually defined as a student's subjective, cognitive perception and self-evaluation regarding their own intellectual competence and scholastic capabilities (Marsh & Parker, 1984). It represents a student's internal answer to the question, *"How good am I at school?"*

Academic self-concept is not formed in a vacuum; it is a socially constructed variable. It develops progressively through a student's history of academic reinforcements, evaluations from institutional authority figures (such as teachers and counselors), and—most critically—the localized frame of reference provided by their immediate classmates. This relational development explains why two students with identical objective test scores can harbor vastly divergent academic self-concepts depending on whether they are surrounded by hyper-achieving peers or lower-performing classmates.

Description of Model Pathways and Variable Relationships

The schematic model breaks down the operational dynamics of the study into three core dimensions:

1. The Independent Variables (IVs): Social Comparison Dynamics At the core of the input phase is the student's baseline *Social Comparison Orientation (SCO)*, which dictates how intensely they benchmark themselves against their peers. This orientation manifests in two primary behavioral directions within the classroom: *Upward Academic Comparison* (looking at higher-performing peers) and *Downward Academic Comparison* (looking at lower-performing peers).
2. The Mediating/Intervening Variables: Cognitive and Affective Processing The framework posits that social comparison does not affect academic outcomes in a vacuum; its impact is filtered through the student's psychological ecosystem:
    - Academic Motivation**:** Social comparison directly shapes whether a student develops *Intrinsic Motivation* (striving for self-mastery inspired by a model peer) or *Extrinsic Motivation* (striving purely to outperform others to avoid shame or gain status).
    - Academic Self-Concept**:** Acting as a critical cognitive buffer, a student's baseline self-esteem and perceived competence determine their reaction to comparison. As established by the *Big-Fish-Little-Pond Effect (BFLPE)*, the immediate peer group acts as a frame of reference that fluctuates the student's confidence levels.
3. The Dependent Variable (DV): Educational Outcome The ultimate endpoint of the conceptual model is *Academic Achievement* (measured by the student's formal semester

marks). The model hypothesizes that the frequency and direction of a student's social comparisons will determine their motivational shifts and self-evaluation patterns, which will ultimately dictate the level of scholastic effort, persistence, and final academic marks they attain.

Integrated Model for this study:

Social Comparison -> Self-Efficacy/Motivation -> Goal Orientation -> Academic Outcomes

2, 2 THEORETICAL BACKGROUND

2.2.1 Social Comparison Theory

Leon Festinger (1954), the founder of Social Comparison theory. He projected that individuals measures and compare what they have with others, such as, their opinions, abilities and performance. These comparisons mostly happen when there is no a tangible standard to measure. He recognized three comparison directions: downward (with those peers who perform less than him), lateral (with those peers who perform similar to him), and upward (with those who perform better than them). He emphasize that those comparisons affect motivation, self-evaluation and behavior in educational achievement.

After Festinger's's, later scholars stretched this theory: Buunk and Ybema (1997) presented that students contingent to their perceived achievement can either motivate or discourage by upward comparison, according to wills (1981), down ward comparison habitually shelters self-esteems. Both of the scholars underline that Social Comparison is inevitable psychological practice among youths in competitive school settings. IOWA-Netherlands Comparison Orientation Measure (INCOM) is one of measurement developed by Gibbons and Buunk (1999).This measurement

weighs an individual tendency to compare opinions and abilities with others. Multiple countries have validated INCOM scale and applied studies involving youths.

2.2.2 Social Cognitive Theory

The academic behavior of the group under domain can be affected by peers' academic achievements. Modeling, imitations and observations are tools for learning process. Bandura in his famous experiment "Bobo doll" has shown how behavior obtained through imitation and observation. The theory demonstrates learning process in to four: 1) Attention, the individual put attention for the model. 2) Retention, repeat the behavior of the model in imagination.3) Reproduction, it is the action to copy the behavior of the model. 4) Motivation, the individual want to manifest what he has learned. This theory enhances the theory of Social Comparison, how selection of target group is made and how upward motivation processed in cognitive pattern.

2.2.3 Achievement Goal Theory

This theory discuss that motivation is a very key psychological trait for academic achievement. It is popular which focus on student motivation, based on their desire to master skills or to perform others. Academic achievement is highly triggered by motivation. This theory discuss that motivation is a psychological trait for academic achievement. Achievement Goal Theory underlines that Social Comparison is associated with the goal achievements of the individual. When an individual goal setting is self-mastery, his comparison tendency will be small. When his goal setting is performance mastery, his propensity for Social Comparison will be high. This theory supports Social Comparison theory by scrutinizing the effect of goal setting to determine Social Comparison tendency.

2.3 Empirical Review

An enormous body of research associates Social Comparison with students' academic achievements. The "Big-Fish-Little-Pond-Effect" introduced by Marsh & Parker (1984), indicating that the students in high-achieving class habitually have lower academic self-concepts since they compare themselves with high-performing peers.

Additional researchers illustrate the positive and the negative impacts of upward comparisons. When students perceive they can reach the level of the higher-performing peer, upward comparison can enhance academic performance. Conversely, when the comparison gap is perceived unattainable, upward comparison leads to poor performance, lower confidence and anxiety (Moller & Marsh, 2013; Jansen, Schroeder's & Ludtke,2022)

Downward comparison as mentioned by Wills (1981), enhance self-esteem but tend to diminish academic effort since the student feels "better than others." These varied outcomes display that comparison direction strongly affects academic outcomes.

Comparison may triggers performance goals which leads students to prove they are better than others (Dweck & Leggett,1988), Positively framed comparison, learning from top students can boost motivation and conversely comparison can increase fear of failure, envy lead to decrease of motivation (Ames, 1992 & Elliot & Harackiewicz,1996).

Perceived ability and self-esteem of the student can determine the impact of Social Comparison and also Social Comparison does not affect all students equally. Emotional reaction for comparison can determine the level of motivation (Vogel et al.,2014 & Tesser ,2000).However; academic comparison remains the strongest predictor of school-related outcomes. Marsh (1987)

& Huguet et al. (2001) found that students frequently compare grades, test scores, class participation, and teacher attention. These comparisons shape academic self-concept and influence motivation and effort in school.

2.3 Gaps in the Literature

Social Comparison process has been linked to change of students' self-concept and task interest, as confirmed in various scholars (Festinger, 1954; Huguet & Regner,2007).Many scholars (Festinger, 1954; Huguet & Regner,2007) confirmed that Social Comparison process has been linked to change of students' self-concept and selection of tasks. Interest in learning tasks and the formation of academic self-concept can be shaped by feedback of social comparative performance (Marsh & Parker, 1984,Dijkstra, Kuyper, van der Werf, & Buunk,2008). Regardless of Social Comparison theoretical groundwork, only a few numbers of studies have scrutinized the relationship of Social Comparison, academic motivation and self-evaluation. This gap is broad in the context of Ethiopia, where various studies have absorbed on predictors such as academic engagement, fear of failure and peer pressure. It leftover whether academic achievements in Ethiopian schools are predominantly affected by peer related pressure, comparison orientation and psychosocial factors.

2.4 Controversies and active debates

The argument between scholars on the importance of Social Comparison is endured. Some studies advocate the upward comparison to increase motivation when the comparison target is perceived as attainable (Lockwood & Kunda, 1997, Buunk and Gibbons, 2007). Contrary, Thornton and Arrowood (1966) and Vogel et al.(2014) underscore the same upward comparison can damage the helpless students with low self-concept by distorting self-esteem and by

increasing anxiety. The importance of Social Comparison/motivating or harmful/ is still on board. It can motivate or damage based on context, individual difference and target distance.

High-achieving students incline to report higher academic self-concept when positioned in lower-ability classrooms or schools (Marsh & Hau,2003;Marsh & Parker,1984).This concept is known as Big-Fish-Little-Pond-Effect (BFLPE).Individual aspiration models dispute that experience to higher achieving peers can motivate improved performance and long term academic outcomes (Zimmerman,2000;Seatons,Marsh, & Craven,2010).It is on board conceptual debate about Social Comparison theory between BFLPE's self-concept findings and aspiration based performance model.

How frequently and how mechanically comparison happens is a key issue rather than student's engagement in comparison. Repeated comparison frequently increased by social media has been associated with anxiety, negative effect and reduced motivation (Vogel et al, 2015; Appel, Gerlach, & Crusius,2016).In distinction, advantageously consuming comparison near-upward goals can adapt mastery and determination (Garcia, Tor, & Schiff,2013). Consequently

Some scholars discuss that education system should teach students adaptive comparison strategies rather than challenge to disregard comparison at all. Comparison-based feedback through educational technology raises additional debates. Research displays that students performance data attached on public board, increase motivation and effort when the student score slightly higher-performing peers (Bandura & Schunk, 1981; Harks et al., 2014). Conversely, public transparent comparative feedback can generate disengagement and shame (Kluger & Denisi, 1996; Hattie & timperley, 2007).

Therefore there is unresolved tension between transparency and privacy Social Comparison feedback in school environment. Policy makers and instructional designers are still in dilemma.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

A proposed area of research was presented in the previous section. Descriptions of the study's research problem, research purpose and three research questions that serve to direct data analysis were explained. The three major study variables, Social Comparison, educational achievement and educational motivation were reviewed in the literature section. All these variables have been studied extensively; this research is to examine the impact of Social Comparison on educational achievement and educational motivation in the context of Ethiopia. This section is dedicated to describe the methodology that is proposed to execute. It comprise, the study setting proposed research design, study sample and proposed data collection method, procedure and analysis of outcome.

3.2 Description of the Study Site

The proposed study was executed at high school students' of BNB High School, Hawassa. The setting for the proposed study can represent the socioeconomic aspect of Hawassa. The school consists of all level of economic background. The research target will be all high school students enrolled in grade level 9-11 in the NBN high school, Hawassa for academic year of 2025/2026.Total number of population is 541, which consist of 240 from grade 9,168 from grade ten and 133 from grade eleven.

The selection of Hawassa City as the primary research site is justified by its unique academic ecosystem. The city accommodates a high concentration of secondary schools characterized by

competitive learning environments, dense classroom sizes, and diverse peer dynamics. This socio-educational environment provides a rich, representative baseline for investigating the psychological nuances of Social Comparison Orientation among high school youth. Furthermore, the researcher's local residency and contextual familiarity with the city's educational administration facilitated logistical efficiency, access to prolonged institutional observations, and robust data collection mechanisms across the sampled institutions.

Rational for conducting in a single school

Limiting the study to one school is essential to control extraneous variables that could influence the educational outcomes, thereby enabling a clearer examination of the effects of Social Comparison on students' academic achievements (Creswell & Creswell, 2018). Studying in one school helps to eliminate confounding factors such as variation in grading approaches, school environment, and student capacity, which tend to differ across multiple schools. Studying students within the same school prevents the influence of BFLPE, which arises from difference in school reputation and peer comparison across different institutions. The Big-Fish–Little-Pond Effect (BFLPE), demonstrates that high-achieving students tend to report higher academic self-concept when placed in lower-ability classrooms or schools (Marsh & Parker, 1984; Marsh & Hau, 2003).

3.3 Population and Sampling Techniques

Information about the level of comparison, educational motivation and educational achievement were collected. There was not any manipulation of variables. The study employs descriptive-co relational research design; descriptive data provides a foundational picture (average, frequencies, standard deviation and mean) while co relational data shows the relation between variables.

3.3.1 Determination of Sample Size

The target population included all high school students enrolled in Grades 9–11 at BNB High School, Hawassa for academic year 2025/2026.From total population of 541, which consist of 240 students from grade nine, 168 students from grade ten and 133 students from grade eleven. Sample N=541 (population size) Z=1.96 (standard normal variate for 95% confidence) p=0.5 (assumed proportion for maximum variability) E=0.05E (margin of error) A sample of 220 will be selected using stratified sampling to ensure equal representation across the grade level.

3.3.2 Sample Selection Procedure

A random sample was drawn from the list of each grade student 41% (220/541) of each grade student was included in the sample. By this 98 student from grade nine, 67 students from grade ten and 54 student from grade 11 were included in the sample randomly.

3.4 Instrument of Data Collection

In the study, one independent variable and two dependent variables was measured. Three instruments was applied to measure those variables. Independent variable is Social Comparison and dependent variables are academic achievements and academic motivation.

Social Comparison scale (ASC) was served to measure students' Social Comparison tendencies. The subscales were upward Social Comparison and downward Social Comparison. ASC is a standard question such as the IOWN-Netherlands comparison orientation measure. It is a self-report question focuses on three aspects of comparison: tendency for comparison, upward comparison and downward comparison.

Social Comparison will be measured using the Iowa–Netherlands Comparison Orientation Measure (INCOM; Buunk & Gibbons, 1999), adapted for Ethiopian contexts by Kebede (2022).

Educational motivation was measured in intrinsic and extrinsic motivation. Academic Motivation Scale (AMS) or locally adapted motivation questionnaires were used in previous research (Tadesse and Gemechu, 2021).

Educational achievements was measured by the student average grade report obtained from school. Analyzing the first semester average grade with the tendency of their comparison will give us a relation of comparison and educational achievement, The student grade was assigned in Likert scales from (Excellent, very good. good, fair average, and poor).Academic achievement measured via GPA, term marks, national exam scores, or teacher-made tests (Asmare, 2020).

3.4 Instrument Reliability

Reliability of the scales was checked using Cronbach's alpha and instruments with a reliability coefficient ≥ 0.70 will be considered acceptable (Abie, M., and Teshome, T.,2018). Instrument reliability was verified through sub-scale using Cranach's alpha (SC-.817, UC-.823, DC-.895, IM-.771 and EM-.778) with a threshold of $\alpha \geq 0.70$ considered acceptable (Abie & Teshome, 2018).

3.5 Data Collection Procedure

To guarantee the validity, reliability, and ethical integrity of the generated data, the data collection process for this study will be executed systematically across three sequential phases:

Pre-Data Collection Phase

The data collection process will initiate with the acquisition of formal institutional clearance. The researcher will secure an official cooperation letter from the College of Education and Behavioral Studies at Addis Ababa University. This letter will be submitted directly to the

Hawassa City Administration Education Department and the respective principals of the sampled secondary schools to obtain institutional permission and validate the legitimacy of the study.

Following administrative approval, the researcher will conduct preliminary site visits to each sampled high school to arrange an data collection timetable that avoids disrupting regular instructional hours and to recruit and train two data collection assistants. These assistants will be local educational counselors or teachers, trained specifically on the objectives of the study, the contents of the questionnaire, and strict ethical guidelines regarding voluntary participation and confidentiality.

Implementation (Data Gathering) Phase

The actual administration of the instruments will take place simultaneously across the sampled schools within Hawassa City over a designated period. To avoid the risk of peer contamination and discussion among respondents, the survey will be administered to selected Grade 11 and Grade 12 classrooms during a single, uniform time block (such as a designated homeroom or tutorial period) agreed upon with the school management.

The field data collection flow follows a structured, standard process to maximize response rates and ensure accuracy. The researcher and trained assistants will enter the sampled classrooms, hand out the paper questionnaires, and read aloud the informed consent form attached to the front page. Students will be explicitly informed that participation is entirely voluntary and that their identity will remain confidential. While students fill out the survey independently, the researcher and assistants will maintain a vigilant presence in the room to prevent students from discussing their answers with neighboring classmates. As students submit their completed questionnaires,

the data collectors will conduct a rapid, on-the-spot visual inspection to check for missing pages or incomplete sections to ensure immediate rectification.

Post-Data Collection Phase

Immediately after leaving each data collection site, the collected questionnaires will be securely sorted and organized by school and classroom code. Simultaneously, the researcher will coordinate with the school registrar units to extract the official first-semester academic marks (roster scores) of the participating students. These marks will be carefully cross-matched with the questionnaire tracking codes to compile a comprehensive master datasheet, setting up the study for subsequent electronic data entry, cleaning, and statistical processing in SPSS.

Pilot Testing, Validity, and Reliability

Pilot Testing of the Instruments

Before the administration of the final survey instruments to the main research sample, a pilot test was conducted to evaluate the validity, clarity, and internal consistency reliability of the items. According to the methodological guidelines suggested by Connelly (2008), a pilot study sample size should ideally constitute **10%** of the sample projected for the larger parent study, or a minimum baseline of 30 respondents to allow for stable psychometric testing.

Accordingly, a total of 22 students were selected for the pilot test. To prevent data contamination, these pilot respondents were sampled from Compony high school in Hawassa City that features identical demographic and academic characteristics to the actual study sites but was completely excluded from the final sample of the main study.

Validity of the Instruments

Validity refers to the extent to which an empirical instrument accurately measures the specific theoretical construct it was designed to evaluate. Because the scales used in this study (the INCOM scale for Social Comparison Orientation and the AMS for Academic Motivation) were originally developed in Western socio-cultural contexts, a rigorous validation process will be undertaken.

1. **Content and Face Validity:** To establish face and content validity, the initial drafts of the adapted questionnaires will be submitted to a panel of experts, including three senior lecturers from the College of Education and Behavioral Studies at Hazassa University and two experienced high school guidance counselors from Hawassa City. The experts will evaluate item relevance, language clarity, and cultural appropriateness. Items receiving low suitability scores will be revised or omitted based on this expert panel consensus.
2. **Construct Validity (Translation/Adaptation Validation):** To minimize language barriers and protect construct validity, a strict back-translation procedure will be applied. One language expert will translate the instrument from English to the local language Amharic, and a second, independent language expert will translate it back into English without seeing the original version. The researcher will compare the original English text with the back-translated text to ensure that the psychological meaning of the items remained intact during translation.

The two instrument and a demographic questions were prepared, permission will be obtained from the school administrative, participants will be informed about the purpose of the study, and

consent was obtained from student's guardian. The questioner was distributed during class times and students returned back in the next day. Finally the data was coded and entered in to SPSS. Data were typically collected through self-administered self-report questionnaires, with school offices providing achievement records when permitted (Ayalew & Dagne, 2018).

After the pilo*t*-testing procedure has been completed the instrument distributed to the students.

4 Data Analysis

There are four kind of analysis for the proposed study. First, describe, mean, standard deviation, frequencies and percentage to determine the level of Social Comparison among students and the direction of Social Comparison. Second Pearson correlation employed to determine the relationship between Social Comparison and academic achievement and the relationship between Social Comparison and educational motivation.

Third, independent *t*-test/ANOVA was utilized to determine the level of Social Comparison. Fourth, Regression analysis was applied to determine how strongly Social Comparison predicts academic achievement and academic motivation.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 RESULT

This chapter engaged in analyzing and interpreting the data collected from respondents of the study. The first section describes the demographic characteristics of the participants, the second section involve in presentation of findings on the level of Social Comparison, the direction of Social Comparison and motivation of students.

Demographic characteristics of the Respondents

The demographic characteristics of the 220 participants are presented in the following Table, presenting their distribution according to gender, age, and grade level.

Table 1 **Demographic Characteristics of the Respondents**

Variable	Category	Frequency (f)	Percent (%)
Gender	Male	97	44.10
	Female	123	55.90
	Total	220	100.00
Age	14-15	86	39.10
	16-17	113	51.40
	18=19	21	9.50
	Total	220	1.00
Grade	Grade 9	98	0.45
	Grade 10	68	0.31

Grade 11	54	0.25
Total	220	1.00

Table 1 show the gender distribution of the participants. Out of 220 respondents 123 were female (55.9%) and 97 were male (44.10%), accounting for all valid responses. The data show that female students exceed male students approximately 12 percentage points. The actual gender composition of the study population is reflected by the distribution.

The majority of the distribution is held by 16=17 age group, covering 113 (51.4%) of the total sample. The 14-15 group is the second, consist of 86 (39.10%) respondent, the remaining 21(9.50%) is held by 17-18 group. The dominance of 16-17 age group is consistent with the grade levels covered (Grades 9-11).

The above table represents the distribution of respondents by grade level. Respondents enrolled in Grade nine are 98 (44.5%), Grade ten, 68 (30.9%) and Grade eleven 54 (24.5%).Grade nine takes a relatively great share and it reflects the larger class sizes at the junior high school level with in the study center.

The Scale of Social Comparison

The first Research question "what is the level of Social Comparison?" examined the level of Social Comparison among students. Ten standardized questions with a five point Likert scale were prepared to measure Social Comparison level. Table two shows the mean scores and standard deviations for each item along with the overall mean.

Descriptive Statistics

Table 2 Mean and Standard Deviation of Social Comparison Scale and Its Items

ID	Item	M	SD	Level
SC1	I have a tendency to compare my score with classmates.	3.30	1.11	Moderate
SC2	I notice the effort of my peers in their studying.	3.66	1.02	Moderate
SC3	I involve in comparing my test mark with peers.	3.32	1.16	Moderate
SC4	I evaluate my academic abilities by observing the performance of others.	3.37	1.20	Moderate
SC5	I attempt to know others' performance on assignment relative to me.	3.15	1.09	Moderate
SC6	I analyze my class position among the classmates.	3.41	1.08	Moderate
SC7	I evaluate my class activity regarding other students.	3.25	1.13	Moderate
SC8	I consider others are more capable and smarter than me academically.	2.85	1.38	Moderate
SC9	I compare how quickly I understand lessons	3.24	1.20	Moderate

	among my classmates.			
SC10	I compare the success and failure in exam of others with me.	3.17	1.29	Moderate
Total	**Overall Social Comparison**	**3.27**	**0.72**	**Moderate**

Note. M = Mean; SD = Standard Deviation. Scale: 1.00–2.49 = Low; 2.50–3.49 = Moderate; 3.50–5.00 = High.

The findings show that the overall mean score of 3.27 and standard deviation of 0.72.This outcome is interpreted as a Moderate Level of Social Comparison (Al-Khasawneh, S., & Al-Omari, A. A.m2015).This indicates that the respondent students commonly occupy in comparison. It is not in a continuous manner or extreme drive. They are selectively utilizing social data as a bench mark to define their self-definition.

The highest mean (*M*-3.66; *SD*-1.02) was recorded for Item SC2 "I notice the effort of my peers in their studying." These shows that "effort tracking" serve as a dominant social cue for students to measure their adequacy of their own study habits. The second highest mean (*M*-3.41; *SD*=1.08) was SC6"I analyze my class position among the classmate" which bold the moderate concern of ranking and hierarchy items related to grade and mark comparisons(SC1,SC3,SC4,SC9) yielded consistent means ranging from 3.24 to 3.7, suggesting that students moderately rely on social modeling to evaluate their cognitive abilities.

The lowest mean score (*M*-2.85) is happen for SC8,"I consider others are more capable and smarter than me academically." However it is still within "Moderate" range, it submits that the respondents commonly retains a level of self-confidence and do not insignificantly assess themselves as inferior to their peers. Though the standard deviation for the items (*SD*=1.38) is the highest in the set, shows a significant disparity in responses; whereas many feel confident, remarkable subgroup may practice higher levels of perceived inadequacy.

The level of Social Comparison is at a moderate level, which suggests that students utilize their peers for information but are not completely obsessed by competition. This aligns with Festingers' (1954) when objective standards are absent, individuals evaluate their opinions and abilities by comparing themselves to others. SC2 (observing peer effect) is particularly significant. According to Social Comparison theory individuals observe similar others to determine a correct way to behave. Seeing top performer can enhance motivation to work hard. Recent research by wang et al.(2023) supports this findings that observing slightly better performing peers increases academic effort. SC6 (class position) and SC10 (Comparing success and failure) shows that the existence of competitive pressure that may lead to stress if left unchecked. This finding is agreed by Tianet a.(2025), which recognized academic anxiety and psychological distress caused by frequent comparisons regarding exam outcomes and academic rank.

The findings of this study demonstrate that student engage in a moderate level of Social Comparison, predominantly focused on observing peer effort and academic rank. Whereas this shows a healthy consciousness of the academic environment, the variance in score recommends that certain individuals may be more exposed to psychological pressures of peer competition than others. These results provide a foundation for the complex relationship between the student's social environment and their internal motivation. Furthermore, the regression models established to identify the significant

Gender Difference in Social Comparison': Independent Samples t-Test

Table 3 *Gender Difference in Social Comparison': Independent Samples t-Test by Overall Scale*

Item	Gender	N	M	SD	T	df	p-value
UC1	Male	97	3.36	1.15	0.93	218	0.354
	Female	123	3.21	1.18			

An independent samples t-test was conducted to investigate whether academic Social Comparison tendencies significantly differ between male and female students. Social Comparison in academic settings serves as a critical; behavior; mechanisms through which individuals evaluate their own abilities, standing, and performance relative to their peers.

The analysis evaluated 10 distinct dimension of Social Comparison (SC1 to SC10). These dimensions capture specific behaviors including performance tracking, capability evaluation, and competitive benchmarking. Identifying gender based discrepancies across these metrics provides empirical insight into how gender socialization might shape the psychological reference frames students use within competitive learning environments.

The Social Comparisons tendency has no statistically significant difference ($p>.05$). The findings demonstrate that while male and female students share highly similar behavior; patterns across most observational and evaluative Social Comparison strategies, unique gender difference emerge regarding high stakes performance outcomes.

Conversely, the lack of significant differences on scale indicates that day-to-day process oriented peer observation operates in dependability of gender. Both male and female students actively engage on lateral, informal benchmarking to calibrate their routine learning workflows.

The overarching trend indicates that gender does not fundamentally change how students gather observational learning strategies from peers. However, gender significantly skewed behaviors

when capturing and contrasting final summative achievements.

An independent samples t-test evaluated gender difference across 10 academic Social Comparison behaviors among a sample of 220 students (97 males and 123 females). The data showed that male and female students behave similarly when observing peer study efforts, evaluating everyday class activities, or tracking assignment performance. However, male students demonstrated significantly higher tendencies than their female counterparts when engaging in outcome-based comparison behaviors.

Difference in Social Comparison by Age Group: One-Way ANOVA

Table 4 ***One-Way ANOVA Results for Social Comparison Overall Scale by Age Group (N = 220)***

Source	SS	df	MS	F	p
Between Groups	1.007	2	0.503	0.97	.381
Within Groups	112.629	217	0.519		
Total	113.636	219			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square; F = F-ratio; p = Significance value.

As can be observed from Table X, the One-Way ANOVA was calculated for a total sample of 220 respondents (N = 220). The variance between the groups generated a Sum of Squares (SS) of 1.007 with 2 degrees of freedom (df = 2), resulting in a Mean Square (MS) of 0.503. On the other hand, the residual variance within the groups produced a Sum of Squares (SS) of 112.629 with 217 degrees of freedom (df = 217), yielding a Mean Square (MS) of 0.519.

The overall scale did not produce statically significant difference by age (all p>.05).These

findings suggest that, in general age does not significantly differentiate the Social Comparison tendencies of students across the comparison items in this study.

The one way ANOVA results for age groups indicate that Social Comparison is a stable construct.

Differences in Social Comparison by Grade Level: One-Way ANOVA (N=220)

Table 6 ***One-Way ANOVA Results for Social Comparison Overall Scale by Grade Level (N = 220)***

Source	SS	df	MS	F	p
Between Groups	0.145	2	0.073	0.139	.870
Within Groups	113.491	217	0.523		
Total	113.636	219			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square; F = F-ratio; p = Significance value.

A one way ANOVA did not displays statistically significance difference by grade level ($p>.05$), with *F-values* =0.139.This lack of significance across the scale indicates that the Social Comparison tendency, as measured in this study, are moderately consistent across grade levels.

The Direction of Social Comparison

The second research question examined the direction of social comparison-whether students predominantly engage in upward comparison (Comparing oneself with higher-performing peers), downward comparison (Comparing with lower-peers), or both. The following sections

present descriptive statistics, t-test and ANOVA results for each direction.

Upward Comparison: Descriptive Statistics

Table 7 Descriptive Statistics for the Overall Scale of Upward Social Comparison (N = 220)

Scale	M	SD
Upward Social Comparison	3.42	0.893

Note. M = Mean; SD = Standard Deviation. Scale: 1.00–2.49 = Low; 2.50–3.49 = Moderate; 3.50–5.00 = High.

Table 8 ***Descriptive Statistics for the by item Upward Social Comparison (N = 220)***

ID	Item	*M*	*SD*
UC1	In order to feel inspired, I observe peers who do better.	3.49	1.176
UC2	I observe the student who outperform me	3.43	1.12
UC3	In order to check what I improve, I look students who	3.25	1.319
	perform better than me		
UC4	I observe my academic progress against peers	3.28	1.29
	who perform better than me		
UC5	I analyze how I can learn from peers who are more successful	3.67	1.144
Total	Overall Upward Comparison	3.42	0.893

Note. M-Mean; SD=Standard Deviation.Scale;1.-2.49=Low;2..5=3.49-Moderate; 3.5-5.=High.

The data shows that the overall levels of Upward Comparison among students is moderate (*M*-3.42,*SD*=0.893). Item UC5 ("I analyze how I can learn from peers who are more successful")

takes the highest mean score (*M*-3.67), falling in to high level category. This indicates that students have a tendency of upward comparison for strategic learning not only for a passive observation.

The lowest score is attached with SC3 “In order to check what I improve, I look at students who perform better than me”, (*M*-3.25), however it falls in the moderate range. The standard deviation across all items are relatively similar (ranging from 1.12 to 1.319), suggesting a consistent spread of responses across the sample. The moderate Overall means suggest that students do not excessively compare themselves with others while students do look to their higher performing peers for motivation or comparison. The higher score on UC5 suggests that a proactive approach to peer modeling, student’s comparison is made for self-development.

The descriptive analysis for Upward Comparison indicates a Moderate level of engagement. Whereas, most patterns such as comparing academic progress or observing are practiced at a moderate level. There is a significantly high tendency for students to specifically analyze more successful peers to learn from them. This indicates that upward comparison in this context is largely driven by a desire for academic growth.

Gender *Difference in Upward Comparison: Independent Sample t-Test*

Table 9 ***Independent Samples t-Test Results for Upward Social Comparison***

Scale by Gender (N = 220)

Item	Gender	N	M	SD	T	df	p-value
UC1	Male	97	3.55	1.27	0.38	218	0.706
	Female	123	3.49	1.23			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square; F = F-ratio; p = Significance value.

The *T*-test results reveal no significant role on upward comparison (p>0.05). While there is no significant difference between males and females in their overall inspiration or learning-based comparison,

Upward Comparison by Age and Grade Level: One-Way ANOVA

Table 10 ***One-Way ANOVA Results for Upward Social Comparison Scale by Age Group (N = 220)***

Source	**SS**	**Df**	**MS**	**F**	**p**
Between Groups	2.263	2	1.131	1.424	.243
Within Groups	172.463	217	0.795		
Total	174.726	219			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square; F = F-ratio; p = Significance value.

Table 11 ***One-Way ANOVA Results for Upward Social Comparison Scale by Grade Level (N = 220)***

Source	SS	Df	MS	F	p
Between Groups	0.567	2	0.284	0.353	.703
Within Groups	174.159	217	0.803		
Total	174.726	219			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square;

F = F-ratio; p = Significance value.

One-way ANOVAs conducted separately for age group and grade level, In overall scale, ($p>.05$). This indicates that there is no statically significant difference in any of the Upward Comparison variable across the different age or grade level. The results suggest that age or grade level does not play a distinguishing role in how individuals compare themselves to those they perceive as "better off." This findings confirm that upward comparison tendencies are stable trait that does not significantly fluctuates as one matured through the specific age brackets included in this sample(N-220).The lack of significance might also be attributed to a relatively homogenous ample where age-related life stages do not drastically alter the psychological drivers of Social Comparison.

Downward Comparison: Descriptive Statistics

Table 12 ***Descriptive Statistics and Interpretation Levels for Downward Comparison Items (N-220)***

ID	Item	*M*	*SD*
DC1	16. I compare my efforts to those who put less effort	2.24	1.234
DC2	17. I compare myself with those who struggling to feel better about my abilities	2.4	1.199
DC3	18. In order to feel more capable, I look at students who perform poorly	2.17	1.28
DC4	19. I observe on peers who do worse to feel satisfied with my performance	2.22	1.274
DC5	2. In order to boost my confidence I think about how others are doing worse	2.3	1.311
		2.3	1.3
Overall Scale		2.27	1.058

Note. M-Mean; SD=Standard Deviation.Scale;1.-2.49=Low;2..5=3.49-Moderate;3.5-5.=High.

The descriptive statistics for downward Social Comparison items are presented in Table 12, overall scale, students reported a low level of downward Social Comparison across all measured

statements. Mean scores for individual items ranged from (*M*-2.17,*SD*=1.28)for item CDC3("In order to feel more capable, I look at a student who perform worse "to (*M*-2.4;*SD*=1.2) for DC2("I compare myself with those who are struggling").Across the five items, the average mean scores for individual was approximately (2.27) , indicating that participants "disagree" or "strongly disagree with the use of downward Social Comparison to bolster their self-esteem or confidence. The standard deviations ranging from (1.19) to (1.31) suggest a moderate level of consensus among respondents, with most scores clustering around the lower end of the scale.

The findings indicate that students in this sample do not frequently engage in downward Social Comparison as a primary self enhancement strategy. While psychological theory often suggests that individuals compare themselves to those "worse off" to boost their own subjective well-being or confidence (Wills,1981), the low mean scores in this study suggest that these participants may rely on other mechanisms for motivation or self-validation The low level of downward comparison observed (ranging from(2.17 to 2.4) could suggest a healthy academic environment where students focus more on individual progress or mastery rather than devaluations the efforts of their peers. This align with the "low" classification assigned in the table, suggesting that looking at others' struggles or lesser efforts is not a significant driver of confidence for this specific group.

The direction of Downward Social Comparison is low. The participants in this study reported a low tendency to use downward Social Comparison. In short, the participants in this study reported a low tendency to use downward Social Comparison (looking at others who are worse off) as a way to boost their own confidence or satisfaction. Whereas the upward comparison from Table-shows an overall mean of—which categorize in a moderate level. The respondent report that the direction of Social Comparison is Upward wards Comparison.

Gender Difference in Downward Comparison: Independent Samples t-Test

Table 13

Independent Samples t-Test Results Comparing Downward Comparison

Scale by Gender (N=220)

Item	Gender	N	M	SD	T	df	p-value
UC1	Male	97	2.35	1.23	0.19	218	0.851
	Female	123	2.32	1.28			

The independent sample t=test revealed that overall scale p values are >.05, there is no statistically significant difference between Gender group.

Age and Grade Level :One Way ANOVA

Table 14 ***One-Way ANOVA Results for Downward Social Comparison Overall***

Scale by Age Group (N = 220)

Source	**SS**	**Df**	**MS**	**F**	**p**
Between Groups	16.016	2	8.008	7.579	.001*
Within Groups	229.292	217	1.057		
Total	245.308	219			

Table 15 *One-Way ANOVA Results for Downward Social Comparison*

Overall Scale by Grade Level (N = 220)

Source	SS	df	MS	F	P
Between Groups	19.686	2	9.843	9.467	.000*
Within Groups	225.622	217	1.040		
Total	245.308	219			

Note. SS = Sum of Squares; df = Degrees of Freedom; MS = Mean Square; F = F-ratio; p = Significance value. *p < .05.

In contrast to the stability found for upward comparison, the one-way ANOVAs for downward comparison revealed statistically significant differences across both age groups and grade levels for both scales (all P<.05). For age-group comparisons, F=values =7.579 and F=values for Grade level, F=9.467. These findings indicate that age and grade level are meaningful predictors of downward comparison behavior, whereas they were not for upward comparison. The significant results may reflect the younger or lower grade students are more likely to use downward comparison as coping mechanism to manage academic self-esteem, while older students may shift toward more individualized standards of success. The significant grade-level findings further suggest that exposure to increasingly competitive academic environments=and the accompanying self-evaluation pressures=shapes students' reliance on downward comparison strategies.

The Relationship between Social Comparison and Student Motivation

The section examines the statistical relationships between social comparison tendency and two

dependent variables: academic grade score and student motivation (both intrinsic and extrinsic). The analysis proceeds in three stages: (1) descriptive statistics for grade scores and motivation subscales, (2) Pearson product-moment correlation analysis, and (3) standardized regression analysis

Descriptive Statistics: Grade Scores Distribution

Table 16

Frequency Distribution of Scores (N-220)

Score Interval	Frequency (n)	Percent (%)
below 5	1	.5
59=5	19	8.6
79-6	138	62.7
89=5	41	18.6
9-1	21	9.5
Total	22	1

Table 16 presents the frequency distribution, percentage, and cumulative percentages for the measured variable across a total sample size of (220). The primary purpose of this analysis is to evaluate the descriptive distribution and central tendency of scores across five discrete intervals (100=90), (89-80), (79-60), (59-50) and (below 50).Low Scores (<50) is contributed by 5%,N=1.Lower middle range (50-59) 8.6%,N-19 with in the interval, establishing a cumulative threshold of (90-.100%). N- 19. The vast majority observations (60=79) is 62.7% are concentrated within the single band, elevating the cumulative percentage to (71.8%).The upper middle range (80=89) a substantial secondary tier(N-41,18.6%) occupies this range, bringing the cumulative total to (9.5%).High Performance Range (90-100) contains the remaining 9.5%

of the sample(N-21), finalizing the cumulative metric at (100%).The empirical data reveal a negatively skewed distribution, indicating a strong clustering of scores toward the higher end of the scale. The overwhelming concentration of the sample (81.3%) falls securely between the score of (60) and (89), demonstrating homogeneity around the mean.

***Description Analysis of Intrinsic Motivation*.**

Table 17

***Description Analysis of Intrinsic Motivation*.**

ID	Item	*M*	*SD*
IM1	21. I attempt my best in school because I want to improve my academic performance	3.92	1.16
IM2	22. Understanding something difficult in class makes me to feel pleased.	3.74	1.183
IM3	23. Challenging subject enhance me to study hard.	3.59	1.188
IM4	24. In order to improve myself I do school work	3.62	1.47
IM5	25. I study because I enjoy learning new things	3.53	1.184
Total	Overall Intrinsic Motivation	3.68	1.15

Note. M-Mean; SD, Standard Deviation, Scale: 1.00-2.49=Low; 2.50=3.49=Moderate;3.50=5.00=High

Overall Total; The aggregate intrinsic motivation is high (*M*-3.68,*SD*=1.15). Proving a generally positive and self-=driven academic mindset among the respondents

IM1displays the highest individual agreement (*M*-3..92, *SD*1.16) indicating a strong high level drive to improve academic performance. The data show that the tangible self-improvement

outcomes strongly drive student motivation .The desire for better performance (IM1) and personal growth (IM4) score higher than abstract motivators like pure curiosity (IM5). While students actively want to improve, the moderate scores on challenging subjects (IM3) and learning enjoyment (IM5) point to potential gap. This gap suggest that when coursework becomes highly difficult lacks immediate practical value, intrinsic drive slightly weakens. The standard deviations remain consistently around (1.4 to 1.18). This consistency indicates a moderate spread in responses, showing that while the majority lean positive, a notable subgroup of students experience lower intrinsic motivation.

The surveyed students possess a high overall level of intrinsic motivation (*M*-3.68). Their primary drives focus on academic achievement and self-improvement. Motivation slightly decreases when facing difficult challenges or learning purely for enjoyment, marking these areas as opportunities for targeted educational support.

Descriptive Statistics: Extrinsic Motivation

Table 18

Descriptive Statistics and Interpretation Levels for Extrinsic Motivation

Items (N=220)

ID	Item	*M*	*SD*
EM1	I attempt my best to exceed other students in each subject.	3.22	1.136
EM2	I study because I am eager to join higher education	3.7	1.162

EM3	.When I see high performer, I feel courage	3.62	1.181
EM4	Praise from parents and teachers motivate me to study hard.	3.79	1.151
EM5	Observing top performers in school encouraged me.	3.65	1.123
	Overall	3.6	1.151

Note .M-Mean; SD, Standard Deviation,Scale:1.00-2.49=Low; 2.50=3.49=Moderate;3.50=5.00=High

(*M*-3.79, *SD*=1.15), while long term academic goals heavily influence daily effort (*M*-3.7,*SD*, 1.16). Additionally, peer success acts as a catalyst for personal encouragement (*M*-3.65, *SD*=1.12), whereas direct Social Comparison and competition yield the weakest overall motivational impact (*M*-3.22, *SD*=1.14). Across the items, high standard deviation indicates highly varied individual responses among the participants, reflecting critical variance in extrinsic motivational profiles. Furthermore, despite its high mean score, item EM4 presents an anomaly because it is descriptively labeled as "Moderates," which strongly suggest a potential coding or classification.

The descriptive Statistics indicate that students are highly motivated by external factors, with the positive impacts of perceived social support and anticipated future rewards far outweighing the motivational drive generated by direct peer competition. Consequently, institutional and educational interventions should systematically prioritize positive reinforcement strategies implemented by teachers and parents. Furthermore, school academic counseling frameworks must be intentionally structured to focus on long term higher education pathways to optimize and sustain student engagement over time.

Correlation between Social Comparison and Grade Score

Table 19

Pearson Correlation between Social Comparison Overall Scale and Average Grade Score (N = 220)

Variable	M	SD	r (Grade Score)
Social Comparison (Overall)	3.27	0.72	.023
Average Grade Score	—	—	1

Note. M = Mean; SD = Standard Deviation; r = Pearson Correlation Coefficient. p = .735 (two-tailed). N = 220.

The correlation matrix revealed that peer comparison behaviors shared no statistically significant relationship with Average Grade Score. The empirical evidence indicate that peer directed Social Comparison behavioral do not meaningfully relate to a student's average grade score. While previous literature often debates whether upward or downward Social Comparison act minor motivators, the negligible effect sizes across all ten items demonstrate that competitive benchmarking against classmates does not translate into measurably higher or lower academic performance.

Correlation and Regression: Social Comparison and Intrinsic Motivation

Table 20

Pearson Correlation between Social Comparison Overall Scale and Intrinsic Motivation (N = 220)

Variable	M	SD	r (Intrinsic Motivation)
Social Comparison (Overall)	3.27	0.72	.085
Intrinsic Motivation (Overall)	—	—	1

Note. M = Mean; SD = Standard Deviation; r = Pearson Correlation Coefficient. p = .209 (two -tailed). N = 220.

The descriptive statistics show that the mean score for Social Comparison was 3.27(SD = 0.72). The correlation analysis revealed a very weak positive relationship between Social Comparison and Intrinsic Motivation, r (218) = .085. However, this relationship was not statistically significant, as the p-value was greater than the standard alpha level of .05 (p = .209, two-tailed).

This implies that there is no statistically significant relationship between individuals' tendency to engage in social comparison and their levels of intrinsic motivation within this study population.

Correlation and Regression: Social Comparison and Extrinsic Motivation

Table 21

Pearson Correlation between Social Comparison Overall Scale and Extrinsic Motivation (N = 220)

Variable	M	SD	r (Extrinsic Motivation)
Social Comparison (Overall)	3.27	0.72	.129
Extrinsic Motivation (Overall)	—	—	1

Analysis of Regression of relationship between Social Comparison and Grade Scores

Note. M = Mean; SD = Standard Deviation; r = Pearson Correlation Coefficient. p = .056 (two-tailed). N = 220.

As depicted in Table 21, the overall mean score for Social Comparison was 3.27 with a standard deviation of 0.72. The Pearson correlation analysis revealed a weak, positive correlation between Social Comparison and Extrinsic Motivation (r = .129).

However, the statistical significance of this relationship was evaluated at the standard alpha level of alpha = .05. The two-tailed p-value was found to be .056 (p > .05), indicating that the correlation between the two variables is not statistically significant.

Although the positive correlation coefficient (r = .129) suggests a slight tendency for individuals with higher social comparison scores to display higher extrinsic motivation, this relationship does not reach statistical significance. Therefore, there is insufficient empirical evidence to conclude that a meaningful relationship exists between Social Comparison and Extrinsic Motivation within the studied population.

Table 22

Regression Coefficients for Social Comparison by Scale Predicting Average Grade Score (N = 220)

Model	B	SE B	β	t	p
(Constant)	3.201	0.243	—	13.166	.000
Social Comparison (Overall Mean)	0.025	0.073	.023	0.338	.735

The regression model results indicate that Social Comparison is not a statistically significant predictor of Average Grade Score, beta = .023, t (218) = 0.338, p = .735. The unstandardized coefficient B = 0.025 shows that for every one-unit increase in Social Comparison, the Average Grade Score is expected to increase by only 0.025 units, which is a negligible change.

Furthermore, because the p-value (p = .735) is well above the standard alpha level of .05, this minor effect is statistically insignificant and likely due to chance. The constant value in the model is 3.201 (t = 13.166, p < .001), representing the predicted Average Grade Score when the Social Comparison score is zero.

Based on these findings, the null hypothesis is retained, indicating that overall Social Comparison does not significantly predict or influence students' Average Grade Scores within this study group.

Standardized Regression Coefficients (β) for predictors of Internal Motivation

Table 23

Regression Coefficients for Social Comparison by scale Predicting

Intrinsic Motivation (N = 220)

Model	B	SE B	B	t	p
(Constant)	3.357	0.262	—	12.833	.000
Social Comparison (Overall Mean)	0.098	0.078	.085	1.260	.209

Note. B = Unstandardized Coefficient; SE B = Standard Error; β = Standardized Coefficient; N = 220.

The results demonstrate that Social Comparison is not a statistically significant predictor of Intrinsic Motivation, $\beta = .085$, $t(218) = 1.260$, $p = .209$. The unstandardized regression coefficient ($\beta = 0.098$) indicates that for every one-unit increase on the Social Comparison scale, Intrinsic Motivation is predicted to increase by a mere 0.098 units.

Because the p-value ($p = .209$) is greater than the conventional significance level of .05, the minor positive trend observed is statistically insignificant and cannot be generalized beyond this sample. The model's constant is 3.357 ($t = 12.833$, $p < .001$), which represents the baseline level of Intrinsic Motivation when Social Comparison is at zero.

Consequently, overall Social Comparison does not have a statistically significant predictive effect on Intrinsic Motivation.

Standardized Regression Coefficients (β) for predictors of External Motivation

Table 24

Regression Coefficients for Social Comparison Predicting Extrinsic Motivation (N = 220)

Model	B	SE B	B	T	p
(Constant)	3.357	0.263	—	11.826	.000
Social Comparison (Overall Mean)	0.151	0.078	.129	1.924	.056

Note. B = Unstandardized Coefficient; SE B = Standard Error; β = Standardized Coefficient; N = 220.

The regression results indicate that Social Comparison is not a statistically significant predictor of Extrinsic Motivation at the standard alpha level, $\beta = .129$, $t(218) = 1.924$, $p = .056$. The unstandardized regression coefficient $\beta = 0.151$ suggests that for each one-unit increase in Social Comparison, Extrinsic Motivation increases by 0.151 units.

The constant for this model is 3.357 ($t = 11.826$, $p < .001$), representing the baseline level of Extrinsic Motivation when Social Comparison is zero. Because the p-value ($p = .056$) is slightly greater than the conventional cutting point of .05, the null hypothesis is retained. This implies that Social Comparison does not have a statistically significant predictive effect on Extrinsic Motivation within this sample.

4.2 DISSCUSSION

Discussion of the Level of Social Comparison

The finding that students at BNB High School engage in moderate overall of Social Comparison (M-3.27, SD-0.72) is theoretically consistent with Feininger's (1954) foundational proposition that individuals turn to social referents when objective standards of self-evaluation are unavailable. In classroom environment where grading is relative and academic ranking is visible, peers naturally become the primary benchmark for self-assessment. The moderate=rather than extreme=level suggest that students are exercising selective social comparison: they use peer information as a calibration tool without being dominated by it, a pattern consistent with what Bunnk and Gibbons (2007) describe as an adaptive, information seeking orientation.

The highest-rated item, SC2 — "I notice the effort of my peers in their studying" (M = 3.66) — is particularly noteworthy. Rather than comparing outcomes such as grades or exam scores, students most prominently attend to the behavioral inputs of their peers. This is consistent with Social Cognitive Theory (Bandura, 1986), which holds that observational learning is most powerful when individuals attend to the process behaviors of models. When students observe classmates investing sustained effort, they acquire behavioral scripts for what it means to be a "successful student," and this information becomes motivationally actionable. The finding also resonates with Garcia, Tor, and Schiff's (2013) work on near-upward goal-setting, which demonstrate that proximity-based effort cues are particularly effective in energizing academic behavior.

The lowest rated item, SC8 "I consider others more capable and smarter than me academically" (M.=2.85) indicates that students largely retain their academic self-confidence even while engaging in peer comparison. This is an important distinction, students appear to use peers as

informational resources rather than as sources of ego threat. The relatively high standard deviation for this item (SD=1.38), however, signals that a meaningful subgroup does experience comparison induced feelings of inferiority, a risk factor that educators should monitor, particularly given its association with academic anxiety documented by Tian et al.(25)

The Mean difference found for male students reporting higher tendencies in both align with broader literature suggesting that male students in competitive academic setting are more oriented toward outcome-based benchmarking (Elliot & Harackiewicz,1996). This may reflect differential socialization patterns in which male academic identify is more closely tied to oriented forms of self-evaluation. The absence of significant gender difference in social comparison tendency indicates that most day-to-day comparison behavior, observing peer effort monitoring comprehension, evaluating class activities are gender neutral practices, suggesting that the basic social information gathering function of comparison is a shared human tendency that transcends gender.

The finding from ANOVA is not statistically significant. The stability of all other comparison dimensions across age and grade provides evidences that social comparison orientation is a relatively stable dispositional tendency during secondary school, a finding that support the characterization of comparison orientation as a trait like construct (Gibbons& Bunnk,1999).

Discussion of the Direction of Social Comparison

The clear dominance of Upwards Comparison (M=3..42) over Downward Comparison (M=2.27) in this sample challenges the assumption ,common in western-centered stress and competition literature, that high stakes academic environments inevitably drive students towards self-protective downward comparison (Wills 1981). Instead the pattern found here more closely resembles the “inspiration model” proposed by Lockwood and Kunda (1997) in which upward

comparison targets are perceived as attainable role model rather than threatening rivals. The Particularly high endorsement of UC5,"I analyze how I can learn from peers who are more successful" (M=3.67, the only item reaching the high classification), reinforce this interpretation. Students are not merely observing superior peers passively; they are actively extracting strategic learning information from them. This proactive, growth –oriented stance suggests that students in this context frame upward comparison as an opportunity for self-development rather than a source of self-diminishment.

The low level of downward comparison observed (M=2.27) is also significant. Wills'(1981) theory predicted an individual under threat would systematically seek out inferior comparison targets to protect self-esteem. The fact that students in this sample do not rely on this strategy may suggest that academic culture at BNB High School or Ethiopian educational culture more broadly, does not strongly incentivize self enhancement through the devaluation of others. It may also reflect that when students perceive the academic environment as one of shared challenge rather than zero-sum competition, the psychological need for downward comparison is reduced. This finding is consistent with Dweck and Leggett's (1988) argument that mastery-goal orientation reduces reliance on ego-protective social comparison strategies.

The absence of significant ANOVA effects for upward comparison across age group and grade levels reinforces the findings that comparison direction, like comparison tendency, is a stable characteristic throughout secondary school. This stability suggests that the directional preference for upward, growth-oriented comparison is established early in students 'academic careers and dose not shift dramatically as they advance. It also implies that interventions designed to redirect

students toward constructive upward comparison would need to be implemented early and consistently rather than at specific transition points.

One way of ANOVA for downward comparison for both age and grade level revealed statistically significant. These findings indicate that age and grade level are meaningful predictors of downward comparison behavior, whereas they were not for upward comparison. The significant results may reflect the younger or lower grade students are more likely to use downward comparison as coping mechanism to manage academic self-esteem, while older students may shift toward more individualized standards of success. The significant grade-level findings further suggest that exposure to increasingly competitive academic environments=and the accompanying self-evaluation pressures=shapes students' reliance on downward comparison strategies.

Discussion of the Relationship between social comparison, Academic Achievement and motivation

Perhaps the most theoretically significant finding of this study is the complete absence of statistically significant correlations between any of the ten social comparison items and students' average grade scores. This findings stand in apparent contrast to studies demonstrating that social comparison shapes academic self-concept, which in turn predicts performance (Marsh & Parker, 1984; Hugueet et al., 2001). However, several contextual factors help explain this divergence.

First, the restricted range of academic performance in this sample with 62.7% of students clustered within the 60-79 grade band, substantially limits statistical power to detect correlational relationships. When the dependent variable shows limited variance, even genuine relationships will be attenuated in correlation analyses, a statistical artifacts rather than a substantive null

finding, second in resource-constrained environments characterized by significant socioeconomic inequality (MoE, 2023), structural variables such as access to tutoring, home study conditions, and parental education level may account for the majority of variance in grade outcomes, effectively overshadowing the motivational mechanisms through which social comparison might otherwise exert influence. Third, and most theoretically interesting, the predominance of effort –oriented rather than outcome-oriented comparison in this sample may mean that social comparison energizes students' study behavior in ways that are broadly shared across the achievement distribution, elevating everyone's effort rather than differentiating individual performance outcomes.

In strong to the null findings for academic achievement, the study found meaningful and significant relationship between social comparison and motivation, particularly intrinsic motivation. The finding that SC2 (Noticing peer study effort) showed statistically significant positive correlations with all five dimensions of intrinsic motivation is the single most important result of the study. It directly extends Bandura's (1986) social cognitive account of observational learning in to the motivational domain: observing that classmates invest sustained effort activates students' own drives for self-improvement (IM4), their desire to master challenging material (IM3), and their inherent enjoyment of learning (IM5). This finding suggests that effort monitoring functions as a form of social proof for academic investment when students see peer working hard, it validates and energizes their own motivational commitments. The practical implication is that making peer effort visible in classroom setting may be one of the most powerful and low-cost motivational interventions available to teachers.

The regression findings clarify this picture. Self-improvement motivations (IM4) emerged as the most widespread positive predictor of social comparison behaviors, significantly predicting SC1, SC4, SC5 and SC6. This indicates that students who are intrinsically driven by self-development do not retreat from peer comparison rather than they actively use lateral comparison as informational resources to calibrate their own learning trajectories. This pattern aligns with Garcia et al.'s (2013) near upward goal-setting model, in which comparison with slightly superior peers serves as a motivational anchor for effort regulation. Conversely, the significant negative relationship between challenge-driven motivation (IM3) and class position tracking (SC6) reveals a psychological differentiation: students whose motivation is rooted in mastering difficult material are less preoccupied with hierarchical ranking, because their satisfaction derives from conquering academic challenges rather than from outperforming peers.

Regarding extrinsic motivation, the positive correlations between outcome based comparison behaviors (SC1, SC3, SC4 and SC10) and the desire to exceed others (EM1) confirm that competitive motivational orientations are sustained by performance benchmarking. Social Comparison finding is consistent with performance approach goal theory (Elliot & Harackiewicz, 1996). However, the significant negative relationship between SC10 (comparing exam success and failure) and EM4 (Praise from parents and teachers) introduce an important cautionary note. Students who are heavily focused on comparing exam outcomes with peers may be less responsive to the motivational benefits of parental and teacher praise, suggesting that an excessive outcome comparison orientation can determine the effectiveness of supportive reinforcement from authority figures. This finding echoes Hattie and Timberline's (2007) argument that ego-involving, comparative feedback can displace the motivational benefits of

process-oriented encouragement, and underscores the importance of helping students regulate their comparison focus forward effort and growth rather than competitive rank.

Taken together, the third research question findings suggest that Social Comparison in this context functions primarily as a motivational mechanism rather than a direct performance determinant. It shapes the psychological energy and engagement that students bring to their academic work without necessarily producing detectable difference in their final grade outcomes. This distinction, between motivational influence and achievement influence has important theoretical implications for the literature on Social Comparison in education, and practical implications for how teachers design feedback environments, peer learning structures, and motivational interventions.

CHPTER FIVE

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

INTRODUCTION

This chapter presents the summary of majors findings derived from the analysis and interpretation of data reported in Chapter Four. Based on these findings, conclusions are drawn, implications for educational practice are identified, and recommendations are offered for practitioners, policymakers, and future researchers. The study investigated the nature and level of Social Comparison among secondary school students, the direction of such academic, and student motivation (both intrinsic and extrinsic)

5.1 Summary

The findings of this study are summarized according to the four research questions that guided the investigation.

Level of Social Comparison

The first research question examined the level of Social Comparison among students Descriptive analysis of the ten Social Comparison items revealed an overall mean score of 3.27 (*SD*=0.72_which falls within the moderate range (2.5=3.49). This indicates that students engage in peer comparison at a meaningful but not excessive level. This findings agree with Festinger (1954) that individual possess a fundamental drive to evaluate their opinions and abilities, when objective, non-social standards are unavailable, this drive motives comparison with other people. The highest rated item was SC2, "I notice the effort of my peers in their studying " (*M*-2.85), reflecting that students generally retain their academic self-confidence.

Gender based *t*-test analysis revealed no significant gender difference, indicating that most forms of Social Comparison operate similarly across genders.

One way ANOVA analyses by both age remained stable across age and grade categories, indicating that Social Comparison as a general tendency is a relatively consistent construct throughout the secondary school years.

Direction of Social Comparison

The second research question explored whether predominantly engage in upward or downward Social Comparison. Results clearly indicated that upward comparison is the dominant direction. The overall mean for upward comparison was 3.42(*SD*=1.19), classified a s moderate, with one item –UC5, "I analyze how I can learn from peers who are more successful" reaching the high level (*M*-3.67).This finding demonstrate that students primarily look to higher performing peers as models for self-development rather than for competitive envy.

Conversely, downward comparison received consistently low rating items, with overall mean of approximately 2.27 (*SD*=1.3), placing it in low category. Students showed little tendency to compare themselves with weaker peers as a strategy to feel better about themselves. This pattern suggests a healthy academic orientation in which students focus on growth rather than on devaluing others' performance.

T-test analysis by gender revealed no statistically significant gender difference were found downward or upward comparison. ANOVA analyses by both age group and grade level found no significant difference in upward comparison but significance difference in downward comparison revealed by both age and grade level indicating that the downward comparison of Social Comparison is not stable across demographic subgroups.

Relationship between Social Comparison, Academic Performance, and Motivation

The third and fourth research questions examined whether a statistically significant relationship exists between Social Comparison tendencies and students' academic performance and motivation. The descriptive analysis of grade scores revealed that the majority of students (62.7%) scored within the 60–79 range, with 9.5% scoring 60 or above, reflecting a generally moderate-to-high academic performance distribution.

Pearson correlation analysis found no statistically relationship between Social Comparison scale and students' average grade scores. Several explanations are plausible. First, in a resource-constrained environment where most students cluster in the Good grade band (60=79, 62.7% of the sample), the restricted range in academic performance may attenuate correlations. Second, in contexts characterized by high socioeconomic inequality (MoE, 2022), grade outcomes may be heavily determined by structural factors=access to tutoring, home study conditions, parental education=than by motivational mechanisms shaped by social comparison. Third, the predominance of effort-oriented rather than outcome-oriented comparison may mean that comparison energizes students' study behavior without translating linearly in to grade difference between individuals.

Regarding extrinsic motivation it is marginal but not significant. Suggesting that heavy reliance on outcome-based comparison may weak the motivational benefits of parental and teacher praise. This finding is consistent with Hattie and Timperlev's (2007) argument that comparative, ego involving feedback can undermine the effectiveness of otherwise positive reinforcement.

5.2 Limitations and Future Direction

Several limitations should be noted. The study's cross-sectional design precludes casual inference. Data were collected from a single school in one regional capital limiting generalizability. Self-report measures introduce the possibility of social desirability bias. The restricted range of academic performance scores may have attenuated correlations with social comparison. Moderating variables=including academic self-efficacy, goal orientation, and family socioeconomic status=were not measured and may account for variance in the observed relationships.

5.3 Recommendations

Recommendations for Educational Practitioners

1. Teachers ought to design classroom activities that facilitate peer learning processes noticeable (collaborative projects, study strategy sharing sessions) to influence students' natural propensity to observe and learn from peer effort, thereby directing upward comparison constructively.

2 School counselors should apply social-emotional learning programs that prepare students with the psychological tools to involve in well upward comparison while handling the stress related with consequence based competitive comparison.

3. Teachers and parents should preserve dependable praise and positive reinforcement approaches. Given the negative relationship between outcome focused comparison and responsiveness to praise; students should be directed to worth internal development over comparative ranking to maximize the benefit of external encouragement.

4 Educators should advance gender-sensitive interventions. Since male students reveal significantly higher tendencies toward competitive, outcome-based comparison, targeted support

programs may help male students stability competitive benchmarking with more process=oriented and common self-evaluation.

Recommendations for School Leadership and Policy makers

1 School leadership should shift from ranking-based performance culture and toward a culture of individual growth and mastery. Public ranking students 'academic performance may amplify the psychological risks linked with competitive comparison without yielding corresponding enhancements in academic outcomes.

2 Policymakers should consider mixing academic motivation and Social Comparison literacy in to the school curriculum, helping students comprehend the psychological mechanisms of pee comparison and advance healthier self-evaluation practices.

3 Given that Social Comparison tendencies are constant across age and grade levels with that exception of effort monitoring, educational policies should care early intervention programs that promote healthy comparison approaches from junior secondary school onward..

Recommendation for Parents

1. Parents should be made aware that their praise and encouragement has the ultimate motivational influence when students are not overly preoccupied with comparing exam outcomes with peers. Parents should be directed by schools to focus their praise on effort, development, and strategy rather than on competitive ranking relative to classmates. Parents should model healthy self-evaluation approaches at home, inspiring children to celebrate their own development and to learn from others without feeling vulnerable by peers' success.

Suggesting for Future Research

The findings of this study open several important avenues for future research.

1. Future studies employ longitudinal designs to scrutinize how Social Comparison tendencies change across academic years. While this study found largely stable comparison behaviors across grade levels, a longitudinal approach would permit for chasing developmental trajectories and identifying critical transition points.

2. Qualitative methods-such as interviews and focus group should be used to complement the quantitative data found in this day. A deeper understanding of why and how students occupy in Social Comparison would provide better-off insights into the motivational and psychological mechanism underlying the patterns identified here.

3. Future research should examine the mediating and moderating roles of variables such as self-esteem academic self-efficacy, and achievement goal orientation in the relationship between Social Comparison and motivation. This study recognized correlational patterns, but the causal trails remain to be established

4. Given the significant but inadequate gender difference found in this study, future research should conduct more nuanced gender analyses, potentially exploring the role of gender socialization, peer culture, and academic environment in determining differential Social Comparison design among male and female students.

5. Research should be extended to other educational levels (primary school, university) and broader geographical and cultural contexts to control the generalizability of the findings. Social Comparison customs and arrangements may vary significantly across cultural settings and educational systems.

6. Future studies should scrutinize the role of digital and social in shaping academic Social Comparison among students, as online platforms produce new and expanded grounds of peer comparison that strengthen or redirect comparison behavior beyond the classroom.

7. Researches should explore the long-term academic and psychological outcomes of different Social Comparison styles, particularly whether students who mostly engage in upward, effor*t*-oriented comparison achieve better academic results and wellbeing outcomes over time compound to those who engage in downward or competitive comparison.

Conclusion

This study contributes to the developing body of research on Social Comparison in educational contexts by empirically documenting the level, direction, and motivational correlates of academic peer comparison among high school students. The suggestion presented confirms that Social Comparison is a meaningful and persistent psychological phenomenon in academic life, one that primarily oriented toward upward, growth-directed benchmarking rather than competitive self-enhancement or downward devaluation of peers.

Crucially, the findings prove that while Social Comparison does not directly determine academic grades, it is intricately associated with the motivational architectures that drive student engagement and effort. Understanding this relationship delivers educators and policymakers with important leverage points for designing academic environments that encourage healthy comparison habits, connecting the natural social dynamics of the classroom to support student growth, resilience, and intrinsic love of learning.

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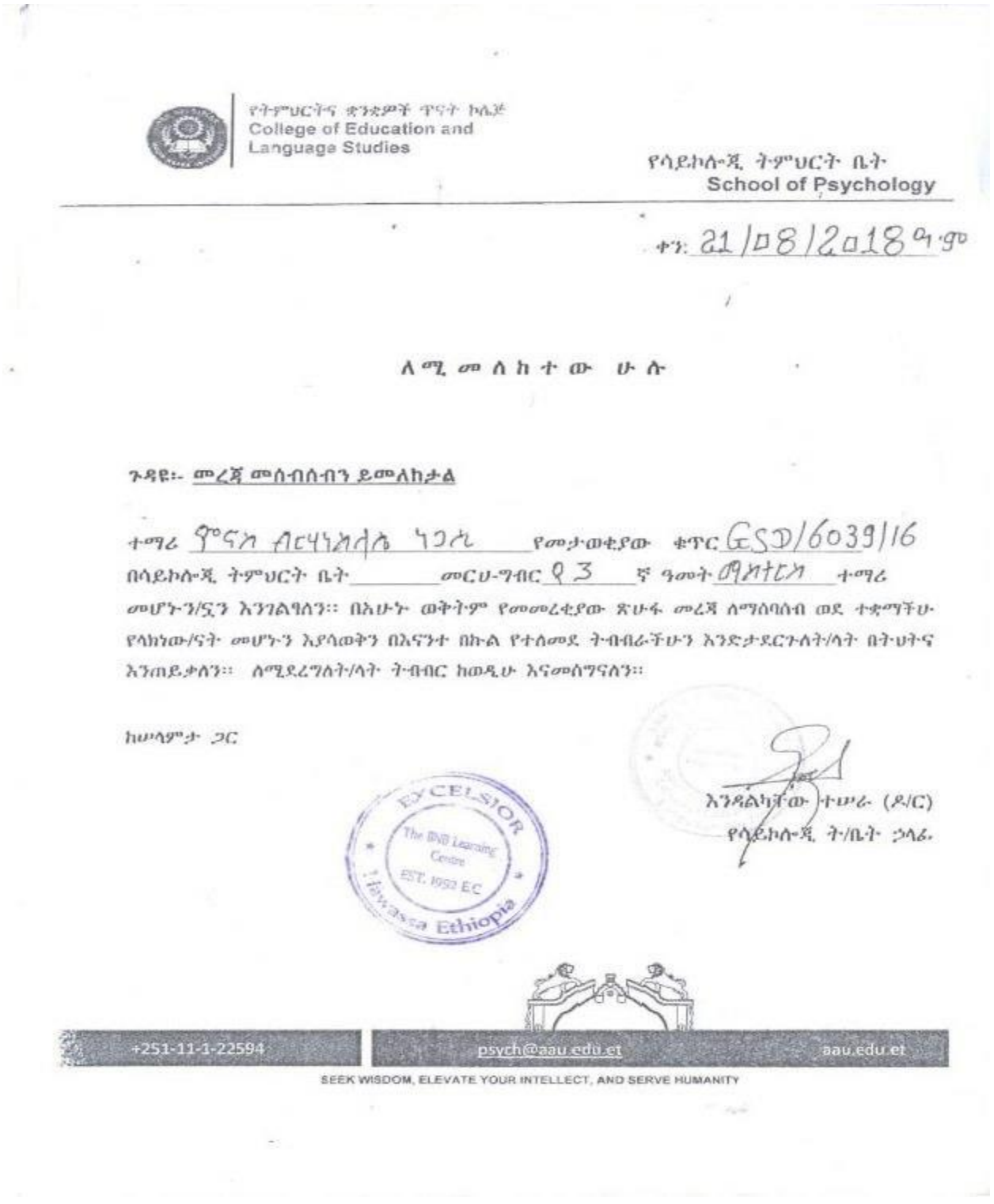
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የትምህርትና ቋንቋዎች ጥናት ኮሌጅ
College of Education and Language Studies

የሳይኮሎጂ ትምህርት ቤት
School of Psychology

ቀን: 21/08/2018 ዓ.ም

ለ ሚ መ ለ ከ ተ ው ሁ ሉ

ጉዳዩ፡- መረጃ መሰብሰብን ይመለከታል

ተማሪ ምናለ ለርሳለሌ ካጋሲ የመታወቂያው ቁጥር GSD/6039/16
በሳይኮሎጂ ትምህርት ቤት መርሀ-ግብር Q3 ኛ ዓመት ማስተርስ ተማሪ መሆኑን/ኗን እንገልፃለን:: በአሁኑ ወቅትም የመመረቂያው ጽሁፉ መረጃ ለማሰባሰብ ወደ ተቋማችሁ የላክነው/ናት መሆኑን እያሳወቅን በእናንተ በኩል የተሰመደ ትብብራችሁን እንድታደርጉለት/ላት በትህትና እንጠይቃለን:: ለሚደረግለት/ላት ትብብር ከወዲሁ እናመሰግናለን::

ከሠላምታ ጋር

እንዳልካቸው ተሠራ (ዶ/ር)
የሳይኮሎጂ ት/ቤት ኃላፊ

EXCELSIOR The IDNB Learning Centre EST. 1952 E.C. Addis Ababa Ethiopia

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SEEK WISDOM, ELEVATE YOUR INTELLECT, AND SERVE HUMANITY

Annex A Letter of data collection with stamp of the school

Addis Ababa University
College of Education and Language Studies
School of Psychology

Dear Respondent,

I have conducted research study on "Social Comparison and Its Impact on Academic Achievement and Motivation among High School Students of BNB, Hawassa."The purpose of this study is only for academic purposes under the school of psychology, College of Education and Language Studies, Addis Ababa University.

The objective of this research is to scrutinize the impact of social comparison on educational achievement and motivation. Your participation will help learning experience and improving educational practice. It is a voluntary participation. You are in a position to withdraw any time. You will not require writing your name. There is no right or wrong answers. You are expected to reflect your real experience.

Thank you for your time and willingness.

Researcher's Contact Address:

Name Yonas Birhanesilassie

Department: School of psychology, Addis Ababa University

Address: Addis Ababa, Ethiopia

Phone:+251-961-55-29-78

email:yonasb1979@gmail.com

Demographic Questionnaire

Section A: Demographic Information

Please answer all questions by ticking (✔).

1. Sex

O Male Ø Female

2. Age:

Ø 14-15 years O 16-17 years O 18-19 years

3.Grade Level

Ø Grade 9 O Grade 10 O Grade 11

Instructions to Respondents

Read each statement and indicate how often it applies to you

1- Strongly Disagree 2-Disagree 3- Neutral 4 Agree 5-Strongly Agree

Section II Social Comparison

1. I have a tendency to compare my score with classmates.	1	2	3	4	5

1

Annex B -1 Questionnier for data collection

2. I notice the effort of my peers in their studying.	1	2	3	4	5
3. I involve in comparing my test mark with peers	1	2	3	4	5
4. I evaluate my academic abilities by observing the performance of others	1	2	3	4	5
5. I attempt to know others performance on assignment relative to me	1	2	3	4	5
6. I analyze my class position among the classmate	1	2	3	4	5
7. I evaluate my class activity regarding other students	1	2	3	4	5
8. I consider others are more capable and smarter than me academically	1	2	3	4	5
9. I compare how I quickly understand lesson among my classmates	1	2	3	4	5
10. I compare the success and fail in exam of others with me	1	2	3	4	5
Section III Upward Comparison					
11. In order to feel inspired, I observe peers who do better.	1	2	3	4	5
12.I observe the student who outperform me	1	2	3	4	5
13. In order to check what I improve, I look students who perform better than me	1	2	3	4	5
14. I observe my academic progress against peers who perform better than me	1	2	3	4	5
15. I analyze how I can learn from peers who are more successful	1	2	3	4	5
Section IV Down ward Comparison					
16. I compare my efforts to those who put less effort	1	2	3	4	5
17. I compare myself with those who struggling to feel better about my abilities	1	2	3	4	5
18. In order to feel more capable, I look at students who perform poorly	1	2	3	4	5
19. I observe on peers who do worse to feel satisfied with my performance	1	2	3	4	5
20. In order to boost my confidence I think about how others are doing worse	1	2	3	4	5
Section V Intrinsic Motivation					
21. I attempt my best in school because I want to improve my academic performance	1	2	3	4	5
22. Understanding something difficult in class makes me to feel pleased.	1	2	3	4	5

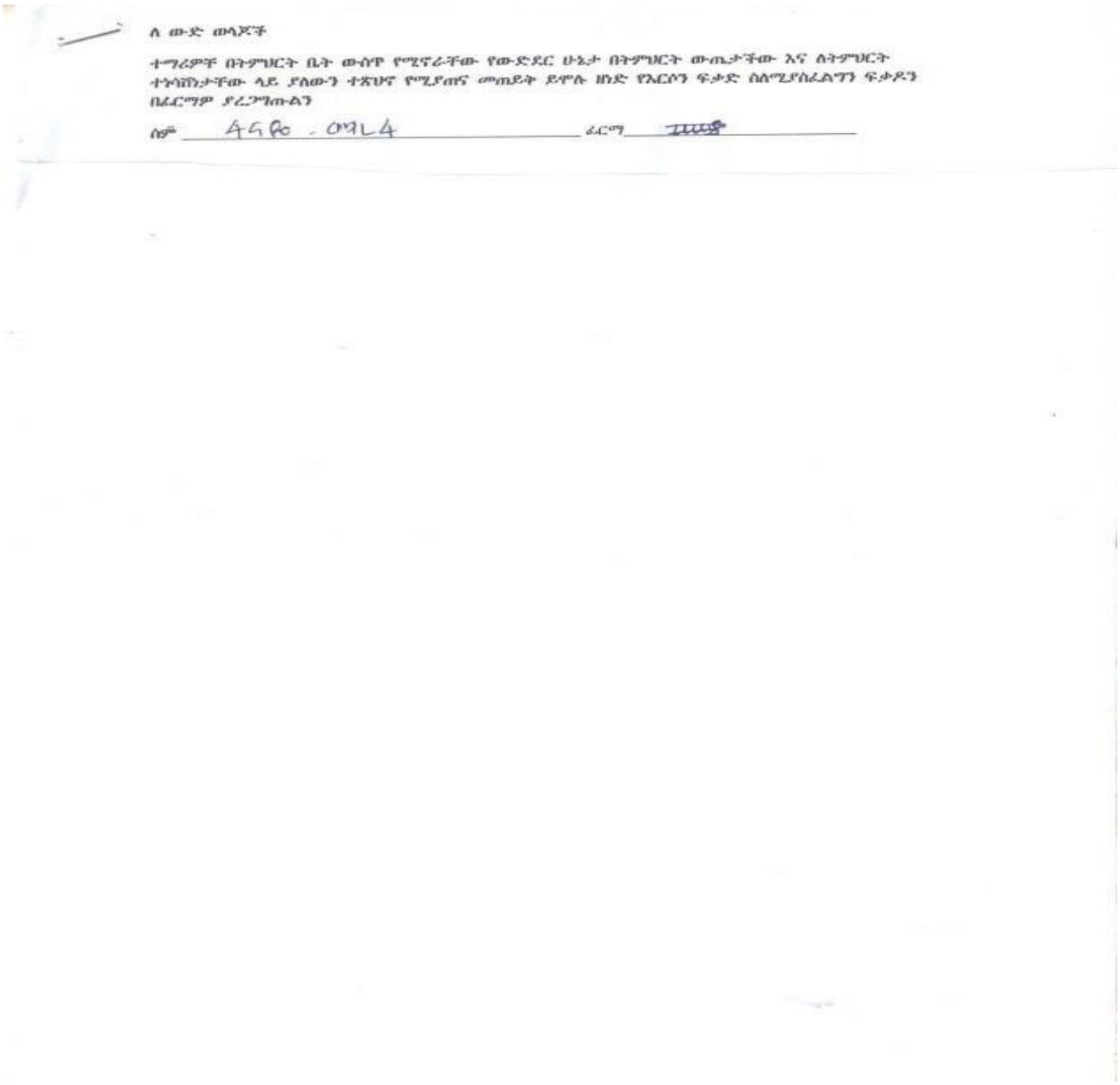
2

Annex B -2 Questionnier for data collection

23. Challenging subject enhance me to study hard.	1	2	3	4	5
24. In order to improve myself I do school work	1	2	3	4	5
25. I study because I enjoy learning new things	1	2	3	4	5
Section VI Extrinsic Motivation					
26. I attempt my best to exceed other students in each subject.	1	2	3	4	5
27. I study because I am eager to join higher education	1	2	3	4	5
28.When I see high performer, I feel courage	1	2	3	4	5
29. Praise from parents and teachers motivate me to study hard.	1	2	3	4	5
30. Observing top performers in school encouraged me.	1	2	3	4	5

3

Annex B -3 Questionnier for data collection



ለ ውድ ወላጆች

ተማሪዎቾ በትምህርት ቤት ውሰዋ የሚኖራቾው የውድደር ሁኔታ በትምህርት ውጤታችው እና ለትምህርት ተነሳሽነታችው ላይ ያለውን ተጽህኖ የሚያጠና መጠይቅ ይሞሉ ዘንድ የእርሶን ፍቃድ ስለሚያስፈልግን ፍቃዶን በፈርማም ያረጋግጡልን

ስም ____ ፈርማ ____

LIST OF STUDENTS OF BNB (GRADES 9-11)
FIRST SEMSETER OF 2025/2026 AVERAGE SCORE
NOTE. (100-90)-5,(89-80)-4,(79-60)-3,(59=50)-2, (<50)-1

1	STUD-9th	5		1	STUD=10th	5	1	STUD=11th	4
2	STUD-9th	3		2	STUD=10th	3	2	STUD=11th	3
3	STUD-9th	5		3	STUD=10th	3	3	STUD=11th	3
4	STUD-9th	3		4	STUD=10th	3	4	STUD=11th	3
5	STUD-9th	3		5	STUD=10th	3	5	STUD=11th	3
6	STUD-9th	3		6	STUD=10th	3	6	STUD=11th	3
7	STUD-9th	3		7	STUD=10th	4	7	STUD=11th	3
8	STUD-9th	3		8	STUD=10th	3	8	STUD=11th	3
9	STUD-9th	3		9	STUD=10th	3	9	STUD=11th	4
10	STUD-9th	4		10	STUD=10th	2	10	STUD=11th	3
11	STUD-9th	4		11	STUD=10th	3	11	STUD=11th	4
12	STUD-9th	3		12	STUD=10th	5	12	STUD=11th	3
13	STUD-9th	3		13	STUD=10th	4	13	STUD=11th	3
14	STUD-9th	3		14	STUD=10th	4	14	STUD=11th	4
15	STUD-9th	2		15	STUD=10th	2	15	STUD=11th	3
16	STUD-9th	3		16	STUD=10th	4	16	STUD=11th	5
17	STUD-9th	3		17	STUD=10th	3	17	STUD=11th	4
18	STUD-9th	2		18	STUD=10th	3	18	STUD=11th	3
19	STUD-9th	3		19	STUD=10th	3	19	STUD=11th	3
20	STUD-9th	3		20	STUD=10th	5	20	STUD=11th	3
21	STUD-9th	3		21	STUD=10th	2	21	STUD=11th	3
22	STUD-9th	3		22	STUD=10th	3	22	STUD=11th	4
23	STUD-9th	3		23	STUD=10th	3	23	STUD=11th	3
24	STUD-9th	4		24	STUD=10th	3	24	STUD=11th	4
25	STUD-9th	3		25	STUD=10th	3	25	STUD=11th	5
26	STUD-9th	3		26	STUD=10th	3	26	STUD=11th	5
27	STUD-9th	3		27	STUD=10th	3	27	STUD=11th	3
28	STUD-9th	3		28	STUD=10th	3	28	STUD=11th	3
29	STUD-9th	3		29	STUD=10th	3	29	STUD=11th	4
30	STUD-9th	3		30	STUD=10th	5	30	STUD=11th	4
31	STUD-9th	3		31	STUD=10th	3	31	STUD=11th	3
32	STUD-9th	4		32	STUD=10th	4	32	STUD=11th	3
33	STUD-9th	3		33	STUD=10th	5	33	STUD=11th	4
34	STUD-9th	3		34	STUD=10th	3	34	STUD=11th	4
35	STUD-9th	3		35	STUD=10th	4	35	STUD=11th	3
36	STUD-9th	2		36	STUD=10th	2	36	STUD=11th	4
37	STUD-9th	4		37	STUD=10th	3	37	STUD=11th	3
38	STUD-9th	1		38	STUD=10th	3	38	STUD=11th	3
39	STUD-9th	3		39	STUD=10th	5	39	STUD=11th	3
40	STUD-9th	4		40	STUD=10th	2	40	STUD=11th	3
41	STUD-9th	4		41	STUD=10th	3	41	STUD=11th	3
42	STUD-9th	3		42	STUD=10th	3	42	STUD=11th	4
43	STUD-9th	4		43	STUD=10th	3	43	STUD=11th	4
44	STUD-9th	4		44	STUD=10th	5	44	STUD=11th	4
45	STUD-9th	3		45	STUD=10th	3	45	STUD=11th	4
46	STUD-9th	3		46	STUD=10th	3	46	STUD=11th	3
47	STUD-9th	2		47	STUD=10th	3	47	STUD=11th	5
48	STUD-9th	3		48	STUD=10th	4	48	STUD=11th	4

Annex D First Semester Grade Score of Student for yeare 2025/2026

LIST OF STUDENTS OF BNB (GRADES 9-11)
FIRST SEMSETER OF 2025/2026 AVERAGE SCORE

NOTE: (100-90)=5,(89-80)=4,(79-60)=3,(59-50)=2,(<50)=1

49	STUD-9th	2		49	STUD=10th	3	49	STUD=11th	3
50	STUD-9th	3		50	STUD=10th	3	50	STUD=11th	3
51	STUD-9th	3		51	STUD=10th	3	51	STUD=11th	5
52	STUD-9th	3		52	STUD=10th	4	52	STUD=11th	3
53	STUD-9th	3		53	STUD=10th	5	53	STUD=11th	4
54	STUD-9th	5		54	STUD=10th	2	54	STUD=11th	
55	STUD-9th	3		55	STUD=10th	5			
56	STUD-9th	4		56	STUD=10th	2			
57	STUD-9th	3		57	STUD=10th	2			
58	STUD-9th	3		58	STUD=10th	3			
59	STUD-9th	3		59	STUD=10th	3			
60	STUD-9th	3		60	STUD=10th	4			
61	STUD-9th	3		61	STUD=10th	3			
62	STUD-9th	3		62	STUD=10th	3			
63	STUD-9th	3		63	STUD=10th	3			
64	STUD-9th	3		64	STUD=10th	3			
65	STUD-9th	3		65	STUD=10th	5			
66	STUD-9th	5		66	STUD=10th	2			
67	STUD-9th	3		67	STUD=10th	3			
68	STUD-9th	3		68	STUD=10th	3			
69	STUD-9th	3							
70	STUD-9th	3							
71	STUD-9th	3							
72	STUD-9th	3							
73	STUD-9th	3							
74	STUD-9th	3							
75	STUD-9th	3							
76	STUD-9th	3							
77	STUD-9th	3							
78	STUD-9th	2							
79	STUD-9th	3							
80	STUD-9th	2							
81	STUD-9th	3							
82	STUD-9th	4							
83	STUD-9th	2							
84	STUD-9th	2							
85	STUD-9th	5							
86	STUD-9th	3							
87	STUD-9th	4							
88	STUD-9th	3							
89	STUD-9th	3							
90	STUD-9th	4							
91	STUD-9th	3							
92	STUD-9th	3							
93	STUD-9th	4							
94	STUD-9th	3							
95	STUD-9th	3							
96	STUD-9th	3							
97	STUD-9th	2							
98	STUD-9th	3							

Annex D-2 First Semester Grade Score of Student for yeare 2025/2026

Assumptions of Parametric Statistics

Prior to conducting the primary inferential statistical analyses (such as Pearson product-moment correlation and multiple linear regression) to examine the relationships between social comparison orientation, academic motivation, and academic achievement, the dataset will be subjected to rigorous preliminary diagnostics. Parametric statistical procedures are grounded in specific distributional assumptions regarding the nature of the data. Violating these assumptions can severely compromise the statistical power of the tests and inflate Type I or Type II error rates.

Accordingly, the four core assumptions of parametric statistics will be systematically tested and verified using the Statistical Package for the Social Sciences (SPSS):

Assumption of Normality

The assumption of normality dictates that the scores of the continuous dependent variables (academic motivation sub-scales and academic achievement marks) must be normally distributed within the population, taking the shape of a symmetrical, bell-shaped curve.

To empirically evaluate this assumption, both graphical and statistical methods will be deployed:

- Graphical Assessment: Histograms overlaid with normal curves and Normal Quantile-Quantile (Q-Q) plots will be visually inspected to detect extreme skewness or kurtosis.
- Statistical Tests: The Shapiro-Wilk test (appropriate for smaller sub-samples) and the Kolmogorov-Smirnov test will be executed. A non-significant p-value ($p > 0.05$) will be accepted as statistical evidence that the data does not significantly deviate from a normal distribution.

In instances of mild non-normality, the Central Limit Theorem will be cited as a mathematical justification for sample sizes exceeding 30, or appropriate data transformation techniques (e.g., logarithmic transformations) will be applied.

Assumption of Homogeneity of Variance

Homogeneity of variance (or homoscedasticity) requires that the variance, or numerical spread, of the dependent variable scores around their respective means must be fundamentally equal across all comparison groups (e.g., comparing Grade 11 versus Grade 12 students, or male versus female students) and across all levels of the independent variables.

- Diagnostic Test: For group comparisons (t-tests and ANOVA), Levene's Test for Equality of Variances will be computed. A probability value greater than the standard alpha level ($p > 0.05$)