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የፓይ The Influence of Teachers' Leadership on Student Engagement in Public Universities of the State Of Amhara: The Mediating Role of Student Trust in Teachers

Yalalem, Assefa

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BAHIR DAR UNIVERSITY

COLLEGE OF EDUCATION

SCHOOL OF EDUCATIONAL SCIENCES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

THE INFLUENCE OF TEACHERS' FULL-RANGE LEADERSHIP ON STUDENT
ENGAGEMENT IN PUBLIC UNIVERSITIES OF THE STATE OF AMHARA:
THE MEDIATING ROLE OF STUDENT TRUST IN TEACHERS

BY:

YALALEM ASSEFA ZELEKE

JUNE, 2026

BAHIR DAR, ETHIOPIA

Bahir Dar University
College of Education
School of Educational Sciences
Department of Educational Planning and Management

The Influence of Teachers' Full-Range Leadership on Student Engagement in Public
Universities of the State of Amhara: The Mediating Role of
Student Trust in Teachers

By:

Yalalem Assefa Zeleke

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Doctor of Philosophy
in Educational Policy and Leadership of the Department of Educational Planning and
Management, School of Educational Science, College of Education, Bahir Dar University,
Ethiopia.

Principal Supervisor: Getnet Tizazu Fetene (PhD, Associate Professor, Addis Ababa University)

Co-Supervisor: Getu Shiferaw Wolle (PhD, Associate Professor, Bahir Dar University)

June, 2026

Bahir Dar, Ethiopia

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CANDIDATE'S DECLARATION FORM

This is to certify that the dissertation titled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the State of Amhara: The Mediating Role of Student Trust in Teachers”, submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Educational Policy and Leadership of the Department of Educational Planning and Management, Bahir Dar University, is a record of original work carried out by me and has never been submitted to this or any other institution to get any other degree or certificates. The assistance and help I received during the course of this investigation have been duly acknowledged.

<u>Yalalem Assefa Zeleke</u>		<u>13/05/2026</u>	<u>Bahir Dar, Ethiopia</u>
Name of the candidate	Signature	Date	Place

ADVISORS' APPROVAL FORM

Bahir Dar University

College of Education

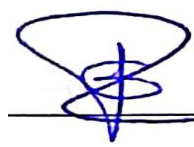
School of Educational Sciences

Department of Educational Planning and Management

Approval of Dissertation for Defence

I hereby certify that I have supervised, read, and evaluated this dissertation titled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the State of Amhara: The Mediating Role of Student Trust in Teachers”, prepared under my guidance. I recommend that this dissertation be submitted for oral defence.

Getnet Tizazu Fetene (PhD, Associate Professor)



13/05/2026

Principal supervisor's name

Signature

Date

Getu Shiferaw Wolle (PhD, Associate Professor)



13/05/2026

Co-supervisor's name

Signature

Date

Getu Shiferaw Wolle (PhD, Associate Professor)



13/05/2026

Department Head

Signature

Date

EXAMINERS' APPROVAL FORM

Bahir Dar University

College of Education

School of Educational Sciences

Department of Educational Planning and Management

Approval of Dissertation for the defence result

As members of the board of examiners, we examined this dissertation entitled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the State of Amhara: The Mediating Role of Student Trust in Teachers”. We hereby certify that the dissertation is accepted for fulfilling the requirements for the award of the degree of “Doctor of Philosophy in Educational Policy and Leadership”.

Board of Examiners

Markos Tezera Taye (PhD, Associate Professor)



18/06/2026

External examiner's name

Signature

Date

Melaku Mengistu G/Meskel (PhD, Associate Professor)



18/06/2026

Internal examiner's name

Signature

Date

Birhan Kefyalew Taye (PhD, Assistant Professor)



18/06/2026

Chairperson's name

Signature

Date

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LIST OF ABBREVIATIONS AND ACRONYMS

ABI	Ability, Benevolence and Integrity
AMOS	Analysis of Moment Structures
AVE	Average Variance Extraction
CFA	Confirmatory Factor Analysis
CVI	Content Validity Index
FRLM	Full-Range Leadership Model
MLQ-5X	Multifactor Leadership Questionnaire - Short Form
MoE	Ministry of Education, Ethiopia
PATLB	Passive/Avoidant Teacher Leadership Behaviours
SE	Student Engagement
SEM	Structural Equation Modelling
SPSS	Statistical Package for the Social Sciences
TLS	Teacher Leadership Scale
TRFTLB	Transformational Teacher Leadership Behaviours
TRSTLB	Transactional Teacher Leadership Behaviours
USES	University Student Engagement Scale

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Abstract

In recent years, the study of various forms of teachers' leadership, student trust and engagement has gained increasing attention because these constructs are critical for understanding student success. However, investigation of how these constructs interact to shape students' learning, particularly in the Ethiopian higher education contexts, remains underexplored. Addressing this gap, this study investigates how teachers' full-range leadership influence student engagement in public universities of the regional state of Amhara, Ethiopia, with an emphasis on the mediating role of student trust in teachers in this relationship. Employing a mixed-methods research approach with a sequential explanatory design, the study involved 734 participants, including 719 undergraduate students (for quantitative data) selected through multistage stratified sampling and 9 undergraduate students and 6 university teachers (for qualitative data) selected through purposive sampling. Quantitative and qualitative data were collected using self-reported questionnaires and semi-structured interviews. While the quantitative data were analysed through descriptive statistics, one-sample t-test, and structural equation modelling, the qualitative data were analysed through thematic analysis. The study findings reveal that a moderate level of student engagement is often characterised by compliance with academic and institutional requirements. Regarding teachers' full-range leadership, transformational leadership behaviours were strongly evident, which developed through ethical conduct, inspiration, and intellectual stimulation of students. Whereas transactional and passive/avoidant leadership behaviours received moderate and modest level ratings, mainly characterised by encouraged students' conditional engagement and little support, respectively. Relatively, a higher level of student trust in teachers was evident, which developed through teachers' competence, emotional support, and consistent treatment. The structural model findings further revealed that transformational teacher leadership behaviours show a significant, moderate and strong positive influence on student engagement and student trust in teachers, respectively, suggesting the effectiveness of transformational leadership behaviours for student engagement and trust in teachers. Conversely, transactional teacher leadership behaviours show a non-significant negative influence on student engagement and a significant, modest positive influence on student trust in teachers, suggesting a lesser contribution of teachers exhibiting transactional leadership behaviours for student engagement and trust in teachers. Passive/avoidant teacher leadership behaviours, on the other hand, show a non-significant positive influence on student engagement and a negative influence on student trust in teachers, reflecting a negligible contribution to both student engagement and trust in teachers. Additionally, student trust in teachers shows a significantly large and positive influence on student engagement, reflecting a very strong relationship. It also plays a partial mediating role in facilitating the influences of transformational teacher leadership behaviours on student engagement. Nevertheless, no mediating roles do student trust in teachers play in transforming the influence of transactional and passive/avoidant teacher leadership behaviours on student engagement. In conclusion, these findings underscore the importance of nurturing trust-based student-teacher relationships as a pathway for translating effective teachers' leadership practices, particularly the transformational and, to a lesser extent, the transactional ones, into meaningful student engagement.

Keywords: Teachers' full-range leadership, Student trust in teachers, Student engagement, Ethiopian public universities, Mixed-methods research

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

In recent years, educational institutions, including higher education, have increasingly given emphasis to learning practices that help to promote student engagement (Bowden et al., 2021; Coleman et al., 2024). This is because of two important reasons. First, student engagement is often viewed as a critical attribute of education and student success that aims to equip students with 21st-century key learning skills such as proficiency in creativity, critical thinking, communication, and collaboration (Buckley, 2018; Kılınç et al., 2021). Second, student engagement is viewed as a new way of understanding student learning experiences to inform educational policy and practice (Ashwin & McVitty, 2015; Kahu & Nelson, 2018). In these senses, prioritising educational investments that foster student engagement has become a critical task for higher education institutions (Buckley, 2021; Coleman et al., 2024).

Pioneering scholars such as Fredricks et al. (2004), Kassab et al. (2023) and Reeve (2012) define student engagement as students' active participation and investment of time in academic and institutional activities. Harper and Quaye (2009) and Özer et al. (2018) also highlight that student engagement reflects students who devote considerable energy to studying, spend much time in meaningful academic activities and frequently interact with faculty members and other students. These imply that student engagement is conceived as students' active involvement in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable learning outcomes (Zhang & McNamara, 2018).

Consultation of the literature indicates that student engagement is conceptualised as a multidimensional construct that involves many dimensions, each of which works together to influence student learning outcomes (Harper & Quaye, 2009; Kuh, 2009). Nevertheless, the

conceptualisation given to student engagement was not without controversy, as there is no complete agreement on the number of dimensions that comprise the construct. For example, scholars such as Friedrichs et al. (2004), Gupta and Nagpal (2021), and Maroco et al. (2016) conceive student engagement as a three-dimensional construct that consists of behavioural, emotional, and cognitive engagement of students in academic and institutional activities. Other researchers, such as Reeve and Tseng (2011) and Veiga (2016), understand student engagement as a four-dimensional construct by including agentic engagement in the earlier dimensions. Studies by Kassab et al. (2023), on the other hand, advance the conceptualisation of student engagement as a comprehensive framework that consists of five dimensions by introducing socio-cultural engagement into the four dimensions. Specifically, Kassab et al.'s (2023) comprehensive framework integrates both the previous dimensions (behavioural, emotional, and cognitive) with the recently recognised but overlooked ones (agentic and sociocultural) of student engagement.

Considering the growing patterns of student engagement conceptualisation across dimensions, the current study seeks to understand student engagement as a multi-dimensional construct consisting of the five dimensions: behavioural, emotional, cognitive, agentic and sociocultural. The behavioural dimension of student engagement reflects students' participatory actions in learning and observable academic performance (Guo et al., 2023; Kahu & Nelson, 2018; She et al., 2023). The emotional dimension refers to the summative and enduring levels of emotions experienced by students and captures the level of passion students feel for their learning experience (Bowden et al., 2021; Kahu & Nelson, 2018). The cognitive dimension mirrors the intellectual effort that students invest in understanding and mastering course content in the learning process (Fredricks et al., 2004; Kahu, 2013; Kassab et al., 2023). The agentic

dimension, which is considered the most important for 21st-century students, indicates students' intentional and constructive contributions to the learning process (Ashwin & McVitty, 2015; Reeve, 2012; Reeve & Jang, 2022). The sociocultural dimension also emphasises students' awareness and consideration of the personal, social and cultural context in which learning occurs (Kahu & Nelson, 2018; Kassab et al., 2023; Zhang & McNamara, 2018).

The above-discussed perspectives highlight that student engagement is a complex and multidimensional phenomenon influenced by various factors. The study by Li and Xue (2023) highlights influencing factors of student engagement operating at individual, institutional, family, and contextual levels. For example, students' individual level factors such as learning motivation, self-efficacy, academic preparedness, and learning strategies affect engagement (Azila-Gbetteor et al., 2021; Kahu, 2013; Mindaye et al., 2023). Likewise, institutional-level factors, including classroom environment, teaching quality, and university support services, play an important role in influencing student engagement (Ashwin & McVitty, 2015; Kahu & Nelson, 2018; Lasekan et al., 2024). In addition to this, family background, socioeconomic status, and parental support have also been identified as important factors of student learning engagement and related academic success (Chen et al., 2024; Qiu & Ye, 2023).

However, among the above-discussed multiple factors affecting student engagement, several educational researchers such as Balwant et al. (2019), Cruz and Kim (2023), Kutip (2023), and Schott et al. (2020) highlight that developing student engagement and associated learning outcomes in higher education heavily depends on teachers' professional practice. This may be due to the fact that, as other researchers, for example, Coleman et al. (2024) and Guo et al. (2023) remark, teachers are the most influential factors for optimising several student learning outcomes, including student engagement in various ways.

The evolving literature in this context stipulates that teachers have two inseparable roles: educator and leader (Rashid et al., 2020; Wenner & Campbell, 2017). As educators, teachers encourage students to explore their surroundings and better understand themselves and others during the instruction process (Balwant, 2016; Hunzicker, 2022). This means that students should not be left to fend for themselves without support. And it is here that the other role of teachers, as leaders (which is the focus of the current study), comes in. As leaders, teachers exert influence on students by inspiring them to actively participate in educational and institutional activities that are personally meaningful to them (Cruz & Kim, 2023; Öqvist & Malmström, 2016). Such a kind of teachers' action informs the term, teachers' leadership, which refers to teachers' demonstrating leadership behaviours with a focus on influencing students toward better learning experiences and achievement of learning goals (Balwant, 2016; Harrison, 2011).

The emphasis on teachers demonstrating leadership roles and examining their associated influence on a variety of student learning outcomes has received considerable attention since Frost and Harris's (2003) discourse on teacher leadership and York-Barr and Duke's (2004) synthesis of two decades of literature on teachers' leadership. These pioneering scholars opened the door for succeeding educational researchers to view teacher-student interaction in a leadership context. Subsequently, researchers, for example, Hunzicker (2022), Nguyen et al. (2020), Schott et al. (2020) and Wenner and Campbell (2017) provide further theoretical foundations and empirical frameworks for teachers' exhibiting leadership of student learning and its associated outcomes. Nevertheless, the question of whether a teacher exercises a leadership role by virtue of having a formal position or not is still a matter of debate. This is due to the existence of different viewpoints in the literature regarding teachers' leadership actions across contexts, and yet the notion remains unclear in terms of activities, roles, and behaviours.

Further consultation of literature on teachers' leadership suggests that several leadership theories have been employed in educational settings to explain how teachers demonstrate leadership aimed at influencing students towards the achievement of learning goals. The dominant perspectives include instructional leadership, distributed leadership, and full-range leadership, among others. Yet these theoretical perspectives differ considerably in their emphasis on describing teacher-student interactions within a leadership context. The instructional leadership perspective, for example, focuses on improving teaching and learning processes through curriculum management, instructional supervision, and academic monitoring (Hallinger, 2005). In classrooms, teachers certainly perform instructional leadership functions, for example, by organising content, delivering lectures, and assessing learning (Blase & Blase, 1999; Neumerski, 2013). However, this form of leadership primarily focuses on improving classroom instruction rather than explaining how teachers influence students through motivation, interpersonal relationships, and other actions both inside and outside the classroom.

The distributed leadership perspective, on the other hand, views leadership as a shared practice emerging through interactions among individuals and their contexts (Spillane et al., 2007). Those scholars such as (e.g., Frost & Harris, 2003; Ghamrawi et al., 2024; York-Barr & Duke, 2004) contemplate teachers as individuals who lead a group of professional communities based on shared responsibilities and collaborative efforts among team members based on mutual respect and shared goals. Examples of teachers' roles include serving as assistant to instructional leaders, department chair, mentor, and related roles within the learning environment (Ghamrawi et al., 2024; York-Barr & Duke, 2004). However, the distributed leadership perspective provides a limited explanation of how teachers directly influence students' learning outcomes inside classrooms and beyond.

In spite of their importance, both the instructional and the distributed leadership theoretical perspectives of viewing teachers' leadership receive some criticism because the types of leadership exercised by teachers indirectly influence student outcomes. In this respect, Hidayat et al. (2023) and Zepeda et al. (2013) argue that the instructional and distributed leadership emphasise teachers' roles in improving instruction and assuming shared leadership responsibilities. Nevertheless, these perspectives frequently conceptualise teachers' leadership as a formal or semi-formal leadership role, positioning teachers between classroom teaching and leadership responsibilities. This approach of considering teachers' leadership practices to some extent ignores the leadership capacity of teachers who have a direct influence on students (Katyal & Evers, 2004; Kutip, 2023). Such kind of criticism opens the door for recent scholars (e.g., Balwant, 2016; DeDeyn, 2021; Erdel & Takkaç, 2020a; Jiang & Jia, 2018; Moreno-Casado et al., 2021) who attempt to view teachers' leadership from a student-centred leadership perspective by adapting the full-range leadership model (FRLM) into teacher-student contexts.

The FRLM views leadership as a continuum that includes three distinct but inseparable styles and behaviours: transformational, transactional, and laissez-faire (Bass & Riggio, 2006). Initially, this framework was widely used to study leadership styles and behaviours in organisational settings (Northouse, 2021). However, it has recently been extended to the context of higher education, particularly to conceptualise the influence of teachers' transformational teaching and their leadership in predicting several student outcomes. This focus advocates teachers' leadership not just as a designated full-time or part-time position, but as a teacher's influence on students by inspiring and motivating students, and using expertise power as a tool to lead students toward learning goals (Balwant, 2016; Kim & Cruz, 2024; Harrison, 2011; Pachler et al., 2019). Based on this thought, several studies (e.g. Bogler et al., 2013; Prickett, 2016;

Rashid et al., 2020) suggest that the FRLM provides insights into how teachers' leadership behaviours influence the variety of student outcomes.

Considering this trend [the ideas reviewed above on teachers' leadership] in mind, it can thus be argued that the current study aligns itself with the FRLM, as it offers a broader perspective to view teachers' full-range leadership behaviours as a continuum that includes transformational (idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration), transactional (contingent reward and management by exception, involving active and passive forms) and laissez-faire in a single model (Bass & Riggio, 2006; Northouse, 2021). Although the FRLM was initially presented as comprising transformational, transactional, and laissez-faire leadership, subsequent theoretical and empirical developments reconceptualised, particularly the passive form of transactional and laissez-faire end of the model as passive/avoidant leadership, consisting of two related dimensions: management-by-exception passive and laissez-faire leadership to reflect leaders' failure to intervene, delayed responses to problems, and avoidance of responsibilities (Bass & Riggio, 2006). Hence, the present study proceeds to conceptualise teachers' full-range leadership that consists of transformational, transactional, and passive/avoidant behaviours, each of which has a different influence on student outcomes, including engagement and trust in teachers in higher education.

Particularly, the study chose to use the passive/avoidant leadership connotation instead of using laissez-faire leadership for two reasons. First, subsequent development of FRLM treats passive/avoidant leadership as a higher-order construct encompassing both management-by-exception passive form of transactional and laissez-faire behaviours (Antonakis & House, 2013; Bass & Riggio, 2006). Second, empirical studies that have adapted the FRLM to operationalise teachers' leadership have labelled the negative end of the model, including management-by-

exception passive and laissez-faire leadership, as passive/avoidant or non-leadership behaviours (Assefa et al., 2025; Balwant, 2016; DeDeyn, 2021; Jiang & Jia, 2018; Moreno-Casado et al., 2021). This broader conceptualisation captures ineffective teachers' full-range leadership that extends beyond complete leadership absence to include delayed intervention, avoidance of feedback, and failure to address students' academic needs. Therefore, this study conceptualised teachers' full-range leadership through transformational, transactional, and passive/avoidant behaviours, enabling the simultaneous examination of their influence on student engagement.

When discussing teachers' utilisation of full-range leadership and their potential influences on student outcomes, including engagement, it is very important to consider the nature of the established trustworthy educational relationship between teachers and students. This is because one necessary part of high-quality educational interactions is students' trust in their teachers (Felten et al., 2023; Hiatt et al., 2023; Şirin et al., 2022). Trust is, thus, seen as a key factor underpinning the educational interaction between teachers' intentions and students' confidence in teachers (Macfarlane, 2009; Platz, 2021; Şirin et al., 2022). That is why the topic of student trust in teachers has attracted considerable attention in educational research (e.g., Kim et al., 2023; Pachler et al., 2019; Şirin et al., 2022) due to its implications for understanding how the educational relationship between teachers and students affects student learning.

Based on the above reviewed premise, several researchers in higher education (e.g., Kim et al., 2023; Hiatt et al., 2023; Lewicka & Bollampally, 2022; Zhou, 2023) conceptualize student trust in teachers as the interpersonal relationship, that exists between a teacher and the students, in which the students are willing and confident to rely on the teacher's intentions to help them achieve academic goals. By adopting Mayer et al.'s (1995) integrative trust model, Hiatt et al. (2023) provide a three-dimensional trust framework that reflects students' perceptions of trust in

their teachers' ability, benevolence and integrity. Perceived ability reflects the collection of perceived knowledge, skills, and competencies to perform a task that enables teachers to be trusted by the students (Payne et al., 2023; Svare et al., 2020). Perceived benevolence replicates teachers' behaviours which involve caring, empathetic, and acting in ways consistent with the interests of students (Macfarlane, 2009; Zhou, 2023). Perceived integrity also indicates teachers' sense of fairness and congruence between their actions and words towards students' learning success (Hiatt et al., 2023; Macfarlane, 2009; Svare et al., 2020).

Furthermore, Hiatt et al. (2023), Macfarlane (2009), and Zhou (2023) argued that understanding the nature of trust between students and teachers in higher education is vital for the following reasons. First, trust is one of the most important carriers and determining factors of any type of leadership vision (e.g., teachers' vision for their students' future development) (Balcerzyk, 2020; Bligh, 2017; Legood et al., 2021; Northouse, 2021). Second, the extent of effective teachers' leadership influence on different student outcomes largely depends on the established relationship between teachers and students (Lewicka & Bollampally, 2022; Pachler et al., 2019). Therefore, taking these two conditions into account, it is very important to support the discussion about the influence of teachers' full-range leadership on student engagement through the dynamic trusting relationship between teachers and students.

Consultation of recent literature on the current study topic reveals an increasing attention on examining the association between various forms of teachers' leadership and several student outcomes, including engagement and trust in teachers across the globe in several ways. Most studies have been conducted in developed countries' education systems, particularly in the United States of America (e.g. Bolkan & Goodboy, 2009; DeDeyn, 2021; Harrison, 2011; Hunzicker, 2022; Kim et al., 2023), Europe (e.g., Erdel & Takkaç, 2020a, 2020b; Espinosa &

González, 2023; Pachler et al., 2019; Trigueros et al., 2020), and to some extent in Asia (e.g., Jiang & Jia, 2018; Rashid et al., 2020; Zhao & Zhang, 2022). This implies that the idea of linking teachers' leadership with related student outcomes is a well-established concept in such a setting. When coming to the context of developing countries' education systems, on the other hand, comprehending the influence of teacher leadership on student outcomes, particularly in the African context, is still in its infancy as compared to that of the context of developed regions (Grant, 2019; Msila, 2020).

While much of the prevailing literature is based on the contexts of developed countries' education systems, there is also a growing number of studies that highlight the importance of considering different forms of teachers' leadership and examining its impact on improving student outcomes in some African countries' context. For example, some studies conducted in South Africa (e.g., Grant, 2019; Msila, 2020; Van der Vyver et al., 2021) advocate that teachers' leadership becomes crucial for advancing culturally responsive education, which encourages students to actively participate in the learning process. Comparably, the recent study by Sepiriti (2024) in the Lesotho context posits the relevance of teachers' exhibiting leadership in addressing educational issues related to students' experiences and backgrounds, which in turn strengthens students' trust in their teachers.

Furthermore, there are some studies conducted in Ethiopia's higher education setting (e.g., Assefa et al., 2025; Gedifew & Bitew, 2017) that show teachers who exhibit various forms of leadership play an important role in influencing students towards engaging in their academic activities and achieving results. Although limited studies examine how teachers' full-range leadership influences student engagement and student trust in teachers, the earlier discussed empirical studies highlight the critical importance of teachers' demonstrating leadership in

promoting student learning progress and results. This signals that teachers' leadership is becoming an important part of educational development that helps to optimise student outcomes, including engagement, in the context of African countries, including Ethiopia. Considering this importance in such a setting, therefore, the current study seeks to investigate the influence of teachers' full-range leadership on student engagement in higher education in Ethiopia. It also attempts to examine the specific role of student trust in teachers in this relationship.

1.2. Statement of the Problem

Two main reasons prompted the start of the study: practical limitations and insufficient research in the literature. The present study was initiated in response to practical concerns surrounding student engagement in public universities in Ethiopia and the limited empirical evidence regarding the influence of teachers' full-range leadership and the mediating role of student trust in teachers in improving engagement.

Practical gap: The Ethiopian higher education system has adopted several interventions aimed at enhancing student learning. For example, the Ministry of Education (MoE) recently endorsed some working documents, such as the Differentiation of the Higher Education System in Ethiopia (Hunde et al., 2023) and the new Education and Training Policy (MoE, 2023), which aims to create a conducive learning environment that promotes students' real-world application of knowledge. However, challenges persist despite these efforts. To mention one major piece of evidence in this regard, in the last two years, the results of undergraduate candidates on the national exit exam have not been encouraging. In the 2022/23 academic year, of the total eligible undergraduate candidates who sat for the national exit exam, only 40.65% of prospective undergraduates passed (Reporter, 2023). In addition, the investigation by Tamrat (2024) shows that in the 2023/24 academic year, of the total prospective undergraduate candidates who sat for

the national exit, only 42% scored the pass mark. The two consecutive years of data show that despite a slight upward trend and a marginal rise, students' passing performance remains below half of the candidate undergraduate students who sat for the national exit exam. This worrying result may indicate that students put limited effort into their learning progress. Conformingly, several local researchers (e.g., Agonafir, 2023; Tadesse et al., 2022; Tamrat, 2024) agree that among various factors leading to such discouraging results in the Ethiopian higher education, the issue of student engagement and motivation is perhaps an important area for improvement.

Furthermore, reports from some universities and professional experience and observation support the abovementioned evidence. For example, the 2023/24 academic year annual reports from some Ethiopian public universities, such as Woldia University and the University of Gondar, show that students' lack of participation and motivation hinders their efforts to produce qualified graduates that the labour market demands (Woldia University, 2024; University of Gondar, 2024). Additionally, since my [the researcher of this study] professional experience as a university lecturer since 2019, I have had the opportunity to take part in numerous discussion forums, conferences, and seminars that deal with the quality of education, challenges and opportunities of teaching and learning, factors that lead to poor student academic performance, and the ways out. It was often pointed out at those events that, among factors, the limited quality of students' participation and motivation in the learning process becomes the main issue.

This empirical idea was further supported by a recent empirical study by Abay and Marishane (2023) that shows “poor engagement capacity of students in the teaching and learning process” is becoming the profile of many Ethiopian universities (p. 228). Besides, the recent study by Minaye et al. (2024) highlights that the overall status of student engagement is not satisfactory in Ethiopian public universities due to student-related factors, including students'

academic background, as well as teacher-related factors like teachers' commitment to engage students. The implications of these worrying results in terms of student engagement observed in the Ethiopian higher education are troubling, and this set the stage for a more investigation into the reasons for such unfavourable results and the possible solutions.

Under such conditions, researchers such as Coleman et al. (2024), Pachler et al. (2019), and Trigueros et al. (2020) argue that teachers have considerable role to minimise students' unfavourable results, including poor engagement. The literature asserts that teachers' professional practices, including their teaching and leadership tasks, are essential to bring about positive changes in student learning (Ashwin & McVitty, 2015; Fullan, 2004; Tsai, 2017).

In this case, it may be worth considering the other side of teachers' professional practice (their leadership behaviours that extend beyond classroom instruction), which has a significant impact on motivating and engaging students to take responsibility for their learning activities (Balwant et al., 2019; DeDeyn, 2021; Rashid et al., 2020; Zhao & Zhang, 2022). That is because nowadays teachers' leadership is becoming "one of the teaching competencies in teaching and learning that influences students' engagement in higher learning" (Kutip, 2023, p. 1). In this regard, the literature suggests that where student learning is the focus of various forms of teachers' leadership, the likelihood of a positive impact on student learning outcomes, including engagement, is much greater (Balwant, 2016; Bogler et al., 2013; Erdel & Takkaç, 2020a). This is because teachers' utilisation of leadership behaviours is expected to promote students' learning progress and outcomes in many ways by helping them challenge their learning problems.

Despite this kind of strong position in the above-reviewed studies on the importance of teachers exhibiting leadership in improving student learning, stakeholders in the Ethiopian higher education environment continue to overlook the leadership role teachers play and their potential

influence on student outcomes, including engagement. This may be because, as posited in the literature (e.g., Erdel & Takkaç, 2020b; York-Barr & Duke, 2004), the term "teacher" is primarily associated with classroom teaching—a conception that ignores the "inner power of teachers' lives—their leadership of student learning" (Katyal & Evers, 2004, p. 1).

The current study argues that this narrow conception persists in the Ethiopian higher education context precisely because there is limited public discussion on various forms of teachers' leadership and their implications for optimising student engagement and associated learning outcomes. Particularly, there is a notable absence of continuous public discussion in comprehending the extent to which teachers demonstrating the full-range leadership can influence student engagement. This issue has neither been the focus of multiple public discourses nor has it become an area of intervention proposed in policy and working documents in the Ethiopian higher education environment. This type of problem, therefore, becomes the central motif of the study with the desire to gain a deeper understanding of how teachers exhibiting full-range leadership influence student engagement.

Literature gap: to see whether the problem underlying the current study has already been addressed by previous empirical studies conducted in comparable and other contexts around the world, the literature was consulted. The consultation reveals a variety of theoretical and empirical studies that point to the growing consideration of the various forms of teachers' leadership behaviours and styles and their impact on several student outcomes in higher education. For example, some studies attempt to examine the association of various form of teachers' leadership behaviours and styles with student motivation (e.g., Jiang & Jia, 2018; Noland & Richards, 2014); student satisfaction (Cruz & Kim, 2023; Erdel & Takkaç, 2020a; Pachler et al., 2019); trustworthy student-teacher relationship (e.g., Lewicka & Bollampally,

2022; Pachler et al., 2019); academic performance and achievement (e.g., DeDeyn, 2021; Schott et al., 2020; Zhao & Zhang, 2022). This indicates that extensive research (most of them are from the outside world, meaning in a different context than the current study's context) has been conducted to reveal the importance of teachers' demonstrating various leadership forms in improving student outcomes in higher education. In spite of the availability of these empirical studies, an important gap remains in the existing educational literature related to the topic of the present study. The following three reasons show this gap in terms of theoretical and empirical understanding, methodological approach, and contextual coverage.

First, most studies stated earlier have examined the association between different forms of teachers' leadership behaviours and styles and have mentioned several student outcomes. This provides important empirical evidence to develop a considerable theoretical foundation within their study focus and contexts. However, such studies provide little empirical understanding to theorise how teachers exhibiting full-range leadership influence student outcomes, particularly student engagement through student trust in teachers in higher education settings.

Second, even the earlier gap is reinforced with methodological restrictions. Most of the mentioned previous studies have mostly employed quantitative approaches to understand teachers' leadership and its effect on several student learning outcomes from the students' perceptions end. Although such emphasis gives quantifiable evidence from a typical study sample, i.e., students, this provides limited insight into exploring in-depth not only students' experience and observation, in addition to their perceptions, but also teachers' views on their leadership behaviours and how both students and teachers interpret such observed leadership behaviours into student engagement, trust in teachers and related learning outcomes.

Third, even in their current focus, those empirical studies stated earlier predominantly originate from the Western and, to some extent, the Asian educational contexts, limiting their applicability to the African, including the Ethiopian higher education settings, suggesting little is known in such a setting.

Taking together these reasons into account, efforts to examine how teachers' utilisation of full-range leadership influences student engagement, as evident from both students' and teachers' perspectives, remain a poorly established scenario in the educational literature from the Ethiopian higher education context. The need to provide additional empirical evidence from such a context is, therefore, the additional reason for conducting the present study. Addressing such a gap contributes additional empirical evidence to the existing body of knowledge.

Another limitation is that the role of student trust in teachers is comparatively overlooked in explaining the predictive influence of teachers' full-range leadership and student engagement in higher education. Of course, there is widespread consensus that the role of a trusting relationship is a key element for conveying leadership vision to influence groups (e.g., Bligh, 2017; Legood et al., 2021) and sustaining meaningful learning engagement (e.g., Felten et al., 2023; Platz, 2021). However, exploring how teachers' full-range leadership influence student engagement mediated by student trust in teachers has been overlooked in the literature. Although limited, some researchers (e.g., Hiatt et al., 2023; Şirin et al., 2022) have shown that students are more likely to be receptive to teachers and engage in activities both inside and outside the classroom when they trust in their teachers' intentions for their success. In a similar vein, studies by Kim et al. (2023) and Pachler et al. (2019) reveal that students who trust in teachers are more likely to respond to their concerns by being motivated to work harder, persist longer, and engage in extra-role behaviours. Such findings may suggest that student trust in teachers plays a

mediating role in explaining the relationship between teachers' full-range leadership and student engagement. Unfortunately, the specific role of student trust in teachers, which either partially or fully mediates such a relationship, has not been adequately examined. This gap has also become an additional inspiration for the current study as it seeks to determine how student trust in teachers mediates the influence of teachers' full-range leadership on student engagement in Ethiopian higher education.

Therefore, the present study not only emphasises appreciating the theoretical and conceptual constructs of teachers' full-range leadership, student trust in teachers, and student engagement but also seeks to demonstrate the empirical interplay among these variables in the Ethiopian higher education context, particularly public universities located in the regional state of Amhara, Ethiopia. Hence, in the course of the study, it aims to reveal three main outcomes. First, the study examines and describes the status of student engagement in academic and institutional activities in public universities. This helps to understand the current status and level of student engagement and model its associations with the other key study variables: teachers' full-range leadership and student trust in teachers. Second, the study investigates the extent of the specific teachers' full-range leadership (transformational, transactional, and passive/avoidant behaviours) in public universities. This helps to understand teachers' full-range leadership dynamics and identify each of their effectiveness in predicting student engagement and trust in teachers. Third, the study examines the level of student trust in teachers in public universities. This is necessary to model how the influence of the specific teachers' full-range leadership behaviours likely translates into student engagement through cultivating student trust in teachers. This helps to determine how student trust in teachers mediates the influence of the specific teachers' full-range leadership behaviours on student engagement in public universities.

1.3. Research Questions

The study is guided by the following seven research questions. Some of the questions (1-3) were forwarded to investigate the status of student engagement, the specific teachers' full-range leadership behaviours, and student trust in teachers within the Ethiopian higher education context, with a particular focus on public universities located in the regional state of Amhara. The other remaining questions (4-7) were designed to examine the structural relationship among these constructs.

- 1) What is the status of student engagement (behavioural, emotional, cognitive, agentic, and sociocultural) in public universities?
 - 1.1. How do students describe the observed status of their engagement?
 - 1.2. How do teachers describe the observed patterns of student engagement?
- 2) What is the extent of teachers' demonstrating the specific full-range leadership behaviours (transformational, transactional, and passive/avoidant) in public universities?
 - 2.1. How do students interpret the observed extent of teachers' demonstrating the specific full-range leadership behaviours?
 - 2.2. How do teachers describe their specific full-range leadership behaviours?
- 3) What is the level of student trust in teachers (perceived trust in teachers' ability, benevolence, and integrity) in public universities?
 - 3.1. How do students describe the level of their perceived trust in teachers?
 - 3.2. How do teachers describe the practices they believe build trust in students?
- 4) To what extent do the specific teachers' full-range leadership behaviours influence student engagement in public universities?

- 5) How much do the specific teachers' full-range leadership behaviours influence student trust in teachers in public universities?
- 6) To what extent do students' perceptions of trust in teachers influence student engagement in public universities?
- 7) What mediating role does student trust in teachers play in explaining the influence of the specific teachers' full-range leadership behaviours on student engagement in public universities?

1.4. Significance of the Study

The study is expected to contribute to higher education research, practice, and policy by providing empirical evidence on the relationships among teachers' full-range leadership, student trust in teachers, and student engagement. The findings may enhance the understanding of teacher-student interactions within a leadership context in higher education and provide insights for improving teaching practices and learning experiences. Accordingly, the study may have the following significance in relation to research, practice, and policy.

Research significance: From an educational literature and research perspective, the study is expected to have the following significance for educational research scholars in higher education. It is hoped to contribute to the existing body of knowledge by addressing the specific dynamics of teachers' full-range leadership and their influence on student engagement and trust in teachers in the context of Ethiopian higher education. Furthermore, examining student trust in teachers as a mediating variable in predicting the influence of teachers' full-range leadership on student engagement may deepen the current understanding of student engagement in terms of the student-teacher relationship in a leadership context. This aspect is crucial because it can provide evidence for research scholars that helps stimulate further discussion about how trustworthy

relational dynamics between teachers and students facilitate the effectiveness of teachers' full-range leadership and its influence on student engagement. This may help educational research scholars further explore the little-known but important leadership role that teachers demonstrate in optimising student outcomes. It is, therefore, hoped that the study results will provide additional signals to the body of knowledge and suggest future research agendas in this area.

Practical significance: From a practical perspective, this study is anticipated to provide insights into how the specific teachers' full-range leadership are related to student engagement and trust in teachers in the Ethiopian higher education context. This helps to provide higher education teachers with some practical strategies that may help them optimise their leadership behaviours and related practices, thereby improving students' learning experiences. To maintain a stimulating learning environment that promotes student engagement and trust in teachers, the study may provide teachers with approaches that help to integrate the effective full-range leadership behaviours into their instructional practices. The study is also expected to provide some evidence on how teachers can enhance a trusting relationship with their students, which is essential for sustaining an environment where students feel encouraged and engaged. These practices can help students develop trust in teachers' support in the process of achieving learning goals.

Policy significance: From policy-level perspectives, this study aims to provide higher education administrators and policy-level decision makers with evidence that may facilitate their policy decisions regarding the importance of incorporating the effective teachers' full-range leadership behaviours as a critical area of intervention to improve student engagement. By showing the most effective one, the study findings are hoped to stimulate officials and administrators of the higher education institutions in Ethiopia to pay attention to integrating

various forms of effective full-range leadership that can be exercised by teachers as one of the critical components of existing teachers' training and professional development programs. This, in turn, may help to improve the leadership capacity of teachers not only in improving student engagement and facilitating a positive relationship with students but also in enhancing related student outcomes in higher education.

1.5. Delimitations of the Study

To maintain a manageable scope and ensure an in-depth investigation of the topic, the present study was delimited in terms of its geographical and institutional setting, conceptual scope, study target participants, and the sources of data. These delimitations define the boundaries of the study and guide the interpretation, generalisation, and transferability of the findings. These specific delimitations of the study are detailed below.

Geographical and institutional scope: This study was delimited to public universities located in the regional state of Amhara, Ethiopia. The focus on public universities was justified by their distinctive organisational and educational contexts, including larger student populations, comparable policy environments, and similar academic regulations. Since teachers' full-range leadership, student engagement and trust in teachers are influenced by institutional conditions, locating the study topic in public universities provided a relatively consistent context for investigating the relationships among the study variables. Moreover, public universities in Ethiopia have experienced growing concerns regarding the quality of teaching and learning and student engagement, making them particularly relevant settings for the present investigation. Consequently, the findings are intended to explain focused dynamics of teachers' full-range leadership, student trust in teachers, and student engagement within such a context rather than across all types of higher education institutions.

Conceptual scope: The study was delimited to teachers' full-range leadership, student trust in teachers, and student engagement. Although student engagement is influenced by various factors such as individual, family, peer, and institutional factors, the study focused specifically on teachers' full-range leadership because teachers directly interact with students and can influence their engagement. Student trust in teacher was also included as a mediating variable because it constitutes an important psychological mechanism through which the specific teachers' full-range leadership behaviours can be translated into student engagement. Hence, limiting the study to the intersection of these variables allowed for a more focused examination of the direct and indirect relationships among the constructs within the public university context.

The study population scope: This study considers two groups of sample populations: students and teachers. Targeted students were bound to undergraduate students who are attending their university education in a regular program. Furthermore, this study specifically delimits the undergraduate students to the senior year student groups (4th year and above) to avoid data meagreness and obtain more comprehensive data from their longer experience. That means, students from first-year (freshman) to third-year were not considered in the sampling process, with the belief that they may have little experience of university life. Other student groups, such as postgraduate students and undergraduate students in extension and summer programs, were not considered in the study. The reason for this decision is that, as compared with those of postgraduate and undergraduate students in extension and summer programs, undergraduate students in the regular program were considered because they generally require closer academic interaction, continuous feedback, and stronger teacher support. Their learning experiences involve more frequent teacher-student interactions, making them particularly suitable for examining teachers' full-range leadership, student trust in teachers, and student engagement. In

contrast, postgraduate and extension students often have less regular interaction with teachers, which may influence the nature of these relationships. Additionally, the teacher population consists of those who are on duty and currently teaching students. This approach enabled the study to obtain their experiences on the specific leadership behaviours they are demonstrating, their observations of student engagement, and the actions that enable them to make students trust them. Teachers who are on study leave were not considered because they might not have frequent direct relationships with students at the time of this study process. Such decisions were intended to create a sample that reflects the typical experiences of both students and teachers.

Source of data scope: The study collected both quantitative and qualitative data from the study participants, students and teachers. The quantitative segment was delimited to undergraduate students because the study aims to examine teachers' full-range leadership as perceived by students and its influence on student trust in teachers and student engagement in public universities. Since trust in teachers and engagement are student-centred constructs, students are considered the most appropriate source of information regarding these variables. Along with some other students who were not involved in the quantitative phase, teachers were included in the qualitative phase to provide complementary insights into their full-range leadership experiences as well as their observations on actions that enable students to trust them and engage in academic and institutional activities.

1.6. Operational Definitions of Key Terms

Operational definitions of the key study variables were provided to ensure a common understanding of the key concepts examined in this study. The operational definitions were developed based on the theoretical foundations of the constructs, the measurement employed, and the context of the study. The operational meanings of the key terms are presented below.

Teachers' Full-Range Leadership: This construct is considered the independent variable of the study. In this study, teachers' full-range leadership refers to the transformational, transactional, and passive/avoidant behaviours demonstrated by university instructors, lecturers, faculty, and professors during teaching-learning interactions. These leadership behaviours were quantitatively observed through students' perceptions using standardised scale items.

Qualitatively, it was explained through students' and teachers' experiences regarding teachers' full-range leadership practices in the classroom and beyond interactions. Particularly, the quantitative scores were computed by averaging the item responses, with higher scores indicating greater demonstration of the respective full-range leadership behaviours.

Student Engagement: This construct is considered the dependent variable of the study. The construct refers to the extent to which students actively participate in and invest behavioural, emotional, cognitive, agentic, and sociocultural efforts in academic and institutional activities. The construct was quantitatively observed through students' self-reported perceptions of their engagement on standardised scale-based items and qualitatively explored through students' experience and teachers' observation regarding students' involvement in meaningful learning and institutional activities. Quantitative scores were computed by averaging the item responses on a five-point Likert scale, with higher scores indicating higher levels of student engagement.

Student Trust in Teachers: This construct is considered the mediating variable of the study. This construct reflects students' perceptions of trust in their teachers' ability, benevolence, and integrity, in which the students are willing and confident to rely on the teacher's intentions to help them achieve better learning goals. The construct was quantitatively observed through students' perceptions measured using standardised scale-based items and qualitatively explored through students' and teachers' experiences concerning trust-building relationships in the

teaching-learning process. Quantitative scores were computed by averaging the item responses scale, with higher scores indicating higher levels of student trust in teachers.

1.7. Organisation of the Study

Following the Dissertation and Thesis Guideline endorsed by Bahir Dar University (2020), this study was organised into six chapters and enclosed with some appendices. Chapter one presents the introduction of the study, which includes the background, problem statement, research questions, significance, scope, and operational definition of the key terms of the study. Following the introduction, chapter two provides an overview of the existing literature review on student engagement, teachers' full-range leadership, and student trust in teachers that informs the theoretical foundations and models the conceptual frameworks of the study based on the key study variables with their expected relationships. Chapter three presents the methodological aspect of the study that was taken into account in the study process. The section outlines the paradigm guiding the study's worldviews, research approach and design, population and sampling, data gathering tools and procedures, data analysis procedures and ethical considerations. Chapter four deals with the study results/findings. It contains reports on the results of preliminary data assessments, quantitative and qualitative data analysis and findings. Chapter five presents the discussion and implications of the study findings. It presents the study findings in terms of comparing and contrasting with previous study findings across different and comparable educational contexts. Chapter six also addresses the study conclusion, recommendations and limitations of the study that warrant further exploration in future studies. Last but not least, following references, some related appendices such as supplementary result tables, data collection tools and other related materials are added.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

This section of the study provides a comprehensive review of the existing related literature on the current study topic, outlining the theoretical foundation of the key study variables (student engagement, teachers' full-range leadership, and student trust in teachers) and their conceptual frameworks. In doing so, the chapter is organised in the following order. The first part outlines the theoretical foundation and conceptualisation of student engagement, teachers' full-range leadership, and student trust in teachers with their respective dimensions in a higher education setting. The second section also critically delves into the development of conceptual frameworks that guide the expected relationships between these constructs.

2.1. Student Engagement

Student engagement is increasingly recognised in educational research and practice; it has become a research agenda in the setting of higher education (see Kahu, 2013; Zhang & McNamara, 2018). Within the contemporary higher education landscape, several researchers (e.g., Buckley, 2021; Coleman et al., 2024; Harper & Quaye, 2009; Kahu, 2013; Kahu & Nelson, 2018) argue that maintaining student engagement has become of critical concern. This is because successful learning experiences are built on the foundation of student engagement, which is characterised by the dynamic interaction of multiple dimensions (Kahu & Nelson, 2018; Kuh, 2009; Kassab et al., 2023).

Pioneering scholars such as Fredricks et al. (2004), Kuh (2009) and Reeve (2012) agree on the definition of student engagement as students' active participation and investment of time in academic and institutional activities. Furthermore, in the higher education environment, Harper and Quaye (2009) and Özer et al. (2018) highlight that student engagement reflects

students who devote considerable energy to studying, spend much time in meaningful activities at the university, and frequently interact with faculty members and other students.

In spite of the above conceptualisation, the definition of student engagement was not without controversy. The multidimensional nature of student engagement makes it difficult to construct a general concept map that captures the whole picture (Balwant, 2019; Coleman et al., 2024). Focusing on higher education, Kahu (2013) in her seminal study offers four dominant approaches to framing student engagement (behavioural, psychological, sociocultural, and integrative or holistic), each representing a broad range of explanations with varying scope.

The behavioural approach of viewing student engagement places institutional practices and student behaviours at the centre (Zhang & McNamara, 2018). It explains student engagement in terms of the relationships between institutional practices (e.g., support services and teaching practices) and student behaviours (e.g., students' involvement in academic and extracurricular activities) that lead to learning success (Kahu & Nelson, 2018). However, Kahu (2013) argues that defining student engagement within the behavioural perspective is too narrow, as the approach only blends institutional factors into student behaviours, which overlooks the student-level factors (e.g., emotion, cognition, motivation, and related variables) and the social contexts that influence the engagement of university students. This limits the usefulness of the behavioural approach as a research perspective for comprehensively understanding student engagement (see Kahu, 2013).

The psychological approach of viewing student engagement is particularly dominant in the pertinent literature and considers engagement as the internal psychosocial process experienced by students in the learning process (Kahu, 2013; Zhang & McNamara, 2018). Considering students at the centre of this approach, student engagement is viewed as a

combination of various dimensions, including behaviour, cognition, and emotion to describe the state of being engaged in learning activities (Fredricks et al., 2004; Gupta & Nagpal, 2021; Maroco et al., 2016). Although this perspective is critical for understanding the psychological concept of student engagement, it often unspecifies and neglects the context of engagement, for example, school, peer, or classroom climate, in explaining engagement (Kahu, 2013). Kahu further explains this as “in positioning engagement so clearly within the individual, there is a danger of downplaying the critical importance of the situation. Engagement is fundamentally situational – it arises from the interplay of context and individual” (p. 8). This perspective indicates that dominantly depending on this approach to describe student engagement may lead to overlooking the potential influence of the situation (e.g., learning environment) in explaining student engagement.

The sociocultural approach of viewing student engagement emphasises the interaction of the broader social context and student experience in the learning process. In their book, Zhang and McNamara (2018) posit that the sociocultural perspective of student engagement “pays much attention to the impact of the broader social and cultural context on student engagement, and explains why students become engaged or disengaged” (p. 24). Although this perspective is critical for understanding a specific concept of student engagement in higher education, it is often overlooked in contemporary literature (Kahu & Nelson, 2018; Kassab et al., 2023). As a limitation, this approach gives little emphasis to student-level variables that influence engagement, like those of the behavioural approach (Kahu, 2013). This restricts its usefulness as a research perspective to frame student engagement.

The Integrative or holistic approach of viewing student engagement is proposed by Kahu (2013) as a response to the limitations of the former three approaches. As the name indicates, the

integrative approach attempts to bring together the previous three perspectives and provide a holistic explanation of student engagement (Zhang & McNamara, 2018). According to Kahu (2013), this approach views student engagement as a variable state that is influenced by a variety of student-level variables (e.g., behaviour, cognition, emotion), institutional-level variables (e.g., student agency in institutional affairs) and sociocultural context (e.g., students' willingness for intercultural dialogue and acceptance of learning from others with different perspectives).

When comparing the four approaches of viewing student engagement, the integrative or holistic model is found to be more comprehensive than the earlier three models to comprehend student engagement in higher education. It covers the specific components of all approaches and integrates them together in explaining the engagement of students in their academic and institutional activities. Therefore, the current study proceeds with this approach to conceptualise student engagement, which consists of the behavioural, emotional, cognitive, agentic, and sociocultural dimensions. A thorough description of these dimensions is detailed as follows:

2.1.1. Behavioural engagement

The behavioural dimension of student engagement is defined as students' observable academic performance and participatory actions in learning (Guo et al., 2023; She et al., 2023). This dimension of engagement draws on the idea of participation, including involvement in academic and extracurricular activities to achieve positive academic outcomes (Kahu & Nelson, 2018; Zhang & McNamara, 2018). Several researchers, for example, Fredricks and McColskey (2012), Kahu and Nelson (2018), and Kahu (2013), noted that students' behavioural engagement is measured through observable academic competence and tracking of achievement. These include student attendance, asking questions during class discussions and time spent on learning activities (Fredricks et al., 2004; Kahu & Nelson, 2018; Kuh, 2009); participation in academic

and extracurricular activities (Bowden et al., 2021; Buckley, 2018); and the ability to persist in academic activities despite challenges (Kassab et al., 2023). The above-mentioned characteristics suggest that behaviourally engaged students demonstrate proactive participatory behaviours in university life as well as in extracurricular civic activities.

2.1.2. Emotional engagement

The emotional dimension of student engagement refers to the summative and enduring levels of emotions experienced by students and captures the level of passion students feel for their learning experience (Bowden et al., 2021; Kahu and Nelson, 2018). This dimension reflects students' positive as well as negative emotional reactions to the learning process and teachers' instruction (Gupta & Nagpal, 2021; Maroco et al., 2016). Students' emotional engagement can be assessed using indicators such as students' sense of belongingness to their learning community (Fredricks et al., 2004; She et al., 2023); students' increased levels of a variety of affective responses on campus and off-campus activities, which can be demonstrated through happiness, pride, enthusiasm, openness, and curiosity (Bowden et al., 2021; Fredricks & Guo et al., 2023; Zhang & McNamara, 2018); and students' beliefs about the value of learning (Kassab et al., 2023; Kuh, 2009). This dimension of engagement focuses primarily on whether students feel a sense of belongingness or on more immediate emotions such as enjoyment and interest in the learning tasks (Kahu, 2013; Kahu & Nelson, 2018).

2.1.3. Cognitive engagement

The cognitive dimension of student engagement reflects the intellectual effort that students invest in understanding and mastering course content during the learning process (Fredricks et al., 2004; Kahu, 2013). Additionally, Zhang and McNamara (2018) emphasise that students' cognitive engagement draws on two ideas: investment and strategic learning.

According to Zhang and McNamara, “cognitively engaged students may be intrinsically motivated, willingly go beyond the requirements, prefer challenges and be resilient; they may strategically manage and control their efforts on tasks, such as suppressing distractions or regulating their learning” (p. 25).

Cognitive engagement can be assessed using indicators such as students' acquisition of new knowledge and abilities, and effort to understand and master complex learning content and skills (Maroco et al., 2016; She et al., 2023); process information through their active knowledge construction and critical thinking (Kassab et al., 2023; Kuh, 2009); and self-regulated learning and strategy use (Fredricks & McColskey, 2012). Therefore, it is argued that cognitively engaged students are more likely to demonstrate abilities in identifying content, meaning, and application of academic tasks (Kahu & Nelson, 2018).

2.1.4. Agentic engagement

The agentic dimension of student engagement is considered to be one type of engagement, but perhaps the most important for 21st-century students (Reeve & Jang, 2022). Agentic engagement is understood as students' intentional and constructive contributions to the learning process they receive in the classroom (Ashwin & McVitty, 2015). Although this dimension was proposed to be included within the traditionally granted components of student engagement (behavioural, emotional, and cognitive) a decade ago (see Reeve & Tseng, 2011; Reeve, 2012, 2013), the emphasis given on student engagement has been rather limited.

Existing research sets a clear demarcation to better understand the connection between agentic engagement and the earlier three aspects of engagement. For example, Reeve (2013) articulates that the earlier three types of student engagement largely accept the teacher's instructions as they are given. Students use their behaviour, emotions, and cognitions to translate

those teacher-provided instructions into student-acquired knowledge, understanding, and skills. Whereas agentic engagement is a constructive, student-initiated path to academic progress (Reeve, 2012, 2013). Students' agentic engagement includes students' involvement in decision-making processes about learning and teaching (Reeve & Jang, 2022); involvement in university administration as a source of feedback, and as collaborators in learning improvement projects (Buckley, 2018; Moges et al., 2024); and participation in institutional activities beyond the classroom (Ashwin & McVitty, 2015; Kassab et al., 2023).

2.1.5. Sociocultural engagement

The socio-cultural dimension of student engagement has recently been proposed in the conceptualisation of student engagement. As a result, studying student engagement from a sociocultural perspective is a relatively new research area, and there is still much to learn about how to comprehend this together with the earlier components (see Kassab et al., 2023; Zhang & McNamara, 2018). This dimension of engagement emphasises the importance of considering the social and cultural context in which learning occurs (Kahu & Nelson, 2018).

The socio-cultural dimension of student engagement reflects the influence of social and cultural contexts on students' participation and investment in their learning progress and success (Kahu, 2013; Zhang & McNamara, 2018). Furthermore, it involves students' awareness and appreciation of diverse cultural backgrounds and different perspectives represented in their learning community (Ashwin & McVitty, 2015; Kassab et al., 2023); willingness for intercultural dialogue, and acceptance of learning from others with different perspectives (Zhang & McNamara, 2018); valuing cohesion with peers and teachers to enable effective and respectful interactions and teamwork (Zhoc et al, 2019). This implies that the sociocultural dimensions of engagement place emphasis on students paying attention to the cultural norms that shape

participation in learning activities (Kahu & Nelson, 2018). Therefore, it adds an essential—and frequently overlooked—component to the process of comprehending student engagement in higher education.

Overall, most of the previous studies on student engagement in higher education (e.g., Gupta & Nagpal, 2021; Maroco et al., 2016; She et al., 2023) have often considered the traditionally known aspects of student engagement, such as the behavioural, emotional, and cognitive dimensions. However, agentic and sociocultural dimensions are relatively neglected in empirical studies and have yet to be thoroughly considered in the conceptualisation of student engagement. Therefore, the current study seeks to comprehend the construct of student engagement that integrates both the traditionally known dimensions (behavioural, emotional, and cognitive) and the newly recognised dimensions (agentic and sociocultural) of engagement. This provides a comprehensive framework for understanding it more broadly.

2.2. Teachers' Full-Range Leadership

The various forms of leadership behaviours and styles exercised by teachers have received increasing attention in the educational literature to clarify their scope and use in educational contexts (Ghamrawi et al., 2024; Tsai, 2017). Accordingly, numerous theoretical and empirical perspectives on various forms of teachers' leadership roles are presented in the literature. For example, York-Barr and Duke's (2004) ground-breaking study conceptualises the leadership practice of teachers as “teacher agency through establishing relationships, breaking down barriers, and marshalling resources throughout the organisation to improve students' educational experiences and outcomes” (p. 263). Likewise, Katzenmeyer and Moller (2009) defined teachers' leadership role as tasks of teachers who “lead within and beyond the classroom; identify with and contribute to a community of teacher learners and leaders; influence

others toward improved educational practice; and accept responsibility for achieving the outcomes of that leadership” (p. 6). These definitions describe teachers’ leadership as a set of responsibilities that teachers should demonstrate in the learning environment to lead a group of teachers to facilitate instruction.

Another body of literature considers the leadership role of teachers from the student-learning perspective. Öqvist and Malmström (2016), for example, define it as “a behaviour, a mobilisation of the available attributes of teachers to influence students at the ground level during their daily activities within and outside the classroom and beyond” (p. 156). Given this description, teachers’ use of leadership behaviours is explained as a process by which a teacher intentionally exerts influence on students by guiding and facilitating them towards better learning goals rather than as a mere collection of tasks performed by so-called teacher leaders (Balwant, 2016; Kılınç et al., 2021; Schott et al., 2020). This type of conceptualisation opens the possibility for researchers (e.g., Balwant et al., 2019; Harrison, 2011; Zhao et al., 2020) to view teachers’ leadership role from a learner-oriented perspective.

Furthermore, there is a growing interest in the recent educational literature that considers teachers’ leadership as teachers employing comprehensive leadership behaviours that wholeheartedly influence students to achieve learning goals. For example, researchers (e.g., Balwant et al., 2019; Jiang & Jia, 2018; DeDyn, 2021; Kim et al., 2023; Pachler et al., 2019) consider teachers’ leadership based on the popular FRLM, which includes the prevalent leadership components: transformational, transactional, and passive/avoidant behaviours (Bass & Riggio, 2006; Lindberg, 2022; Northouse, 2021). Although the FRLM has been developed initially in organisational settings, like that of the abovementioned educational researchers, it is

increasingly interested in using the FRLM to describe the leadership behaviours of teachers and predict its influence on various student outcomes in higher education.

The current study, therefore, seeks to view teachers' leadership behaviours based on the FRLM with the belief that it provides a robust framework for understanding the various leadership behaviours that teachers exhibit to influence student learning outcomes. Given below is a detailed explanation of the specific components of teachers' full-range leadership.

2.2.1. Transformational teacher leadership behaviours

The transformational leadership perspective is one of the most popular leadership approaches that has been the focus of much organisational research (Northouse, 2021; Yukl, 2010). As the name suggests, transformational leadership is a process that changes and transforms people using emotions, values, ethics, standards, and long-term goals (Bass & Riggio, 2006). Basing themselves on the transformational leadership framework, the critical review studies by Balwant (2016) and Zhao et al. (2020) show that researchers are increasingly interested in using the transformational leadership perspective to explain the leadership behaviours of teachers in the context of higher education. Teachers who exhibit transformational leadership can be characterised by four behaviours: idealised influence (includes attribute and behaviour), inspirational motivation, intellectual stimulation, and individualised consideration (DeDeyn, 2021; Erdel & Takkaç, 2020a, 2020b; Zhao et al., 2020).

Idealised influence: This component of transformational leadership has been partitioned into two forms: idealised influence-attributed and idealised influence-behaviour. The two idealised influence factors are often referred to as charisma (Bass & Riggio, 2006; Noland & Richards, 2014). According to DeDeyn (2021) and Lindberg (2022), idealised influence-attributed focus on how students are influenced by their idealisation of the teacher's abilities and

characteristics. Here, the teacher makes the students feel good to be with him/her, creates a sense of belongingness, and cares about students' interests. Such teachers present a clear learning vision and goal, demonstrate the norm that students must follow, and obtain the trust and respect of students to further make more effort in learning (Jiang & Jia, 2018). On the other hand, idealised influence-behaviour reflects how students are influenced as a result of their idealisation of the teacher's behaviour, demonstrating high ethical and moral standards to provide them with direction (Erdel & Takkaç, 2020b; Lindberg, 2022). In this context, Balwant (2016) and Zepeda et al. (2013) suggest that a teacher who exhibits a high ethical and moral code and has a high sense of mission is supposed to be an exemplary teacher so that students are eager to emulate them. Overall, idealised influence describes teachers as role models with moral and ethical standards who bring about positive change in students (Zhao et al., 2020). This motivates students to strive for the same level of dedication and commitment to learning.

Inspirational motivation: This component of transformational leadership reflects the articulation of appealing visions through the use of optimism, enthusiasm, setting high expectations, and using symbols to focus efforts (Bass & Riggio, 2006). A teacher who exhibits inspirational behaviour can provide students with a big-picture view of the education system (Zepeda et al., 2013). This describes the teacher's ability to communicate high expectations to students and inspire them to achieve shared learning goals by providing appealing visions (Zhao et al., 2020). For example, a teacher who motivates students to push their boundaries and believe in their abilities helps them develop a growing mindset (Moreno-Casado et al., 2021; Northouse, 2021). In addition, a teacher who inspires and motivates students can help them gain a clear understanding of the purpose and goal of their education and help them share the vision (Jiang &

Jia, 2018). This fact is supported by DeDeyn (2021), who remarks that inspirational motivation consistently has the strongest association with student learning outcomes.

Intellectual stimulation: This dimension of transformational teacher leadership behaviour refers to an action by the teacher intended to stimulate students to be creative and innovative, and to engage in thoughtful problem-solving activities (Erdel & Takkaç, 2020b; Northouse, 2021). A teacher who exhibits intellectual stimulation behaviour involves using actions that challenge students to conceptualise, realise, and investigate problems in new ways (Balwant, 2016; Zhao et al., 2020). Such actions influence students' sense of logic and analysis, problem-awareness beliefs and values, and potential to find creative solutions to problems (Erdel & Takkaç, 2020b; Northouse, 2021). Moreover, some researchers (e.g., Cruz & Kim, 2023; Jiang & Jia, 2018) emphasise that teachers who stimulate students' intellectual capacity challenge them to find solutions to problems from different perspectives. This action can encourage students to put maximum effort into their learning tasks and goals. For example, a teacher who fosters an environment where students feel safe to question assumptions and think critically, share their thoughts, and engage in respectful debates promotes students' intellectual development (Balwant et al., 2019; Bolkan & Goodboy, 2009).

Individualised consideration. This dimension of transformational behaviour reflects a teacher who creates a supportive learning climate for students by listening carefully to individual needs (Northouse, 2021). Within the transformational teacher leadership context, researchers (e.g., Noland & Richards, 2014; Zhao et al., 2020) point out that individualised consideration is about the act of teachers treating students in a classroom as individuals, not just as members of a team or group. As mentioned by Jiang and Jia (2018), teachers with individualised consideration quality contribute to students' learning by supporting, paying attention to each student's learning

needs, and facilitating their potential development. For example, a teacher can take the time to understand each student's unique strengths and weaknesses, and provide constructive feedback and tailored guidance (DeDeyn, 2021; Moreno-Casado et al., 2021; Pachler et al., 2019).

Overall, transformational teacher leadership behaviours are interrelated and mutually reinforcing (see Assefa et al., 2025; Moreno-Casado et al., 2021). This means that by stimulating a student intellectually, the teacher also shows individual consideration by better understanding how each student thinks. Both factors (intellectual stimulation and individualised consideration) work together to motivate students, especially when the teacher communicates high expectations (a behaviour of inspirational motivation) and creates an emotional bond through idealised influence (Balwant, 2016; Jiang & Jia, 2018; Rashid et al., 2020; Zhao et al., 2020). The notion is that higher education teachers who apply the dimensions of transformational leadership to course teaching can influence student learning, creativity, and ethical behaviours.

2.2.2. Transactional teacher leadership behaviours

Transactional leadership is a more classic style and is described as an instrumental leadership approach (Harrison, 2011; Moreno-Casado et al., 2021). According to Bogler (2013), transactional leadership refers to “exchange relationships between the leaders and their followers where each enters the transaction because of the expectation to fulfil self-interests, and the leader is responsible for maintaining the status quo by satisfying the needs of the followers” (p. 379). Particularly in the context of the teacher-student relationship, it involves a teacher and the students fulfilling a common agreement to exchange valuable objects in the learning process (Northouse, 2021; Jiang & Jia, 2018). In this sense, a teacher “who practices transactional leadership clarifies students’ responsibilities, rewards them for meeting the class objectives and goals, and corrects or punishes them when they cannot meet the class objectives and goals” (Kim

et al. 2023, p.5). This can be done using two approaches: providing appropriate rewards when students perform above expectations or introducing punishments when they perform below expectations (DeDeyn, 2021; Erdel & Takkaç, 2020a). Like that of organisational literature (e.g., Bass & Riggio, 2006; Northouse, 2021), transactional teacher leadership in higher education consists of two components: contingent reward (known as constructive transaction) and management by exception (known as corrective transactions) (DeDeyn, 2021).

Contingent reward: This component of transactional leadership behaviour focuses on clarifying task requirements and rewarding desirable outcomes (Lindberg, 2022). Here, the teacher emphasises exchange and delivers rewards in exchange for desired learning performance and outcomes (DeDeyn, 2021; Harrison, 2011; Northouse, 2021). In this type of leadership, the teacher tries to reach an agreement with students about what needs to be done and what benefits it will have for them to do it (Jiang & Jia, 2018). For example, a teacher behaves transactionally when he/she gives students marks for work that a student has completed (DeDeyn, 2021; Northouse, 2021). This ensures that students know what they need to do to be successful.

Management-by-exception: This component of transactional leadership involves corrective criticism, negative feedback, and negative reinforcement of inappropriate behaviours (Bogler, 2013; Jiang & Jia, 2018). Management by exception takes two forms: active and passive. The active management-by-exception (known as a corrective transaction) is categorised as transactional leadership, while the passive management-by-exception belongs to non-transactional leadership (Assefa et al., 2025; DeDeyn, 2021; Moreno-Casado et al., 2021).

The active management-by-exception consists of active feedback and negative reinforcement to prevent deviance from predetermined guidelines and take corrective action when rules are broken (Kime et al., 2023; Northouse, 2021). A transactional teacher who uses

the active form of management-by-exception closely monitors students for errors or rule violations and then takes corrective action before problems become serious (Balwant, 2016).

The passive management exception form, on the other hand, refers to a teacher who intervenes and takes corrective action only when standards are not met, or a problem becomes significant and obvious (DeDeyn, 2021; Northouse, 2021). Given its limited effectiveness in enhancing student learning outcomes, existing empirical studies on teachers' full-range leadership (e.g., Erdel & Takkaç, 2020b; DeDeyn, 2021; Moreno-Casado et al., 2021) have commonly grouped the passive form of management-by-exception with laissez-faire leadership (discussed next), collectively labelling them as passive/avoidant leadership or non-leadership behaviours, to reflect an absence of proactive leadership (Bass & Riggio, 2006). Accordingly, the present study treats both the passive management-by-exception and laissez-faire forms of leadership collectively as passive/avoidant leadership to understand typical teachers' leadership intervening only when problems become unavoidable or abdicating leadership responsibility.

2.2.3. Passive/avoidant teacher leadership behaviours

This component of leadership is added to the FRLM to indicate non-transactional leadership (involving passive management exception and laissez-faire behaviours), in which a leader avoids decision-making and does not use his/her authority (Bass & Riggio, 2006; Northouse, 2021; Yukl, 2010). In some empirical studies (e.g., DeDeyn, 2021; Erdel & Takkaç, 2020b; Jiang & Jia, 2018; Moreno-Casado et al., 2021), it is reported that this type of leadership behaviour is the least active and is characterised by two factors: management exception-passive and laissez-faire. The passive form of management by exception, as discussed above, refers to a teacher who intervenes and takes corrective action only when standards are not met or a problem becomes significant and obvious (DeDeyn, 2021; Northouse, 2021). Likewise, laissez-faire

leadership also represents the absence of leadership, meaning, taking a hands-off or let-things-ride approach (Northouse, 2021). These forms of teachers' full-range leadership differ from the others (transformational and transactional) in that they are perceived as indicating the lack of active leadership functions, which are essential for classroom structure, students' activities, and the wider learning environment (Bogler, 2013).

The literature regarding passive/avoidant leadership behaviours presents divergent perspectives. On the one hand, there is a conventional viewpoint that frequently characterises this form of teachers' full-range leadership as neglect, associated with suboptimal student results and disengaged classroom environments. Some studies in this regard, for example, DeDeyn (2021) and Erdel and Takkaç (2020), conceive the passive form of management by exception, as a teacher does not get involved much, gives little input, and generally stays out of the way when it comes to supporting students. A teacher who exhibits a *laissez-faire* behaviour abdicates responsibility, delays making decisions, does not provide feedback, and makes little effort to help students meet their learning needs (Balwant, 2016; Jiang & Jia, 2018; Zhao et al., 2020). That is because teachers who exhibit *laissez-faire* behaviour do not give much supervision, watch over students very closely, and give students much feedback. These perspectives suggest that the prevailing view of passive management by exception and *laissez-faire* teacher leadership behaviours altogether is characterised as either avoidant or equivalent to a lack of leadership in supporting student learning.

On the other hand, there is an emerging perspective that indicates this kind of teachers' full-range leadership behaviour might be more complex than just neglect, despite an unfavourable reputation. Although limited, there are a few alternative studies that criticise the dominant notion and indicate situations when, for example, *laissez-faire* leadership may yield

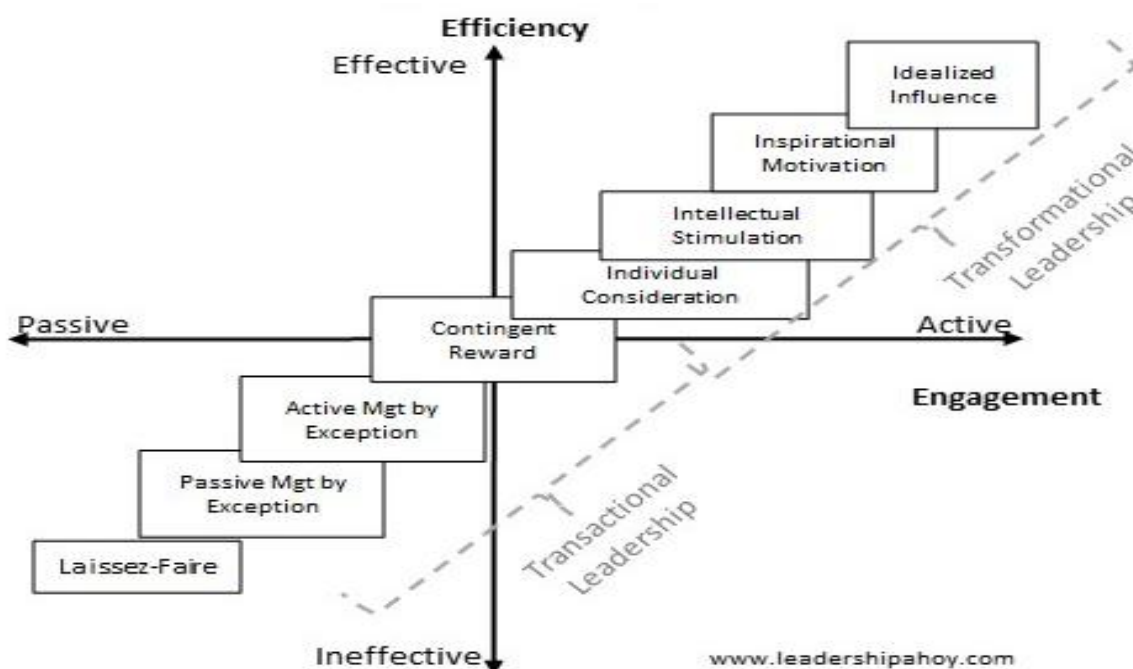
modes or even considerable impacts on expected results. The study by Yang (2015), for example, contends that the conventional view of laissez-faire is inherently biased, as it is encumbered by the notion that this type of leadership is non-strategic, thereby suggesting negative outcomes. He contends that to reveal the true effects of laissez-faire leadership, attention must be directed towards the behavioural dimensions of this leadership style, specifically the leader's non-involvement. The implication of this perspective is important to note that passive/avoidant teacher leadership behaviours do not always mean bad negligence. That is because contextual factors, for example, students' motivation and competence, are essential in shaping the effectiveness of leadership behaviours (Chhom et al., 2024; Kamal & Kesuma, 2024). Some scholars contend that a reduced teachers' presence may foster autonomy and self-directed learning in students who are competent or genuinely motivated (Hunzicker, 2022; Yang et al., 2022). Additionally, it is possible to conceive from Zhang et al.'s (2023) remarks that in settings where students exhibit better competence, intrinsic motivation, and familiarity with organised learning environments, teachers adopting a hands-off approach in the learning process can promote students' autonomy and facilitate self-directed learning.

The above perspectives highlight that while the literature frequently characterises passive/avoidant leadership behaviours as associated with suboptimal student results, often equating this form of leadership with negligence fails to recognise its potential facilitative role in students' learning through autonomy support and self-directed learning. Due to the inconclusiveness in the empirical literature on separating these behaviours and outcomes, it is still not clear whether passive/avoidant teacher leadership behaviours can be helpful in some situations and their role for students in higher education, suggesting further inquiry.

Overall, teachers' transformational, transactional, and passive/avoidant behaviours discussed so far reflect that every teacher exhibits distinct but inseparable leadership behaviours to influence student learning. This means that every teacher shows a continuum of these leadership behaviours, but each teacher demonstrates one behaviour more strongly than the others (Bass & Riggio, 2006; DeDyn, 2021; Lindberg, 2022; Northouse, 2021). The model presented below in Figure 2.1 views all of the discussed teachers' full-range leadership defined by the FRLM as existing on a continuum from highly effective to ineffective in terms of their influence on students' learning goals. The model also emphasises the importance of engagement for effective leadership. In that, transformational teacher leadership is generally preferred as the most effective form of leadership because it can generate higher levels of motivation and dedication among students, followed by transactional leadership. Passive/avoidant leadership, indicated as laissez-faire in the model, on the other hand, is considered the least effective.

Figure 2.1

The continuum of the FRLM adopted from Lindberg (2022)



2.3. Student Trust in Teachers

The significance of trust in leadership has been recognised in the literature on both organisational leadership (e.g., Bligh, 2017; Burke et al., 2007; Legood et al., 2021; Mayer et al., 1995) and educational leadership (e.g., Burke et al., 2007; Kim et al., 2023; Pachler et al., 2019). While the importance of trust for human conduct is seldom questioned due to its positive effects on interpersonal relationships, there is no agreed-upon single definition of the construct and its operational features (Felten et al., 2023; Özer et al., 2018). Some scholars, such as Balcerzyk (2020) and Bligh (2017), show that trust is a determining factor in effective leadership formation (e.g., aligning teachers' leadership actions with students' goals). That is why researchers like Hiatt et al. (2023), Macfarlane (2009), and Platz (2021) argue that within the teacher-student relationship, one necessary part of high-quality educational interactions is student trust in their teachers' intentions and willingness to support them.

According to Şirin et al. (2022), student trust in teachers is regarded as “one of the most important variables affecting university reform and students' college life” (p. 285). This is because trust is seen as a key factor underpinning the interaction between the teachers' intentions and the students' confidence in teachers (Balcerzyk, 2020; Macfarlane, 2009; Platz, 2021). Based on this premise, several researchers in higher education (e.g., Kim et al., 2023; Hiatt et al., 2023; Lewicka & Bollampally, 2022; Zhou, 2023) conceptualize student trust in teachers as the interpersonal relationship, that exists between a teacher and the students, in which the students are willing and confident to rely on the teacher's intentions to help them achieve academic goals.

Furthermore, a careful review of the existing literature reveals two most dominant trust models that help to understand how a trusting relationship can be established between teachers and students in higher education. The first model is the ABI [ABI: Ability, Benevolence, and

Integrity] model of trust proposed by Hiatt et al (2023), adapted from Mayer et al.'s (1995) integrative trust model that consists of three dimensions: ability, benevolence, and integrity. The second model is the network model of trust suggested by Zhou (2023), which emerged from Mishra's (1996) trust model that comprises four components: competence, integrity, benevolence, and predictability. Both models are important descriptors of the notion of student trust in teachers in higher education. But they have their characteristics.

The ABI trust model, on the one hand, has sufficient literature support for its theoretical basis (see Mayer & Davis, 1999; Mayer et al., 1995). Initially, the ABI trust model was developed to address interpersonal relationships between a leader and the followers in the context of organisations (Svare et al., 2020). Moreover, it was further adapted to the higher education context and validated for its suitability as a model for understanding university students' perceptions of trust in their teachers (see Hiatt et al., 2023). According to Hiatt and the associate's study, the model shows a reasonable prediction of undergraduate student outcomes such as learning satisfaction. This suggests the possibility of its application for research and practice purposes. On the other hand, the network model of trust, like that of the ABI trust model, has adequate literature support for its theoretical basis (Adams & Forsyth, 2009; Macfarlane, 2009; Mishra, 1996). However, this model remains largely theoretical and has not yet been empirically tested, particularly in higher education.

The current study, therefore, proceeds to understand student trust in teachers using the ABI trust model with the belief that it provides a robust framework for framing students' perceptions of trust in their teachers' ability, benevolence, and integrity to help them achieve better academic goals.

2.3.1. *Student trust in teachers' ability*

In the context of student trust in teachers, the current study takes ability to refer to the collection of perceived teachers' knowledge, skills, and competencies to perform learning tasks, which enable them to be trusted by the students (Macfarlane, 2009; Mayer et al., 1995). Perceived ability is demonstrated by teachers being confident in their subject matter and by being willing to impart their knowledge clearly and respectfully to their students (Payne et al., 2023). This suggests that teachers who demonstrate favourable ability within their field of instruction are likely to get their students' trust.

Regarding ability, Hiatt et al. (2023) provide four features that teachers should establish to get their students to trust them. The first is demonstration, whereby teachers validate their ability by linking course content and application through current events, real-world examples, and personal stories. Knowledge sharing represents the second feature where teachers use multiple pedagogical tools and perspectives to teach and facilitate course content. Third, teachers can draw on their expertise through their credentials, professional experience, and mastery of the course subject matter. Fourth, teachers can demonstrate their ability by engaging students in discussions about learning activities and modelling their professional behaviour. All of these characteristics explain a teacher's perceived ability, which makes students trust him/her.

2.3.2. *Student trust in teachers' benevolence*

Benevolence refers to "the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive" (Mayer et al., 1995, p.718). This definition points out that benevolence is just the trustee's (teacher's) perceived willingness to consider the interests of the trustor (students). In this matter, Macfarlane (2009), Svare et al. (2020), and Zhou (2023) further posit that benevolence is closely linked to a teacher's behaviours, which involve

caring, empathetic behaviour, and acting in ways that are consistent with the interests of students. Such an explanation suggests that the students will trust a teacher to a higher or lower degree depending on how they perceive a teacher's benevolent behaviour. When students believe that a teacher is looking out for their interests, it will appear that the teacher is showing goodwill toward the students.

Hiatt et al. (2023) identified in their study the most common characteristics that describe perceived benevolent behaviours of teachers in higher education. These include the teacher's focus on flexibility and openness in learning activities (including accommodating student emergencies), considering each student's circumstances, including learning styles and support, tolerance of different opinions, and kindness to student mistakes. For example, a teacher who is willing to offer support for students outside of class hours, or who makes the effort to get to know each student's unique objectives, is an example of perceived benevolent behaviour.

2.3.3. Student trust in teachers' integrity

Mayer et al. (1995) define integrity as "the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable" (p. 719), which includes honesty, reliability, and consistency. This definition encompasses not only the trustee upholding moral and ethical principles that the trustor finds positive, but also the trustee behaving in a manner that is consistent with the principles (Mayer & Davis, 1999). In this explanation, it can be possible to highlight two distinct but inseparable components: (i) the trustee (teacher) who consistently follows a set of principles, and (ii) the degree to which the trustor (students) perceives that set of principles is deemed morally correct and consistent (Burke et al., 2007; Hiatt et al., 2023).

Looking at the context of the student-teacher relationship in higher education, Hiatt et al. (2023) and Zhou (2023) outline that integrity denotes the honesty, fairness, and good faith of a

teacher to students. Additionally, Svare et al. (2020) argue that a teacher is perceived to have integrity when he/she honours a strong sense of justice and congruence between actions and words. For example, keeping promises (providing timely student feedback), fostering learning environments characterised by open debate, and managing confidential information about students indicate a teacher who demonstrates integrity (Hiatt et al., 2023; Macfarlane, 2009).

Overall, as suggested by Hiatt et al. (2023), Mayer and Davis (1999), and Mayer et al. (1995), all components of the ABI trust model taken together appear to explain a trusting relationship between teacher and students while maintaining parsimony. So, if a teacher is perceived highly by students on all three factors, the argument here is that the student-teacher relationship is perceived as quite trustworthy, which can increase students' confidence and security within the teacher-student relationship (Payne et al., 2023). Therefore, knowing the elements of the ABI trust model can help develop a learning setting where students feel confident in their teachers and are more likely to engage in the learning process.

2.4. Relationship Between Teachers' Full-Range Leadership and Student Engagement

Efforts to examine the relationship between teachers' full-range leadership and several student outcomes in higher education have been the focus of studies (e.g., DeDeyn, 2021; Rashid et al., 2020; Zhao & Zhang, 2022). The literature suggests that where student learning is the focus of various forms of teachers' full-range leadership, the likelihood of a positive impact on students is much greater (Balwant, 2016; Bogler et al., 2013; Erdel & Takkaç, 2020a). This is because teachers' utilisation of leadership behaviours helps to promote student engagement in many ways. Given below is a brief description of the expected relationship between specific teachers' full-range leadership and student engagement in higher education.

2.4.1. Transformational teacher leadership behaviours and student engagement

Evidence from educational literature supports the notion that transformational teacher leadership behaviours (idealised influence, inspirational motivation, intellectual stimulation and individualised consideration) can be effective in fostering student outcomes in many ways. The study by Bolkan and Goodboy (2009) on 165 undergraduate students in the USA found that teachers who demonstrate the four dimensions of transformational leadership behaviours moderately influence student outcomes such as cognitive learning, affective learning, motivation, and satisfaction. Related studies conducted in the same context by Harrison (2011) on 112 university students and Noland and Richards (2014) on 273 college students also reveal that transformational teacher leadership are strongly associated with students' affective learning and motivation. Furthermore, several studies, such as Bogler et al. (2013) on 1270 undergraduate students in Israel, Cruz & Kim (2023) on 448 university students in the Philippines, Erdel and Takkaç (2020a) on 300 undergraduate students in Turkey, and Pachler et al. (2019) on 165 undergraduate students in Germany, show that transformational teacher leadership has a strong influence on students' learning satisfaction. Likewise, the study by Trigueros et al. (2020) on 3354 university students in Spain discloses the positive influence of transformational teacher leadership on student motivation, academic resilience, and performance.

Based on the abovementioned findings, it is possible to grasp that teachers' utilisation of transformational leadership can produce an enormous increase in various student outcomes in higher education. There are, however, studies that report findings that contradict those of the studies reviewed above. The meta-synthesis study by Balwant (2016) on 22 empirical studies (predominantly from the context of developed countries), for example, shows that the predictive relationship between transformational teacher leadership and various student outcomes, such as

motivation, satisfaction, and performance, is significantly weaker. In their recent study, Kim et al. (2023) on 200 undergraduate students in the USA also found that transformational teacher leadership did not significantly predict students' class engagement and academic performance.

A comparison of the findings of both Balwant (2016) and Kim et al. (2023) with those of the preceding studies (e.g., Cruz & Kim, 2023; Harrison, 2011; Noland & Richards, 2014) indicates that the extent of association varies. These inconsistent findings, therefore, suggest that further research should be conducted to add some empirical evidence that may contribute to minimising such inconsistency in the body of knowledge.

Overall, the prevailing studies discussed so far underscore the significant influence of transformational teacher leadership on various student outcomes, although the strength of the association varies. However, knowledge about the relationship between transformational teacher leadership and student engagement in higher education is still scarce. The global, as well as the domestic (Ethiopian) literature that explores this relationship, is relatively little. As the researcher searches the academic databases, some studies by Balwant et al. (2019) on 183 undergraduate students in the UK and Pachler et al. (2019) on 165 undergraduate students in Germany have attempted to investigate the issue. They found that transformational teacher leadership significantly shared a strong predictive relationship with student engagement.

However, two critical issues with these studies may limit the suitability of their findings for taking as granted knowledge in this regard. First, these studies measure student engagement considering the traditional three dimensions (behavioural, emotional, and cognitive); however, it is currently assumed that student engagement is understood as consisting of five dimensions (adding agentic and sociocultural dimensions) (Kassab et al., 2023). Hence, in their studies, the last two dimensions of student engagement are overlooked. Second, the small sample size may

limit the generalizability of those study findings not only in comparable settings but also in the developing countries context, like Ethiopia. Therefore, it is argued that a conclusive investigation that considers all five components of student engagement is necessary to add knowledge to the existing understanding of how teachers demonstrating transformational leadership behaviours can be more effective in influencing student engagement in higher education.

Looking specifically at the case of Ethiopian higher education and other comparable contexts, the empirical research aimed at explaining the influence of transformational teacher leadership on student engagement is a relatively little-established scenario. Some of the empirical studies in this environment focus on investigating the functions of transformational leadership in contributing to higher education reforms, organisational learning, innovation, and effectiveness (e.g., Bahru et al., 2023; Zeleke & Chauhan, 2022). In short, previous domestic literature on transformational leadership in higher education continued to focus on its utility in supporting top-level leaders in leading organisational activities. On the other hand, exploring the influence of transformational teacher leadership on student engagement and other student outcomes in higher education in Ethiopia has rarely been explained, suggesting that further research is needed in this regard. Therefore, the current study is proposed to examine the extent to which teachers' demonstrating transformational leadership behaviours influence student engagement in such a setting.

2.4.2. Transactional teacher leadership behaviours and student engagement

As compared to that of transformational one, the empirical literature gives unfavourable emphasis on examining the predictive association between transactional teacher leadership behaviours (contingent rewards and active management by exception) and student outcomes in higher education. Despite that, several researchers such as Bogler et al. (2013), DeDeyn (2021),

Erdel and Takkaç (2020a), and Kim et al. (2023) have attempted to examine the relationship between transactional teacher leadership and various student outcomes such as satisfaction, motivation, and academic performance. Findings are, however, quite inconsistent among studies.

Some studies, like Assefa et al. (2025), DeDeyn (2021), and Moreno-Casado et al. (2021), on the one hand, show that teachers who demonstrate transactional leadership behaviours meaningfully increase students' participation in achieving predetermined learning goals. Likewise, the study by Erdel and Takkaç (2020a) on 300 undergraduate students in Turkey shows that teachers' use of both contingent rewards and active management by exemption has a significant impact on students' learning satisfaction.

On the other hand, a couple of studies by Bogler et al. (2013) and Kim et al. (2023) report contradictory findings as compared to those of the studies reviewed above. The study by Bogler et al. (2013) on 1,270 undergraduate students in Israel reveals that the two indicators of transactional teacher leadership produce contradictory results among university students. While contingent rewards correlated sufficiently with student satisfaction, participation, and achievement, active management-by-exception was found to produce weak correlations. Additionally, the study by Kim et al. (2023) involving 200 undergraduate students in the USA indicates transactional teacher leadership are not significantly predict students' class engagement and academic performance. These findings challenge the prevailing notion in the dominant literature (e.g., Dedyn, 2021; Harrison, 2011; Northouse, 2021), which highlights that transactional teacher leadership is detrimental to various student outcomes, particularly when there are clear expectations and exchanges set between teachers and students.

A comparison of the above-mentioned two categories of studies indicates that there are varying findings in the literature on transactional teacher leadership and associated student

outcomes. As far as the researcher's access to the literature, neither global nor domestic empirical research attempts to contribute to this ongoing debate. This scenario signifies that little is known about the extent of transactional teacher leadership in predicting the engagement of students in higher education settings. Therefore, the current study is proposed to add some additional empirical evidence to this debate.

2.4.3. Passive/avoidant teacher leadership behaviours and student engagement

The dominant empirical studies conducted in higher education report that the relationship between teachers exhibiting passive/avoidant leadership (passive management-by-exception and laissez-faire) and student outcomes runs in opposite directions. For example, studies that have been conducted both globally (e.g., Bogler et al., 2013; DeDeyn, 2021; Jiang & Jia, 2018) and domestically (e.g., Assefa et al., 2025; Mekuria, 2022) report negative predictive effects of laissez-faire teacher behaviours on various student outcomes. In classrooms with passive teachers, students frequently report that they are uncertain about the expectations, are less motivated, and are less engaged in learning activities (Balwant, 2016; Erdel & Takkaç, 2020a). According to Self-Determination Theory (SDT), when students do not have structure, feedback, and a connection with their teachers, it can frustrate their requirements for autonomy, competence, and relatedness, which can diminish their intrinsic motivation needed for sustained engagement (Ryan & Deci, 2017).

In the extant literature, however, a common misconception is that the frequent views of passive/avoidant leadership, which supposedly result in reduced expected consequences, oversimplify the complex dynamics at play in effective teaching and leadership contexts. That is because the literature generally indicates that this type of leadership is negative due to its frequent absence of essential supports. Although limited, there are some studies (e.g., Kamal &

Kesuma, 2024; Yang, 2015; Zhang et al., 2023) which revealed that, for example, laissez-faire behaviours may have a modest or even significant positive influence on student outcomes.

Additionally, the systematic literature review study by Kamal and Kesuma (2024) on 64 articles highlights that laissez-faire leadership, marked by minimal involvement, is generally associated with negative outcomes like reduced satisfaction and productivity. However, its impact can vary based on context. In this regard, Yang et al.'s (2022) conceptualisation of the positive effects of laissez-faire leadership provides a context that, in classrooms populated by self-regulated and capable students, for example, limited teacher intervention can promote students' autonomy, self-directed learning and intrinsic motivation. Additionally, in settings characterised by established routines and robust peer collaboration, teachers' passivity or avoidance behaviours may not negatively affect student involvement and may even foster student initiatives (Yang, 2015; Zhang et al., 2023). These underscore that the association between teachers' demonstrating passive/avoidant leadership and student outcomes, including engagement, is contingent upon contexts.

The above-reviewed perspectives elucidate the circumstances through which passive/avoidant teacher leadership behaviours either obstruct or promote student engagement. Despite that, neither global nor domestic studies have shown the exact degree/extent of the contribution in a way that points out how teachers' exhibiting such behaviours predict student engagement in higher education. Considering this, the current study seeks to determine the extent of this relationship to suggest specific pathways that may help reduce the negative outcomes of passive/avoidant-oriented teacher behaviours, which may be related to lower student engagement in such a setting.

2.5. Relationship Between Teachers' Full-Range Leadership and Student Trust in Teachers

It is argued in the educational literature that when discussing leadership in the teacher-student context and its associated impact on various student outcomes, examining the educational relationship between teachers and students, which involves trust, cannot be ignored (Balcerzyk, 2020; Felten et al., 2023; Pachler et al., 2019). That is because trust is the basis of the educational relationship manifested between teachers and students (Hiatt et al., 2023; Macfarlane, 2009; Zhou, 2023). The specific teachers' full-range leadership behaviours and their predictive associations with student trust in teachers are detailed as follows.

2.5.1. Transformational teacher leadership behaviours and student trust in teachers

The seminal literature (e.g., Bass & Riggio, 2006; Yukl, 2010) indicates that transformational leadership is logically linked to trust. Northouse's (2021) notable book, in this regard, indicates that teachers who exhibit transformational leadership behaviours typically have very high moral and ethical standards. As a result, they are highly respected and trusted by students, who often have a lot of confidence in them (Hiatt et al., 2023; Macfarlane, 2009; Zhou, 2023). This ultimately leads students to maintain trust in teachers' intentions for their success.

Gilstrap and Collins (2012), in their study, highlight two scenarios that serve as the base for the current study to understand how transformational teacher leadership behaviours influence student trust in teachers. First, teachers' transformational behaviours convey how students' short-term task performance helps them achieve their long-term goals. In this process, students can be inspired to align their attitudes and ambitions with the teacher's vision if they firmly believe and trust in the teacher's support. Second, all transformational leadership behaviours demonstrate a teacher's leadership skills, concern, and integrity, which are critical indicators of trustworthiness. This implies that when teachers foster acceptance of students' goals and articulate a compelling

vision, students will be confident that teachers have the necessary ability, benevolence, and integrity to guide them toward the desired learning outcome.

Conformingly, the systematic review study by Balwant (2016) in a higher education setting indicates that transformational teacher leadership is positively related to undergraduate students' perception of teachers' credibility. Likewise, Bolkan and Goodboy (2009) on 165 undergraduate students in the USA and Pachler et al. (2019) on 165 undergraduate students in Germany reveal that transformational teacher leadership is positively related to students' perceptions of trust in teachers. In the same way, a recent study by Kim et al. (2023) conducted in the USA supports the preceding findings. Furthermore, Lewicka and Bollampally's (2022) qualitative study conducted in the Indian higher education setting shows that student trust in teachers grows when teachers support students' decisions, motivate them, and give them time and special attention. This suggests that a teacher's transformational behaviour is likely to have a positive influence on student trust in teachers, leading them to be successful in learning.

Most of the empirical findings reviewed above are, however, dominantly Western-based. It can thus be argued that there is little empirical evidence in the literature to support these arguments in higher education in the context of developing countries, including Ethiopia. Therefore, the current study is suggested to contribute to such a gap in the literature from a different perspective, the Ethiopian higher education setting.

2.5.2. Transactional teacher leadership behaviours and student trust in teachers

As compared to that of transformational teacher leadership, the empirical literature insufficiently addresses transactional teacher leadership and its association with student trust in teachers. A few studies, such as Burke et al. (2007) and Lewicka and Bollampally (2022), show that when students view teachers' transactional leadership behaviours as consistent, a trustworthy

relationship between teacher and students is expected to flourish. This, in turn, contributes to the teachers being seen as benevolent by students. Similarly, related studies such as Kim et al. (2023) and Prickett (2016) support that teachers' transactional leadership can predict the perceptions of students to be confident in their teachers' ability, benevolence, and integrity.

Overall, existing theoretical and empirical literature suggests that if practised appropriately, transactional teacher leadership behaviours and student trust in teachers are directly related. However, as far as the researcher's understanding goes, neither the global nor the domestic literature offers adequate empirical evidence that can explain what this relationship looks like within the context of higher education. Considering this kind of limitation, the current study seeks to reveal the degree to which teachers' demonstrating transactional leadership behaviours predict student trust in the teachers in the Ethiopian higher education context.

2.5.3. Passive/avoidant teacher leadership behaviours and student trust in teachers

The organisational leadership literature (e.g. Bass & Riggio, 2006; Northouse, 2021; Yukl, 2010) indicates that a leader's passivity or avoidance behaviours are often associated with undesirable outcomes due to followers' lack of trust in them. As far as the researcher's knowledge goes, however, the educational literature shows little empirical study that reveals how teachers' passive/avoidant behaviours influence student trust in teachers in higher education settings. Even though it is very challenging to theorise within this limited theoretical and empirical base, it is argued that teachers' passive/avoidant behaviours are expected to be inversely correlated with students' perceptions of trust in their teachers. Such intent suggests the need for a more detailed empirical framework to know just the magnitude of this relationship and provide relevant approaches which may help minimise such behaviours of teachers, which may have negative influences on student outcomes, including engagement.

2.6. Relationship Between Student Trust in Teachers and Student Engagement

When thinking about what characterises a good learning environment that promotes students' engagement, trust certainly comes to mind (Platz, 2021; Şirin et al., 2022). In her influential book, award-winning educator Melissa Collins shares her twenty-plus years of teaching experience, showing that her strong, trusting relationships with students can best guide her in the right direction to support student development (see Collins, 2023). This professional experience suggests that building strong and trustworthy relationships between teachers and their students helps maintain learning progress and success. In a similar vein, several studies (e.g., Felten et al., 2023; Hiatt et al., 2023; Kim et al., 2023; Macfarlane, 2009; Zhou, 2023) conducted in the context of higher education support Collins's perspective that university teachers should have a trusting relationship with their students because learning is not just a cognitive process; it has affective elements. This specifies that by instilling trust between teachers and students, sustainable learning environments characterised by collaborative inquiry and dialogue can be created (Özer et al., 2018; Payne et al., 2023; Svare et al., 2020).

As highlighted in the comprehensive review studies by Burke et al. (2007) and Payne et al. (2023), it is established that when students develop a trusting relationship with their teachers based on perceptions of the teacher's ability, benevolence, and integrity, this increases students' willingness to integrate the supports received from the teacher into existing learning structures. This argument is further reinforced by Hiatt et al. (2023), Macfarlane (2009), and Zhou (2023), who note that students' trust in teachers has a significant influence on student outcomes such as satisfaction and performance in higher education. Additionally, the study by Pachler et al. (2019) conducted on undergraduate students in higher education in the German context shows that “an increased level of trust in lecturer, in turn, predicts changes in relevant student performance

criteria, namely study engagement, student creativity, and task performance” (p. 169). This suggests that students’ perceptions of trust in teachers are expected to have a potential influence on optimising various student outcomes in higher education.

Although the relationship between students’ perceptions of trust in teachers and various student outcomes has been fairly studied, attempts to examine the influence of student trust in teachers on student engagement are still in their infancy level. As far as the researcher’s knowledge is concerned, few studies in the literature attempt to address the topic. For example, the study by Özer et al. (2018) and Şirin et al. (2022) on 1179 and 552 undergraduate students in Turkey, respectively, shows that student trust in professors was found to be an important indicator of student class engagement. Despite this finding, recent studies conducted by Hiatt et al. (2023) and Zhou (2023) show that, as compared to that of determining the relationship between student trust in teachers and various student outcomes, examining how students’ perceptions of trust in their teachers lead to student engagement in academic and institutional activities has been largely overlooked in empirical research in higher education settings. This implies that further research is required. Therefore, the current study is proposed to examine how students’ perceptions of trust in teachers influence student engagement in higher education.

2.7. The Mediating Role of Student Trust in Teachers

The specific role of trust in explaining the relationship between leadership behaviours and associated outcomes is widely discussed in the organisational leadership literature, which views trust as a mediating construct. For example, some studies conducted on the organisational context show that trust mediates the predictive effects of transformational leadership behaviours on job satisfaction (e.g., Gilstrap & Collins, 2012) and employee performance (e.g., Goodwin et al., 2011). These empirical findings are further supported by the theoretical thesis of Northouse

(2021) and Yukl (2010), who argue that followers may be motivated by transformational leaders to perform beyond expectations due to their established trust and respect for their leaders.

When coming to the educational literature, the importance of trust in fostering the educational relationship between teachers and students is well-recognised in higher education (e.g., Hiatt et al., 2023; Kim et al., 2023; Zhou, 2023). In their study, Kim et al. (2023), for example, show that as the leaders of student groups, teachers who effectively utilise leadership behaviours to encourage students can enhance students' perceptions of trust in his/her support. This leads students to engage in meaningful learning activities. Furthermore, Kim and colleagues suggest that the influence of transformational and transactional teacher leadership behaviours on undergraduate student academic performance becomes significant when trust in teachers enters into this relationship, suggesting that trust plays a mediating role in such relationships.

In spite of this, understanding the specific role of student trust in teachers in explaining the relationship between the specific teachers' full-range leadership behaviours and student engagement is still little researched. A closer scrutiny of the literature in higher education has shown that a few empirical studies have attempted to examine the role of student trust in teachers within this context. The study by Burke et al. (2007), for example, shows that students are more likely to reciprocate teachers' actions by being motivated to work harder, persist longer, and engage in extra-role behaviours when they trust their teachers' ABI. This study's findings suggest that students' perceived trust in teachers facilitates the influence of teachers' full-range leadership behaviours on the mentioned components of student engagement. However, the specific role of student trust in teachers is not reported to either partially or fully mediate the relationship, suggesting the need for further study to add evidence to this issue.

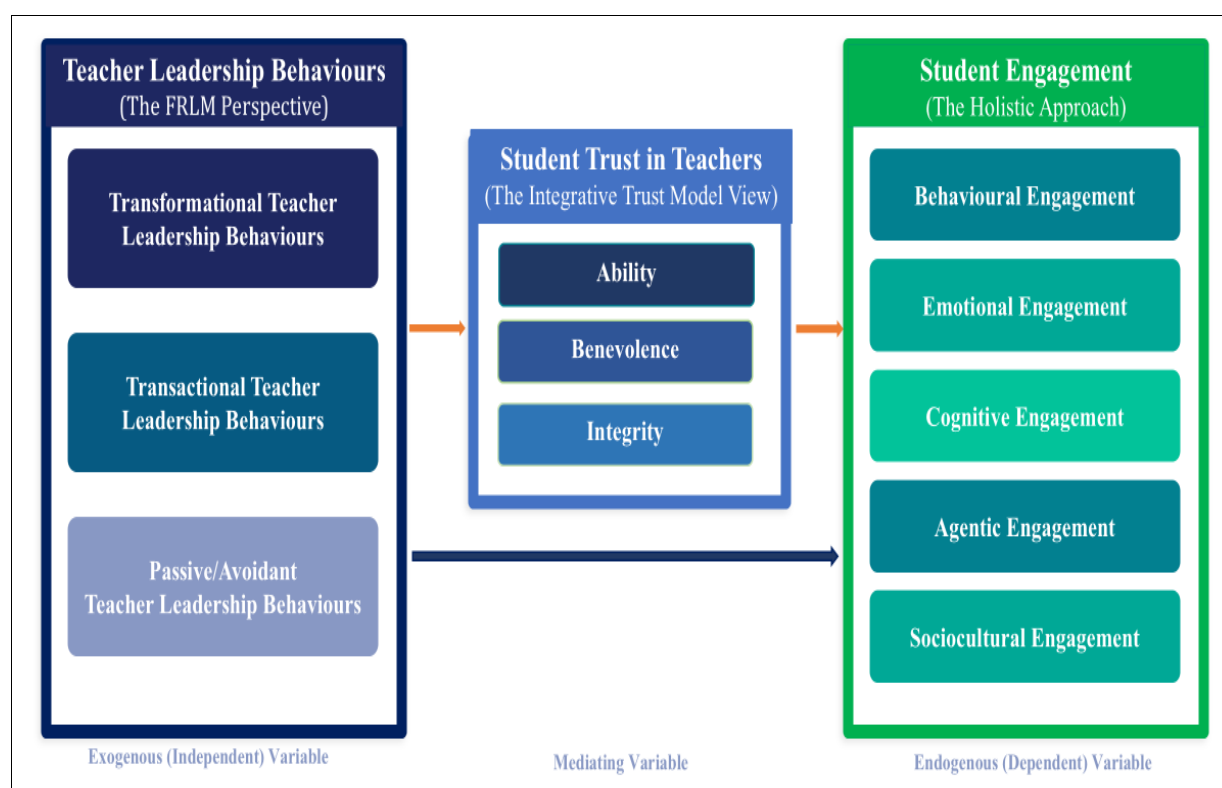
An additional study by Pachler et al. (2019) on 165 undergraduate students has also examined how transformational teacher leadership promotes students' engagement, creativity, and task performance mediated by student trust in teachers and self-efficacy in higher education in Germany. The study reports that student trust in teachers fully mediates the relationship between transformational teacher leadership and student engagement. This finding provides evidence about the specific role that students' perceptions of trust in their teachers play in this relationship. However, one main issue may limit buying Pachler et al.'s (2019) findings as granted knowledge. The conceptualisation of teachers' exhibiting leadership in that study has typically focused on a single leadership behaviour (transformational) rather than simultaneously considering the distinct but inseparable teachers' full-range leadership that includes transformational, transactional, and passive/avoidant behaviours altogether and correlating each with student trust in teachers and student engagement. The transactional and passive/avoidant behaviours are little examined in this context, suggesting that further research is needed. Therefore, given such gaps in the empirical literature, the current study seeks to examine how students' perceptions of trust in their teachers' ABI mediate the influence of the specific teacher leadership behaviours on student engagement in higher education.

Overall, based on the above-reviewed theoretical and empirical perspectives in this section, the study developed the following conceptual framework model, shown in Figure 1.1. Following Ravitch and Riggan's (2017) assertion that a conceptual framework emerges from a critical synthesis of the literature with strong theoretical logic and adequate empirical evidence, the study constructs the following conceptual model. From the outset, the model displays the theoretical framing of the three key study variables with their dimensions. Then, the conceptual model constructs four major relationships. First, teachers' utilisation of the specific full-range

leadership behaviours is expected to have a direct influence on student engagement. Second, teachers demonstrating the specific full-range leadership behaviours are also expected to be directly related to students' perceptions of trust in teachers. Third, considering the educational interrelationship between teachers and students, it is assumed that a trusting relationship established between them can lead to enhanced student engagement. Fourth, given the important role of trust, it is expected that the predictive influence of teachers demonstrating behaviours on student engagement can be mediated by student trust in teachers.

Figure 2.2

Conceptual framework of the study



CHAPTER THREE: METHODOLOGY

This section provides a detailed explanation of the methodological aspects of this study: research world views (paradigm), approach and design, population and sampling, measurement and operationalisation of the key study variables, data collection tools and procedures, validity and reliability of instruments, data analysis methods, and ethical considerations. What follows is a detailed discussion of these elements.

3.1. Paradigm of the Study

The current study aims to examine the influence of teachers' full-range leadership on student engagement mediated by student trust in teachers in public universities located in the regional state of Amhara, Ethiopia. In doing that, understanding the paradigm of study in terms of epistemology, ontology, methodology, and axiology is essential as these concepts encompass the fundamental assumptions, beliefs, norms, and values that serve as the guiding principles in the process of conducting this study (Kivunji & Kuyin, 2017; Guba & Lincoln, 2005; Morgan, 2007). Among the major philosophical worldviews extensively discussed in the research literature, such as positivism, constructivism, transformative, and pragmatism (Mertens, 2015), the philosophical perspective of the current study is located within the pragmatism research paradigm. The following major reasons prompted the decision to prefer this paradigm to guide the study process in terms of epistemology, ontology, methodology, and axiology.

Epistemologically, pragmatism places a strong emphasis on the notion of "what works" and emphasises the importance of practical knowledge and experience in forming our understanding of reality and establishing the truth of knowledge (Creswell & Creswell, 2018; Maarouf, 2019). According to pragmatists, it is advocated that researchers "do not position themselves as distant observers" but rather interact with study participants (Mertense, 2015, p.

88). Therefore, by applying a relational epistemology (Kivunja & Kuyini, 2017; Khatri, 2020, p. 1437; Morgan, 2007), the present study considers the key study variables through the empirical knowledge obtained from the study participants (university teachers and students). Based on the knowledge of these participants (e.g., students' and teachers' perceptions on leadership behaviours, trust in teachers, and engagement), the current study determined how teachers' utilisation of the specific full-range leadership behaviours influences student engagement mediated by student trust in teachers.

Ontologically, pragmatism emphasises the importance of context and the idea that reality is constantly evolving “to make sense of the social phenomenon we are investigating” (Khatri, 2020, p. 1436). Pragmatists typically have a realist ontology, meaning they argue for a nuanced understanding of reality that includes both objective truths and subjective interpretations (Guba & Lincoln, 2005). This highlights that pragmatism recognises both the existence of one reality and that individuals have multiple interpretations of that reality, not the existence of multiple realities based on researchers' construction of reality (Maarouf, 2019; Morgan, 2007). Grounding on this perspective, the present study assumes that understanding the key study variables involve both objective and subjective elements. It acknowledges the existence of a shared reality that both teachers and students may recognise the importance of teacher leadership, trust in teachers, and engagement in the learning process. While accepting that students and teachers may interpret this shared reality differently based on their perceptions and experiences. This allows the study to capture the nuances of how these different individuals (students and teachers) respond to the same reality (e.g., the specific full-range leadership behaviours exhibited by the teachers and their influence on student engagement and trust in teachers). The interactions between the teachers and students shared perceptions, and meanwhile, their independent interpretation of the

key study variables can help the study explain the influence of teachers' full-range leadership on student engagement mediated by student trust in teachers.

Methodologically, pragmatism is a pluralistic research paradigm, meaning that they take a strong position that argues the impossibility of accessing the truth about the real world based only on a single scientific method (Dawadi et al, 2021; Kivunja & Kuyini, 2017; Morgan, 2007). In other words, pragmatism emphasises the importance of using different research methods to address research questions in a study (see Guba & Lincoln, 2005; Mertense, 2015). Therefore, by adopting the pluralistic methodological worldview, the current study employed a mix of both quantitative and qualitative approaches to address the proposed research questions of the study. For example, the quantitative approach allowed for determining the status of teachers' demonstrating full-range leadership and predicting its influence on student engagement or trust in teachers. The qualitative ones also helped to explain the quantitative results about how students' perception and teachers' experience of teachers' full-range leadership is translated into student engagement or trust in teachers.

Axiologically, pragmatism emphasises a values-oriented axiology, which reflects the importance of values that are useful and beneficial to humans and must be taken into account in research work (Kivunja & Kuyini, 2017; Maarouf, 2019). Therefore, this study followed a values-oriented axiology with the belief that the findings of the study are expected to have a great benefit to higher education institutions in improving student learning outcomes. It provides some pathways for higher education to promote teachers' demonstrating the effective full-range leadership behaviours in establishing a trusted relationship with students, aimed at enhancing student engagement. Moreover, in the process of the study, sufficient value was given to the "ethics of care" of the study participants to gain their insights (Mentense, 2015, p. 86).

3.2. Approach of the Study

It is well-established by pioneering research scholars such as Maarouf (2019), Mertens (2015), and Morgan (2007) that the philosophical position of the current study (which is pragmatism) advocates the use of a mixed methods research approach. Hence, the study employed a mixed-methods research approach. This allows for using the combination of both quantitative and qualitative data collection and analysis methods to gain a more comprehensive understanding of the key study variables and their relationships. Related empirical works (e.g. Angelle, 2018; Erdel & Takkaç, 2020b; Thornberg et al., 2022) have also employed a mixed methods research approach to investigate the relationship between various forms of teachers' full-range leadership and student outcomes. Furthermore, three major reasons prompted the decision of this study to employ a mixed methods approach.

First, a quantitative approach helped the study to collect data from a large number of participants and facilitate a quantifiable understanding of the key study variables (Creswell & Creswell, 2018). This approach can help to understand, for example, how students rate the status of their engagement and perceive their teachers' full-range leadership, and the relationships between these variables (e.g., the influence of the specific teachers' full-range leadership behaviours on student engagement). In doing that, standardised measurement scales corresponding to each of the key study variables and a relevant statistical analysis tool helped the study to quantify the understanding of each variable and determine the proposed relationships (Hair et al, 2021; Kline, 2023).

Second, a qualitative approach helped the study to obtain detailed data about the participants' perceptions and experiences of the key variables of the study (Creswell & Creswell, 2018). These include, for example, teachers' experiences of the specific full-range leadership

behaviours, and students' descriptions of their teachers' full-range leadership behaviours. Such qualitative data allowed this study to gain a deeper understanding of the variables, honour the subjective voices and interpretations of participants, and transfer the study findings to a comparable context (Braun & Clarke, 2012). In addition, it allowed for capturing how students and teachers experienced the relationships between the study variables in the classroom and beyond interactions (e.g., how teachers' exhibiting the transformational leadership behaviours influence dimensions of student engagement?). Thus, the qualitative findings strengthened the interpretation of the proposed relationships in the study by providing contextual explanations.

Third, by taking together both quantitative and qualitative data and results, the study attempted to provide a more nuanced perspective on the topic under investigation. The combination of the two approaches offers the opportunity to take advantage of each approach while avoiding its shortcomings to obtain more comprehensive and in-depth information (Creswell & Creswell, 2018; Dawadi et al, 2021). For example, the quantitative approach indicated the specific magnitude and strength of the influence of the specific teachers' full-range leadership behaviours on student engagement. The qualitative approach, on the other hand, offered detailed perspectives and experiences of teachers and students about the specific leadership behaviours and their implications for student engagement. Such an approach allowed the study to complement the results and identify patterns that are not observed using a single approach (Terrel, 2016). This helps to ensure the trustworthiness of the study results.

Based on the above three conditions, therefore, using a mixed methods research approach was found to be beneficial to the current study. While quantitative data provided breadth in understanding the study topic, qualitative data also added depth to it. This allowed the study to address the stated research question well and draw a more nuanced conclusion.

3.3. Design of the Study

The research literature (e.g., Creswell & Creswell, 2018; Dawadi et al, 2021; Terrel, 2016) emphasises that in a mixed-methods study, the following four aspects should be carefully considered when selecting the appropriate study design. These are the relative priority of the approaches (either quantitative or qualitative data and vice versa), the timing of the approaches, the level of interaction between the data, and the mixing phase of the data. With these core principles in mind, the study applied a sequential explanatory study design. The following points justified the reasons for employing this design.

First, as indicated by the stated research questions of the study, most of them are expected to be answered first using quantitative data. Qualitative data was also used to explain quantitative results in-depth. This emphasis suggested that the study gave relative importance to the quantitative data over the qualitative data in answering the research questions (priority was given to the importance of the quantitative data).

Second, in the study process, the timing of quantitative and qualitative data collection and analysis occurred sequentially. This means that the quantitative data was collected and analysed first (sequential–quantitative first). Based on the quantitative results, the subsequent qualitative data were collected. For example, analysis of the quantitative data indicated that among the components of teachers’ full-range leadership behaviours, the transformational one was identified as the main significant factor that has made students more engaged in their learning. Depending on this result, the qualitative data collection was designed to delve deeper into explaining students’ perceptions and teachers’ experiences of demonstrating transformational leadership and its implications for student engagement. In this sense, the qualitative approach helped to explain certain quantitative results in more detail (Dawadi et al., 2021; Terrell, 2016).

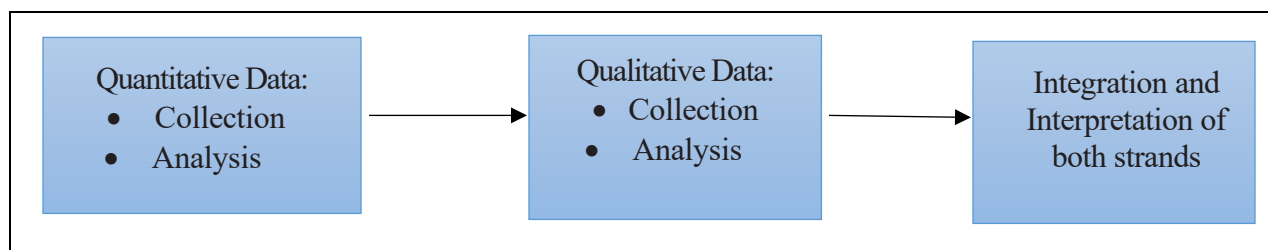
Third, both the quantitative and qualitative data were interacted within the study (both are interactive, not independent of each other), meaning that one influences the other. For example, the study collected and analysed quantitative data to determine the status of students' perceptions of their teachers' full-range leadership, trust in teachers, and engagement. Results of the quantitative analysis informed the development of subsequent guiding questions that the study asked students and teachers during qualitative data collection. This indicates that the quantitative data influences the qualitative one, suggesting that the current study began to interact with the two strands during the data collection stage.

Fourth, following the suggestion by Dawadi et al. (2021) and Creswell and Creswell (2018), the integration of both strands took place in two ways. Hence, the present study connected the quantitative results to the qualitative data collection, indicating that integrations were started during the data collection phase. In addition to this, the study draws integrated findings after combining the two sets of results when the qualitative phase is completed.

Overall, the model in Figure 3.1 shows the flow and pattern of the study design. First, a quantitative strand was executed, and then decisions were made about the specific quantitative results to be explained and supported by additional qualitative data. Then, a qualitative data collection was designed and implemented to further explain the quantitative results. Finally, both strands were integrated by linking the quantitative results with the qualitative ones.

Figure 3.1

Design of the study



3.4. Population and Sampling of the Study

3.4.1. Setting and population

The target population of this study was drawn from public universities located in the regional state of Amhara, Ethiopia. At the time of the study, there are ten public universities in the region: Bahir Dar University, University of Gondar, Wollo University, Debre Birhan University, Debre Markos University, Debre Tabor University, Mekdela Amba University, Debark University, Woldia University, and Injibara University. The focus of the study necessitates the collection of data from students and teachers affiliated with these institutions. Thus, the study population comprised 71,963 students and 13,403 teachers.

The emphasis on these two groups is decided by the following reasons. On the one hand, the focus on student participants is due to the reason that the data obtained from them helps to determine the extent of their perceptions of the specific teachers' full-range leadership behaviours and trust in teachers that can lead them to be engaged in academic and institutional activities. The focus on teacher participants, on the other hand, allowed the study to obtain their experiences on the specific full-range leadership behaviours they are demonstrating, and their observations of student engagement and their actions that enable students to trust them. Overall, such decisions are intended to create a sample that reflects typical experiences of students and teachers in explaining comprehensively and in-depth how teachers' full-range leadership influences student engagement and trust in teachers.

3.4.2. Sample size

Two sets of sample sizes were determined, each for quantitative data (the student sample) and qualitative data (the teacher and student sample). To determine the appropriate student sample size needed for the quantitative data, Cochran's (1977) formula was applied. In doing

that, the initial formula for determining the sample size for an infinite student population is given

as: $n_0 = \frac{Z^2 \times p \times (1-p)}{e^2}$, where:

n_0 : The sample size for an infinite population (before adjusting for a finite population);

Z : The Z-score for the desired confidence level (95% confidence level: $Z = 1.96$);

p : The estimated proportion of the population with the desired characteristic (if unknown, $p = 0.5$ is used, as this maximises the sample size);

e : The margin of error (a typical value of 0.05).

Applying this formula ($n_0 = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{0.05^2}$), the initial student sample size for an infinite population was calculated to be approximately 384 students. To adjust for the finite population size of 71,963 students, the sample size was further refined using the finite population correction formula: $= \frac{n_0}{1 + \frac{n_0-1}{N}}$, where N is the total population size. After applying the

correction, $= \frac{384}{1 + \frac{384-1}{71,963}}$, the final sample size was determined to be approximately 382 students.

Given that the sample was drawn following the stages, and to account for clustering effects, it is often estimated that considering a design effect between 1.5 and 2 would produce a more efficient sample size (Alimohamadi & Sepandi, 2019; Kaiser et al., 2006). Hence, to ensure the scientific rigour, the current study applied a design effect of 2 to adjust the student sample size, resulting in approximately 764 sample students. Additionally, to account for potential non-responses and other contingencies, a 10% contingency was added. As a result, the adjusted

sample size of students, which is calculated as $n_{adjusted} = \frac{\text{sample size (764)}}{1 - \text{expected non response rate (10%)}}$

(Bartlett et al., 2001; Gupta et al., 2016), yield approximately 840 sample students to obtain quantitative data. These determined samples were drawn from three randomly selected sample frame public universities, namely Bahir Dar University, Wollo University and Woldia

University. Furthermore, Table 3.1 below shows the student population and sample distribution that the study took from each sample frame university in proportion to size.

Table 3.1

Population and sample of the quantitative data

University Name	Number of undergraduate students (regular) (N)			Sample students (n)		
	M	F	T	M	F	T
Bahir Dar University	6,393	2,496	8,889	228	89	317
Wollo University	4,611	2,942	7,553	165	105	270
Woldia University	4,340	2,737	7,077	155	98	253
Total	15,344	8,175	23,519	548	292	840

Note: This data was accessed from each university's registrar officers.

Additionally, the study involved some sample teachers and students for qualitative data. The study was projected to involve about 24 participants: 12 teachers and about 12 students to collect the qualitative data. However, the final sample size was decided to be approximately 15 participants: 9 students and 6 teachers due to the saturation level of the data (Creswell & Creswell, 2018; Terrel, 2016).

Overall, the total sample size of the study that involves both students and teachers was approximately 855, including 840 students for quantitative data and 15 participants (9 students and 6 teachers) for qualitative data. The number of sample participants was assumed to be enough for obtaining sufficient data to make unbiased estimations and make appropriate descriptions in answering the stated basic research questions of the study.

3.5.3. Sampling methods

The study employed different sampling techniques to select participants for both the quantitative and qualitative components. Probability sampling techniques were used for the

quantitative component to ensure representativeness of the target population, whereas non-probability sampling techniques were employed for the qualitative component to identify participants capable of providing in-depth insights into the study topic. The following details illustrate the specific sampling methods and procedures employed in the study.

First, a multistage stratified sampling technique was employed to select the student participants for the quantitative data. This method was chosen to systematically narrow down the sample from a broad student population to specific units of interest. The sampling process was carried out in four stages. In the first stage, three public universities were selected through a simple random sampling (lottery) method and identified as the primary sampling units. In the second stage, seven disciplines (e.g., colleges/institutes) were drawn randomly from the selected primary sampling units as secondary sampling units. Like that of the first stage, the same sampling method was applied to select disciplines within each sample frame university, minimising bias and ensuring a fair representation of sub-clusters. In the third stage, all departments within each selected discipline hosting undergraduate regular programs were listed and randomly selected. Finally, all undergraduate courses that are interactive, in which both teachers and students are intimately involved and typically last a semester, were listed in each selected department in consultation with the respective heads. Then, the desired number of random course/s was taken proportionate to size. The selected courses led to the selection of students who are nested within those courses to capture the individual-level data.

In the sampling process, courses were viewed as a critical context of the study because the educational interaction between teachers and students in higher education depends heavily on the types of courses offered. In this context, similar studies (e.g., Balwant, 2016; Bogler et al., 2013; Bolkan & Goodboy, 2009; Erdel & Takkaç, 2020b; Harrison, 2011; Pachler et al., 2019;

Pounder, 2008) which examine the relationship between various forms of teachers' full-range leadership and student outcomes in higher education used courses as a quasi-organisation, considering teachers as leaders and students as followers. The argument is that courses can be viewed as a context in which the effectiveness of teachers' demonstrating the specific leadership behaviours and their outcomes on students interact. In the current study context, therefore, it is considered that students can provide their perceptions of the leadership behaviours of a teacher and their trust in that teacher in the course they are attending. Finally, a simple random sampling technique was used to select sample students who are attending the selected courses.

Additionally, a purposive sampling technique was employed to select both teachers who teach the selected courses and students who are not in the random sample list to obtain the qualitative data. Informed by the purposive sampling techniques (Creswell & Creswell, 2018), the maximum variation sampling strategy was applied to select these participants. This strategy is considered preferable as it helps the researcher select "participants who have the same characteristics but have different experiences which are unique to each other" (Nyimbili & Nyimbili, 2024, p. 95). Hence, by considering some units of analysis, the current study selected samples of teachers and students for the qualitative data as follows:

The determined sample of teachers was selected based on considering the mean score of students' perceptions of their teachers' leadership behaviours from the quantitative data as a unit of analysis. It is worth noting that in the design of the study section, it is mentioned that the quantitative data and results influence the collection of qualitative data. This study assumed that analysis of the quantitative data on students' perceptions of their teachers' leadership behaviours in the selected courses could yield a mean score range from high to low. Possibly, the higher mean scores may indicate a higher level of students' agreement on perceived leadership

behaviours of a teacher who is teaching the selected course, and the reverse is true for a lower mean score. Expecting these variations in students' perceptions, the study selected some teachers who are rated as demonstrating higher leadership behaviours from one extreme and the reverse from the other extreme. These participants provided in-depth insights and experiences from different angles about their leadership behaviours and their implications to get their students' trust in them and enhance student engagement.

Additionally, the sample of students for qualitative data was selected based on considering students' academic achievement as the unit of analysis. The process of identifying sample students based on their academic achievement was facilitated through consultation with the respective department heads to whom the selected courses belong. The heads helped in providing the Cumulative Grade Point Average (CGPA) of students. In that, the study recruited students who have relatively low to average academic achievement from one extreme and those who have high academic achievement from the other extreme. These students shared different perceptions about their teachers' leadership and trust in teachers in terms of their engagement. This helps the study to cross-check students' perceptions of their teachers' leadership with teachers' experiences about their leadership in terms of students' learning.

3.6. Variables of the Study: Operationalisations and Measurements

The key study variables: Student engagement, teachers' full-range leadership, and student trust in teachers were considered the endogenous (dependent), mediating, and exogenous (independent) variables, respectively. Given below are details of these variables with their respective operationalisations and measurements.

3.6.1. Student engagement: The dependent variable

Student engagement is considered the dependent variable of the current study.

Consultation of the literature on the measurement of student engagement suggests the availability of numerous measures that help to assess the engagement of university students in academic and institutional activities. The most dominant measures are the University Student Engagement Inventory developed by Maroco et al. (2016) in the context of Portuguese University students; the University Student Engagement Scale developed by Gupta and Nagpal (2021) in the context of Indian university students; and the University Student Engagement Inventory validated by She et al. (2023) among the Chinese university students. All of these scales consider student engagement, which consists of three components: behavioural, emotional, and cognitive. They demonstrate adequate psychometric properties, suggesting their appropriateness for application in measuring student engagement. However, one important issue draws the study's attention regarding these measures before deciding to use any of them.

It is becoming apparent that definitional claims are emerging in contemporary literature that better operationalise and measure student engagement as a four- and five-component construct rather than solely depending on the previously granted three components (behavioural, emotional, and cognitive). The four-component understanding of student engagement includes agentic engagement (e.g., Buckley, 2018; Reeve, 2012; Reeve & Jang, 2022), and the five-component understanding includes both agentic and sociocultural engagements (see Kassab et al., 2023; Zhoc et al., 2019) into the earlier components. Since the current study adopts the five-component conceptualisation of student engagement, none of the above-mentioned scales can help to measure the current study's conceptualisation of student engagement. This is because these scales often focus primarily on the behavioural, emotional, and cognitive dimensions of

student engagement. The critical role of agentic and sociocultural components of student engagement is overlooked. This suggests the need for an alternative scale that best matches and corresponds to the present study's conceptualisation of the construct. However, as far as the researcher searches the literature, no comprehensive tool is found that integrates both the previously granted components of student engagement (behavioural, emotional, and cognitive) with the newly recognised ones (agentic and sociocultural) in a single scale to measure student engagement.

Considering this (unavailability of a comprehensive student engagement scale), the current study prefers to measure student engagement using a self-developed and adapted scale. The study adapted a comprehensive scale, known as the University Student Engagement Scale (USES), and validated its appropriateness in the context of Ethiopian public universities (see Assefa et al., 2026). The USES integrates both the traditionally known dimensions (behavioural, emotional, and cognitive) and the newly recognised but overlooked dimensions (agentic and sociocultural) of engagement.

At this stage of the study, it is worth giving some justification for the legitimacy of USES for measuring student engagement. The USES demonstrates adequate psychometric properties: excellent evidence for reliability, validity, and measurement invariance. It shows robust evidence for reliability ($\alpha = 0.89$), suggesting all items of the scale are internally consistent. It also shows excellent evidence for all validity assessments. For example, each of the items on the scale received a Content Validity Index (CVI) value ranging from 0.82 to 0.94 from expert assessment, suggesting adequate content-related validity. The Average Variance Extraction (AVE) value of each dimension is greater than 0.50, and the intercorrelations of the sub-scales are below the threshold ($r < 0.85$), suggesting acceptable convergent and discriminant validity,

respectively. The scale shows a strong predictive correlation of each dimension of student engagement with student academic achievement ($r = 0.74-0.84$), suggesting adequate criterion-related validity. Moreover, it demonstrates strong evidence for measurement invariance between gender groups (male and female students). All of these results prove that the USES is a valid and reliable tool for measuring the engagement of university students in this study context.

Furthermore, sample items and rating categories are provided next in the instrumentation section.

3.6.2. Teachers' full-range leadership: The independent variable

Teachers' full-range leadership are considered the independent variable of the study. Consultation of the literature on the measurement of teachers' leadership suggests the availability of various measures developed to operationalise and assess the construct in terms of behaviours, culture, role, and competence in different educational settings (Chen, 2022). Given the current study's conceptualisation of teachers' full-range leadership in terms of behaviours, various measures are available in the educational literature. For example, Pounder (2008) developed the Classroom Leadership Instrument based on modifying the Multifactor Leadership Questionnaire (MLQ-5X) to measure transformational teacher leadership in Hong Kong Universities. Another instrument, the Teacher Leadership Style Scale, was developed by Tsai (2017) based on the charismatic, ideological, and pragmatic model of leadership within the higher education setting in Macau. Most recently, Kutip (2023) validated the Lecturer Leadership Styles Questionnaire based on democratic, autocratic, and laissez-faire leadership in Malaysia's higher education setting. These tools contributed greatly to operationalising teachers' leadership practice into a quantifiable understanding (Chen, 2020).

However, one major concern draws the attention of the current study to use one of the above tools in measuring and operationalising teachers' full-range leadership in the present

study. That is because, as compared to the current study's conceptualisation of teachers' leadership from the FRLM perspective, there is the issue of content-related validity of the above-mentioned measures. For example, Pounder (2008) pays more attention to transformational behaviours, neglecting transactional and passive/avoidant ones; Tsai (2017) emphasises the collection of charismatic, ideological, and pragmatic behaviours; and Kutip (2023) stresses the democratic, autocratic, and laziness-fare styles. This suggests that none of the above measures is congruent with the current study's conceptualisation of teachers' full-range leadership, providing little evidence for their applicability in this context.

In response to the above concerns, Assefa et al. (2025) adapted the Teacher Leadership Scale (TLS) by adapting the MLQ-5X to teacher-student relationships in the Ethiopian higher education context. The scale operationalises teachers' leadership as transformational, transactional, and passive/avoidant (integrating passive management by exception and laissez-faire) behaviours. Although the original version of the MLQ-5X scale was developed to measure the leadership behaviours of leaders in organisational contexts (Bass & Riggio, 2006; Northouse, 2021), it is evident that several empirical studies (e.g., Balwant et al., 2019; Bolkan & Goodboy, 2009; DeDyn, 2021; Harrison, 2011; Noland & Richards, 2014; Pachler et al., 2019) have measured teachers' transformational, transactional and passive/avoidant behaviours by modifying the MLQ-5X into the student-teacher relationship within the leadership context. These studies have reported that the scale adequately measures the specific teachers' full-range leadership behaviours in predicting various student outcomes in higher education settings. This suggests the possibility of using the adapted MLQ-5X for research and practice in measuring teachers' full-range leadership. Therefore, the current study used the TLS, which is adapted from the MLQ-5X, to assess teachers' full-range leadership.

As demonstrated by Assefa et al. (2025), the scale shows sufficient evidence for reliability ($\alpha = 0.87$). It also shows acceptable evidence for validity. For example, the CVI > 0.87 for all indicators, suggesting enough evidence of content-related validity of the scale. The AVE > 0.52 for all dimensions, signifying acceptable evidence for convergent validity. Also, the intercorrelations among the dimensions show $r < 0.85$, indicating the scale has enough discriminant validity. Additionally, the TLS shows strong predictive correlation of the specific teachers' transformational, transactional and passive/avoidant behaviours with that of some student outcomes such as student engagement ($r = 0.84$ for transformational teacher leadership, $r = 0.84$ for transactional teacher leadership, and $r = -0.83$ for passive/avoidant teacher behaviours) and academic achievement ($r = 0.82$ for transformational teacher leadership, $r = 0.83$ for transactional teacher leadership and $r = -0.85$ for passive/avoidant teacher behaviours), indicating adequate evidence for criterion-related validity. All this evidence suggests the appropriateness of using the TLS in measuring the specific teachers' full-range leadership behaviours and, therefore, the current study employed this scale. Further details on the scale's dimensions, sample items and rating are provided in the instrumentation section.

3.6.3. Student trust in teachers: The mediating variable

Student trust in teachers is considered a mediating variable in explaining the relationship between the specific teachers' full-range leadership behaviours and student engagement. As to the focus of the study, consultation of the literature shows that there are some measures developed to assess students' perceptions of trust in teachers in the context of higher education, varying depending on the scope and contextual environment. The first is the Trust in Instructors Scale (TIS) developed by Ozer and Atik (2014) to assess students' perceptions of overall impressions of trust in the teaching staff, focusing on students' interactions with all instructors

during their university experience in Turkish higher education. The second is the ABI trust scale, which was adapted by Hiatt et al (2023) based on modifying Mayer et al.'s (1995) integrative trust model in the USA higher education context.

A comparison of the two scales shows that both have their strengths and limitations. For example, the TIS provides a comprehensive picture of students' perceptions of trust in faculty members across multiple fields and predicts students' class participation and engagement (Şirin et al., 2022). Nevertheless, one of the main limitations of the TIS is that it requires students to assess the level of trust they have in all teachers during their studies at university. Particularly in higher education settings where students take numerous courses taught by different teachers, this comprehensive approach may not necessarily provide accurate or useful data on students' perceived trust in a specific teacher. This method could hide the unique trust dynamics between students and specific teachers, which can vary greatly depending on personality, teaching style, experience, expertise, and other characteristics. Hence, using this scale may be difficult when focusing on measuring students' perceptions of trust in each teacher, like that of the current study, because TIS generalises students' trust across multiple teachers.

In response to such limitations, the ABI trust scale also has some notable strengths. One of the ABI trust scale's strengths is its applicability to assess students' perceptions of trust in each teacher rather than generalising students' trust in multiple teachers. Moreover, its higher education context-specific adaptation from Mayer et al.'s (1995) integrative trust model, which appears to be the most well-known trust framework (i.e., person-to-person, person-to-leader, team-to-team, or person-organisation), is considered the most widely used model for research and practice purposes. This theoretical grounding ensures a more nuanced understanding of students' trust in each teacher, and the scale's utility in assessing trust in students-teacher

interactions makes it more applicable to academic contexts. Therefore, the current study proceeds to measure student trust in teachers using the ABI trust scale.

Before its application, the current study performed contextual adaptation and validation of the original ABI trust scale to measure student trust in teachers within the Ethiopian higher education context. The process followed relevant psychometric testing procedures. The results show that the ABI trust scale demonstrates adequate psychometric properties. It showed, for example, excellent evidence for scale-level reliability, $\alpha = 0.92$, including dimension-level reliability: ability ($\alpha = 0.95$ and $CR = 0.94$), benevolence ($\alpha = 0.87$ and $CR = 0.87$), and integrity ($\alpha = 0.86$ and $CR = 0.86$). It also demonstrated adequate evidence for construct-related validity through convergent (AVE for each factor: ability = 0.77, benevolence = 0.58, and integrity = 0.61) and discriminant validity, as evident by the square root of the AVE for each factor was greater than its correlations with all other factors, and each inter-factor correlation is below the threshold, $r < 0.85$. Additionally, each of the three dimensions significantly predicted student engagement: ability ($\beta = 0.65$, $t = 5.07$, $p < 0.001$), benevolence ($\beta = 0.61$, $t = 4.42$, $p < 0.001$), and integrity ($\beta = 0.692$, $t = 4.91$, $p < 0.001$), supporting the scale's predictive validity. Moreover, the psychometric procedure demonstrated adequate evidence for measurement invariance across student groups based on gender and different universities.

All these results suggest their relevance for use to assess student perceptions of trust in their teachers in the Ethiopian higher education setting. Further details on the scale's dimensions, sample items and rating are provided in the instrumentation section.

3.7. Data Collection Instruments

The study collected both quantitative and qualitative data using questionnaires and interviews, respectively. The questionnaire was employed to obtain quantitative data from students regarding teachers' full-range leadership, student trust in teachers, and student engagement. Interviews were conducted with selected students and teachers to explain the quantitative results. The design, development, and administration procedures of each data collection instrument are detailed as follows.

3.7.1. *Questionnaires*

A self-reported form of questionnaires (see Appendix B and Appendix C) was employed to collect quantitative data from undergraduate students. The questionnaire consists of three sections. The first section contains the introductory part, which informs participants about the purpose of the questionnaires and the collaboration expected from them. This helps to ensure that respondents understand the purpose of the study and their rights before participating in the study. The second section displays some questions about participants' demographic information, including gender, age, department, and year of study. Including such demographic information in the questionnaire allows the study to collect data that contributes to understanding the demographic characteristics of sample students. The third section consists of the main part of the questionnaires, containing standardised scales presented in the form of statement items with a set of predetermined response options. This section consists of three scales, namely, USES, TLS, and the ABI trust scale, which were used to measure the students' perceptions of their engagement, teachers' full-range leadership, and student trust in teachers, respectively. Details of these scales with their respective items are given as follows:

University Student Engagement Scale (USES): This scale was included in the questionnaires to assess students' perceptions of their engagement in academic and institutional

activities. The USES comprises 20 items categorized into five subscales/dimensions, each dimension is assessed by four items: behavioural engagement (e.g., I participate actively in group assignments); emotional engagement (e.g., I am passionate about the learning process I am attending); cognitive engagement (e.g., I review my notes regularly, even if a test is not coming up); agentic engagement (e.g., I offer suggestions to teachers about how to improve classes); and sociocultural engagement (e.g., I connect learning to my personal and cultural experiences in class). The response category of each item was presented on a five-point Likert scale ranging from 1 to 5, representing 1 = strongly disagree, 2 = disagree, 3 = unable to decide, 4 = agree, and 5 = strongly agree.

Teacher leadership scale (TLS): This scale was contained within the questionnaires for obtaining students' perceptions of their teachers' full-range leadership. The following explanation gives some details of the scale and corresponding subscales with sample items. The TLS consists of 36 items divided into three subscales with nine underlying factors. The first subscale is transformational teacher leadership behaviours which consists of five factors, each with four items: idealized influence - behaviour (e.g., my teacher makes clear to us the importance of having a strong sense of duty); idealized influence - attributed (e.g., my teacher acts in a way that earns my respect); inspirational motivation (e.g., my teacher talks excitedly about the future that we envisioned); intellectual stimulation (e.g., my teacher suggests us new ways of looking at how to complete tasks); and individualized consideration (e.g., my teacher considers each student has different learning needs, abilities and aspirations). The second subscale is transactional teacher leadership behaviours, which contains two factors, each with four items: contingent reward (e.g., my teacher only supports me when I do my tasks and activities well) and active management by exception (e.g., my teacher reminds us of all the failures). The third subscale is passive/avoidant teacher behaviours, which integrates two factors, each with four items: passive management-by-exception (e.g., my teacher waits for things to go

wrong before he/she reacts to problems) and laissez-faire (e.g., my teacher avoids getting involved in any important issue). The response category of each item was presented on a five-point Likert scale ranging from 1 to 5, representing 1 = not at all, 2 = once in a while, 3 = sometimes, 4 = often, and 5 = always.

ABI trust scale: This scale was added in the questionnaires for assessing students' perceptions of trust in their teachers. This scale consists of 14 items, categorised into three subscales: ability, benevolence, and integrity. The five items help to assess students' perceptions of trust in teachers' ability (e.g., my teacher has specialised knowledge that can increase my understanding of the course). The other five items help to assess students' perceptions of trust in teachers' benevolence (e.g., my teacher is very concerned about my welfare in the course). The remaining four items also help to assess students' perceptions of trust in teachers' integrity (e.g., my teacher tries hard to be fair in dealings with students in the course). The response category of each item was presented on a five-point Likert scale form ranging from 1-5, representing 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree.

3.7.2. Interviews

Semi-structured interviews were used to collect the qualitative data from purposively selected teachers and students, with the belief that they would supplement the quantitative results. As remarked by research scholars (e.g., Creswell & Creswell, 2018; Zohrabi, 2013), the use of interviews is helpful to delve deeper into the existing experiences, viewpoints, and opinions of participants. Related studies in higher education also emphasise the importance of using interviews to obtain teachers' and students' perceptions and experiences of transformational, transactional and passive/avoidant leadership behaviours and their implications for effective course teaching (Erdel & Takkaç, 2020b); the trusting relationship between teachers

and students (Hiatt et al., 2023); and student engagement (Minaye et al., 2024) rather than relying solely on the use of standardised questionnaires. Taking these observations into account, therefore, the current study prepared two sets of interview protocols, one set for students (see Appendix D) and another set for teachers (see Appendix E), based on the quantitative results to explain the quantitative results and to provide a deeper contextual understanding of the findings. The protocols include a series of guiding questions.

The teacher version of the interview protocol contains 15 guiding questions related to teachers' experiences and perceptions about their full-range leadership, trusting relationship with students and their implications for student engagement. The protocol involves five questions related student engagement (e.g., How do you describe about your students' cognitive engagement?); seven questions related to their leadership: transformational teacher leadership behaviours (e.g., How do you encourage students to approach problems from diverse perspectives in your course?), transactional teacher leadership behaviours (e.g., how do you recognize and honour students for their achievement in your course?) and passive/avoidant teacher behaviours (e.g., In what situations might you avoid intervening in classroom issues?); three question related to student trust in teachers (e.g., how do you show or exhibit integrity to your students?).

The student version of the interview protocol also consists of a set of 15 guiding questions related to their engagement, teachers' full-range leadership, and trust in teachers. The protocol includes five guiding questions about their perceived engagement, such as behavioural engagement (e.g., How do you feel about your behavioural engagement in classroom activities and completing tasks?), emotional engagement (e.g., How do you emotionally connect with your learning environment?), cognitive engagement (e.g., How do you engage cognitively (mentally and intellectually) in your learning beyond class requirements??), agentic engagement (e.g., How do you describe your agentic engagement in taking the initiative for your learning?), and sociocultural

engagement (e.g., How do you explain your sociocultural engagement in relating your learning to your personal, cultural, and social experiences?); seven questions about perceptions of their teachers' full-range leadership such as transformational behaviours (e.g., How does your teacher demonstrate ethical behaviour or moral values in class that you want to follow?), transactional behaviours (e.g., How does the teacher recognise and honour your achievement in the course?), and passive/avoidant behaviours (e.g., based on your experiences, can you think of any situations where the teacher noticed you are not engaging well in the course but chose not to intervene?); three guiding questions about students' perceptions of trust in teachers (e.g., Considering the teacher's expertise in the course or anything else that you feel is important to you, how do you describe your teacher's ability to support your goals?). The interviews were further facilitated using additional prompts under each question.

3.8. Validity and Reliability Assessments and Trustworthiness of the Instruments

To ensure the quality of the study findings, the validity and reliability assessment of the quantitative instruments and the trustworthiness of the qualitative tool were carefully established. These procedures support the accurate measurement and explanation of the key study variables.

3.8.1. Validity of questionnaires

Two types of validity assessments, such as content-related validity and construct-related validity, were carried out to ensure how well the instruments are valid for collecting data to describe the key study variables.

Content-related validity: The content validity concern of the instruments was addressed using two strategies. First, the literature on teachers' full-range leadership, student trust in teachers, and student engagement in higher education settings was consulted to relate the preparation of the questionnaires within the established theoretical frameworks. Second, following the recommendation by Zohrabi (2013), the researcher invited experts in the field,

including the researcher's advisors, to provide feedback on the relevance, clarity, and appropriateness of the contents of both tools within the study context. Based on the feedback, all necessary measures were taken. In addition, the tools were subjected to face validation by these persons. This ensured that the instruments have good face and content validity, confirming that the proposed items in the questionnaires maintained theoretical integrity while being contextually appropriate in the Ethiopian higher education.

Construct-related validity: Scholars such as Byrne (2016) and Hair et al. (2021) suggest that construct-related validity of tools can be examined using Confirmatory Factor Analysis (CFA) by estimating a measurement model. This helps to check whether the indicators (items) of each scale, including USES, TLS, and ABI trust scale, are related to the constructs they are intended to measure. The current study examined the construct-related validity, particularly the questionnaires, using two methods: convergent validity and discriminant validity assessments.

The convergent validity was assessed by examining the factor loadings of each item on its respective construct and the AVE. As suggested in the literature (Kline, 2023; Collier, 2020; Hair et al, 2021), this study considers a standardised factor loading value ≥ 0.60 as a threshold for determining how well each item of the constructs converges or loads onto its intended dimension. Additionally, AVE was used to determine whether the indicators of a latent construct shared sufficient common variance. This helps to determine the large percentage of variation in the study construct as explained by their corresponding scales, while the measurement error accounted for a smaller portion of the variance.

Discriminant validity was also assessed using the Fornell-Larcker criterion and the comparison of AVE with maximum shared variance (MSV) (Fornell & Larcker, 1981). The study examines the factors of each variable, establishing that they are empirically distinct when

the square root of the AVE for each factor exceeds its correlations with all other factors. Furthermore, the intercorrelation among the dimensions of each variable was computed to ensure that no excessively strong correlation ($r < 0.85$) exists, indicating that the explained variance of each factor is below 85% of the variable (Collier, 2020; Hair et al., 2021). This enabled the identification of each dimension as representing a distinct meaning to elucidate the desired variable (e.g., the five components of USES in assessing student engagement, which similarly applies to the other variables). This method enhanced the analysis of dimensions that represent specific variables by reducing multicollinearity issues.

3.8.2. Reliability of questionnaires

According to Zohrabi (2013), “one of the main requirements of any research process is the reliability of the data” (p. 259). To ensure the consistency and repeatability of the current study results under comparable conditions, the reliability of the questionnaires was assessed using two types of reliability assessments: internal consistency (α) and composite reliability (CR). As suggested in the literature (e.g., Cheung et al., 2023), the current study considered a value of both α and CR > 0.70 , which suggests that the items within their underlying construct (e.g., the 20 items of the USES) are measuring the same underlying construct (student engagement) consistently across all respondents.

3.8.3. Trustworthiness of interviews

The trustworthiness of the interview protocols was established using Lincoln and Guba’s (1985) criteria of credibility, transferability, dependability, and confirmability. Credibility was enhanced through expert review of the interview guiding questions. Also, pilot interviews were conducted with participants outside the study area to improve the clarity, relevance, and sequencing of the interview guiding questions. Transferability was supported by designing

interview guiding questions that reflected the context of public universities in Ethiopia and the experiences of both teachers and students. Dependability was ensured by using a semi-structured interview protocol with consistent questions across student and teacher participants to minimise response variability among the interviewees (teachers and students), with their expected roles in relation to the key study variables. Confirmability was strengthened by aligning the interview guiding questions with the study research questions, the conceptual framework, and by minimising the researcher bias through the use of interview guides. All these approaches allowed the study to obtain relatively trustworthy qualitative data to explain and support the quantitative results in addressing the stated research questions of the study.

3.9. Data Collection Procedures

Since the current study is grounded on the sequential explanatory research design, both quantitative and qualitative data were collected sequentially following appropriate procedures. As detailed next, quantitative data was collected and analysed first, and then a qualitative data collection followed.

3.9.1. Quantitative data collection procedures

The quantitative data were gathered by following three steps. First, the questionnaire was prepared in English (see Appendix B) from the outset. Although university students are expected to complete the English version of the questionnaire, most of them have better proficiency in the local language, Amharic. Hence, the English version was then translated into the Amharic version (see Appendix C). The translation process was supported by language professionals. To ensure the precision and cultural relevance of the questionnaire, a thorough forward-backwards translation process was used to translate the instruments from English to Amharic. The English version was translated into Amharic (forward translation) by two native Amharic speakers who

are professionals in the English language. The Amharic translation was compiled into one version and then translated back into English (backward translation) by two other independent English language professionals who were not involved in the forward translation. To identify inconsistencies or contradictions in meaning, the reverse translations were compared with the original English text. And, there were no considerable issues detected.

Second, the questionnaire was pilot-tested on a sample of 45 students who were selected from out of the current study's target participants (University of Gondar) but were almost similar to them. This sample size was considered adequate because research methodological literature suggests that pilot sample sizes ranging from 30 to 50 participants are generally sufficient for evaluating an instrument's clarity and estimating reliability coefficients (Hertzog, 2008; Johanson & Brooks, 2010). Therefore, the use of 45 participants in the pilot study was considered appropriate for refining the questionnaire and assessing its reliability before the main data collection. Subsequent reliability analysis of the piloted data showed adequate Cronbach's alpha value for each of the key study variables ($\alpha = 0.89$ for teachers' full-range leadership, $\alpha = 0.90$ for student trust in teachers, and $\alpha = 0.93$ for student engagement), indicating the items of the questionnaire are internally consistent.

Third, the refined questionnaire was distributed to students. The time for distributing the questionnaires to the targeted sample students started from nearly the end of the first semester and ended in the middle of the second semester of the 2024/25 academic year. That was done with the belief that the data that were collected during such a specified period ensures that students are familiar with their teachers in their interaction at least from the first semester of the said academic year. It was also believed that students could gain sufficient knowledge and experience to be able to evaluate their teachers. It can be said that the present study is informed

by several related empirical studies (e.g., Balwant et al., 2019; Bolkan & Goodboy, 2009; Cruz & Kim, 2023), which have employed a similar approach to obtain students' responses on different forms of teachers' full-range leadership and its associated effects on student outcomes in higher education. Finally, the distributed questionnaires were collected, and the responses were coded and entered into a statistical software package for further analysis.

3.9.2. Qualitative data collection procedures

Before conducting the actual interviews, a pilot test was conducted with 1 teacher and 2 students who were almost similar to the target participants of the current study. This assisted the researcher in identifying some questions that have potential deficiencies in obtaining participants' perceptions and improving the interview protocols. Once modified and improved, the actual interview sessions with the target participants were carried out in a comfortable location to ensure participants' anonymity and ethical treatment. The researcher attempted to build a sound relationship and create an open and non-judgmental environment to encourage participants to freely express their thoughts. Each interview with teachers and students lasted approximately 60-90 minutes. The researcher probed questions during the interview sessions to help the respondents clarify their responses and further explore emerging ideas. All interview sessions were audio recorded with the consent of the participants. The audio-recorded responses were then transcribed verbatim. Lastly, the transcripts were checked for accuracy and completeness to make them ready for further analysis.

3.10. Data Analysis Methods

Consistent with the sequential explanatory mixed-methods design, both quantitative and qualitative data analysis techniques were employed in this study. Quantitative data were analysed to describe the status of study variables and examine the structural relationships among them,

whereas qualitative data were analysed to provide contextual explanations and a deeper understanding of the quantitative results. The specific procedures used for analysing each type of data are presented as follows.

3.10.1. Quantitative data analysis method

The quantitative data analysis was conducted in two stages. First, descriptive statistics, including frequency distribution, means, and standard deviations, were computed to describe the demographic characteristics of the study participants. In addition, a one-sample t-test was performed to show the status of students' perceptions of teachers' full-range leadership, student trust in teachers, and student engagement. In doing so, the study compared the mean scores of the key study variables with the midpoint of the measurement scale to determine whether the observed results significantly differed from the average point of the scale. When reporting the magnitude of the differences from the one-sample t-test values, Cohen's d effect size was also interpreted using the following ranges: Values below 0.20 were considered negligible, values from 0.20 to 0.49 indicated a small effect, 0.50 to 0.79 a medium effect, and 0.80 or greater a large effect (Cohen, 2013). These analyses addressed research questions 1, 2, and 3.

Second, Structural Equation Modelling (SEM) was performed to examine the hypothesised relationships among the latent variables identified in the conceptual framework of the study. As mentioned in the most widely cited books (e.g., Byrne, 2016; Hair et al., 2021; Schumacker & Lomax, 2016), SEM is a ground-breaking statistical analysis approach that helps in testing complex relationships between/among multiple variables. Also, it helps in modelling the direct, mediating, and reciprocal relationships between latent variables. Therefore, SEM was considered the most appropriate method for analysing the quantitative data of this study as it allowed to estimate the complex structural relationships between the specific teachers' full-range

leadership behaviours, student trust in teachers, and student engagement. These analyses addressed research questions 4, 5, 6, and 7.

As recommended by Schumacker and Lomax (2016), before starting the main estimation in SEM, data cleaning was checked for errors, inconsistencies, outliers, normality, and missing values to ensure that the data collected was accurate before being used for final analysis. Then, the two components of SEM: the measurement model and the structural model, were evaluated using the maximum likelihood estimation (MLE) approach (Collier, 2020; Kline, 2023).

In the measurement model phase, CFA was conducted to evaluate the measurement model for three purposes. First, the underlying concepts (latent variables) that the current study's observable variables were intended to reflect were determined. For example, a set of student engagement-related responses represented the latent variable, student engagement, and the same is true for the remaining variables. Second, the strength of each item's association with its corresponding latent variable was assessed using factor loadings. As suggested by Cheung et al. (2023) and Collier (2020), the current study considered a standardised factor loading value ≥ 0.6 as the threshold. Finally, the overall fit of the measurement model was evaluated using different global model fit indices such as Model Chi-square to Degrees of Freedom Ratio (χ^2/df), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), Root Mean Square Error Approximation (RMSEA), and Standardised Root Mean Square Residual (SRMR). The following threshold value of each index was considered to accept whether the measurement model is appropriate. Following common practice, χ^2/df values between 2 and 5 were acceptable, with values between 1 and 2 indicating excellent fit; CFI and TLI values ≥ 0.90 were considered acceptable and ≥ 0.95 excellent; and RMSEA and SRMR values ≤ 0.08 were considered acceptable and ≤ 0.06 excellent (Gaskin & Lim, 2016; Hu & Bentler, 1999).

In the structural model phase, the structural relationships among the latent variables were established. Then, the overall fit of the structural model to the data was evaluated just like that of the measurement model. Finally, the expected direct relationships between the study's latent variables (e.g., the influence of the specific teachers' full-range leadership behaviours on student engagement, the influence of the specific teachers' full-range leadership behaviours on student trust in teachers, and the influence of student trust in teachers on student engagement) were estimated. Additionally, a bias-corrected bootstrap procedure (with 5,000 resamples) was also conducted to evaluate the precision of the standardised path estimates, generating 95% confidence intervals for the direct and mediating paths (e.g., the mediating role of student trust in teachers in explaining the relationship between the specific teachers' full-range leadership and student engagement) (Byrne, 2016; Hair et al., 2021). To provide a more nuanced understanding of how the specific teachers' full-range leadership behaviours influence a particular dimension of student engagement and trust in teachers, an additional path analysis was conducted to facilitate the explicit examination of cross-dimensional influences among the key study variables. That means, the analyses were conducted at both the dimensional and composite levels to examine the relative contribution of each dimension and the overall level of the constructs. In the structural model, the dimensions served as indicators of their respective higher-order latent constructs, and the relationships among the composite constructs were subsequently examined.

During reporting, the magnitude of direct, indirect (mediating), and total influences between the study constructs was reported with effect size to show the practical magnitude of the relationships beyond mere reporting of statistical significance values. Hence, the following Cohen's (2013) commonly referenced benchmarks of standardised path coefficients (β) were considered. The results of $|\beta| < 0.10$ are often considered a very small or negligible effect size.

Within this range, the results may be statistically significant with large samples but likely lack practical significance. The range between $0.10 \leq |\beta| < 0.30$ is often considered a small effect size. In this case, a meaningful but modest relationship is more common in behavioural and social science research. The range between $0.30 \leq |\beta| < 0.50$ is often considered a medium/moderate effect size, which indicates a practically important relationship. The range $|\beta| \geq 0.50$ is often considered a large effect size, which is an indication of a very strong relationship. In addition, the amount of variance explained in each endogenous (dependent) construct was determined using the squared multiple correlations (R^2). In doing so, the commonly referenced benchmarks of effect size for total variance explained (Cohen, 2013): $R^2 < 0.02$ was considered very small explained variance; $0.02 \leq R^2 < 0.13$ small explained variance; $0.13 \leq R^2 < 0.26$ medium/moderate explained variance; and $R^2 \geq 0.26$ large explained variance. SPSS 27 and AMOS 23 software were used to compute all statistical issues of the quantitative data.

3.10.2. Qualitative data analysis method

The study employed thematic analysis to analyse the collected qualitative data. According to Braun and Clarke (2012), thematic analysis is “a method for systematically identifying, organising, and offering insight into patterns of meaning (themes) across a data set [...] allows the researcher to see and make sense of collective or shared meanings and experiences” (p. 57). Hence, the current study utilised deductive thematic analysis to explain patterns of students’ perceptions and teachers’ experiences about the key study variables.

Inspired by the procedures suggested by Braun and Clarke (2012) and Creswell and Creswell (2018), the following six steps guided the study analysis of the qualitative data. The first step was organising and preparing data for analysis. This involved familiarisation with the data by listening to audio recordings as well as reading and rereading textual data (e.g.

transcripts of interviews with teachers and students). The second step began with the systematic analysis of the data through generating initial codes by looking at all the data to get a general sense of the information and an opportunity to reflect on its overall meaning. At this stage, questions like “What general ideas are participants saying? What is the impression of the overall depth, credibility, and use of the information?” (Creswell & Creswell, 2028, p. 269) were answered to provide a code for a feature of data that may be relevant to support the quantitative results and answer the study’s research questions. Initial codes were generated deductively, whereby the coding framework was developed from the theoretical dimensions of the study constructs. The components of teachers' full-range leadership, including transformational, transactional, and passive/avoidant leadership, together with the dimensions of student trust (ability, benevolence, and integrity) and student engagement (behavioural, emotional, cognitive, agentic, and sociocultural engagement), served as the initial coding categories.

After completing coding, the third step was to generate themes based on the coding process. This involved organising the collected text data, segmenting sentences (paragraphs) into categories, and labelling those categories with a theme that captures something important about the data related to the research questions. This theory-driven coding process enhanced the transparency and consistency of the qualitative analysis and facilitated the integration of qualitative findings with the quantitative results. The fourth step involved reviewing potential themes. This phase involves “a recursive process whereby the developing themes are reviewed concerning the coded data and entire data set. This phase is essentially about quality checking” (Braun & Clarke, 2012, p. 65). The fifth step addressed a detailed discussion of themes. At this phase, descriptions of the unique and specific illustrations, multiple perspectives from participants, and quotations were checked to provide patterns, interconnecting subthemes, and to

sum up the essence of each theme in a few sentences. Finally (the sixth step), the analysis report was produced by connecting potential themes logically and meaningfully. Additionally, the flow of reporting each of them was built on previous themes to tell a coherent pattern of narratives about the data. MAXQDA (Version 24) was used to organise, code, and manage the qualitative dataset.

3.10.3. Mixing of quantitative and qualitative data

In a sequential explanatory design, mixing of quantitative and qualitative strands is expected starting from the data collection phase by connecting the quantitative results to the qualitative data collection. Then, integrated findings can be drawn after combining the two sets of results after the qualitative phase is completed (see Dawadi et al, 2021; Terrel, 2016). Therefore, the study integrated the results of both strands during the data collection and interpretation phases. In the process, two sequential tasks were carried out.

First, to obtain a holistic picture of the topic of the study, the quantitative data were collected and analysed. Then, the quantitative results were explained by the qualitative data and findings. The integration of both the quantitative results and qualitative findings was conducted at the interpretation stage by linking the qualitative themes to the corresponding quantitative dimensions of the study constructs. For example, themes related to teachers' idealised influence, inspirational motivation, intellectual stimulation, and individualised support were used to explain the quantitative results on the status of transformational teacher leadership behaviours across dimensions. The same is true for other leadership behaviours, and student engagement and trust.

Second, relevant explanations and context were provided because when the quantitative analysis showed different directions (either a positive or negative) and varying magnitudes (either a strong or weak) of the relationship between the study variables, the qualitative data shed light on the characteristics of that relationship. For example, the themes derived from the interviews were linked to the corresponding dimensions of teachers' full-range leadership,

student trust in teachers, and student engagement to explain why certain relationships between the dimensions of these constructs were positive, negative, strong, or weak.

3.11. Ethical Considerations

As per the Thesis and Dissertation Guidelines of Bahir Dar University (2020), the researcher gave attention to all the necessary ethical issues. The researcher did each activity of the study rigorously with the appropriate procedures when designing, conducting, and reporting the study. Additionally, all the ethical issues have been approved by the Institutional Research Review Committee (IRRC) of the College of Education, Bahir Dar University, with approval protocol number [001964] on 12 June 2025 (see Appendix H). Besides, during the collection of the data, informed consent was obtained from each participant verbally (see Appendix F) and in written form (see Appendix G) to be involved in the study. Participants were informed about the purpose of the study, their rights and risks of the study, and that they could withdraw at any time to ensure that they participated freely. After confirming each participant's willingness, the researcher invited them to complete the questionnaires and participate in the interviews. When participants had questions, necessary explanations were provided as well. Moreover, the collected data was stored securely and anonymously to maintain participants' confidentiality and anonymity throughout the study. Ultimately, utmost care was taken to protect the dignity, privacy, and well-being of the participants.

CHAPTER FOUR: RESULTS

This section presents the results of quantitative and qualitative data analysis and identifies the main study findings. In doing that, three main activities were carried out sequentially. Initially, preliminary assessments of the collected dataset, including participants' demographic characteristics, data screening and assumption testing were performed. Then, the results of the quantitative data analysis were presented to show the status of the specific teachers' full-range leadership, student engagement and trust in teachers, and the structural relationships among these variables. Finally, findings of the qualitative data were presented to explain the quantitative results in light of addressing the research questions of the study.

4.1. Preliminary Assessments

4.1.1. *Demographic characteristics of the study participants*

The study involved a total of 855 participants for collecting both quantitative and qualitative data. To obtain the quantitative data, the study distributed a total of 840 questionnaires for undergraduate students; 786 of them responded, yielding an encouraging response rate of 93.6%. A response rate of 80% or higher is widely considered excellent for generating valid and reliable results (Fincham, 2008). The high return rate in the present study was achieved because the researcher and the support team distributed the questionnaires to the students in person by visiting them in their classrooms and providing pertinent instructions. This helped increase the return rate and ensure the correctness of the data collected.

Regarding the demographic characteristics of those participants who responded to the quantitative data, Table 4.1 shows their distribution across gender and disciplines. Their gender distributions were 472 (60%) males and 314 (40%) females, with ages ranging between 20 and 39 years ($M = 23.43$, $SD = 1.77$). In terms of study discipline distribution, 181 (23%) were from

Business and economics; 167 (21.3%) social sciences and humanities; 18 (2.3%) natural and computational sciences; 55 (7%) educational and behavioural sciences; 70 (9%) engineering; 183 (23.5%) health sciences; 81 (10.3%) agriculture and land administration; and 29 (3.7%) law. The disciplinary distribution of the participants has implications for interpreting the findings.

Although students from some disciplines, such as natural and computational sciences, law, engineering and education were relatively low as compared with those, for example, from health sciences, business and economics and other disciplines, this distribution reflects the actual enrolment patterns in the participating universities, where some disciplines have smaller student enrolment. Of course, the proportional representation of the disciplines was maintained during the sampling process. Nevertheless, because teacher-student interactions and learning experiences may differ across disciplines, caution should be given when generalising the study findings to disciplines with relatively smaller representation.

Table 4.1

The study participants' demographic characteristics of quantitative data

Demographic category	Characteristics	Participants for quantitative data	
		n	%
Gender	Male	472	60%
	Female	314	40%
	Total	786	100%
Discipline	Business and economics	181	23%
	Social sciences and humanities	167	21.3%
	Natural and computational sciences	18	2.3%
	Educational and behavioural sciences	55	7%
	Engineering	70	9%
	Health sciences	185	23.5%
	Agriculture and land administration	81	10.3%
	Law	29	3.7%
	Total	786	100%

In addition to the above-reported participants for the quantitative segment, the study obtained qualitative data from a total of 15 participants, including 9 students (listed from 1-9 in Table 4.2) and 6 teachers (listed from 10-15 in Table 4.2). Table 4.2 provides detailed information about their profiles and characteristics.

Table 4.2.

Sample participants' profiles and characteristics of the qualitative data

No.	Participant (with a pseudonym)	Sex	Department/field of study	Year of study/ Academic rank
1	Facil	Male	Political science and international relations	4 th year
2	Endalamaw	Male	Psychology	4 th year
3	Dagi	Female	Political science	4 th year
4	Bewketu	Male	Sociology	4 th year
5	Meron	Female	Sociology	4th year
6	Aschale	Male	Psychology	4th year
7	Habtamu	Male	Land administration	4th year
8	Yonas	Male	Medicine	4 th year
9	Helen	Female	Pharmacy	4 th year
10	Tilahun	Male	Sociology	Lecturer
11	Alemayehu	Male	Psychology	Lecturer
12	Solomon	Male	Political science and international relations	Assistant Professor
13	Abebe	Male	Land administration	Lecturer
14	Birhanu	Male	Medicine	Assistant Professor
15	Mekonen	Male	Pharmacy	Lecturer

4.1.2. Data screening and assumption testing

The returned 786 questionnaires were further checked for missing values, and 79 responses had missing values ranging from small to large. Of these, 67 responses with a missing response of more than 50% were excluded from the dataset for lack of information. The remaining 12 responses containing a few missing values were also imputed using the mean

imputation method to minimise bias in the final analysis. After missing values were addressed, four important tasks were performed on the retained 719 responses before the actual analysis.

Firstly, data normality assessments were performed on the final retained dataset, and the results showed that all items of the key study variables demonstrate acceptable univariate normality results. Items of student engagement ranged from -1.481 to -0.704 for skewness and from -0.251 to 2.437 for kurtosis; items of the specific teachers' full-range leadership behaviours ranged from -1.161 to 1.161 for skewness and from -1.191 to 0.749 for kurtosis; and items of student trust in teachers ranged from -1.407 to -0.898 for skewness and from 0.137 to 1.968 for kurtosis (see Supplementary Table 1 in Appendix A). These results indicated that univariate normality was within acceptable limits, as scholars in this area (e.g., Kline, 2023; Finney & DiStefano, 2013) remark that skewness ($-2 < x < 2$) and kurtosis ($-7 < x < 7$) thresholds are within acceptable limits. This indicates that the multivariate normality assumptions were met, as Byrne (2016) suggests a critical ratio value less than 5 can be considered as the threshold for acceptable multivariate normality.

Second, multivariate outliers were assessed using the Mahalanobis Distance (D^2), which was calculated for each case to identify the distance in variance units between the profile of scores and the vector of sample means, or centroids, adjusting for correlations among the variables. The relatively high value of D^2 and a conservatively low level of statistical significance ($p = 0.001$) are usually recommended for this test (Kline, 2023). The study identified a total of 75 cases above the basic threshold of D^2 , which suggests likely multivariate outliers. Following further investigation, it was found that these outliers were actual observations reflecting real and significant variability within the target study participants, rather than errors or anomalies in the dataset. To check whether these outliers are real or not, sensitivity assessments

using both measurement and structural models were conducted with and without including the identified outliers. Models that include the identified outliers yielded more theoretically consistent global model fit indices and stable parameter estimates than those that excluded outliers. In this case, Kline (2023) suggested retaining such kind of outliers to avoid reducing sample heterogeneity because they reflect real variability rather than anomalies within the response dataset. Therefore, they were kept in the final analysis.

Third, the assumptions of linearity and homoscedasticity were examined separately for each hypothesised relationship through scatterplots and residual analyses, respectively. For example, linearity was assessed using scatterplots between transformational teacher leadership behaviours and student engagement; transformational teacher leadership behaviours and student trust in teachers; transactional teacher leadership behaviours and student engagement; transactional teacher leadership behaviours and student trust in teachers; passive/avoidant teacher leadership behaviours and student engagement; passive/avoidant teacher leadership behaviours and student trust in teachers; and student trust in teachers and student engagement. The scatterplots indicated approximately linear relationships among most of the above relationships (see Supplementary Figures in Appendix A). Likewise, homoscedasticity was examined through plots of standardised residuals against standardised predicted values obtained from regression analyses on the above hypothesised relationships. The residual plots showed relatively constant variance of residuals across predicted values (see Supplementary Figures in Appendix A). These results suggest that the assumptions of linearity and homoscedasticity were mostly satisfied.

Fourth, the potential source of common-method bias (CMB) was examined using Harman's single-factor test by entering all items of the study variables into an unrotated exploratory factor analysis. The results indicated that the first factor accounted for 24.35% of the

total variance, which is below the 50% threshold. This suggests that CMB is unlikely to pose a serious threat to the validity of the study findings.

Fifth, a multicollinearity assessment was evaluated using the variance inflation factor (VIF) and tolerance values for the predictor variables (transformational, transactional, passive/avoidant leadership behaviours and student trust in teachers) to determine their unique contribution to the proposed model. The results in Table 4.3 showed that the tolerance value for each predictor ranged from 0.62 to 0.88, and VIF values ranged from 1.33 to 1.60, suggesting that they were within the acceptable ranges (common acceptable thresholds: tolerance >0.2 and $VIF < 5$ are usually considered as safe). These results indicate that multicollinearity was not a concern. And, this implies that multicollinearity is unlikely to bias standardised coefficient estimates, standardised errors and related statistical inference in further analysis of the dataset. Additionally, results of a bivariate correlation in Table 4.3 confirmed that no predictor variables had too high correlation values above the recommended threshold, $r < 0.85$ (Kline, 2023; Hair et al., 2019). This means that multicollinearity is not a problem, which implies that the key study variables are distinct and can be considered for further analysis without any redundancy issues.

Table 4.3
Results of multicollinearity assessment

Predictor variables	Collinearity statistics		Correlation			
	Tolerance	VIF	1	2	3	4
1. Transformational teacher leadership behaviours	0.62	1.60	1			
2. Transactional teacher leadership behaviours	0.74	1.34	0.39**	1		
3. Passive/avoidant teacher leadership behaviours	0.88	1.33	-0.01	0.31**	1	
4. Student trust in teachers	0.68	1.46	0.56**	0.28**	-0.02	1

Note: ** $p < 0.01$

4.2. Results of Quantitative Data Analysis

4.2.1. *The status of student engagement*

The first research question was designed to examine the status of student engagement in academic and institutional activities across the five dimensions (behavioural, emotional, cognitive, agentic, and sociocultural). One-sample t-test results in Table 4.4 showed that all five engagement dimensions and the overall composite score yielded statistically significant t-values ($p < .001$), with means substantially above the theoretical midpoint of the scale ($\mu = 3.00$).

See specifically each dimension, students reported a mean score of behavioural engagement $M = 4.23$ ($SD = 0.68$), which was significantly higher than the scale midpoint, $t(718) = 48.50$, $p < .001$, 95% CI [1.18, 1.28]. Cohen's $d = 0.68$ indicates a medium effect size, suggesting that the observed students' behavioural engagement was above the midpoint. Likewise, the mean for emotional engagement was $M = 4.18$ ($SD = 0.74$), significantly exceeding the midpoint, $t(718) = 42.61$, $p < .001$, 95% CI [1.13, 1.24]. A medium effect size ($d = 0.74$) confirms that students' emotional engagement is observed above the theoretical midpoint. Cognitive engagement also had a mean of $M = 4.06$ ($SD = 0.72$), significantly above the midpoint, $t(718) = 39.60$, $p < .001$, 95% CI [1.01, 1.12]. Cohen's $d = 0.72$ reflects a medium effect size. On the other hand, agentic engagement yielded the lowest mean among the five dimensions, $M = 3.90$ ($SD = 0.86$), yet this was still significantly above the midpoint, $t(718) = 28.13$, $p < .001$, 95% CI [0.84, 0.97]. Notably, Cohen's $d = 0.86$ qualifies as a large effect, indicating that despite being the lowest-scoring dimension, the deviation from the midpoint is the most substantial in practical terms. In addition, the mean score of sociocultural engagement was $M = 4.10$ ($SD = 0.76$), significantly exceeding the midpoint, $t(718) = 38.86$, $p < .001$, 95% CI [1.05, 1.16]. Cohen's $d = 0.76$ indicates a medium effect size.

The composite student engagement mean score also yielded the highest t-value in the analysis, $M = 4.10$ ($SD = 0.56$), $t(718) = 52.03$, $p < .001$, 95% CI [1.05, 1.14], with a medium effect size ($d = 0.56$). This confirms that, on average, students perceived that they demonstrated higher engagement levels as compared with the theoretical mid-point score. Following these quantitative results, the qualitative data were collected and analysed to explain and provide contextual understanding of the status of student engagement in academic and institutional activities across dimensions (presented in the findings of qualitative data analysis section).

Table 4.4

Results of one-sample t-test: Status of student engagement

Student engagement dimensions	Descriptive statistics						One-sample t-test (test value = 3)				
	N	M	SD	SE	t	df	<i>p</i> -value	Mean Diff.	95% CI [LL, UL]	Cohen's d	Effect Size
Behavioural Engagement	719	4.23	0.68	0.03	48.50	718	< .001	1.23	[1.18, 1.28]	0.68	Medium
Emotional Engagement	719	4.18	0.74	0.03	42.61	718	< .001	1.18	[1.13, 1.24]	0.74	Medium
Cognitive Engagement	719	4.06	0.72	0.03	39.60	718	< .001	1.06	[1.01, 1.12]	0.72	Medium
Agentic Engagement	719	3.90	0.86	0.03	28.13	718	< .001	0.90	[0.84, 0.97]	0.86	Large
Sociocultural Engagement	719	4.10	0.76	0.03	38.86	718	< .001	1.10	[1.05, 1.16]	0.76	Medium
Overall Student Engagement	719	4.10	0.56	0.02	52.03	718	< .001	1.10	[1.05, 1.14]	0.56	Medium

Note. Test value (μ) = 3.00 (theoretical midpoint of 5-point Likert scale). M = Mean; SD = Standard Deviation; SE = Standard Error of the Mean; t = t-statistic; df = Degrees of Freedom; p = two-tailed significance; Mean Diff. = Mean – 3.00; 95% CI = 95% Confidence Interval; Cohen's d = effect size; Effect size benchmarks: Small = 0.20–0.49; Medium = 0.50–0.79; Large ≥ 0.80 .

4.2.2. *The status of teachers' full-range leadership*

The second research question was forwarded to examine students' perception about the extent of teachers' demonstrating the specific full-range leadership behaviours: transformational, transactional and passive/avoidant in the learning process. One-sample t-test results in Table 4.5 showed that all the dimensions of each of the specific teachers' full-range leadership behaviours show varied results.

Regarding teachers' transformational leadership behaviours, all its dimensions and the overall composite score yielded statistically significant t-values ($p < .001$), with means substantially above the scale midpoint. See specifically across dimensions, teachers' idealised influence behaviour showed $M = 3.93$ ($SD = 0.93$), $t(718) = 26.89$, $p < .001$, 95% CI [0.86, 1.00] with Cohen's $d = 1.00$, indicating a large effect size. This reflects that teachers were strongly perceived as ethical role models who instil pride and respect in students. Similarly, teachers exhibiting idealised influence attributed showed $M = 3.96$ ($SD = 1.03$), $t(718) = 24.97$, $p < .001$, 95% CI [0.89, 1.04] with Cohen's $d = 0.93$ reflects a large effect, indicating that teachers were strongly perceived as those who demonstrate the norm that students must follow, and obtain the trust and respect of students to further make more effort in learning. Likewise, perceived teachers' inspirational motivation yielded $M = 3.84$ ($SD = 1.02$), $t(718) = 22.28$, $p < .001$, 95% CI [0.77, 0.92]. Cohen's $d = 0.83$ indicates a large effect, showing teachers were strongly perceived as articulating a compelling vision and motivating students toward shared learning goals. Teachers' intellectual stimulation also showed $M = 3.71$ ($SD = 1.03$), $t(718) = 18.41$, $p < .001$, 95% CI [0.63, 0.78]. Cohen's $d = 0.69$ reflects a medium effect. This suggests that teachers were moderately perceived as stimulating students to be creative and innovative, and to engage in thoughtful problem-solving learning activities. Additionally, teachers' individualised

consideration demonstrated $M = 3.71$ ($SD = 0.94$), $t(718) = 20.35$, $p < .001$, 95% CI [0.64, 0.78]. Cohen's $d = 0.76$ reflects a medium effect, indicating teachers attended to individual student needs and provided personalised support, though this was the lowest-rated transformational dimension as compared with that of other dimensions.

The overall composite score of transformational teacher leadership behaviours showed $M = 3.80$ ($SD = 0.80$), $t(718) = 26.91$, $p < .001$, 95% CI [0.74, 0.86], with a large effect size ($d = 1.00$). This reflects that teachers demonstrating transformational leadership were highly perceived by students as important in their learning in the study context.

Regarding transactional teacher leadership behaviours, both the dimensions and the composite score were significantly above the scale midpoint ($p < .001$) with a modest level of effect sizes, suggesting the deviation from the midpoint. Teachers demonstrating contingent reward, for example, showed $M = 3.32$ ($SD = 1.01$), $t(718) = 8.39$, $p < .001$, 95% CI [0.24, 0.39]. Cohen's $d = 0.31$ indicates a small effect. This reflects that teachers perceive rewards and recognition as moderately used contingent on student learning progress and performance. Likewise, teachers' use of active management-by-exception yielded $M = 3.26$ ($SD = 1.08$), $t(718) = 6.52$, $p < .001$, 95% CI [0.18, 0.34], with Cohen's $d = 0.24$, indicating a small effect, suggesting teachers occasionally monitored and intervened to correct deviations.

The overall composite score of transactional teacher leadership behaviours showed $M = 3.29$ ($SD = 0.89$), $t(718) = 8.69$, $p < .001$, 95% CI [0.22, 0.36]. Cohen's $d = 0.32$ reflects a small effect. This indicates that while transactional leadership was present above the midpoint, its perceived practical significance for student learning was limited.

To the contrary of both transformational and transactional, teachers demonstrating passive/avoidant leadership behaviours across their dimensions yielded negative t-values ($p <$

.001), with means significantly below the scale midpoint. For example, teachers exhibiting passive management-by-exception showed $M = 2.45$ ($SD = 1.14$), $t(718) = -13.02$, $p < .001$, 95% CI $[-0.64, -0.47]$. Cohen's $d = -0.49$ reflects a small-to-medium effect. Also, teachers' laissez-faire behaviour showed $M = 2.06$ ($SD = 1.25$), $t(718) = -20.21$, $p < .001$, 95% CI $[-1.04, -0.85]$. Cohen's $d = -0.75$ indicates a medium effect. Overall passive/avoidant teacher leadership behaviours demonstrated $M = 2.25$ ($SD = 1.13$), $t(718) = -17.73$, $p < .001$, 95% CI $[-0.83, -0.67]$. Cohen's $d = -0.66$ reflects a medium effect, confirming that passive/avoidant teacher leadership behaviours were perceived as at a low level in this study context.

Taken together, the three components of teachers' full-range leadership, the one-sample t-test results reveal clear patterns. Transformational teacher leadership behaviours were perceived as high level with large effect sizes across all dimensions, indicating strong and meaningful practices. Transactional teacher leadership behaviours were also perceived above the midpoint but with small effect sizes, suggesting limited practical significance despite statistical significance. Passive/avoidant teacher leadership behaviours, on the other hand, were perceived below the midpoint with medium effect sizes, confirming their little importance for students as compared with those of transformational and transactional ones. Following these quantitative results, the qualitative data were collected and analysed to provide contextual understanding of the status of these full-range leadership behaviours exhibited by teachers across each component's dimensions (presented in the findings of qualitative data analysis section).

Table 4.5

One-sample t-test results: Extent of specific teachers' full-range leadership behaviours

Teachers' full-range leadership across components	Descriptive statistics						One-sample t-test (test value = 3)				
	N	M	SD	SE	t	df	p	Mean Diff.	95% CI [LL, UL]	Cohen's d	Effect Size
Transformational teacher leadership behaviours											
Idealised Influence Behaviour	719	3.93	0.93	0.03	26.89	718	< .001	0.93	[0.86, 0.99]	1.00	Large
Idealised Influence Attributed	719	3.96	1.03	0.04	24.97	718	< .001	0.96	[0.89, 1.04]	0.93	Large
Inspirational Motivation	719	3.84	1.02	0.04	22.28	718	< .001	0.84	[0.77, 0.92]	0.83	Large
Intellectual Stimulation	719	3.71	1.03	0.04	18.41	718	< .001	0.71	[0.63, 0.78]	0.69	Medium
Individualised Consideration	719	3.71	0.94	0.04	20.35	718	< .001	0.71	[0.64, 0.78]	0.76	Medium
Overall Transformational Teacher Leadership	719	3.80	0.80	0.03	26.91	718	< .001	0.80	[0.74, 0.86]	1.00	Large
Transactional teacher leadership behaviours											
Contingent Reward	719	3.32	1.01	0.04	8.39	718	< .001	0.32	[0.24, 0.39]	0.31	Small
Active Management-by-Exception	719	3.26	1.08	0.04	6.52	718	< .001	0.26	[0.18, 0.34]	0.24	Small
Overall Transactional Teacher Leadership	719	3.29	0.89	0.03	8.69	718	< .001	0.29	[0.22, 0.36]	0.32	Small
Passive/avoidant teacher leadership behaviours											
Passive Management-by-Exception	719	2.45	1.14	0.04	-13.02	718	< .001	-0.55	[-0.64, -0.47]	-0.49	Small
Laissez-Faire	719	2.06	1.25	0.05	-20.21	718	< .001	-0.94	[-1.04, -0.85]	-0.75	Medium
Overall Passive/Avoidant Teacher Leadership	719	2.25	1.13	0.04	-17.73	718	< .001	-0.75	[-0.83, -0.67]	-0.66	Medium

Note. Test value (μ) = 3.00 (theoretical midpoint of 5-point Likert scale). M = Mean; SD = Standard Deviation; SE = Standard Error of the Mean; t = t-statistic; df = Degrees of Freedom; p = two-tailed significance; Mean Diff. = Mean – 3.00; 95% CI = 95% Confidence Interval; Cohen's d = effect size; Effect size benchmarks: Small = 0.20–0.49; Medium = 0.50–0.79; Large $\geq$ 0.80.

4.2.3. *The status of student trust in teachers*

The third research question was stated to examine the level of students' trust in their teachers' ability, benevolence, and integrity towards their learning success. One-sample t-test results in Table 4.6 showed that all three dimensions of student trust in teachers and the composite score were significantly above the scale midpoint.

Dimensional level analysis demonstrates that students' perceived trust in teachers' ability showed $M = 4.05$ ($SD = 0.90$), $t(718) = 31.36$, $p < .001$, 95% CI [0.99, 1.12]. Cohen's $d = 1.17$ indicates a large effect, reflecting strong students' perceived confidence in their teachers' competence and expertise towards their learning. Similarly, students' perception of trust in teachers' benevolence yielded $M = 3.95$ ($SD = 0.86$), $t(718) = 29.88$, $p < .001$, 95% CI [0.89, 1.02]. Cohen's $d = 1.11$ reflects a large effect. This indicates that students strongly perceived their teachers as genuinely caring about their well-being in the learning process. Also, students' perceived trust in teachers' integrity showed $M = 4.17$ ($SD = 0.77$), $t(718) = 40.60$, $p < .001$, 95% CI [1.11, 1.22] with Cohen's $d = 1.51$ —the largest effect in the trust construct—suggesting that students most strongly perceived their teachers as acting with integrity in the learning process.

The overall composite mean score of student trust in teachers demonstrated $M = 4.06$ ($SD = 0.71$), $t(718) = 40.20$, $p < .001$, 95% CI [1.01, 1.11] with Cohen's $d = 1.50$ reflects a large effect. This indicates that perceived student trust in teachers was at a high level with large effect sizes, highlighting the strength of the trust relationship between students and teachers. Based on these quantitative results, further qualitative data were collected and analysed to provide contextual understanding on this level of perceived trust in teachers across dimensions (presented in the findings of qualitative data analysis section).

Table 4.6

One-sample t-test results: Level of student trust in teachers

<i>Student Trust in Teachers</i>	Descriptive statistics						One-sample t-test (test value = 3)				
	N	M	SD	SE	t	df	p	Mean Diff.	95% CI [LL, UL]	Cohen's d	Effect Size
Ability	719	4.05	0.90	0.03	31.36	718	< .001	1.05	[0.99, 1.12]	1.17	Large
Benevolence	719	3.95	0.86	0.03	29.88	718	< .001	0.95	[0.89, 1.02]	1.11	Large
Integrity	719	4.17	0.77	0.03	40.60	718	< .001	1.17	[1.11, 1.22]	1.51	Large
Overall Student Trust	719	4.06	0.71	0.03	40.20	718	< .001	1.06	[1.01, 1.11]	1.50	Large

Note. Test value (μ) = 3.00 (theoretical midpoint of 5-point Likert scale). M = Mean; SD = Standard Deviation; SE = Standard Error of the Mean; t = t-statistic; df = Degrees of Freedom; p = two-tailed significance; Mean Diff. = Mean – 3.00; 95% CI = 95% Confidence Interval; Cohen's d = effect size; Effect size benchmarks: Small = 0.20–0.49; Medium = 0.50–0.79; Large $\geq$ 0.80.

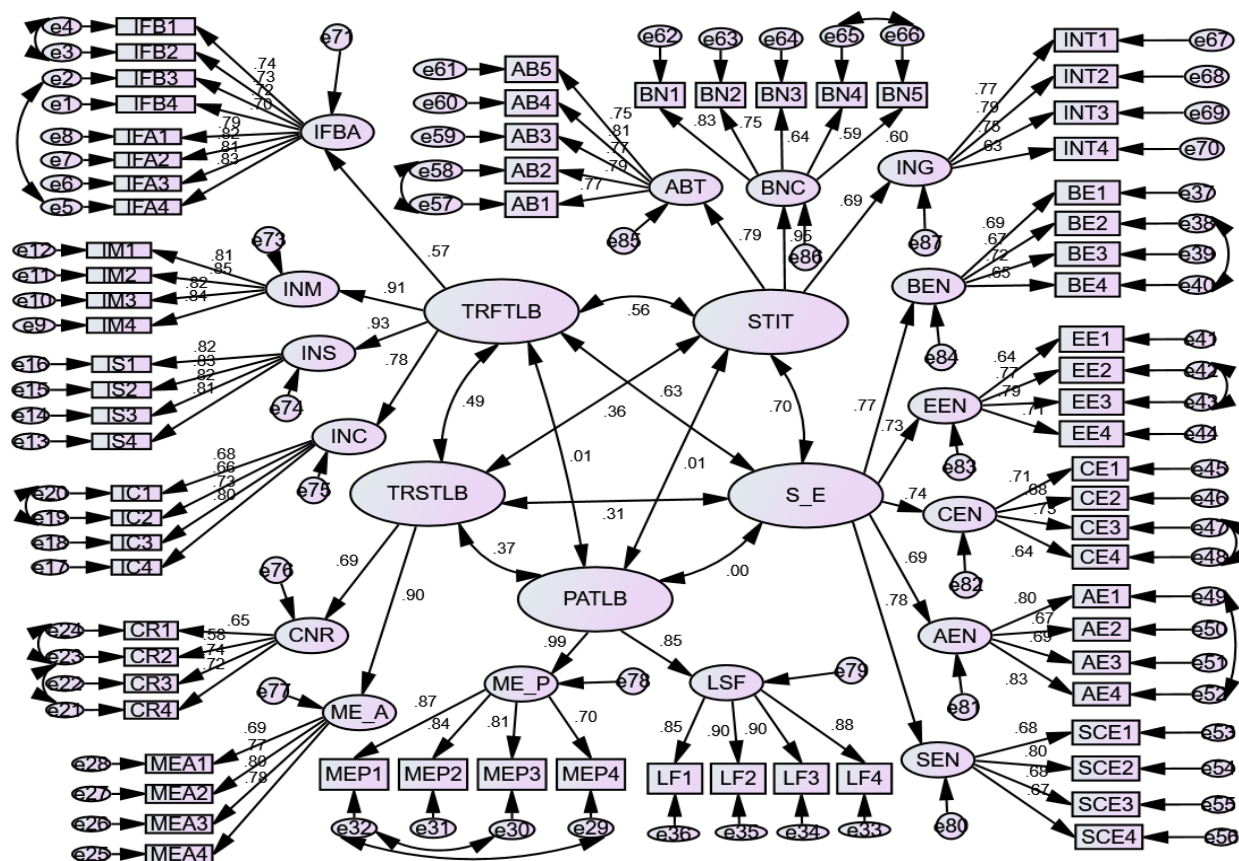
4.2.4. Structural relationships among teachers' full-range leadership, student engagement and trust in teachers

Before executing the structural model for estimating the proposed structural relationships between the specific teachers' full-range leadership behaviours, student engagement and trust in teachers, CFA was conducted to evaluate the adequacy of the measurement model that involves these variables. This helps to identify and fix problematic items, assess the model's global fit, and evaluate the validity of the measurement model. In doing that, a CFA that aggregates all the key study variables and their dimensions into a single measurement model was performed. The model in Figure 4.1 displays a measurement model that consists of the five dimensions of student engagement: behavioural, emotional, and cognitive, agentic and sociocultural; the three

components of teachers' full-range leadership: transformational, transactional and passive/avoidant; and the three dimensions of trust in teachers: ability, benevolence and integrity.

Figure 4.1

Results of the measurement model assessment



Note: TRFTLB = transformational teacher leadership behaviours; TRSTLB = transactional teacher leadership behaviours; PATLB = passive/avoidant teacher leadership behaviours; STIT = student trust in teachers; SE = student engagement; IFBA = Idealised influence behaviour and attributed; INM = Inspirational motivation; INS = Intellectual stimulation; INC = Individualised consideration; CNR = Contingent reward; MEA = Management by exception active; MEP = Management by exception passive; LSF = laissez-faire; ABT = Ability; BNC = Benevolence; ING = Integrity; BEN = Behavioural engagement; EEN = Emotional engagement; CEN = Cognitive engagement; AEN = Agentic engagement; SEN = Sociocultural engagement.

Initially, the specified measurement model was assessed to identify and fix problematic items, such as those with large error covariances and low standardised factor loadings, to ensure that each key study variable fulfilled the minimum psychometric standards. The results showed

that most of the items' standardised factor loadings exceed the recommended threshold ($\beta = 0.60$, $p < 0.001$). In that, the student engagement items ranged from 0.64 to 0.83; the specific teachers' full-range leadership behaviours items ranged from 0.58 to 0.90; and the student trust in teacher items ranged from 0.59 to 0.83 (see supplementary Table 2 in Appendix A). The results indicated that although 0.6 was considered a threshold, two items, such as CR2 of transactional teacher leadership behaviours and BN4 of student trust in teachers, showed slightly lower factor loadings than the recommended threshold. In spite of the difference, that difference is minimal and not a meaningful drop in the quality of these items in practice. Hence, due to their theoretical importance and they show nearly to higher loading levels, these items were retained.

Then, the measurement model was further assessed for global model fit. The initial results, Model 1 in Table 4.7, yield excellent parsimonious fit index ($\chi^2/df = 2.67$, $p < 0.001$), marginal incremental fit indices (CFI = 0.871, TLI = 0.865), and excellent absolute fit indices (SRMR = 0.062, RMSEA = 0.048 [90% CI: 0.047, 0.050]) as compared with that of the threshold or cut-off ranges (see Table 4.7). This result showed that although the parsimonious and absolute fit indices yield excellent, the incremental fit indices generate slightly below the recommended threshold of 0.90 and 0.95 for acceptable and excellent fit, respectively.

As a response to such unsatisfactory results and to improve the overall model's relative fit, the model was iteratively refined over two rounds of specification, during which a series of theoretically justifiable selected error covariances were made to the initial model following observation of model modification indices. Modification indices greater than 15 were used as a threshold for freeing error covariances when theoretically justified. In that, as seen in the model in Figure 4.1, some factors of transformational teacher leadership behaviours, such as IF_B and IF_A, were merged into one factor due to their high similarity. Then, some item covariances

were added between some selected error terms following the modification indices. For example, items of transformational teacher leadership behaviours such as IFB1 and IFB2, IFB3 and IFA4, and IC1 and IC2; items of transactional teacher leadership behaviours including CR1 and CR2, and CR2 and CR4; items of passive/avoidant teacher leadership behaviours such as MEP1 and MEP3, and MEP1 and MEP4; items of student trust in teachers such as AB1 and AB2, BN4 and BN5; and items of student engagement consisting of BE2 and BE4, EE2 and EE3, CE3 and CE4, AE1 and AE4; were covary due to their content similarity. These modifications enhanced the measurement model's parsimony with the empirical data while preserving theoretical coherence.

The refined measurement model was then re-examined across the global fit indices. The second round results, seen Model 2 in Table 4.7, demonstrated acceptable to excellent global fit across all major indices: excellent parsimonious fit index ($\chi^2/df = 2.30$ $p < 0.001$), acceptable incremental fit indices (CFI = 0.910, TLI = 0.900), and excellent absolute fit indices (SRMR = 0.069, RMSEA = 0.042 [90% CI: 0.041, 0.044]), supporting the soundness of the measurement model for the subsequent structural model assessment to estimate the hypothesized relationships between the study constructs to address the stated research questions.

Table 4.7

Results of the measurement model global fit

Model		χ^2/df	CFI	TLI	SRMR	RMSEA
Model 1		2.67***	0.871	0.865	0.062	0.048 [90% CI: 0.047, 0.050]
Model 2		2.30***	0.910	0.900	0.069	0.042 [90% CI: 0.041, 0.044]
Cut-off	Excellent fit	1-3	>0.95	>0.95	<0.08	<0.06
	Acceptable fit	>3	>0.90	>0.90	<0.08	<0.06

Note: Model 1 = the initial structural model, Model 2 = the improved structural model by following modification indices,

*** $p < 0.001$

Furthermore, following the model specification, the convergent and discriminant validity of the measurement model was evaluated. The results in Table 4.8 showed that the CR and AVE values for all key study variables were above 0.7 and 0.5, respectively, suggesting adequate convergent validity. Additionally, the square root of the AVE on the diagonal (seen in bold in Table 4.8) for the key study variables exceeded their correlations with others in the model, thus supporting discriminant validity. Additionally, the AVE values for each construct exceeded their corresponding MSV values, demonstrating that each construct shares more variance with its own indicators than with other constructs in the model, further confirming that the constructs are empirically distinct. These results showed that the refinement of some measurement items which have relatively high covariance was effective in reducing conceptual overlap between some dimensions and items within their underlying construct and improving the overall validity of the measurement model. This confirms that each variable shares more variance with its own indicators than with other variables, indicating each variable is empirically distinct and functions well together in the same analytic structural model.

Table 4.8

Results of the measurement model validity measures

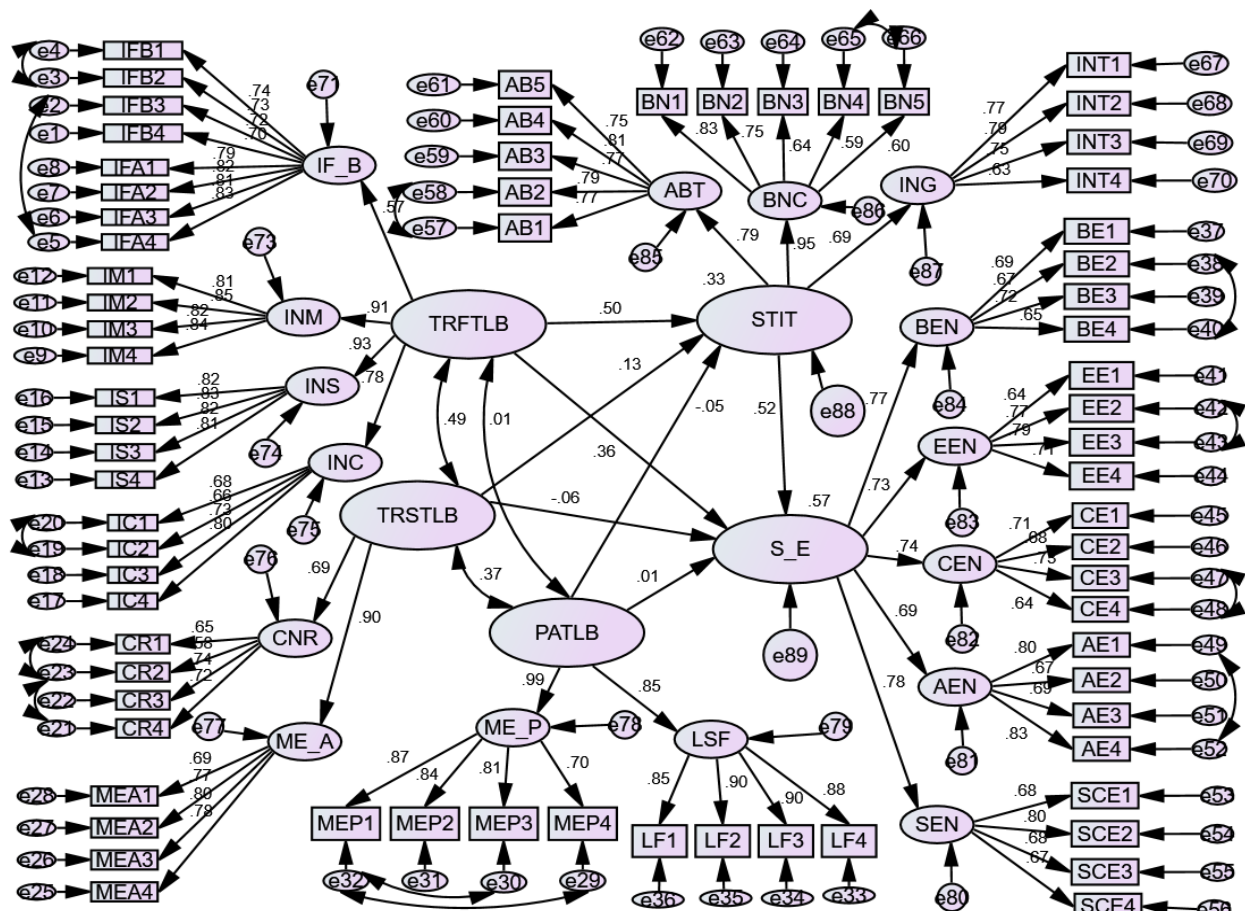
Construct	CR	AVE	MSV	Correlation				
				1	2	3	4	5
1. Transformational teacher leadership behaviours	0.88	0.66	0.39	0.81				
2. Transactional teacher leadership behaviours	0.78	0.64	0.24	0.49***	0.80			
3. Passive/avoidant teacher leadership behaviours	0.92	0.85	0.14	0.01	0.37***	0.92		
4. Student trust in teachers	0.86	0.67	0.49	0.56***	0.36***	0.01	0.82	
5. Student engagement	0.86	0.55	0.49	0.65***	0.31***	0.00	0.70***	0.74

Note: ***p < 0.001

After the measurement model assessment was completed, the structural model was performed to estimate the direct and indirect influences of the specific teachers' full-range leadership behaviours on student engagement, considering student trust in teachers as a mediator in explaining this relationship. This analysis was performed to address the last four research questions (Questions 4–7) outlined in the basic research questions of the study section. The structural model in Figure 4.2 displayed the results.

Figure 4.2

Results of the structural model assessment



Note: TRFTLB = transformational teacher leadership behaviours; TRSTLB = transactional teacher leadership behaviours; PATLB = passive/avoidant teacher leadership behaviours; STIT = student trust in teachers; SE = student engagement; IFBA = Idealised influence behaviour and attributed; INM = Inspirational motivation; INS = Intellectual stimulation; INC = Individualised consideration; CNR = Contingent reward; MEA = Management by exception active; MEP = Management by exception passive; LSF = laissez-faire; ABT = Ability; BNC = Benevolence; ING = Integrity; BEN = Behavioural engagement; EEN = Emotional engagement; CEN = Cognitive engagement; AEN = Agentic engagement; SEN = Sociocultural engagement.

Before estimating the proposed relationships between the study variables, the structural model's global fit was evaluated across all major indices. The results in Table 4.9 displayed the model fit values with threshold points. It indicates an acceptable to excellent model fit: shows excellent parsimonious fit index ($\chi^2/df = 2.30$, $p < 0.001$), acceptable incremental fit indices (CFI = 0.910, TLI = 0.900), and excellent absolute fit indices (SRMR = 0.069, RMSEA = 0.042 [90% CI: 0.041, 0.044]). These results suggest that the hypothesised structural model fits the data well and is suitable to estimate the proposed direct and indirect (mediated) relationships between the key study variables.

Table 4.9

Results of the structural model fit

		χ^2/df	CFI	TLI	SRMR	RMSEA
Model		2.30***	0.910	0.900	0.069	0.042 [90% CI: 0.041, 0.044]
Cut-off	Excellent fit	1-3	>0.95	>0.95	<0.08	<0.06
	Acceptable fit	>3	>0.90	>0.90	<0.08	<0.06

Note: *** $p < 0.001$

For further clarity, the structural model results displayed in Figure 4.2 are summarised in Table 4.10, showing the direct, indirect (mediated), and total influences of each of the specific teachers' full-range leadership behaviours on student engagement and student trust in the teacher, with the magnitude of association in effect size. Furthermore, additional cross-dimensional path analysis was conducted to examine the influence of the specific teachers' full-range leadership behaviour on the different dimensions of students' perceived trust in teachers and their engagement (see Supplementary Table 3 in Appendix A). What follows next are these details.

4.2.5. The direct influence of teachers' full-range leadership on student engagement

The fourth research question of the study was designed to estimate the predictive influence of the specific teachers' full-range leadership behaviours on student engagement. The analysis presented below provides empirical evidence for answering this question and shows varied results in terms of statistical significance, direction and magnitude of association.

The direct influence of transformational teacher leadership behaviours on student engagement was statistically significant with a moderate positive effect size ($\beta = 0.36$, $SE = 0.08$, $p < 0.001$, 95% CI [0.208, 0.536]). These results suggest that teachers' demonstrating transformational leadership behaviours accounted for a practically important influence on student engagement. Furthermore, to provide a more nuanced understanding of how transformational behaviours influence a particular dimension of student engagement, the cross-dimensional level path analyses results supported that transformational teacher behaviours significantly and positively influence each dimension of student engagement with varied in magnitude: strong positive on sociocultural ($\beta = 0.52$, $SE = 0.03$, $p < 0.001$); moderate positive but close to strong on emotional ($\beta = 0.48$, $SE = 0.04$, $p < 0.001$); and moderate positive on behavioural ($\beta = 0.42$, $SE = 0.04$, $p < 0.001$), agentic ($\beta = 0.39$, $SE = 0.04$, $p < 0.001$), and cognitive ($\beta = 0.37$, $SE = 0.04$, $p < 0.001$). The results suggest that students perceived that teachers demonstrating transformational leadership behaviours meaningfully and practically influence all dimensions of their engagement.

As compared to that of transformational one, the direct influence of transactional teacher leadership behaviours on student engagement was not statistically significant with a very small negative effect size ($\beta = -0.06$, $SE = 0.06$, $p = 0.283$, 95% CI [-0.174, 0.050]), which is an indication of a negligible relationship. This means that teachers' utilisation of transactional

leadership behaviours likely lacks a practical influence on student engagement. Considering the negative direction, further path analysis at the sub-dimensional level confirmed that its influences on each dimension of student engagement were not significant. Very small negative on behavioural ($\beta = -0.03$, $SE = 0.04$, $p = 0.475$), emotional ($\beta = -0.01$, $SE = 0.04$, $p = 0.874$), cognitive ($\beta = -0.01$, $SE = 0.04$, $p = 0.749$) and very small positive on agentic ($\beta = 0.06$, $SE = 0.041$, $p = 0.192$) and sociocultural ($\beta = 0.03$, $SE = 0.04$, $p = 0.35$). This indicates that the current application of teachers' transactional strategies is negligibly related to enhancing student engagement.

Like that of transactional one, the direct influence of teachers exhibiting passive/avoidant leadership behaviours on student engagement, on the other hand, was not statistically significant with a very small positive effect size ($\beta = 0.01$, $SE < 0.04$, $p = 0.824$, 95% CI [-0.073, 0.092]), which represents a negligible relationship. The results indicate that this form of teachers' leadership behaviours literally suggests it has no detectable influence on student engagement. In addition to this, the results of cross-dimension path analysis further supported that students perceived that teachers exhibiting passive/avoidant behaviours do not significantly influence any engagement dimensions and are even negative on the majority of them. Very small negative on behavioural ($\beta = -0.01$, $SE = 0.04$, $p = 0.816$), emotional ($\beta = -0.02$, $SE = 0.04$, $p = 0.64$), agentic ($\beta = -0.05$, $SE = 0.04$, $p = 0.184$), and sociocultural ($\beta = -0.00$, $SE = 0.03$, $p = 0.971$) and very small positive on cognitive ($\beta = 0.03$, $SE = 0.04$, $p = 0.463$). This implies that, like that of transactional one, teachers' demonstrating passive/avoidant leadership behaviours contributes to creating a fragile learning environment that is not conducive to sustained student engagement.

The above presented results indicate that teachers demonstrating each of the specific full-range leadership behaviours have a different magnitude of influence on student engagement.

While transformational one shows the relatively moderate influence, transactional and passive/avoidant yield nearly negligible results. Following these quantitative results, the qualitative data were collected and analysed to explain and provide contextual understanding of the predictive influence of each of the teachers' full-range leadership behaviours on student engagement (presented in the next section on results of qualitative data analysis).

4.2.6. The direct influence of teachers' full-range leadership on student trust in teachers

The fifth research question of this study was designed to investigate the predictive influence of the specific teachers' full-range leadership behaviours on student trust in teachers. The analysis presented below provides empirical evidence for answering this question and shows varied results in terms of statistical significance, direction and magnitude of association.

The direct influence of transformational teacher leadership behaviours on student trust in teachers was statistically significant with a large positive effect size ($\beta = 0.50$, $SE = 0.07$, $p < 0.001$, 95% CI [0.359, 0.644]), which is an indication of a very strong relationship. The results indicate that a larger variation in how much students trust their teachers is associated with and can be explained by teachers' demonstration of transformational behaviours. Although the construct of transformational teacher leadership and student trust in teachers exhibited considerable correlations, results of dimension-level path analysis indicated that the influence of transformational behaviours on each trust dimension were not uniform across all subdimensions, varied in terms of magnitude: moderate positive and close to strong on benevolence ($\beta = 0.49$, $SE = 0.04$, $p < 0.001$) and integrity ($\beta = 0.480$, $SE = 0.04$, $p < 0.001$), and moderate on ability ($\beta = 0.29$, $SE = 0.01$, $p < 0.001$). This suggests that transformational behaviours seem to have a meaningful and practical influence on all dimensions of student trust. That implies that teachers who demonstrate the transformational leadership behaviours are more likely to build trust among

students by demonstrating his/her ability, benevolence and integrity to them, all of which enhance the emotional safety and confidence of students in teachers' support in learning.

Additionally, the direct influence of transactional teacher leadership behaviours on student trust in teachers was statistically significant with a small positive effect size ($\beta = 0.13$, $SE = 0.07$, $p < 0.05$, 95% [CI 0.002, 0.276]), suggesting a meaningful relationship. These results show that only modest variation in students' perception of trust in their teachers' support is linked to these leadership behaviours towards student learning. Regarding the specific influence on each dimension of student trust in teachers, results of cross-dimensional path analysis showed varied influences: significant and moderate positive on ability ($\beta = 0.322$, $SE = 0.01$, $p < 0.001$), very small positive on benevolence ($\beta = 0.09$, $SE = 0.04$, $p < 0.05$), and very small but not significant on integrity ($\beta = 0.07$, $SE = 0.04$, $p = 0.091$). This implies that while teachers demonstrating transactional leadership behaviours are associated with a moderate level of students' perceived trust in teachers' ability, there is a lower level of association with perceived benevolence and integrity.

To the opposite of both transformational and transactional ones, the direct influence of passive/avoidant teacher behaviours on student trust in teachers was not statistically significant with a negligible negative effect size ($\beta = -0.05$, $SE = 0.05$, $p = 0.348$, 95% CI [-0.149, 0.050]), suggesting no meaningful and practical relationship. This indicates little change in student trust in teachers is explained by this form of leadership behaviours, suggesting subtly erodes students' trust in their teachers and does not drive it meaningfully. Additional results of the cross-dimensional level path analysis revealed that it has no significant influence on all dimensions of perceived trust in teachers' ability ($\beta = 0.05$, $SE = 0.39$, $p = 0.229$), benevolence ($\beta = -0.01$, $SE = 0.04$, $p = 0.865$) and integrity ($\beta = -0.07$, $SE = 0.03$, $p = 0.065$). The results suggest that teachers'

use of passive/avoidant behaviours does not have a measurable influence on any dimensions of student trust in teachers, as minimal teachers' involvement neither builds nor undermines students' perceptions of trust in their teachers' support.

The above-presented results indicate that teachers exhibiting each of the specific full-range leadership behaviours influence student trust in teachers differently. Transformational behaviours accounted for a large contribution in predicting student trust in teachers, whereas transactional and passive/avoidant behaviours yielded modest and negligible influence. Based on these quantitative results, the qualitative data were collected and analysed to explain the quantitative results and provide contextual understanding of how teachers' use of transformational, transactional, and passive/avoidant leadership behaviours related to students' perceptions of trust in their teachers (presented in the next section on results of qualitative data analysis).

4.2.7. The direct influence of student trust in teachers on student engagement

The sixth research question of the study was considered to examine the predictive influence of students' perceived trust in teachers on the engagement of students. The analysis presented below provides empirical evidence for answering this question. The analysis showed varied results in terms of the magnitude of association.

The direct influence of student trust in teachers on student engagement was statistically significant with a large positive effect size ($\beta = 0.52$, $SE = 0.08$, $p < 0.001$, 95% CI [0.361, 0.689]), representing a very strong relationship. The results show that a large extent of the change in student engagement is explained by how much students trust their teachers, independent of the specific teachers' full-range leadership behaviours. This implies that students'

perceptions of trust in their teachers are strongly related to and practically increase in the engagement of students in academic and institutional activities.

In addition to these results, the higher-order constructs exhibiting substantial correlations, dimension-level analysis indicated that these interactions were not consistent across all subdimensions. Perceived ability, for example, showed a significant with moderate positive influence on behavioural ($\beta = 0.36$, $SE = .01$, $p < 0.001$); non-significant with modest positive on emotional ($\beta = 0.08$, $SE = 0.05$, $p = 0.130$); non-significant with modest negative on cognitive ($\beta = -0.05$, $SE = 0.05$, $p = 0.360$); significant with modest negative on agentic ($\beta = -0.14$, $SE = 0.05$, $p < 0.01$), and non-significant with modest negative on sociocultural ($\beta = -0.07$, $SE = 0.05$, $p = 0.120$). Perceived benevolence, on the other hand, significantly influences all student engagement dimensions: Moderate positive on behavioural ($\beta = 0.301$, $SE = 0.01$, $p < 0.001$), cognitive ($\beta = 0.35$, $SE = 0.05$, $p < 0.001$), agentic ($\beta = 0.43$, $SE = 0.05$, $p < 0.01$), and sociocultural ($\beta = 0.34$, $SE = 0.04$, $p < 0.001$), and modest positive on emotional ($\beta = 0.23$, $SE = 0.05$, $p < 0.01$). Similarly, perceived integrity also significantly influences all engagement dimensions with small to moderate level: Modest positive and close to moderate on behavioural ($\beta = 0.27$, $SE = 0.01$, $p < 0.001$) and emotional ($\beta = 0.28$, $SE = 0.04$, $p < 0.001$), modest positive on cognitive ($\beta = 0.12$, $SE = 0.05$, $p < 0.05$) and agentic ($\beta = 0.12$, $SE = 0.05$, $p < 0.05$), and moderate positive on sociocultural ($\beta = 0.35$, $SE = 0.05$, $p < 0.001$). This suggests that the overall association between trust in teachers and student engagement seems to be predominantly influenced by certain dimensions. While perceived trust in teachers' benevolence and integrity is significantly related to student engagement, perceived ability has a relatively limited contribution to the relationship.

The results outlined above specify that students' perceptions of trust in their teachers show a large contribution in predicting student engagement. Considering these quantitative results, subsequent qualitative data were collected and analysed to obtain respondents' experiences and perspectives to clarify how each of the dimension of perceived student trust in teachers contribute to student engagement (presented in the next section on results of qualitative data analysis).

4.2.8. The mediated influence of teachers' full-range leadership on student engagement

The seventh research question of the study was designed to estimate how student trust in teachers mediates the predictive influence of the specific teachers' full-range leadership behaviours on student engagement. Like that of the direct influences, the mediation analysis presented below provides empirical evidence for answering this question and shows varied results in terms of statistical significance, direction and magnitude of association.

The indirect influence of transformational teacher leadership behaviours on student engagement mediated by student trust in teachers was significant with a small to moderate positive effect size ($\beta = 0.26$, $SE = 0.06$, $p < 0.001$, 95% CI [0.164, 0.396]), which indicates a meaningful relationship. This suggests that, in addition to its direct influence ($\beta = 0.36$, $SE = 0.08$, $p < 0.001$), teachers' utilisation of transformational leadership behaviours indirectly generates an additional modest level of change in student engagement through cultivating students' trust. When comparing the standardised beta coefficient between the direct influence and the indirect (mediated) one, it was significant in both conditions. This suggests that student trust in teachers plays a partial mediating role in explaining this relationship, implying that student trust in teachers explains part, but not all, of the influence of transformational teacher leadership behaviours on student engagement. Despite these results, dimension-level path

analysis revealed that these mediated influences are not uniform across all subdimensions of engagement and trust in teachers, suggesting that the overall mediated influences seem to be more influenced by certain dimensions.

In that, students' perceptions of trust in teachers' ability, for example, significantly mediates the influences of transformational teacher leadership behaviours on most dimensions of student engagement: Moderate positive on behavioural ($\beta = 0.277$, $SE = 0.009$, $p < 0.001$, 95% CI [0.260, 0.295]), emotional ($\beta = 0.150$, $SE = 0.023$, $p < 0.001$, 95% CI [0.103, 0.191]), and very small positive on cognitive ($\beta = 0.089$, $SE = 0.030$, $p < 0.01$, 95% CI [0.026, 0.145]), and sociocultural ($\beta = 0.096$, $SE = 0.025$, $p < 0.01$, 95% CI 0.046, 0.142]). However, not significant on agentic ($\beta = 0.030$, $SE = 0.032$, $p = 0.351$, 95% CI [-0.033, 0.094]). This result indicates that perceived trust in teachers' ability meaningfully facilitates the influence of teachers demonstrating transformational leadership behaviours, particularly on students' behavioural and emotional engagement. Whereas, it has likely limited practical influence on cognitive, agentic and sociocultural engagement.

Students perceptions of trust in teachers' benevolence also significantly mediates the influences of transformational teacher leadership behaviours and all student engagement dimensions: moderate positive on behavioural ($\beta = 0.373$, $SE = 0.034$, $p < 0.001$, 95% CI [0.304, 0.439]), and modest positive on emotional ($\beta = 0.134$, $SE = 0.023$, $p < 0.001$, 95% CI [0.093, 0.182]), cognitive ($\beta = 0.134$, $SE = 0.025$, $p < 0.05$, 95% CI [0.086, 0.187]), agentic ($\beta = 0.130$, $SE = 0.024$, $p < 0.05$, 95% CI [0.086, 0.181]), and sociocultural ($\beta = 0.144$, $SE = 0.023$, $p < 0.05$, 95% CI [0.104, 0.193]). This indicates that although perceived trust in teachers' benevolence mediates the influence of transformational teacher leadership behaviours on all five dimensions

of engagement, it has more practical influence on behavioural engagement and meaningful influence on the remaining dimensions.

Like that of perceived benevolence, students' perceptions of trust in teachers' integrity significantly mediates the influences of transformational teacher leadership behaviours on all student engagement dimensions: moderate positive on behavioural ($\beta = 0.349$, $SE = 0.035$, $p < 0.001$, 95% CI [0.280, 0.417]), modest positive on emotional ($\beta = 0.136$, $SE = 0.023$, $p < 0.001$, 95% CI [0.094, 0.185]) and sociocultural ($\beta = 0.154$, $SE = 0.027$, $p < 0.001$, 95% CI [0.106, 0.210]), and very small positive on cognitive ($\beta = 0.072$, $SE = 0.024$, $p < 0.01$, CI [0.027, 0.123]) and agentic ($\beta = 0.057$, $SE = 0.023$, $p < 0.01$, CI [0.014, 0.106]). The results suggest that perceived trust in teachers' integrity significantly mediates the influence of teachers exhibiting transformational leadership behaviours more practically on behavioural engagement, followed by a meaningful influence on emotional and sociocultural dimensions.

Unlike the transformational one, the indirect influence of transactional teacher leadership behaviours on student engagement mediated through student trust in teachers was statistically significant with a very small positive effect size ($\beta = 0.068$, $SE = 0.04$, $p < 0.05$, 95% CI [0.002, 0.166]), which suggests a negligible relationship and likely lacks practical significance. This indicates that, in addition to its negligible direct influence ($\beta = -0.06$, $SE = 0.06$, $p = 0.283$), teachers demonstrating transactional behaviours indirectly accounted for a very small positive change of variance in student engagement through student trust in teachers.

When comparing the direct and indirect paths in the model, the direct influence was not significant and negative. However, when student trust in teachers was included in the structural model as a mediator, the indirect influence of transactional teacher leadership behaviours on student engagement became statistically significant and positive, although the magnitude is a

very small effect size. This change in the sign of the relationship direction suggests that teachers' exhibiting transactional behaviours appears to influence student engagement through two opposing pathways: a negative direct influence and a positive indirect influence through student trust. This means that students perceived that teachers' use of transactional leadership behaviours reduces their engagement on its own, but it can positively influence engagement indirectly through cultivating perceptions of trust in teachers. This suggests that when teachers enhance students' perceptions of trust in their willingness to support them, the negative influence of transactional leadership behaviours on engagement is reduced and converted into a positive outcome. This pattern suggests that student trust in teachers plays a suppressor (competitive or inconsistent) mediating role in explaining the influence of transactional teacher leadership behaviours on student engagement, counterbalancing the negative direct influence of transactional behaviours and producing a positive indirect influence on engagement. Despite that, the mediation role of student trust in teachers in this relationship is nearly negligible. Furthermore, results of sub-dimensional level path analysis showed that each trust dimension mediated the influence of the transactional leadership on student engagement dimensions.

Perceived trust in teachers' ability, for example, significantly mediated the influence of transactional teacher leadership behaviours on most of student engagement dimensions: moderate positive on behavioural ($\beta = 0.309$, $SE = 0.008$, $p < 0.001$, 95% CI [0.295, 0.325]) and modest on emotional ($\beta = 0.168$, $SE = 0.025$, $p < 0.001$, 95% CI [0.115, 0.214]), cognitive ($\beta = 0.100$, $SE = 0.034$, $p < 0.01$, 95% CI [0.030, 0.163]), and sociocultural ($\beta = 0.107$, $SE = 0.028$, $p < 0.01$, 95% CI [0.051, 0.159]), but not significant on agentic ($\beta = 0.034$, $SE = 0.036$, $p = 0.351$, 95% CI [-0.037, 0.105]).

Perceived trust in teachers' benevolence also significantly mediate the influence of transactional teacher leadership behaviours on all engagement dimension but the magnitude is weaker: very small positive on behavioural ($\beta = 0.069$, $SE = 0.030$, $p < 0.05$, $CI [0.008, 0.129]$), emotional ($\beta = 0.025$, $SE = 0.012$, $p < 0.05$, $CI [0.004, 0.049]$), cognitive ($\beta = 0.025$, $SE = 0.012$, $p < 0.05$, $CI [0.004, 0.052]$), agentic ($\beta = 0.024$, $SE = 0.011$, $p < 0.05$, $CI [0.004, 0.050]$), and sociocultural ($\beta = 0.027$, $SE = 0.012$, $p < 0.05$, $CI [0.005, 0.053]$). This implies that although the results showed statistically significant and positive results, transactional teacher leadership behaviours do not meaningfully and practically build on students' perceptions of care and concern that facilitate further engagement.

Perceived trust in teachers' integrity, on the other hand, showed non-significant and marginal mediating role in facilitating the influence of transactional teacher leadership behaviours on all student engagement dimensions as most CI values include zero: Behavioural ($\beta = 0.050$, $SE = 0.030$, $p = 0.090$, 95% $CI [-0.010, 0.110]$), emotional ($\beta = 0.019$, $SE = 0.012$, $p = 0.076$, 95% $CI [-0.003, 0.045]$), cognitive ($\beta = 0.010$, $SE = 0.007$, $p = 0.055$, $CI [0.000, 0.028]$), agentic ($\beta = 0.008$, $SE = 0.006$, $p < 0.05$, $CI [0.000, 0.025]$), and sociocultural ($\beta = 0.022$, $SE = 0.013$, $p = 0.080$, 95% $CI [-0.003, 0.050]$). The results suggest that perceived integrity does not have a significant influence on translating the influence of transactional teacher leadership behaviours on all aspects of student engagement.

As opposed to that of transformational and transactional teacher leadership behaviours, the indirect influence of passive/avoidant teacher behaviours on student engagement through student trust in teachers was not significant, with a very small negative effect size ($\beta = -0.026$, $SE = 0.03$, $p = 0.331$, 95% $CI [-0.090, 0.022]$). The results suggest that student trust in teachers does not play any mediating role in explaining this relationship, as teachers' use of

passive/avoidant behaviours neither meaningfully fosters student engagement directly nor indirectly through cultivating student trust. Teachers' avoidant leadership weakly suppresses trust, which in turn weakly suppresses engagement, but the magnitude is too small to be practically meaningful. Besides, sub-dimension-level path analysis indicated that while most of the dimensions of student trust in teachers showed non-significant and negative mediation, there are a few mediation paths that show positive results. This suggests that although the overall passive/avoidant teacher leadership behaviours do not exert a generalised influence on student engagement through student trust in teachers, the influence is not uniform across all subdimensions. This highlights that the theoretical relationship between these constructs may exist in a specific aspect rather than the full construct.

Perceived trust in teachers' ability significantly and positively mediated the influence of passive/avoidant teacher behaviours on most of students engagement dimensions: moderate positive on behavioural ($\beta = 0.392$, $SE = 0.010$, $p < 0.001$, 95% CI [0.373, 0.411]) and emotional ($\beta = 0.213$, $SE = 0.032$, $p < 0.001$, 95% CI [0.145, 0.271]), modest positive on cognitive ($\beta = 0.126$, $SE = 0.043$, $p < 0.01$, CI [0.039, 0.207]), and sociocultural ($\beta = 0.136$, $SE = 0.035$, $p < 0.01$, CI [0.066, 0.201]), but not significant on agentic ($\beta = 0.043$, $SE = 0.046$, $p = 0.355$, CI [-0.047, 0.133]).

Perceived benevolence, on the other hand, showed non-significant and negative mediation role in facilitating the influence of passive/avoidant teacher behaviours on all student engagement dimensions: very small negative on behavioural ($\beta = -0.004$, $SE = 0.026$, $p = 0.865$, 95% CI [-0.057, 0.047]), emotional ($\beta = -0.002$, $SE = 0.010$, $p = 0.859$, 95% CI [-0.020, 0.017]), cognitive ($\beta = -0.002$, $SE = 0.010$, $p = 0.865$, CI [-0.021, 0.017]), agentic ($\beta = -0.001$, $SE =$

0.009, $p = 0.861$, CI [-0.021, 0.016]), and sociocultural ($\beta = -0.002$, SE = 0.010, $p = 0.858$, CI [-0.022, 0.018]).

Similarly, perceived integrity showed non-significant and negative mediating role: Very small negative on behavioural ($\beta = -0.047$, SE = 0.025, $p = 0.066$, 95% CI [-0.096, 0.004]), emotional ($\beta = -0.018$, SE = 0.010, $p = 0.054$, 95% CI [-0.039, 0.000]), cognitive ($\beta = -0.010$, SE = 0.006, $p < 0.03$, CI [-0.023, -0.001]), agentic ($\beta = -0.008$, SE = 0.005, $p < 0.05$, CI [-0.021, -0.001]), and sociocultural ($\beta = -0.021$, SE = 0.011, $p = 0.052$, CI [-0.044, 0.000]).

These results indicate that while perceived trust in ability moderately mediates students' behavioural and emotional engagement and other dimensions with a small magnitude, even under passive/avoidant conditions, except for the agentic dimension. However, deeper engagement still does not occur. That is because benevolence and integrity, on the other hand, did not significantly mediate the influence of passive/avoidant teacher behaviours on any engagement dimensions.

Moreover, the total influence of the specific teachers' full-range leadership behaviours on student engagement, which includes both the direct and indirect influences, was statistically significant only for transformational behaviours, but not for transactional and passive/avoidant behaviours. The standardised total influences of transformational teacher leadership behaviours on student engagement were positive with a very large positive effect size ($\beta = 0.62$, SE = 0.07, $p < 0.001$, 95% CI [0.485, 0.767]). This means that a large portion of variation in student engagement can be related to and explained by both the direct (unmediated) and the indirect (mediated) influence of teachers' utilisation of transformational leadership behaviours. To the contrary, the total influence of transactional teacher leadership behaviours on student engagement was not statistically significant with a modest positive effect size ($\beta = 0.008$, SE

0.07, $p = 0.909$, 95% CI [-0.131, 0.145]). Likewise, the total influence of passive/avoidant teacher behaviours on student engagement was not significant with a modest negative effect size ($\beta = -0.016$, $SE = 0.05$, $p = 0.753$, 95% CI [-0.113, 0.081]). These results mean that the total influences of teachers' use of transactional leadership and passive/avoidant behaviours lack practical contributions to student engagement.

Overall, the full structural model that combines the three specific teachers' full-range leadership behaviours (transformational, transactional and passive/avoidant behaviours) collectively accounted for 33% of the variation in the mediator, student trust in teachers ($R^2_{\text{M}} = 0.33$), representing a large explained variance with the expected shared variance among these predictors. That means that the combined influence of each predictor (transformational, transactional, passive/avoidant) explained the large variance in student trust in teachers. In addition to this, when student trust in teachers was included in the full structural model as a mediator, a large amount of explained variance was observed in the outcome variable, student engagement ($R^2_{\text{full model}} = 0.57$). This indicates that around 57% of the total explained variance in student engagement can be predicted by the aggregate influences of transformational, transactional, passive/avoidant teacher leadership behaviours, and student trust in teachers. Altogether, these results highlight that although transactional and passive/avoidant teacher behaviours independently have little influence, their combined effect with transformational teacher leadership behaviours, as well as mediated through student trust in teachers, can predict a large portion, i.e., 57%, of the variance in student engagement.

Table 4.10

Results of the direct, indirect(mediating) and total influences

Influence	Regression weight (path)	β	SE	<i>p-value</i>	95% CI
Direct influence	Transformational teacher leadership behaviours → student engagement	0.36	0.08	***	0.208, 0.536
	Transactional teacher leadership behaviours → student engagement	-0.06	0.06	0.283	-0.174, 0.050
	Passive/avoidant teacher behaviours → student engagement	0.01	0.04	0.824	-0.073, 0.092
	Transformational teacher leadership behaviours → student trust in teachers	0.50	0.07	***	0.359, 0.644
	Transactional teacher leadership behaviours → student trust in teachers	0.13	0.07	*	0.002, 0.276
	Passive/avoidant teacher behaviours → student trust in teachers	-0.05	0.05	0.348	-0.149, 0.050
	Student trust in teachers → student engagement	0.52	0.08	***	0.361, 0.689
Indirect (mediated) influence	Transformational teacher leadership behaviours → student trust in teachers → student engagement	0.260	0.06	***	0.164, 0.396
	Transactional teacher leadership behaviours → student trust in teachers → student engagement	0.068	0.04	*	0.002, 0.166
	Passive/avoidant teacher behaviours → student trust in teachers → student engagement	-0.026	0.03	0.331	-0.090, 0.022
Total (both direct and indirect) influence	Transformational teacher leadership behaviours → student engagement	0.620	0.07	***	0.485, 0.767
	Transactional teacher leadership behaviours → student engagement	0.008	0.07	0.909	-0.131, 0.145
	Passive/avoidant teacher behaviours → student engagement	-0.016	0.05	0.753	-0.113, 0.081
Model-Level	Variance explained in the mediator variable (R^2_M)				0.33
Explained variance (R^2)	Variance explained in outcome variable ($R^2_{Full\ model}$)				0.57

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, and R^2 = Variance explained in outcome variable

4.2. Findings of Qualitative Data Analysis

This part of the results section presents the qualitative findings related to student engagement, the specific teachers' full-range leadership behaviours, and student trust in teachers. Guided by the predetermined dimensions of each of the key study variables deductively, the analysis identifies several themes, subthemes and patterns that emerged from the coded data. The themes outline how students and teachers understand the specific teachers' full-range leadership behaviours, interpret student trust in teachers, and illustrate how these behaviours are manifested in shaping student engagement. A supplementary table that displays patterns of themes is appended (see Supplementary Table 4 in Appendix A). The details are presented as follows:

4.3.1. *The Complexity of student engagement across the five dimensions*

Considering the extent of students' participation in academic and institutional activities at the university, students and teachers discussed the status of student engagement. Both groups of respondents described student engagement across five subthemes: behavioural, emotional, cognitive, agentic, and sociocultural dimensions. Given below is a detailed report of these subthemes and several patterns that emerged from the responses from the two groups of respondents.

Students' behavioural engagement: Compliance vs. active participation: Behavioural engagement was observed from the emerging data as one of the key indicators of student engagement in academic activities. Students and teachers described behavioural engagement in terms of four patterns: Participation in academic activities and attending class, timely completion of individual assignments, involvement in discussions and working with peers during group tasks, and asking and answering questions related to learning tasks.

Participation in academic activities and attending class: One of the observed patterns of behavioural engagement that emerges from the coded data was students' participation in academic activities and attending class. However, descriptions of this engagement varied across students' experiences and teachers' observations. Students largely describe themselves as active in their participation in academic activities and attending class. For example, Facil (Political Science and International Relations (PSIR) department) thinks that his engagement in academic activities is better since he attends class regularly and participates actively when the teachers teach in class. In addition to this, basing themselves on their previous academic progress as an indicator, students feel that their change in terms of academic achievement is a sign that they are actively engaging in their academic and class tasks. In this regard, Endalamaw (Psychology department) reflected, "Since I have been evaluating myself by the result so far in comparison to my past self, I have found my current result to be better. So, I think I have engaged." Similarly, Dagi (PSIR) explained, "My academic performance is good now compared to when I was a freshman. I was a bit weak this semester, the first semester of my fourth year, due to sickness and other things, but so far, it is good." These accounts indicate that students see whether they are engaged or not through comparison with their past performance. They consider such kind of academic changes and improvements as an indication that they are behaviourally engaging students.

Although students expressed themselves as behaviourally engaged in academic activities and attending class, teachers think that this kind of involvement is not uniform across students. Solomon, an Assistant Professor in the Department of PSIR, and Alemayehu, a Lecturer in the Department of Psychology, emphasised that the level of students' participation in class varies. According to their experiences, students with good participation are those with good ranks and

those who score good grades. Some engage at an intermediate level. And sometimes some students are quiet and do not even participate unless invited; several students tend to be silent unless called upon by name. Similarly, Birhanu, an Assistant Professor in the Department of Medicine, agrees, “It is obvious that some students engage well, interact, and reflect on their thoughts faster than their friends. Others require the teachers to push or invite them with questions.”

The above perspectives show a divergence between how students and teachers think about students’ participation in academic activities and attending class. Most students think of themselves as actively engaged when they attend class regularly, when they participate in class, and when they exhibit better academic performance compared to their previous achievement. In contrast, teachers think that students are not always actively engaged in class activities unless they invite and push them to participate fully. This difference suggests that students and teachers have different notions about what participation in academic activities and class attendance is, and how to achieve it. Students think they are involved enough, whereas teachers think that self-initiated and more proactive student participation often needs to wait for the teachers to encourage them to participate.

Timely completion of individual assignments: Another observed pattern of behavioural engagement was the timely completion of classwork and individual assignments. Many students reported that they consistently meet deadlines. Habtamu (Land Administration) and Helen (Pharmacy) noted that they are good at completing assignments on time. Likewise, Yonas (Medicine) explained, “I try to submit assignments on time, but often I tend to put in more effort as the deadline nears. ..., but I would still describe it as good.” Meron (Sociology) also reported, “Except in very rare cases, I try to submit most of the assignments on time” These accounts show

that students consider themselves effective in the timely completion of assignments, although some exert extra effort as the deadlines approach.

Teachers, on the other hand, observed that students are good at completing assignments in time, but they attribute this to fear of being penalised if they fail to do so. In this regard, Tilahun, a Lecturer in Sociology, noted, “Students complete their classwork and individual assignments on time. We set a deadline, and they submit it on time out of fear of the consequences of missing the deadline.” Abebe, a Lecturer in Land Administration, also agrees. “My students accomplish their learning tasks, including assignments on time,” says Abebe, “because I warn them that late submission might result in a lower grade; so, they adhere to deadlines set.”

A close look at student and teacher responses reveals a clear divergence in interpretation. Students view timely completion and submission as evidence of genuine academic engagement. Teachers, however, are more skeptical, suggesting that adherence to deadlines is driven less by commitment than by concern about the consequences of non-compliance. In their view, most students complete and submit work on time primarily to avoid penalties.

Participation in group discussions and working with peers: Another subtheme emerging from the coded data was students’ participation in discussions and peer collaboration during group tasks, identified as a key pattern of behavioural engagement. However, students and teachers offer contrasting accounts of this form of participation.

As opposed to subthemes discussed earlier, students expressed mixed views regarding their involvement in academic tasks requiring group work. While some students describe their group work as engaging and academically rewarding, others report a negative experience. For example, Habtamu (Land administration) views group works are necessary and beneficial.

Reflecting on his experience, he noted, “I participate and work in group projects with all members despite resource constraints since most assignments and projects in the department [Land administration] require special tools [e.g., Total Station, an electronic/optical instrument that provides highly accurate 3D positioning data for surveying] to be provided by the department.” Likewise, Aschale (Psychology) and Bewketu (Sociology) described themselves as actively engaged in group assignments with their peers and spoke favourably about their collaborative experience.

In contrast, some other students portray participation in group discussions as uneven and, at times, inequitable. They describe situations in which one or two members, often high-achieving students or group leaders, shoulder most of the workload, while others have a free ride. In this sense, some participants underlie group work is demanding for a committed few members, while it is symbolic for the majority of the members, who merely add their names without significant participation and contribution. In the words of Meron (Sociology), “The trend for group assignment is well known: one or two students do the work. The remaining members are just asked to bring their ID so that their names can be included in the group’s list. “Likewise, Dagi ‘s (PSIR) experience and observation are even more telling:

I can tell you that most of the group projects are done by a few students, either the group leader or high-achieving students. One of the pressures of being a high scorer is that we carry a burden. For group assignments and everything else, I am the one who does the work for them without real teamwork from other members.

Most of the teachers interviewed observe a degree of reluctance among some students to actively participate in group discussion and work with their peers. Highlighting this pattern, Abebe (Land Administration), noted:

When students are given group assignments, it is common for two or three students to do the work. If we take a question from a group assignment and include it in an exam, only a few students answer that question correctly. That means that the majority of the students did not participate in it. If they had, they would be able to answer it.

Mekonen (Pharmacy) expressed a similar concern:

I cannot boldly say that students' participation in group work is entirely good because I occasionally observe problems. For example, recently I formed five groups to review an assignment on "Achieving Ethiopia's Food-Based Dietary Guidelines." Members of the students in one of the groups were very engaged when I randomly picked one of them to present their group work. But in four of the other groups, there was a disagreement over who should present what they had done.

All these empirical materials indicate that students' participation in group work is often uneven, with a tendency for the majority of the group members to defer responsibility to a few members. And, this trend may prevent students from developing their cooperation skills to work with others to achieve common goals.

Participation in asking and answering questions relating to learning tasks: Another pattern of student behavioural engagement observed from the coded data was participation in asking and answering questions relating to learning tasks. Students offer different accounts of experiences. Some of them feel they have better experiences. For example, Facil (PSIR) and Aschale (Psychology) both described that they would not hesitate to speak up if something was unclear. They take time to communicate with their teachers to find a way to make it clear to them. Dagi (PSIR) also described a related tendency: "When there are questions and a discussion of an idea, I think I raise it". Likewise, Bewketu (Sociology) noted, "During class time, although

my participation in answering questions is not very prominent as compared to that of others, I ask questions, raise various cases.” All these accounts indicate that students’ involvement in asking and responding to questions is good.

On the other hand, some other students and teachers reported that students hesitate to ask and answer questions for some reasons. As for the students, Meron (Sociology) noted a lack of habit: “I am not the kind of student who asks many questions. If there is something I do not understand, I will find out for myself.” Likewise, Helen (Pharmacy) described that involvement is limited to obedience: “I answer questions when teachers ask me, but my tendency to take initiative to ask or answer questions or challenge ideas is very low.”

In a similar vein, the responses of teachers are more telling. They described that most students have no interest in asking obscure questions or answering questions voluntarily, unless they are compelled to do so. Alemayehu (Psychology) emphasised this pattern, saying that most students only reflect when they are called upon to speak. “Students do not want to ask questions. Even if they will not answer when I ask them simple questions, unless I call their name,” says Alemayehu, “even after I call their names, whether they understand or not, they try to answer in a nervous tone.” This shows that students' participation is often dependent on the teachers compelling them to ask and answer questions, rather than students volunteering to participate. In addition, Mekonen (Pharmacy) observed a decrease in students’ active participation. He postulated, “Even if we take these pharmacy students as an example, when I give a course, the number of students who actively participate in asking and answering obscure questions is small. It is predictable who is active [he refers to top students], but the majority wait for the teacher to call their name.” These accounts tell that students keep quiet, either asking questions or answering them, unless teachers call them on by name to speak.

Students' emotional engagement: Belongingness vs. detachment: Students' emotional engagement was identified as another key indicator of student engagement in the academic and learning environments. Students and teachers described emotional engagement in terms of three patterns: Sense of belonging with the teachers, sense of belonging with peers, and sense of enjoyment and motivation with the learning process.

Sense of belonging with teachers: One of the observed patterns of emotional engagement that emerges from the data was students' sense of belonging with their teachers. Many students and teachers described this aspect of engagement as positive, indicating that students have good relations with teachers. For example, Bewketu (Sociology) expressed, "... Since I do not foresee any major difficulties in meeting my teachers, I consider my relationship with them to be positive and consistent." Similarly, this experience was described by Habtamu (Land administration): "I have no major problems with my teachers. I try to relax and interact with them as much as I can." All of these reports indicate that students interact with the teachers in a positive way, indicating good emotional attachment between students and teachers.

In line with this, the responses of teachers resemble what the students reported. Teachers underlined that their approach serves as a basis for such a positive interaction with students. Highlighting this point, Abebe (Land administration) reflected:

I think that [positive students-teachers interaction] depends on the behaviour of the teachers. Based on my experience, for example, I tell students that I want them to ask me anything they want, without any fear or doubt, and without crossing any boundaries [the teacher-student educational role]. When I give them this kind of welcome and show good deeds, they look up to me as an older brother, and they ask me any question and for support without fear of reprisal. That is what I experience with my students.

In the same vein, Tilahun (Sociology) agrees with Abebe's opinion. Giving students freedom and emotional safety enables them to develop good relationships with teachers. "I think their [students'] relationship with me is a very good one. Most of the time, I do not approach them strictly as a teacher outside the class," says Tilahun, "but rather as a friend in a very relaxed way, which gives them freedom to develop an emotional safety and sustain the relationship with me." These empirical reports show that treating and approaching students as friends can help them feel safer and develop a positive emotional connection to teachers. And, this kind of emotional bonding allows students to openly express their feelings about the academic support and instruction they want from teachers without any doubt. In this respect, Alemayeh's (Psychology) observations are even more informative:

... I receive written comments from students at the end of every semester. I ask them to write that down and put it on a piece of paper. And they say to me, "The explanations and examples you give in your lectures are very good, but you make tests too hard for us." This informs me that they are openly expressing their feelings about what they want to say about me and my teaching. That is why I feel that they are free from asking me anything they need from me, indicating they have a good emotional attachment to me.

These views suggest that teachers' approach and openness to students, both inside and outside the classroom, give students emotional freedom. Such an emotional bond makes students feel more relaxed when interacting with teachers and allows them to see teachers as approachable in learning interactions.

Sense of belongingness with peers: Another pattern that emerges from the coded data was a sense of belongingness with peers, identified as a key indicator of students' emotional engagement. However, two different but related experiences were observed from students in this

respect. On the one hand, most students feel that they have good relations with their peers, as they care, help, respect and talk to one another comfortably. A couple of responses from the students explain this sort of relation more articulately. For example, Habtamu (Land administration) explained, “Personally, I do not have any negative relationships with anyone. I love my classmates, and they care for me. I try to help them as much as I can, and they do the same to me.” Similarly, Facil (PSIR) noted:

Currently, I am the class representative. When I want to quit the representative role, they tell me, “You are beneficial to us in this area, so we want you to stay.” That is good to me and makes me feel like I am respected by my classmates.”

These ideas indicate that there is a positive feeling of belongingness among students, highlighting that students feel accepted, respected, and included by their classmates.

On the other hand, some other students, especially those with a relatively better academic performance, experience less sense of belonging to their classmates, as other students do not make meaningful contributions to group projects and assignments. This tendency leads some students who assume most of the responsibility for group work to develop anxiety and frustration in learning, and can lead to social isolation in the learning community. Emphasising her experience, in this regard, Dagi (PSIR) portrayed:

We, students, are working in groups to improve academic results through teamwork, but in practice, responsibility for carrying out group work often falls with one or two students. It seldom functions as a genuine collective effort. It is known that shared academic tasks require, for example, money [to purchase paper and related materials for group work] and knowledge sharing from everyone. However, some member students

cannot contribute money, time and effort; they are also unlikely to contribute any advice.

This imbalance creates tension and often leads to conflict among group members.

This suggests that although there is a good relationship between the students, as discussed above, which is one of the signs of good emotional involvement, there are sometimes factors, such as reluctance to contribute to group work projects, which lead to some conflict among the students. This can create some frustration and cause anxiety in those students who do most of the work in the group.

Feeling of enjoyment and motivation in the learning process: Another observed pattern of emotional engagement that emerges from the data was students' feeling of enjoyment and motivation in the learning process. However, divergence responses were observed from students and teachers. Most students, on the one hand, reported that they feel comfortable in their field of studies and express passion for the learning they attend. In the learning process, they feel motivated in their studies and see themselves as a future change agent, largely because they are admitted to their preferred field of study, which gives them a sense of personal interest in the learning that they are attending. Highlighting this idea, the following quotations from the students may be more informative:

Endalamaw (Psychology): I am happy with the field [Psychology] I am studying. When I first came here, I was a student of science. Later, I transferred to social science and joined this department. Since I entered voluntarily, I am happy.

Helen (Pharmacy): I was initially interested in medicine when I came here. But after I entered the pharmacy and understood the processes that drugs go through in our bodies, I grew to love the field of study. Being a pharmacist gives me a lot of professional pride.

Bewketu (Sociology): ... I joined the department [Sociology] as my first choice. I intend that this department is the right choice for me, and I believe that the right path is open to me to serve my community, which is my intention.

Habtamu (Land administration): I can honestly say I am happy with my studies because I chose this department [Land Administration] myself.

These empirical materials show that students are satisfied with their field of study. This could potentially mean that they are motivated and engage in the learning process in the field they are attending, which is often expected to increase their academic achievement.

Although students reported that they feel passionate about the learning process they attend, interviews with teachers revealed that this feeling is not present as expected. Teachers see the emotional investment and passion of students in the learning process as something that differs from student to student. Most teachers agree that many students do not fully engage and are not enthusiastic in the learning process. Responses from teachers highlight two factors: personal (department choice) and environmental (future job market and other influences), both of which affect students' motivation in the learning process. Tilahun (Sociology) noted:

Students choose their majors according to their previous grades [12th grade national exam and Freshman results], and we know who usually ends up in some disciplines, like social sciences [he refers to relatively lower-level students joining social science fields of study]. I feel that the quality of graduates has diminished from time to time, as most of them attend unmatched studies.

This account indicates that students' placement in a non-preferred department seems to correspond to reduced interest in learning, which may negatively affect their academic motivation and engagement. In addition to this empirical evidence, the same level of passion is

attributed to students who continue in their first choice of field of study. Some external factors affect them from being motivated to learn. For example, uncertainty about future job security plays a major role in impeding students' enthusiasm and motivation to learn. In this respect, Birhanu's (Medicine) observation tells what many of the teachers think about their students:

When students first join a university and enter their chosen department [he is talking about students in the Medicine department], they have high expectations of their learning and of the results it will produce in their future life. But I cannot say they will stay that way once they enter the department. Their learning passion is lower as compared to that of their ability. While I try to look at things from their point of view, national conditions [shortage of jobs for medical doctors] and social media influences [TikTokers and YouTubers] have a huge influence on their learning. Nowadays, everyone looks to their future destiny [to get a job immediately after graduation] even before they graduate. In the past years, we [his batch from 10 years ago] did not care about our destiny; the goal was just to get through and get out of there. The issue of getting a job after we graduate was not a concern. But nowadays, students are more concerned about their future than focusing on their current learning. Also, I noticed that some students want to become a TikToker to make money instead of waiting seven years or longer to finish their medical degree. Due to these and other reasons, I doubt that their initial enthusiasm for learning will remain.

The above-noted teachers' accounts show that although students express a sense of passion for their academic field, this passion is not always translated into visible enthusiasm and emotional investment in daily learning.

Students' cognitive engagement: Surface vs. deep learning: Cognitive engagement was also observed from the responses of both students and teachers as another key subtheme of student engagement. Both respondents described this form of engagement across three patterns: exploring related learning content outside the curriculum, applying learning to real-life situations, and thinking deeply and reflectively.

Exploring related learning content and materials outside of the curriculum: One of the observed patterns of students' cognitive engagement that emerges from the coded data was students' ability and habit to explore relevant learning content outside of the curriculum. However, considerable divergence was shown across students' self-reported experiences and teachers' observations.

Many students think that they actively explore relevant learning materials outside the course curricula they attend for different purposes. Some of them seek reference materials to better understand key concepts, as the courses in their field of study use different case studies. The experience of Bewket (Sociology) is indicative of this practice: "I read and use reference books because Sociology courses are often taught through case studies," says Bewketu, "This helps me understand those cases and concepts outlined in the curriculum." With fairly similar experiences, some other students seek out more information and read material related to their courses to better understand the learning content and experiences outlined in the courses they take, indicating they consider themselves eager to learn outside the course curriculum. Highlighting this, the experiences portrayed by Helen (Pharmacy) and Yonas (Medicine) seem convincing. They read textbooks and new medical guidelines to understand pharmacological treatments and medication procedures, suggesting that they have a desire to synthesise information and understand it thoroughly. They pronounce that reading what teachers give them

to get grades is not enough for them, because the medicine they dispense tomorrow will have an impact on human life. Such a trend encourages them to spend a lot of time and mental investment seeking additional knowledge.

In addition to this, the accounts of some other students indicate they study materials not primarily to understand in depth the course they attend, but mainly to obtain a pass mark for their examination. In this respect, Aschale (Psychology) and Habtamu (Land administration) affirmed that they receive and read further educational material from friends at other universities, in addition to what is taught in their class, for the reason that they specifically think that the “national exit exam” would come in a big package and from everywhere. Maybe if their teachers do not cover it up, reading friends’ material means they are sharing what other teachers thought their counterparts. This indicates that although students describe reading additional materials, their approach seems like “strategic,” focusing on passing the “exit exam” rather than on exploring different learning perspectives and mastering the discipline they pursue.

Although students report these ways, as described above, teachers’ observations contradict what most students reported to some extent. For example, according to his experience, Tilahun’s (Sociology) description represents what most teachers agree on:

I rarely see a strong desire among students to explore further information beyond the basic learning content outlined in the course curriculum. Many of them prefer short materials, PowerPoint slides, and are reluctant to engage with lengthy academic resources. They often choose short PowerPoint slides instead of even more detailed handouts.

This account suggests that students prefer shorter notes shared by the teachers over looking at in-depth handouts and related reference materials, reflecting students’ desire for less

cognitive burden. Students mainly depend on short notes from teachers and rarely take the initiative to seek out more supplementary academic materials for their learning. This indicates a serious threat to their depth of knowledge, which can result in superficial learning processes because brevity obscures the complexity of the topic, as the emphasis is on memorising the content of the short notes rather than going in deeper and synthesising it across diverse perspectives.

The difference between students' self-descriptions and teachers' observations about students' effort in exploring further learning content raises the possibility that students' independent study of learning material may not be as extensive in reality as they stated.

Applying learning to practice: Another pattern that emerges from the data that reflects students' cognitive engagement is applying learning to practice. Both students' and teachers' responses converge to recognise that students cannot apply what they learn in practical situations, raising concern about the disconnect between theoretical knowledge and real-world application. Interviews with students, for example, Facil (PSIR), Yonas (Medicine), and Habtamu (Land administration), show that although they consider themselves very good in understanding theoretical concepts, they consider themselves to be relatively weak in implementing what they learn. Furthermore, Endalamaw's (Psychology) experience illustrated this more:

When I try to apply the theory I learned in practice, it is difficult, to be honest. For example, I learned about how to conduct research, but to say that I can go out and do research with confidence is questionable. I feel like there is a gap that I have to improve.

These views depict that although students attempt to understand the theoretical concepts of the courses, they poorly apply such knowledge in their learning process. Teachers also

acknowledged this issue, but they additionally blame instructional factors like the scarcity of helpful learning resources and appropriate guidance from teachers exacerbates the problem. The idea expressed by Abebe (Land administration) represents most of the teachers' shared perspectives in this respect:

In my department [Land Administration], there are several practical courses such as GIS, Remote Sensing, Surveying, and Photogrammetry, which require students to be able to demonstrate. Given the capacity of students on the one hand [he means, the lack of students' demonstration capability], there is a shortage of materials at the university, such as the Total Station, which exacerbates the problem. Due to this shortcoming, we give the equipment to groups of six or more students. So, only a small number of students who are very close will work on it, but the majority will not. Even though we teachers do not evaluate each student individually, we evaluate them as a group, asking them how they did and so on. ... because we cannot reach and support all eight students at once with a single Total Station. From this perspective, it is sometimes difficult for students to demonstrate what they have learned.

This excerpt reinforces that students' inability to demonstrate learning into action is exacerbated due to not only their limitations but also the lack of supportive teaching materials and the related support of teachers.

Deep and reflective thinking: Another pattern that emerged from the coded data was students' deep and reflective thinking in the learning process, identified as a key indicator of cognitive engagement. Students and teachers offer a convergent account of this form of participation. They characterised students' attempts to reflect on their learning and think critically as progress, albeit unsatisfactory progress. Students portray that although they may occasionally

engage in the analysis of ideas and reflection on their learning experiences, these activities remain inconsistent and underdeveloped. Highlighting this, for example, Facil's (PSIR) experience is more telling:

... in addition to the department level, I try to reflect my thoughts to a certain extent in various situations and contexts. There are various stages, for example, seminars on debatable issues, panel discussions, and academic gatherings at the university level, where I can learn and express my ideas. Of course, I try to share my experiences and think about the issues in those gatherings; I also learn from others. But to say that I express my thoughts critically in a coordinated and integrated manner is still an understatement. I have a long way to go in that realm as well.

Teachers also provide similar perspectives. Birhanu (Medicine), for example, takes a more in-depth look at the practice from his observations. He noted, "There is a high degree of conformity and passive obedience, where students follow a predetermined, rigid, and traditional path to academic success without deviating, questioning, or exploring their own pathways." Similarly, Solomon (PSIR) agrees that students' critical thinking and reflection on learning issues are not satisfactory: "I think this [low level of students' critical thinking and reflection] may be related to students' focus on memorisation of learning content that they learn in class rather than comprehension and application of self-monitoring learning strategies." In addition to these excerpts, the empirical material from Mekonen (Pharmacy) is more revealing:

I am currently facing some challenges with students' critical and reflective thinking. Sometimes, I give students learning tasks [he refers to individual and group assignments] to assess them think critically about a certain problem and come up with their own solutions. Most of the time, I notice a lack of cognitive investment in this matter. For

example, they do their works copy from elsewhere or having others do it for them, without truly understanding it. When I ask them questions about their work, they try to provide something, but do not deeply understand and analyse it and give critical answers from their perspectives. This suggests that there is restraint in this respect.

All these accounts discussed above indicate that the level of students' deep and reflective thinking in the learning process is still not good enough. This shows the presence of a deficiency, indicating students' cognitive engagement mainly looks like surface level, where their intention to conform and passive obedience in learning becomes dominant.

Students' agentic engagement: Sense of ownership vs. the culture of silence: Agentic engagement is considered another key indicator of student engagement. Students and teachers described this form of student engagement in academic activities and institutional affairs across three patterns: Students' sense of ownership or taking responsibility for learning, giving feedback and alternative learning approaches to teachers, and involvement in the affairs of university administration as a source of feedback.

Sense of ownership and taking responsibility for one's own learning: One of the observed patterns of agentic engagement that emerges from the coded data was students' sense of ownership and taking responsibility for their own learning. However, responses are rather mixed among students, suggesting differing levels of autonomy and self-regulated learning capacity among students. On the one hand, most students describe themselves as the one who take full responsibility for their learning. The following quotes illustrate this more. Yonas (Medicine) noted, "I do not think I am at the level where I can work motivated and with passion. And in the process, I do not blame others because my own weakness should end with me." Similarly, the notion of Helen (Pharmacy) reflects related concerns. "I take full responsibility for

my academic results. When I get a poor grade, I believe it is due to my own lack of preparation, instead of blaming the teachers,” says Helen, “I do not say, 'I got an A or the teacher gave me a D.' The responsibility for my success or failure is mine.” These accounts indicate that students take complete responsibility for their learning progress and outcomes, regardless of the results they get, suggesting that they demonstrate a feeling of ownership in their academic activities and related outcomes. This sense of ownership has implications for learning motivation, skill acquisition and related academic outcomes.

As opposed to the accounts discussed earlier, some other students define themselves as taking partial responsibility and externalise their failures to other factors (e.g., teachers and institutional support). The following excerpt from an interview held with Endalamaw (Land administration) could be representative of the shared feelings among other students:

I take responsibility for my learning progress and academic outcomes, but external factors can also sometimes affect my learning performance and the expected results.

When teachers deliver courses effectively and provide proper guidance, I am motivated and strive to work hard and achieve better results. However, in some courses, limitations in teaching affect my learning experience. There are situations where I study mainly to pass the exam rather than to fully understand the material. I believe I could have achieved higher results with more effective teaching and support.

This account shows that students take partial responsibility for their learning and that they associate outcomes with the support and guidance of teachers. While students accept some responsibility, they still rely heavily on teacher guidance, suggesting that they lack full self-regulation and ownership of the learning process.

To further understand the variation in students' perceptions, interviews with teachers provide additional empirical materials that describe students' sense of ownership and taking responsibility. Most teachers reported related ideas that confirm students' limitations in taking responsibility and a low level of ownership for their learning progress and outcomes. For example, Abebe (Land administration) noted, "Most students cannot learn with passion. Many of them attend class for the reason that they cannot sit for the final exam unless they attend 85% of the class. That indicates a lack of responsibility." Additionally, Tilahun (Sociology) details what many teachers feel:

Often, when students succeed, they feel it is because of their hard work. They feel confident and say, "I got this result because I studied hard." On the contrary, when their results are low, I do not think they want to take any responsibility beyond making excuses. For example, if a student finds a course difficult and scores 5 out of 25, he/she will not say it is because they did not study; they will say the teacher made the exam too difficult. They do not look at their own role; it is always they say, like "the teacher did this to me" or "this happened to me." Another sign of a lack of taking responsibility is the high level of cheating attempts. Even in a spacious class with a manageable number of students, many students try to cheat. I think that is a dangerous sign of avoiding responsibility. So, I do not think they dare take responsibility for their learning outcomes.

Although most students claim to have a sense of responsibility and ownership, teacher accounts show that such responsibility is not regularly demonstrated in reality. Teachers' observations affirm that students still have limitations in taking full responsibility for their learning, particularly as they associate their failure with teachers.

Giving feedback and suggesting alternative learning approaches: Another pattern of students' agentic engagement emerging from the data was taking initiatives in giving feedback and suggesting alternative learning approaches to teachers, aiming at enhancing the instructional process. However, responses from students and teachers show two types of students' experiences with diverse reasons. Some students (e.g. they served as class representatives), on the one hand, think that they actively provide relevant feedback for teachers to improve instruction and the overall classroom environment. The following could be regarded as a representative opinion of these students' feelings:

Facil (PSIR): ... I give my suggestions to teachers freely on what the class wants and how to improve the way teachers deliver the course and teach us.

Endalamaw (Psychology): ... Even if I do not say it word-for-word, I say to the teachers, "This way of your teaching approach is good for us, and that way is not convenient." I at least give suggestions about what the class wants, so that the teachers and their instruction can be improved.

Yonas (Medicine): I give teachers feedback as much as I can. There are things I tell them that the classroom prefers to be done in a certain way.

These accounts reflect that students provide teachers with relevant feedback as representatives of the class. It means that students act as a bridge between the class and the teachers; they communicate classroom feedback about the teaching and learning process and suggest ways to improve instruction. A closer look at this sense suggests that they monitor how teaching and learning are going through collecting students' concerns and opinions, and providing constructive suggestions to help teachers improve teaching practices.

Contrary to the earlier reports, most students rarely give teachers feedback and criticise their teaching methods due to two reasons: fear of retaliation and cultural norms that emphasise respect for teachers, which discourage direct criticism. With respect to fear of retaliation, some students, for example, Meron noted, “I have neither in class nor privately told teachers, “This is the strong side of the teaching-learning process, and this is the weak side.” That is because of fear.” Likewise, Habtamu portrays a similar concern: “In the classroom, if teachers notice a weakness in their teaching, they ask us to suggest a different approach. However, I am personally afraid to speak up orally.” These perspectives indicate that students’ participation is limited as they may fear negative judgment from teachers due to their ideas or feel their ideas would not be taken seriously. If students refrain from commenting out of fear, this may be an indication of a classroom setting that discourages open communication between teachers and students. This reduces the contribution of students to classroom learning.

In addition, students are limited in providing comments to teachers on how to improve instruction, because they consider commenting on teachers on how to improve teaching as a sign of disrespect. Even if they see a problem with teachers’ teaching, they focus on adapting to the environment and developing their own learning pathways, rather than commenting. Helen's (Pharmacy) reflection could be noted as a shared feeling of many students:

To be honest, my involvement in this area [giving teachers feedback and suggesting alternative teaching approaches] is very limited. I am afraid of giving teachers feedback or saying, “I do not like this teaching approach.” Because I think that disagreeing with a teacher or giving too many suggestions is seen as disrespectful. I prefer to stay quiet.

This quote indicates that students hesitate to provide feedback to teachers because they value respect and adaptability over confrontation, stemming from their willingness to accept the

feelings of teachers even if they perceive that something is uncomfortable. This shows a pragmatic approach of students to navigating social dynamics and creating their own learning pathways.

Similarly, the observations of most teachers converge with those of students. Teachers reported that students rarely provide feedback and propose alternative learning approaches. They attribute the students' limited contribution to fear of consequences and their focus on simply completing the academic requirements. The following quotes can be taken as an indication of this feeling:

Tilahun (Sociology): To be honest, fear might be one reason for the lack of this [students providing feedback to teachers]. Many students are afraid to suggest changes. I think this is because different teachers may react differently [negative response].

Mekonen (Pharmacy): Students are afraid of teachers, especially when it comes to giving feedback to the teaching-learning process. They show fear in expressing their own interests. Even if they are uncomfortable with the process, they usually stay silent.

Alemayehu (Psychology): Most of the time, students never ask for a relevant change in academic matters. Of course, they may ask for a change in exam time because of a scheduling conflict, but beyond that, I have never heard feedback like, "Teacher, we do not like your teaching method," or "You should change that." I do not think it is just a lack of courage or fear, but maybe it is because their goal is simply finishing the process and leaving.

These views reflect the feeling that students are generally reluctant to provide feedback to teachers in improving pedagogical practices. As the teachers boldly noted above, three main ideas can be taken that show students' surface-level participation in this respect. That one point is

that students fear possible consequences or negative responses from teachers if they criticise teaching methods. Another important point is that students remain silent even when they are uncomfortable with the teaching-learning process. Some students may not see the value of asking for improvements because their main goal is simply to complete their studies and graduate, rather than actively shape the learning environment. All of these ideas reflect a weak culture of student voice and participation in improving teaching and learning.

Involvement in affairs of university administration as a source of feedback: Students' participation in the affairs of university governance as a source of feedback was identified as another key pattern of agentic engagement. Responses from both students and teachers revealed that this form of participation remains below the expected level. Their testimonies show that students have restricted participatory culture because of their limited institutional voice, and they do not see themselves as concerned stakeholders in some decision-making processes. Emphasising this, the voice pronounced by Endalamaw (Psychology) could be a representative of many of the students' shared feelings:

I would not describe my engagement in the university affairs as great. I am not the kind of person who speaks openly and asks for correction when I see something wrong at the university level. I do not think anything will change even if I speak about university-wide issues. Most of the time, we students feel that our concerns are not taken seriously, so many of us, including me, prefer to remain silent rather than raise problems we believe will not be corrected.

This quote reflects that students associate their limited participation in university-wide affairs due to they feel a sense of powerlessness and low institutional trust among themselves. It suggests that students avoid participation because they feel their voices have little influence on

institutional decisions or practices. Similarly, Habtamu (Land administration) explained, “My participation in institutional activities is poor. However, I am involved to some extent in providing feedback on some matters. For example, if there is a disturbance around the dormitory, I will speak to the proctor privately to take action.” This indicates that the student prefers to provide feedback privately, possibly because of fear or discomfort with expressing concerns publicly. Additionally, Helen’s (Pharmacy) reflection indicates another reason for the limited participation: “Most of my peers and I join clubs and institutional ad hoc committees, which are organised to support the university’s functions. However, we join those committees and clubs mainly to obtain certificates rather than to actively fulfil the expected responsibilities.” This suggests that participation is often motivated by personal benefit rather than genuine involvement in institutional improvement. All of these perspectives indicate that students’ participation in university administration and their role as a source of feedback remain limited and below the expected standard.

The students’ experiences discussed earlier are also supported by teachers' (e.g., Alemayehu (Psychology), Tilahun (Sociology) and Birhanu (Medicine)) opinions, which affirm that although they do not have much follow-up of student participation in institutional affairs, only a few students out of the class they teach or know are active members of the clubs they are coordinating. Students' lack of agency may erode their connection with institutions because when they do not participate outside of the classroom, their overall civic and institutional participation may suffer as a result of their passive engagement culture.

Students’ sociocultural engagement: Tolerance amidst diversity vs. connecting course content to personal and sociocultural experiences: Students’ sociocultural engagement is considered another key manifestation of student engagement in academic and institutional

activities. Students and teachers expressed this form of student participation across three main patterns: awareness and appreciation of diverse sociocultural backgrounds within the learning community, intercultural dialogue within the learning community, and connecting course content to personal and sociocultural experiences.

Awareness and appreciation of diverse cultural backgrounds and different

perspectives: One of the patterns of students' sociocultural engagement that emerges from the responses of students and teachers was awareness and appreciation of different cultural backgrounds and different perspectives in the learning community. Both respondents' reflections show a positive feeling towards this form of involvement, with students showing respect and openness to cultural differences within and outside the classroom. Some of the following excerpts are more telling about this form of engagement:

Facil (PSIR): My relationship with peers across diverse groups in the University is better. There are many student groups here. I believe that we are living together, tolerating and accepting each other. I think I am a part of that.

Endalamaw (Psychology): I feel I have a good relationship with my classmates at this university. Whatever culture they have, it has never affected me.

Helen (Pharmacy): There is mutual respect in our class; we do not do anything to disparage another student based on his/her culture or beliefs.

These views show students' willingness to respectfully interact across cultural differences within their learning community. And, most teachers support these testimonies, which indicates the existence of positive relationships among students, suggesting a stable sociocultural climate in the learning environment. This type of positive intercultural awareness can facilitate social

cohesion, group work and peer interaction among students, which is essential to promote a collaborative learning environment.

Intercultural dialogue within a learning community across cultural differences:

Another pattern of students' sociocultural engagement emerging from the data was intercultural dialogue within the learning community. To the opposite of the earlier discussed subtheme, both the students' and teachers' accounts show that this form of student participation is limited. While most students reported tolerance among themselves, further interviews highlight that this tolerance does not reflect a genuine intercultural dialogue across cultural differences within the learning community. Rather, it is simply a passive coexistence, as most of the students came from relatively the same geographical area. Highlighting this pattern, Meron's (Sociology) experience could reflect the feelings shared by most students: "While there is tolerance among us [students], my participation in different cultural and social discussions is very minimal because most of us came from the Amhara region."

Further interviews with teachers also show that opportunities for intercultural dialogue among students seem limited, as most university students today come from communities with relatively similar geographical and cultural backgrounds. The following teacher observations even tell more in this regard. For example, Tilahun (Sociology) noted, "There is little variety in the classroom nowadays in the University. Owing to political influence, it has become almost local, mostly consisting of students from the Amhara region." Similarly, Alemayehu (Psychology) expressed, "Nowadays, Universities do not look like universities; they seem like high schools. We cannot find so many students with multicultural backgrounds. I think this makes it less likely that students cannot engage in a dialogue with different sociocultural points of view." These accounts show that while there is a good feeling of awareness and appreciation

of diverse backgrounds and different perspectives, as discussed in the earlier subtheme, a true intercultural discourse among students in the learning community is lower than expected due to the fact that most of them come from the same geographical and cultural backgrounds. This naturally limits opportunities to engage with a diverse intercultural environment.

Connecting course content to personal and sociocultural experiences: Students' initiative to link and relate the content of courses they take to their personal and sociocultural experiences was identified as another key indicator of sociocultural engagement. Both students and teachers acknowledged that the integration of course content and learning with personal experiences and sociocultural contexts is relatively low. Students affirm that, while they feel positive about cultural sensitivity and awareness of differences, there is little opportunity to actively link academic learning to broader sociocultural experiences and engage in meaningful intercultural exchanges in the learning environments. Helen's (Pharmacy) reflection, which of course, could represent the majority of others students' perspectives, highlights this restraint: "There is a mutual respect in our classroom; we do not criticise negatively the culture or belief of any other student," says Helen, "however, connecting learning content to our social and cultural experiences is not strong that much beyond academic matters." This excerpt shows students' weak effort to connect learning content to their personal and sociocultural contexts, indicating limited participation in contextualization of learning and meaningful knowledge construction.

Further interviews with teachers uphold that this low-level participation is linked to students limited cognitive abilities. Most teachers believe that students struggle to contextualise learning and knowledge construction from the environment. In this respect, the following observations from teachers could be considered as more informative:

Tilahun (Sociology): When I give students assignments, I often ask them to describe what the concept looks like in their own area. For example, if the topic is about marriage or the kind of marriage, I ask them to write about what it looks like in the context of their community. I think they attempt to describe. But the problem is a capacity issue; they may simply have access to global information on the Internet about marriage and bring it to class instead of relating and reflecting on it with respect to their local contexts and sociocultural experiences.

Alemayehu (Psychology): I do not claim that students' efforts to connect the learning content of their studies with their personal and sociocultural backgrounds are completely absent, but it exists at a limited level and need to be improved. For example, I frequently invite students to share examples of their own cultural backgrounds during class discussions to support the topic of the discussion. However, this rarely happens to the extent that is expected, so I cannot describe it as satisfactory; rather, it remains low. I believe that one of the main reasons for this is students' low cognitive ability, which limits their willingness and capacity to deeply engage with others' perspectives and experiences.

These empirical materials suggest that the difficulty students have in linking learning content to their personal experiences and sociocultural contexts seems to arise from their restricted cognitive and reflective abilities. This may suggest that students have limited opportunities to connect their learning with their social and cultural contexts, which could otherwise enhance the relevance, meaning, and depth of the learning process.

4.3.2. *Transformational teacher leadership behaviours and implications for student engagement and trust in teachers*

Teachers demonstrating transformational leadership behaviours were considered as one of the key elements of teachers' full-range leadership behaviours. Considering a teacher who teaches course/s that students are currently taking, both students and teachers described the status of transformational teacher leadership behaviours and their implications for student engagement and trust in teachers across the four subthemes: Ethical and respectful conduct (idealised influence), inspirational motivation and future-oriented support, intellectual stimulation and openness, and individualised learning support. Given below are detailed reports of these subthemes and several patterns that emerged from the responses from the two groups of respondents.

Ethical and respectful conduct (idealised influence): One of the subthemes of teachers' transformational leadership behaviours that emerged from the coded data was ethical and respectful conduct or idealised influence. Students and teachers described this form of teachers' behaviours and its implications for students' learning across four patterns: respectful interaction that earns students' trust, being open and transparent with students, understanding and listening to students' situations, and demonstrating ethical conduct that maintains students' emotional safety.

Ethical and respectful interaction: Teachers' ethical and respectful interaction that earns students' trust emerges from the coded data as one of the key indicators of teachers' idealised influence. Respondents expressed this kind of teacher behaviour in three ways: professional disciplines, showing regard for students through the duty of instruction, and relational practices that convey moral integrity and respect.

Some students consider teachers' professional disciplines, for example, punctuality, as a sign of teachers' respectful interaction with them. In this respect, the following couple of quotes may give a better idea of the students' opinion. For example, Aschale (Psychology) expressed, "The teacher is very punctual. He does not let time pass; ... Not just me, but the students in the class have confidence in him in this respect." Likewise, Habtamu (Land administration) reported, "One thing I take from his [the teacher's] behaviours as a role model is his punctuality." These excerpts suggest that the punctuality of teachers and adherence to a consistent academic ethics demonstrate that students perceive that teachers value their time. This has a great influence on student behavioural engagement, especially the modelling of teachers' punctuality, which can encourage students to attend class regularly and complete academic work on time.

In addition, some other students describe ethical and respectful interaction in terms of teachers demonstrating regard for students through the duty of instruction. Teachers' efforts to make learning meaningful are seen as an act of professional respect that earns students' admiration for the intentions of teachers. In this respect, Dagi (PSIR) explained, "He [the teacher] explains the content of the lessons in a way that is familiar to us. This thing led us to give him a great deal of respect, trust in his support and love the course." With a similar notion, Meron (Sociology) depicted, "When the teacher tries hard to explain a lesson for us in a way that we understand, it makes me like his approach and efforts as a means of helping us. I also put in my own effort, too, and this one really encourages me." These perspectives indicate that when teachers dedicate themselves to fostering students' understanding of the learning content through making it close to them, students recognise such teachers' effort as a principled commitment rather than a mere routine duty. These actions can increase both students' perceived trust in the abilities of their teachers and their cognitive engagement, as students' trust and modelling of

these teacher actions leads them to invest their time and mental energy in understanding the learning content deeply that teachers teach.

Many students also described some relational practices that convey moral integrity and respect, as another indicator of teachers' ethical and respectful conduct that they would like to emulate. Facil's (PSIR) expression may make this assertion more vivid and represent the shared narratives of other students:

When we meet outside the classroom on different occasions, the teacher does not just give me greetings, but also asks me about what I am doing, gives advice on areas I need to improve, and encourages me to keep working hard. I believe this kind of approach and support outside formal class settings positively influences my motivation and learning.

Such interactions strengthen teacher-student relationships and contribute to better academic achievement.

Students recognise teachers' interactions that show genuine advice and support beyond the standard academic interaction, where teachers are accessible to help students both personally and academically. Such interaction can enhance, for example, students perceived care and sense of belongingness with teachers, each of which can be considered as an indication of students perceived trust in teachers' benevolence, and emotional engagement, respectively.

In addition to the student accounts discussed above, teachers' responses affirm that teachers demonstrate ethical and respectful behaviour that earns students respect and pride in having them as their teachers. According to the reports of Tilahun (Sociology) and Solomon (PSIR), they agree that when they approach and teach their students, they do it with great love and respect. They also note that they are very punctual in meeting their students and arriving on

time, because they want students who want to learn to be able to do so. Alemayehu's (Psychology) narrative may make this assertion more vivid:

I try to be a role model in the way that students interact with me in class and in my office.

I also feel there are some parts of me that I am not a role model for them. For example, I tend to get a little emotional. I can feel it myself. Now, I say students model these parts of my behaviours: in terms of dressing, honouring time, entering class prepared with the content, and delivering the prepared content appropriately. I think I am a model to my students in these areas. I even heard from them once that if there is something [a complex idea], they would say, "Let him give the explanation to it," or "Let him give the explanation when a question is asked."

Like what the students reported, the above excerpts show that teachers' interest in offering assistance to students extends beyond academics, emphasising the importance of punctuality and delivering clear explanations, whereas being on time and ready is regarded as a way to honour students' time. These behaviours are positioned as essential to their ethical commitment rather than considering them as optional professional practices. The alignment of views between teachers and students suggests that ethical and respectful interaction between teachers and students is consistently acknowledged, as these transformational teacher behaviours help students to exert extra effort in their learning participation.

Being open and transparent for students: Another pattern of teachers' ethical and respectful conduct that emerges from the coded data was being open and transparent to students. The reflections from students and teachers show a convergent view. The response of most students indicates that teachers are more open and approachable as they support the teaching-

learning process with their personal and professional backgrounds. A remark made by some students is indicative of that:

Dagi (PSIR): During the teaching-learning process, the teacher shares his experience openly with us. He does not hide his success; he is not stingy, and that makes us more inspired, it motivates us, and it makes me eager for the things I pursue.

Yonas (Medicine): The teacher, when he teaches us, does more than deliver theoretical explanations during class. He connects the lessons with real-life situations and insights from his own personal experience. He sometimes shares his personal struggles and experiences related to learning, which makes the lessons more realistic and relatable. This approach encourages persistence in our studies.

Bewketu (Sociology): ... beyond his [his teacher's] skill of explanation, the teacher tells us his experiences to help us understand in detail. And that way greatly helps the students and me to understand the courses that he taught.

According to these viewpoints, students find their teachers more approachable and genuine when they connect learning to their own professional experiences and personal struggles. Such teachers' openness can enhance students' belief in their teachers' integrity as an indication of sincerity and confidence. That is because when teachers set an example of integrity by sharing pertinent experiences, it also makes learning more relatable to students.

Comparable experiences were also spoken by teachers who support what the students feel perceived. For example, Tilahun (Sociology) noted, "I think I am very transparent with my students. I tell them everything. When I first start the class, I tell them my personality. I can be short-tempered but also very humorous, yet I want students to be disciplined." Similarly, Solomon (PSIR) expressed, "When I enter the classroom, more than anything else, I think I am a

role model, and I want them to follow my behaviours. I share my experiences with them in the classroom, and my relationship I have with them is very good.” These accounts highlight that teachers’ openness and transparency to students have clear implications for both student engagement and trust in teachers. When teachers openly share their relevant experiences with students, with clear expectations, it can reduce social distance, which encourages students to ask teachers any questions and express their opinions freely. As a result, students’ behavioural and cognitive engagement can be strengthened. Furthermore, being transparent also supports relational trust, as these teachers’ qualities signal to students to trust in teachers’ integrity.

Understanding and listening to students’ situations: Understanding and listening to students’ situations emerged from the data as one of the key patterns of ethical and respectful teacher behaviours. Participants consistently describe this behaviour positively. Interviews with students, for example, Bewketu (Sociology), portrayed, “When we explain the problems we have, saying for example, 'This problem happened to us, we did not submit the assignment,' and the teacher adjusts it out of great understanding. I can say that he is someone who can listen to students’ problems.” This statement illustrates that the teacher responds to missed assignments with empathy rather than punishment, which is an indication that the teacher allowed students flexibility. This reflects that the teacher's action can maintain students' perceived benevolence and relational sensitivity in the teacher. Such understanding likely strengthens students’ emotional security, which can support sustained engagement in learning tasks. Along the same line, Dagi (PSIR) explained her teacher’s behaviour as: “I think the teacher helped me to survive from a difficult situation I was in. I was depressed at one moment. His willingness to understand students greatly helped me recover from that situation.” This description of the teacher as someone who “helps me survive from a difficult situation” can be interpreted as the teacher’s

support that extends beyond academic instruction, reinforcing students' confidence in the teacher's benevolence and personal caring behaviours. Such support strengthens students' emotional engagement as teachers caring for students can enhance a sense of belongingness and be motivated to participate more in the classroom despite challenges.

Similar responses were observed from teachers' experiences about how they support students when they face challenges. Teachers try to understand every student's situation and the problems they face. Emphasising this, Abebe's (Land administration) opinion could be viewed as a shared experience of other teachers:

I want the students to approach me like a brother or sister and to enjoy the course that I teach them. More importantly, I try to understand their feelings as much as I can. For example, if you are a teacher who intimidates students with attendance, a female student might be on her period. And because of fear, she may come and sit in class while in pain. If I notice a different look on her face than usual, I ask her what the problem is and tell her that she can leave the class if she is in pain. I do not tell her "This is your pain," but rather tell her that she can leave the class and take a rest. We only know that [such kinds of students' problems or difficulties] if we have an attachment to the students. I know how they were yesterday and how they looked because I am close to them. I think I try to maintain a level of closeness that supports my students' learning and development.

This reflection shows a deliberate effort to understand students' personal and learning challenges, indicating that teachers should be ethical and honest by understanding and listening to students' situations. This enables students to model benevolence behaviours from their teachers, which likely strengthens students' emotional engagement.

Demonstrating ethical conduct that maintains students' emotional safety: Another pattern of teachers' ethical and respectful conduct that emerges from the coded data was teachers demonstrating ethical conduct that maintains students' emotional safety. Most students described teachers of this behaviour positively in several ways. Some students, for example, Bewketu (Sociology) and Habtamu (Land administration), described their teachers as disciplined and effective ones who build consistent relationships with students regardless of any differences or backgrounds. Endalamaw (Psychology) also expressed his teacher as polite in terms of treating students: "Based on what I see, he is a teacher who shows good behaviour to all students. I think he is an ethical and polite teacher who treats students respectfully and professionally without any favour to some student groups." Consistent with this, Yonas (Medicine) reflected: "The teacher is very knowledgeable. However, I think he has some limitations in transmitting that knowledge to students. But in terms of ethical character, he is a very good teacher who sees every student equally and gives emotional safety for us."

Collectively, the above students' views show that teachers' ethical character is very positive, as they make students feel emotionally safe in their teaching. This is a very important factor to enhance, particularly students' perceptions of confidence in their teachers' integrity and benevolence. Additionally, when students feel safe and respected by their teachers, they can be more likely to participate, persist during challenges, and engage both emotionally and behaviourally in learning.

Additionally, most teachers expressed related views, which reinforce the views of students. Teachers think that their intentional practice of treating students equally makes students feel emotionally safe. In this context, the actual words used by Solomon (PSIR), which could be seen as a common experience among teachers who held this view, are more eloquent:

More or less, I do what I have to do since I believe it benefits students and supports their learning. I see everyone [students] equally, and even outside the classroom, I treat and advise everyone the same. I do not discriminate; whether female or male, they are all equal to me. I always tell them, “You might come from Oromia, Tigray, Amhara and others—wherever you come from, you came here to learn, and in my view, you are all equal.” In my teaching and assessment, I notice that students feel that I never give favour to anyone. I think this is a good thing in terms of preventing division and separation among themselves.

This account underpins the idea that teachers intentionally demonstrate ethical conduct that maintains students’ emotional safety through treating all equally, irrespective of any differences. When students perceive equal treatment from their teachers, it enhances conditions for stronger emotional and sociocultural engagement among students because they may feel secure enough to participate and express themselves within the learning community.

Inspirational motivation and future-oriented support: Another subtheme that emerges from the data was inspirational motivation and future-oriented support, identified as a key manifestation of transformational teacher leadership behaviours. Students and teachers expressed this form of teachers’ behaviour across three patterns: Inspiring students through communicating future goals, inspiring students through emphasising their role as change agents, and inspiring students through sharing personal struggles and experiences.

Inspiring students through communicating future goals: One of the key patterns of teachers’ inspirational motivation and future-oriented support that emerges from the data was inspiring students through communicating future goals. Most students reported that teachers inspire them through talking enthusiastically about the goals they have to achieve and articulate

in the future. For example, Facil (PSIR) noted, “Our teacher inspires the class that we should develop ourselves more on how to formulate the policy, or engage in diplomacy, by seeing various countries' policies that have been issued besides academics.” Similarly, Helen (Pharmacy) reflected, “The teacher shows us what the future holds during those interactive sessions—asking what we will do after we graduate and how we should conduct ourselves as pharmacists when we deal with patients.” These perspectives indicate that teachers position students as future advocates in their field of study, expanding their sense of purpose beyond achieving immediate academic tasks. This kind of teachers’ future-oriented framing during interactive discussions invites students to actively imagine and articulate their futures. This, in turn, strengthens students’ cognitive and agentic engagement by linking their current learning activities to societal impact, while reinforcing students' perceived trust in the teachers’ ability as a visionary guide toward meaningful goals and future success.

Teachers also provide comparable experiences about how they inspire students with vision and dreaming big for the future. Teachers view this practice as a routine part of their teaching, reflecting that they consistently inspire students by presenting future goals that they will achieve. For example, Alemayehu (Psychology) remarks that he inspires students by highlighting their future professional roles and linking current learning experiences with concrete workplace competencies:

I want students to have a vision. I list all the courses they are taking. I tell them, “You are learning the basic things, the essential things a person needs to live. At the end of the day [after graduation], you will be trainers. When you become a trainer, first, you must be able to express your ideas in a well-organised manner. Second, your ability to articulate ideas should be improved. Third, your language ability must be improved, and you must

have public speaking skills. If you have these skills, you are in demand.” I do frequently like this and that.

Along the same line, some other teachers attempt to inspire students through linking academic choice and current efforts to future employability and professional competitiveness. Reflects on his experience, for example, Solomon (PSIR) explains this sort of inspiration more articulately:

I talk to them [students] starting from the department [PSIR] itself. I have often talked to them about how lucky they are to enter PSIR, as it currently has various jobs—especially that they can become diplomats, work on various state affairs, become actors in International Relations, and work in various governmental and non-governmental organisations, even up to becoming lecturers. I tell them all this. In the meantime, I tell them, “A lazy student should not enter here to get this.” And I strongly advise them, saying, “The market is very tough, it is a time of competition, the employment rate is high, but to get that job, you have to work hard from the beginning here, and if you do that, your future is bright, and you will enter various places.” I use these kinds of sayings to motivate students.

The above-discussed empirical materials indicate that teachers communicate with students’ high expectations tied to long-term success. They frame students as future professionals through linking current learning and academic effort to concrete and expected workplace competencies, future employability and professional competitiveness. This reflects teachers’ future-oriented and developmental support that connects students’ current classroom learning to long-term career expectations. This approach can strengthen students’ cognitive, behavioural and agentic engagement dimensions, as students recognise that sustained effort is

necessary to access future opportunities, see a clear purpose for competencies development and are encouraged to take ownership of their growth. It also reinforces students' perceived trust in the teachers' ability and integrity, as students may view teachers' support practice as knowledgeable about professional demands, committed to preparing them for future roles.

Inspiring students through emphasising their future role as change agents: Another observed pattern of teachers' inspirational motivation and future-oriented support was inspiring students through emphasising their future role as change agents. Students explained that teachers inspire them through discussing future professional responsibilities and their potential contributions to the community as change agents. The following excerpts illustrate this behaviour of teachers more convincingly:

Bewketu (Sociology): When the teacher enters class, he not only gives a lecture but also tells us about what role we will play in our community after we graduate. For example, he frequently reminds us, “You are the community change agents; you are the ones who will go down and change the community tomorrow.” This thing is a big morale boost for us. Sometimes, when the learning gets difficult or boring, the vision he tells us wakes us up again. It makes us think that a lot is expected from us. I think this raises the attention we give to the learning we attend.

Yonas (Medicine): The teacher often tells us that being a health professional is not only about treating patients but also about serving the community and saving lives. Those discussions motivate me, and I think that other students think about our future responsibility.

Helen (Pharmacy): The teachers, when he teaches us related content in class, tell us, “All of you, after you complete your studies, you will be pharmacy professionals who have a

responsibility not only to provide modern medications but also to understand and be aware of traditional medicine practices within the community.” Such kind of discussions help me see the broader role of my future profession and motivate me to become a responsible and socially aware pharmacy professional.

These accounts suggest that by framing students as future community changers, teachers can inspire students with social value and collective responsibility. This promotes students’ sociocultural engagement and builds their perceived confidence in the teacher’s benevolence, as students perceive that the teacher believes in their potential to serve their communities.

Teachers also emphasise that inspiring students through discussions about future aspirations and social responsibility is part of their teaching practice. Tilahun’s (Sociology) reflection could be taken as a representative of the shared feeling of many teachers:

From my experience, I try to motivate students by connecting lessons with real social issues and encouraging classroom discussions about community challenges. I also share practical examples from sociological points of view to help them understand how their knowledge can be applied to create positive social change in their community.

This quote highlights that encouraging students to see themselves as future professionals and change agents for their community helps strengthen students’ motivation, commitment, and sense of purpose in their studies. This indicates that encouraging students to see themselves as future contributors to their community can strengthen their sense of responsibility and commitment toward learning, enhancing students’ agentic engagement.

Inspiring students through sharing personal struggles and experiences: Another pattern that emerges from the data was that teachers inspire students by sharing personal struggles and learning experiences, identified as a key indicator of teachers’ inspirational motivation and

future-oriented support in the teaching-learning process. Both students and teachers expressed similar views about this form of teacher behaviour, which indicates that teachers encourage students to persist in learning during challenges and develop a sense of purpose toward their future goals. In this regard, the empirical material from Habtamu's (Land administration) opinion is more revealing:

The teacher often gave us advice on how we can bypass challenges. For example, when we feel exhausted or bored when he is teaching, he would pause the lesson for a break and share his own background—how he faced many struggles to get to where he is today. He encourages us by saying, "You have technology and teachers' support, so you must work hard." He would use examples from his colleagues, like someone who lost their life because of certain choices, and say, "If he were alive, he would be where I am today." Such kind of communication serves as a prediction of what could happen if we gave up. I think that was very good of him.

This observation illustrates that sharing personal struggles and learning experiences about oneself can help students model resilience and perseverance behaviours when they are faced with learning challenges. This deepens behavioural and emotional engagement dimensions and strengthens trust in both the teacher's benevolence and integrity, as students view the teacher as ethically grounded in sharing personal experiences that may give lessons learned for students.

Similarly, teachers reported that they try to inspire students through demonstrating future visions with expected challenges. Reflecting on his experiences, Tilahun (Sociology) communicates with students about the future world of work through telling his experiences to help them learn from and see the future despite challenges:

I share my experiences with students about how I reached this stage [becoming a university teacher]. No one in this world has it easy. I tell them, “When I was a student, I worked to support myself. I went to school and studied alone; no one helped me. On top of that, I studied and worked in a daycare during my four years at the university. I have passed through many challenges—studying while working.” But I show them that one can get ahead despite such kind of challenges; at least I have reached here without anybody's help. I am trying to instil the idea that if you believe in yourself, you can overcome any adversity. I share such kind of my personal experiences thoroughly, and I believe it motivates them to work and strive for their future.

This statement shows that when teachers share personal narratives about how they face challenges and mitigate them, it may encourage students to be more behaviourally and emotionally involved in learning. That is because they can relate to what the teachers have been through in the learning path that they are taking part in. Also, such teachers’ behaviours enable students to believe in the teachers’ openness, honesty and kindness since they see teachers as open to sharing personal experiences and showing interest in their current academic and long-term success.

Intellectual stimulation and openness: Another subtheme of teachers exhibiting transformational leadership behaviours that emerges from the responses of both students and teachers was teachers' intellectual stimulation of students. Both participants understood teachers’ behaviour of intellectual stimulation in terms of two main patterns: helping students understand ideas and solve problems from different dimensions, and stimulating deeper thinking.

Helping students understand ideas and solve problems from different dimensions: One of the patterns of teachers’ intellectual stimulation emerging in the coded data was helping

students understand ideas, solve learning problems and consider competing ideas from multiple perspectives. Most students' accounts show that teachers encourage students to approach learning content and problems from different perspectives. For example, a couple of students' experiences may be representative of the shared feelings among students:

Dagi (PSIR): I think the teacher helps us view learning activities from multiple angles.

Let me share one experience that illustrates this. One time, I asked the teacher for guidance on studying harassment experienced by female students at the university. He asked me, "For example, if you want to raise this issue, by whom would you investigate it?" I replied, "Both teachers and students." Then he asked, "Do you already know students who have experienced harassment?" I said, "Yes, I do." He then explained, "You should not frame the question in that way. If you directly say that teachers are harassing students, it may sound like an accusation and make them defensive when you interview them. Even if your intention is good, the discussion may shift away from the issue itself. Instead, you can approach it by saying, "There is this issue of harassment. What are your thoughts about it? In that way, you encourage them to share their perspectives more openly. Even when you are aware that the issue exists, you need to approach it humbly." Through such experiences, he helped us see issues from different perspectives and dynamics.

Habtamu (Land administration): The teacher plans lessons in a way that initiates students to solve problems based on their own abilities. For example, the course we are taking this semester with him [the teacher] involves some calculations. After he finished teaching the lesson, he gave us a formula or a problem on the slide and said, "Try to work this out." Then he walks around the room and checks on each student individually, on

how we are doing. If it is a group task, we may just let one member do it. But because he makes it individual and walks around, we try to stay active and attentive. I think that is a great approach of his to encourage us to see problems from our own perspectives.

These students' accounts show that teachers intentionally encourage students' active problem-solving abilities. For example, Dagi's experience illustrates that the teacher guides her how to question things properly, think critically about others' points of view, and think about what might happen next. Likewise, Habtamu's account shows that the teacher plans lessons such that students have to solve problems on their own. Such kinds of teachers' actions improve students' mental exercise (cognitive engagement) because it encourages students to look at situations from several points of view and improve reasoning. In terms of trust, this kind of coaching also builds students' confidence in the ability of teachers' guidance and encourages them to engage more openly in inquiry and problem-solving.

Along the same line, teachers' perspectives indicated that they try to encourage students to see problems and learning activities from different perspectives. However, they noted that their efforts in stimulating students to see problems from different dimensions do not produce the expected outcomes because of restraints on students' ability to see things critically and reflectively. The experiences of many teachers, for example, Alemayehu (Psychology), Abebe (Land administration), Birhanu (Medicine), and Solomon (PSIR), illustrate that the passivity of students reduces their efforts in supporting them to see learning problems from multiple perspectives. Alemayehu's observation could be more telling:

I cannot confidently say that I provide students with full support in this matter [stimulating students to see learning problems from different perspectives]. When there were active students, I would go as far as looking for many different books. Even some

students would read ahead and challenge me a lot in class. When you have such kind of students, you are happy, and you try to read and bring a different perspective and support them to do the same. But with the current students, if I tell them, “This room is painted yellow [the current colour is lead],” they will just leave it at that. They do not argue with me that it is not yellow. When that happens, it becomes difficult to introduce a learning problem and invite students to solve it with different perspectives. If they could at least understand one dimension of an issue, it would motivate me to provide more support.

This quote reinforces the perspective that reciprocal classroom dynamics shape teachers’ intellectual stimulation. In that, teachers put forth more effort and present different viewpoints when students ask questions, pose challenges, and read ahead. Perceived students’ passivity, however, lessens teachers’ desire to broaden the instructional and academic conversations aimed at encouraging students to bring diverse perspectives in the learning process, limiting students’ cognitive engagement. It can also negatively affect students’ confidence in teachers’ ability and benevolence. That is because, due to students’ passivity, teachers may be demotivated to challenge students to see learning activity from different angles, and this trend may lead students to perceive their teachers as those who lack commitment to support and care for them.

Stimulating deeper and reflective thinking: Another observed pattern of teachers’ intellectual stimulation and openness that emerges from the responses of students and teachers was stimulating students’ deeper and reflective learning. Students valued teachers’ effort in stimulating their deeper and reflective thinking. In support of this, Facil (PSIR) noted, “The teacher wants our effort to be improved. He advises us, especially to write new ideas, elaborate and evaluate existing cases, and if there is a theory, criticise that theory and generate our own ideas.” Similarly, Helen (Pharmacy) portrayed, “The teacher often gives us assignments to see

how we reviewed and understood them. He gave us an initial insight and then expected us to find additional references and reflect on them from our own perspectives.” These accounts indicate that teachers stimulate students through supporting their critical and reflective thinking while performing academic tasks, encouraging students’ cognitive engagement.

Additional interviews with teachers support students’ perspectives. Teachers try to stimulate students' views on ideas in learning activities deeply through questioning them and valuing diverse perspectives. However, students differ in their level of ability to question complex ideas. Teachers attempt to address such student limitations through different strategies. Emphasising his experiences, for example, Tilahun (Sociology) encourage students to see ideas by presenting unconventional and argumentative thoughts:

I encourage students to raise and challenge unique ideas, even if they are wrong. For example, when I teach them about obedience, conformity, and authoritarian power in society, I often mention Adolf Hitler as an example. I tell them that, “We know Hitler is a man hated by the world and called evil. However, in terms of persistence of purpose, we can take an example from Hitler. It was his purpose that was wrong, but his persistence was remarkable.” I always take them toward such kinds of debatable ideas. Sometimes they are shocked by these unconventional thoughts. I tell them that, “He believed in his cause; what he believed was wrong, but living for what you believe is correct. That is how that man’s humanity was limited. But I then bring up the idea that we must first carefully examine and adjust what we believe in.” Sometimes they are startled when I say Hitler was a remarkable person in that sense, but they understand the point once I explain it. I try to get them to think outside the box through my own efforts.

This statement shows that the teacher's efforts to stimulate students to look at difficult or controversial ideas are based on analytical evaluation. This puts more emphasis on students' reasoning over correctness, which increases cognitive engagement through enhancing students' mental investment in questioning unconventional ideas and promoting reflective thinking. Likewise, such teacher practices can enhance students' confidence in the teacher's ability, as students perceive the teacher as intellectually capable of guiding complex discussions.

Individualised learning support: Teachers' individualised consideration was also identified as another subtheme of transformational teacher leadership behaviours. The accounts of students and teachers showed that they understand this form of teachers' behaviour across two patterns: understanding each student's learning problems and giving emotional support, and paying attention to each student's learning needs.

Understand each student's learning problems and give emotional support: One of the patterns of teachers' individualised consideration that emerges from the coded data was teachers' intentions to understand each student's learning problems and give emotional support accordingly. The empirical material from students described teachers positively in this respect:

Facil (PSIR): If some students are absent from class, he [the teacher] asks us if there is anything that made them uncomfortable rather than take any legal or negative measures.

Bewketu (Psychology): In various situations, we encounter learning difficulties, the teacher treats us a lot like a brother rather than thinking in other ways, like taking some legal procedures. That is how I describe him.

Meron (Sociology): When we [classmate] faced challenges in the learning and even in the university environment, honestly, he [the teacher] is very open to showing us the way out and teaching us how to make ourselves safe in moving forward in a balanced way.

In addition to these students' accounts, interviews with teachers strengthen the students' opinions that teachers are regarded as good at treating students when they face learning difficulties. The following excerpts from teachers' experiences may be representative of the shared feelings among most teachers:

Tilahun (Sociology): I watch for students with psychological concerns. Despite not being a psychologist, when I notice something, I ask them, "What is wrong? Your face did not look like this before; you are not yourself." Students communicate freely. If I observe any problems with students, I attempt to help them as much as I can, either through advice or some material support.

Abebe (Land administration): When I see some struggles students carry beyond the classroom, I try to discuss with and support those students in ways that change their attention to continue learning. To share with you one experience, I had a student who had been there for three years and had no family support; she was working in a hotel during the summers to support her education. By chance, I went to have coffee with my friend, and she came to take our order. She was very startled when she saw me. At the time, I was also startled as I did not expect it. After learning about her situation, I tried to support her with my friends as much as I could, and she is now in her graduating class. Since then, she often seeks my advice whenever she faces challenges in life.

The above perspectives indicate that teachers are attentive to individual learning difficulties and provide emotional support to students to continue their learning. This strengthens both students' behavioural engagement, as students are more willing to persist in their learning participation despite challenges, and enhances emotional engagement through feelings of safety,

encouragement, and reduced anxiety. Such teachers' actions also build trust in teachers' benevolence, as students respect teachers' caring and understanding of their learning problems.

Paying attention to each student's learning needs: Another pattern of teachers' individualised learning support that emerges from the responses of students and teachers was paying attention to individual learning needs. To the opposite of the earlier discussed pattern, both students and teachers noted that teachers have observable limitations in paying attention to each student's learning needs. Many students feel that their teachers treat them mostly as groups. The following narratives about such a practice, told by students, are more revealing. Endalamaw (Psychology) expressed, "Most of the time, the teacher assumes and serves us as a group of learners." Helen (Pharmacy) also agrees. "We students have some personal learning needs that should be considered, but the teacher does not consider those," says Helen, "He focuses on the majority. He focuses on treating students as a group of learners as a whole." Likewise, Yonas (Medicine), portrayed, "The teacher considers us as a group of learners. I think he has some gaps in considering each student's learning pace."

In a similar perspective to that of students' accounts, teachers acknowledged their practical limitations, although they are aware of the importance of paying attention to each student's learning needs. They expressed that they cannot always provide the level of one-on-one attention students need. Rather, their behaviours lean more toward treating students as a group of learners. The following excerpts shed light on why teachers do that:

Solomon (PSIR): I am not good at this one [paying attention to each student's learning needs]. I do not like it because I believe that if a student expects excessive and stretched support, it can hinder each student's growth.

Alemayehu (Psychology): If you ask me how I view and consider students' individualised learning needs compared to what is expected, I feel it is low. The scenario where I treat them [students] as individual learners is not frequent. ... I think I am not good at individualistic matters. I do not try to give individual comments to every single student by calling them. I prefer to see them as a group.

Mekonen (Pharmacy): This is where I think I have a big limitation. Honestly, when delivering a course in class, they [students] have individual learning needs and abilities. There might be students with many problems or a lack of capacity. I understand that it is necessary to pay attention to each student and assess their learning needs. I try, but I often do not succeed because there is a rush to deliver the course and finish the session.

The above-discussed accounts of both students and teachers illustrate that teachers consider students as a group of learners rather than pay attention to what each student needs in the learning process. When a teacher does not consider differences among students, some of them struggle while others get bored. That is because if the lesson is too hard, some students who are relatively poor in their academics may not participate well in learning, feel frustrated and stop trying. If it is too easy, others who have relatively better academic achievement feel bored, which limits their motivation. In both cases, students can lose interest and stop paying attention to their learning when lessons do not match their level and learning style. Such practices have little contribution to enhancing students' behavioural and emotional engagement. In addition, students may feel that teachers do not want to understand or care about them when they struggle and receive no relevant support from their teachers, which may lead to lower students' confidence in the teacher's support toward their individual learning goals.

4.3.3. Transactional teacher leadership behaviours and implications for student engagement and trust in teachers

Transactional teacher leadership behaviour was considered another key element of teachers' full-range leadership behaviours. Considering a teacher who teach course/s that students are currently taking, both groups of respondents described the status of teachers demonstrating transactional leadership behaviours and their implications for student engagement and trust in teachers across two subthemes: recognition and reinforcement, and monitoring students' progress and taking corrective actions. Given below is report of these subthemes and several patterns that emerged from the responses from the two groups of respondents.

Recognition and reinforcement: Teachers giving recognition and reinforcement are identified as one of the subthemes of transactional leadership behaviours. The responses of students and teachers portrayed this form of transactional leadership into two patterns: Clarifying task requirements and rewarding outcomes, and clear assessment criteria and feedback systems.

Clarifying task requirements and rewarding desirable outcomes: One of the patterns of teachers' recognition and reinforcement that emerges from the coded data was clarifying task requirements and rewarding desirable outcomes. Regarding this, both students and teachers reported a convergent perspective.

Students recognise that teachers communicate with them and make clarification of task requirements in advance, and provide associated rewards for the observed outcomes. For example, Helen (Pharmacy) described, "When the teachers teach in class, frequently he says participation has marks. He communicates those things in advance. So, we want to participate because we want the marks." Likewise, Aschale (Psychology) noted, "There are times the

teacher says, ‘If you [students in class] submit the assignment on time, it has a bonus mark.’ This is a clear deal. I like this because I know what is expected of me and what I will get.”

These students’ responses suggest that teachers motivate students more and praise them when they see students being more active and participating in the class activities. This indicates that students see such kind of rewards, extra points, as good motivators. However, motivation-driven engagement seems to appear conditional as students increase effort to participate in the learning process and take initiatives for tasks when rewards are visible. This means that external affirmation may help to enhance students’ behavioural and agentic engagement; yet, its conditional aspect constrains prolonged intrinsic and holistic engagement. In addition to this, students’ perceptions of teachers using praise and reward-related motivation conditionally based on students’ performances may make it harder to build trust in teachers based on benevolence because of restraints in consistency. When teachers’ acknowledgement is only linked to student performance outcomes, students could view appreciation as conditional rather than relational, especially benevolence-based trust.

Teachers’ experiences also support what students reported. They clarified with students the task requirements and rewarded them for what they worked for. Emphasising his experience, Mekonen (Pharmacy) noted, “I give extra marks to students who submit assignments on time and to those who answer questions in class, especially when others are unwilling to participate. I use this type of recognition commonly to encourage student classroom participation.” Additionally, the response of Alemayehu (Psychology) represents what most of the teachers shared:

I briefly touched on rewarding earlier. To motivate students, I tell them that I will give an additional mark or bonus for doing something extra. For example, if it is a group presentation, I add one mark for a student from another group who is bold enough to ask

the other group or the student who is presenting an individual presentation. On the other hand, if a student tries to argue with me excessively to get a mark, I reduce the mark. I do it practically. Also, if they are short one mark, that would make a grade difference. After they see their final result, they come to my office and say, "I want to get that one mark." When such arguments arise, I reduce their mark. I communicate this very well.

The above-noted accounts of students and teachers suggest two related but to some extent contradictory ideas. On the one hand, teachers' providing clear expectations and explicit reward mechanisms fosters perceived predictability of teachers. In this sense, students may view teachers as applying outcome-rewarding approaches consistently, suggesting trust in teachers' integrity. On the other hand, students' participation is often driven by seeking additional marks rather than genuine curiosity about their learning. In this sense, engagement seems to be conditional; they do things to secure what the teachers promise to them, as their performance will have consequences. This makes students more likely to follow the communicated task requirements than to be intrinsically engaged in the learning process. That is because students indicated their participation was "by necessity" due to associated marks, suggesting that involvement was externally regulated rather than intrinsically motivated.

Clear assessment criteria and feedback system: Another pattern of teachers' recognition and reinforcement that emerges from the data was a clear assessment criteria and feedback system. However, both groups of respondents reported divergent ideas.

Students feel that teachers' assessment criteria and feedback systems cannot help them understand their experiences and learn from lessons. They associated this limitation with feedback systems that are often delayed and provide limited recommendations. Highlighting these, the following students' accounts indicate this shared conception:

Helen (Pharmacy): The teacher assesses our work, for example, individual or group assignments, based on the established criteria, but there is a limitation in providing the feedback results with necessary recommendations. He only shows us the results, the score. He does not often tell or recommend to us how to correct the shortcomings. I think those kinds of things [providing feedback with recommendations] are missing.

Aschale (Psychology): The teacher provides the results of continuous assessments only at the end of the semester. Even after we complete and submit assignments, the teacher points out our mistakes and gives us our results at the end, but by that time, we no longer have the opportunity to correct or improve our work. This is somewhat discouraging.

These empirical materials suggest that teachers are limited in providing students with timely feedback with necessary recommendations, which prevents students from learning from their lessons. This kind of transactional teacher behaviour gives little opportunity for students to reflect on comments, understand mistakes, and use feedback to improve their learning and performance, undermining cognitive engagement. Likewise, such teacher behaviour creates the impression that students view teachers as not caring about their learning, making it more difficult for students to trust their teachers' benevolence because they perceive them as not being committed to their learning improvement.

As opposed to the students' accounts discussed earlier, teachers partly support the notion of students. Teachers admitted that there might be limitations to providing timely feedback. However, they stressed that setting assessment standards and evaluating students' work consistently and fairly is an important part of their work. Solomon's description may be representative of the shared experiences among teachers:

I have to be honest here [Laughing]. Assessing correctly and giving relevant feedback for all students' learning activities, including individual assignments and group projects, is very difficult, particularly giving feedback on time for every assessment. However, what I do more is set assessment standards and communicate to students what to do, for example, an assignment, and how I evaluate their work within those criteria.

The above-discussed perspectives under this pattern highlight the disparity between the two groups of respondents. Students value a continuous and developmental feedback system more, whereas teachers place emphasis on standards-based fairness with student outcomes. Teachers' focus may not allow students to engage in deeper cognitive engagement because there is not enough formative interaction given to them to revisit their work and learn more from their lessons. But it can be considered that teachers' fairness in assessment may shape their perceived predictability, while limited feedback makes them less likely to believe in kindness.

Monitoring progress and taking corrective actions (management by exception):

Mentoring students' learning progress and taking corrective actions, which is considered management by exception, was identified as one of the key subthemes of transactional teacher leadership behaviours. Students and teachers described this in terms of two patterns: monitoring students' learning progress, and taking corrective actions to prevent inappropriate behaviours.

Monitoring students' learning progress: One of the patterns of management by exemption that emerged from the data is focusing on monitoring students' learning progress. However, the reflections of students and teachers showed divergent views. Most students think that they are not sure of teachers' support when they struggle with challenges in the learning process stemming from either internal (e.g., difficulty in understanding a topic, staying motivated, managing time) or external factors (e.g., accessing necessary resources and support).

Instead of communicating with students about the issues, teachers might show a different reaction, like overlooking the issues. The following students' voices are more vivid:

Bewketu (Sociology): There are times when I do not understand the case studies that the teacher teaches. I just wait and hope the teacher notices. But, most of the time, the teacher does not check on students personally unless we score poor results from the exam.

Aschale (Psychology): I was struggling with internet access to do an assignment. I have to do the assignment only by accessing the Internet, but I have no devices even a smartphone. I think the teacher never considers the challenges if I delay the submission.

Yonas (medicine): Sometimes we students lose motivation, but I do not think the teacher knows the motivation level of each of us when we [teachers and the students] interact in his course. He simply keeps moving forward with the lesson.

These views suggest that in situations where students do not give attention to the learning due to unforeseen issues, teachers overlook each student's learning and provide timely support.

The responses of teachers in this regard also indicate that they monitor students' learning by looking at their learning scores and stepping in when needed. This means that teachers view monitoring students' learning as performance supervision rather than continual mentoring, while students want help with their growth. In this respect, Alemayehu (Psychology) and Birhanu (Medicine) noted that they monitor students' learning through students' scores rather than through process-oriented monitoring, and intervene if the results show a problem. Together, students' and teachers' perspectives suggest two core tensions: teachers consider monitoring of students' learning as a reactive, output-driven supervision while students need proactive, growth-oriented engagement, and this misalignment systematically erodes both long-term student engagement and benevolence-based trust in the teacher-student relationship.

Corrective criticism: Another pattern of teachers' management by exemption behaviours that emerged from the coded data was teachers' corrective criticism (negative reinforcement) to deal with repeated students' inappropriate behaviours and rule violations. Students and teachers agree on the importance of giving constructive criticism and following the regulations strictly. However, students sometimes felt scared and uncomfortable, while teachers thought that taking corrective actions was an essential form of discipline. Students described that teachers' corrective practices reduce students' lateness and absenteeism from class, sometimes motivated by fear. The observation of Facil (PSIR) may capture the appreciation of other students: "There are students who are often late, absent from class, and who do not submit assignments on time. The teacher is not tolerant of such things. I think this is a good trait because it benefits us, not him." Likewise, most teachers reported the same and shared experience of taking corrective criticism for preventing students from showing inappropriate behaviours, and maintaining the academic culture alive. Solomon's (PSIR) quote can be an example:

I do not want to see something and let it go. I absolutely do not tolerate when I see a rule being broken, for example, coming to class late, exam or assignment cheating, and other wrong behaviours. I work to bring those students back to the rules they violated through advice, punishment, and referring them to the department office for further action.

From the above-discussed statements, it can be understood that teachers' corrective action is considered important for maintaining student behavioural compliance. However, it can have a negative impact on teacher-student relationships, as strict corrective reactions may make students feel scared instead of guided. This means that corrective criticism regulates behavioural obedience; however, it may reduce the emotional safety of students and may not help strengthen students' holistic engagement and may undermine perceptions of benevolence.

4.3.4. Passive/avoidant teacher leadership behaviours and implications for student engagement and trust in teachers

Passive/avoidant teacher leadership behaviour was also identified as another component of teachers' full-range leadership behaviours. Considering a teacher who teach course/s that students are currently taking, both students and teachers expressed how teachers demonstrate passive/avoidant leadership behaviours when teachers notice that students are struggling with or not participating in the learning process. Both groups of respondents described this form of teachers' full-range leadership and its implications for student engagement and trust as follows.

Some students described that teachers intervene when they notice that learning problems happen and become serious. For example, Aschale (Psychology) noted, "When we face some learning challenges, the teacher rarely intervenes proactively. I think he prefers to wait until difficulties become visible through poor performance before offering support." In addition to this account, Bewketu (Sociology) mentioned an instance when the teacher prefers to intervene later:

The teacher does not intervene when we are faced with challenges unless the situation truly demands it. For instance, when disagreements arise among us [students] during group work, he tends to withdraw from active involvement, even when his intervention could facilitate resolution. Rather than stepping in with a solution, he limits his role to a brief inquiry about why the conflict occurred before stepping back. His engagement in problem-solving is minimal. I think he appears to operate on the belief that students are capable of, and responsible for, resolving their own disputes. He, therefore, observes us from a distance without taking decisive action unless it escalates beyond what we can manage ourselves.

These statements illustrate that teachers delay or minimise interventions to help students, only engaging when necessary, which is the defining behaviour of teachers' passive management by exception. In such cases, teachers' avoidance of timely intervention (emotional or physical distance) not only decreases holistic student engagement but also lessens students' perceptions of trust in teachers' support towards their learning.

Some other students expressed that sometimes there is inconsistent teacher intervention when students are not involved in learning activities due to the reason that they partly leave things for students alone. For example, Meron (Sociology) noted, "Emmm.... I think there are times when the teacher deliberately avoids addressing some issues, leaving us to resolve our learning difficulties." Additionally, Helen (Pharmacy) portrayed, "I am not certain, but I think there are times when the teacher shows little concern when we are not interested in attending the class due to some reasons. He believes sometimes that students should solve things for themselves." These excerpts suggest that teachers let things for students to do by themselves, reflecting a tendency of laissez-faire behaviours, which abdicates leadership responsibility.

The response of teachers also showed that their passive/avoidant leadership behaviours are not typically manifest as sustained neglect, but rather as temporary emotional responses and conditional withdrawal influenced by contextual pressures and professional identity. The following quote, which Tilahun (Sociology) noted, can be taken as a representative of teachers' shared experiences:

There are situations where I feel that I do not intervene when I notice that students are not participating properly in my course and miss the scheduled class for no reason. Then, I went in thinking I would finish everything and leave the class in a few days because they made me so angry. I told myself that I would not care about their [students'] scores in the

course, but I cannot do that. I go back to the way I always have been, and I find that I forget about it after some time.

This narrative represents temporary emotional detachment, although this detachment is predominantly short-lived, indicating that teachers' passive/avoidant leadership tendencies may manifest but are profoundly defined by ingrained professional identity. This implies that teachers' passive/avoidant leadership behaviours are more about negotiating boundaries under pressure than full neglect. Hence, depending on how students perceive these teachers' behaviours, it may have an impact on both student engagement and trust in teachers.

4.3.5. Student trust in teachers and its implications for student engagement

Considering a teacher who teach course/s that students are currently taking, both students and teachers portrayed about student trust in teachers, a trusting relationship that exists between students and teachers in which students are willing and confident to rely on the teachers' intentions to help students achieve learning goals. Both groups of respondents described the status of student trust in teachers and its implications for student engagement across three subthemes: trust in teachers' ability, trust in teachers' benevolence, and trust in teachers' integrity. Given below is a detailed report of these subthemes that emerged from the responses from the two groups of respondents.

Student trust in teachers' ability: Students and teachers described that perceived ability plays a central role in shaping students' perceptions of confidence in their teachers. Most students consistently associate perceived trust in teachers' ability to: clearly explain concepts with real-world problems, and respond to students' questions with confidence.

Some students underline the importance of teachers explaining learning content by linking to local situations and real-world examples to convey complex ideas and abstract

theories. A remark made by Facil (PSIR), for example, is an indication that makes students feel confident in their teachers' ability to explain concepts by connecting the course materials to real-world situations:

I consider my teacher competent. He adapts the course to current situations and expresses ideas. He teaches us new and current things. He teaches things that are not included in the syllabus but should be included. For example, the module we are currently studying, called Foreign Policy, is an old one. The policy has changed a lot recently. He comes and teaches us by incorporating the current political changes, for example, the Nile water, the Sea access, according to the curriculum. He brings it based on what he taught well and on reality. I really like that. Such a thing greatly stimulates the students.

The above statement suggests that such kind of teachers' approach makes the subject matter they teach more relatable and engaging, deepening students' understanding (cognitive engagement) while sparking curiosity and enthusiasm for the course (emotional engagement).

Some other students also felt confident in the abilities of their teachers, seeing how teachers answer questions quickly with confidence and show that they know a lot without relying too much on notes. The following accounts illustrate what most of the students shared:

Meron (Sociology): Since the answers he [the teacher] gives to our questions are satisfactory, I do not doubt his competence. The teacher knows the subject he teaches very well. When he teaches in class, he explains it verbally without any material. This shows his self-confidence. As a result, we also have confidence in him.

Aschale (Psychology): Yes! I do not doubt in this regard. Our teacher is very competent in the course he teaches. He is not the type to just read a slide and leave. He does not get confused when answering questions; he has self-confidence. Since I, as a student, believe

‘This teacher has sufficient knowledge in the course he teaches me,’ I do not struggle to accept what he tells me and us in the class. I have high trust in his competence.

These empirical materials show that the confidence that students feel from their teachers seems to make them less doubtful. This shows that trust in teachers’ competence decreases students’ cognitive barriers and encourages observable participation and effort.

The responses of teachers also reinforce what students reported. Most teachers, for example, Solomon (PSIR) and Alemayehu (Psychology), think that preparing themselves in advance of each class, connecting learning with observable problems, and delivering content with confidence and credibility, earns students’ trust in their ability. Reflecting on his experience, Mekonen described, “I prepare learning materials well based on what the students want, and I deliver them accordingly. When I do this, I am confident that the student will feel like saying, ‘He is our teacher,’ or ‘We wish we could be such a teacher.’” These teachers’ perspectives are congruent with students’ reflections that indicate teachers’ confidence and preparedness in the teaching-learning process as evidence of consistent competence.

A closer look at the above-discussed ideas of this subtheme, perceived ability-based trust works mostly through behavioural, emotional, and cognitive pathways. When students think that their teachers are competent, sure of themselves, and well-prepared at teaching, they are more likely to take part in class activities (behavioural), be interested in learning (emotional), and invest their mental energy in academic activities (cognitive).

Student trust in teachers’ benevolence: The responses of students and teachers showed that students’ trust in teachers’ benevolence is primarily constructed through relational behaviours, and willingness to support students beyond formal academic responsibilities. Most of the student participants are of the opinion that express teachers’ benevolence in terms of

relational behaviours, such as greeting students outside the classroom, remembering and calling their names, and interacting with students in a friendly and respectful manner. A couple of students' own words are quite telling. For example, Meron (Sociology) noted, "When we meet with the teacher even outside of class, he talks to us, and he approaches us like a family member. I think it shows his goodwill towards us." Likewise, Habtamu (Land administration) express in the same tone: "I think the teacher is more interested in strengthening our relationship. He is very encouraging; he learns our names quickly, and greets us like friends when he meets us, even outside the campus in town." From these perspectives, it is understandable that students interpret such kinds of teachers' benevolent behaviours as a sign that teachers value students as individuals rather than merely as learners. This encourages students to develop a strong emotional bond with their teachers, fostering students' emotional engagement.

In addition, some students construct perceived trust in teachers' benevolence based on the dedication that teachers show to the success of students. The responses of some of the students interviewed show that students value the kindness of their teachers when they help them and respond to questions that are not even directly related to the course the teachers are teaching. For example, Yonas (Medicine) described, "The teacher is very kind. He helps students a lot. If we face a problem and ask him, I am sure that he does not hesitate to help us as much as he can." Also, Helen (Pharmacy) noted, "The teacher is nice. If we ask him for any support beyond his professional matters, I think he tries to help us kindly without any bother." These student accounts suggest that such kind of teachers' benevolent behaviours are perceived as compelling evidence of goodwill and generosity that teachers have towards their students. These experiences can foster students' emotional safety and encourage the students' confidence that their teachers

are sincere in supporting them. Such things also strengthen students' emotional engagement and make them more comfortable to express needs and seeking assistance from teachers.

In line with the students' perspectives discussed above, most teachers' reports also reinforce what the students highlighted. Teachers stressed that their readiness and willingness to support students beyond formal academic duties/requirements may enable students to see the actions of teachers as respectful, thereby strengthening relational-based benevolence.

Student trust in teachers' integrity: Students and teachers alike recognise that trust in a teacher's integrity is built through consistent demonstrations of fairness, equity, and equality among students. The responses of many students showed that highly trustworthy teachers are those who treat every student impartially and ensure that each student's performance is assessed in a just and transparent manner. Here are participants' opinions:

Aschale (Psychology): This is our teacher's main strength. The teacher is equal to all students; he does not favour one over the other. When he calculates our results, he puts them clearly and corrects them based on the criteria.

Yonas (Medicine): The teacher is very fair. We received the grade we earned. I have not seen any kind of unfairness from him.

Meron (Sociology): From what I have seen so far, I have not seen the teacher show favouritism in grading. He gives us what we earned. He does not discriminate based on anything else. He has an equal view of all students. If something changes the grade by 0.5 points, for example, he adds it for everyone. When he does anything, he is fair; he does not give to one and deny another.

The above students' accounts show that when students think that teachers grade and assess students based on clear rules instead of favouritism, they are more likely to see teachers'

intentions towards them as fair. This sense of justice seems to encourage students' behavioural engagement because they will be more willing to follow classroom rules and assessment criteria.

In addition to this, some other students reported that teachers who uphold equity and equality among varied student groups, regardless of their backgrounds, enhance perceived teachers' integrity. The excerpts below are perhaps more revealing:

Dagi (PSIR): The teacher does not differentiate students based on academic achievement. When he enters the class, he does not need to boldly talk about who the better student is. With him, it is unknown; he looks and treats everyone in the same manner.

Endalamaw (Psychology): The teacher sees all students equally, and if I describe him as being fair, not differentiate between students. I sense that he looks at all students equally, whether we come from different geographical and ethnic backgrounds. I think that is a good quality of his.

Habtamu (Land administration): The teacher is very transparent and treats everyone fairly, regardless of gender or religious differences.

These perspectives suggest that the lack of discrimination based on student groups such as academic aptitude, ethnicity, gender, or others is considered an important factor in making students confident in their teachers' integrity. Such a treatment of students may demonstrate greater emotional security for students, and they will be more willing to participate and share personal experiences within their learning communities, which can enhance their emotional, behavioural and sociocultural engagement dimensions.

The views of teachers were also very similar to how students perceived things in many ways. Teachers think that they act fairly and transparently in treating and supporting students.

Reflecting on his experience, Alemayehu's expression could be suggestive of the shared opinions of teacher participants:

In fact, I can speak with certainty regarding fairness. There is something called uncontrollable bias in psychology; I know that there might be some uncontrollable bias. If it is not unconscious bias, knowingly, I have not consciously biased anyone. I can say this with great certainty. I think I am very fair on any ground in any situation in treating students regardless of their differences in terms of academic level, gender, or ethnic backgrounds. I can say with certainty that they would speak up for me if you ask them about me in this quality. I think students are certain and can say, "Our teacher will certainly not favour me on this ground."

The statement highlights the teacher's strong commitment to fairness and equal treatment of students. The teacher insists that he never intentionally favours or discriminates against any student regardless of academic ability, gender, or ethnic background, and he feels confident that his students recognise and trust in his fairness. Such kind of fair treatment helps create an inclusive classroom environment where students from different academic, gender, and ethnic backgrounds feel respected and valued. This sense of trust and belonging can increase students' confidence, willingness to engage, and overall participation in learning activities.

CHAPTER FIVE: DISCUSSION AND IMPLICATIONS

This discussion section provides an overview of the integrated findings of both the quantitative results and qualitative findings about the influences of the specific teachers' full-range leadership behaviours, such as transformational, transactional, and passive/avoidant, on student engagement in public universities located in the regional state of Amhara, Ethiopia, with emphasis on explaining the mediating function of student trust in teachers in this relationship. Additionally, this section compares the present study findings with previous related empirical studies conducted in various higher education settings, alongside linking to theoretical frameworks on teachers' full-range leadership, student engagement and trust in teachers. More importantly, the current study findings' implications for practice and policy-level decisions in the Ethiopian higher education setting are discussed in detail with an emphasis on informing teachers to use effective leadership behaviours as well as to build a trustworthy relationship with students to improve the engagement of students in academic and institutional activities.

5.1. Patterns and Paradoxes of Student Engagement in Higher Education

The primary focus of the study was to examine students' perceived engagement and describe how they and their teachers describe it across behavioural, emotional, cognitive, agentic, and sociocultural dimensions. The quantitative findings, on the one hand, suggest that students feel they are moderately engaged in their learning activities. The qualitative findings, on the other hand, reveal clear patterns alongside important paradoxes that show student engagement is present, but it is uneven across dimensions. This indicates that student engagement is visible yet often superficial in some learning activities shaped by students' psychological and teachers' professional identity constraints. Given below is a detailed discussion on the patterns and paradoxes of student engagement across its dimensions.

The study findings revealed that students' behavioural engagement is characterised by visible participation in learning activities but limited autonomy. The quantitative findings showed that students perceived their behavioural engagement relatively better than that of other dimensions, suggesting visible participation in this aspect. The qualitative findings also indicated that students are behaviourally engaged in their learning through attendance, task completion, and participation in structured academic activities. However, most of these kinds of student participation are inconsistent and often depend on their teachers' prompting and adherence to deadlines. This indicates a paradox between students' observable behavioural engagement and restricted autonomy in learning activities.

A comparison of this finding of the study with that of the earlier ones, it converges with studies that showed students' behavioural engagement is the most observable but superficial aspect of engagement that reflects substantive compliance rather than meaningful involvement in learning activities (Bond & Bedenlier, 2019; Minaye et al., 2024; Wang et al., 2025). Furthermore, according to the SDT, this thought, alongside the current study finding, reflects that students' behavioural engagement is often externally regulated, where students engage in learning mostly due to pressure from either the teachers or the environment rather than their own intrinsic motivation-driven engagement (Ryan & Deci, 2017; Reeve, 2012). According to the present study findings, it is possible to say that behavioural engagement is present and visible, but it lacks autonomy and sustainability. In this case, Xue et al. (2025) suggest the need to consider psychological and pedagogical dimensions shaping students' behavioural engagement.

The other finding of the study reveals that students' emotional engagement is characterised by expressed satisfaction and affection with teachers, peers and to some extent in the learning environment. But also, show students' limited interest and motivation, particularly

in classroom learning. In a detailed way, the quantitative findings suggest that students think that they are satisfied and motivated in their learning, largely due to their emotional connection with teachers and peers, which makes them feel accepted, respected, supported, and valued as students in the learning community. The qualitative findings explained that while indicating students' limited motivation due to several factors, such as being placed in a field of study that was not their first choice, which appears to correspond with their diminished interest in learning. This reflects a paradox of internal affection satisfaction without visible, enthusiasm-driven engagement in their learning activities.

A comparison of this finding with that of previous study findings showed interrelated perspectives. For example, the study by Rasuli (2023) highlighted that students' positive belongingness with their teachers certainly facilitates their interest and motivation in learning, which contributes to the enhancement of the learning process. To the contrary of this, Pekrun and Linnenbrink-Garcia (2022) reported that students' general affections with their teachers and peers within the learning community do not necessarily translate into active emotional involvement that drives their motivation and enthusiasm in learning activities. These perspectives suggest that students' emotional engagement is highly context-sensitive. The current study finding is consistent with the thought that students' emotional engagement exists but remains latent rather than activated in all aspects. That means, although students have a sense of affection within the learning community, this feeling does not translate into visible interest and measurable motivation in learning activities. Theoretically, Control-Value Theory (Pekrun, 2006) explains this discrepancy: students value their positive affections with teachers and peers, but may experience limited control over learning process-related emotions, such as enjoyment, frustration, and boredom experienced at learning, leading to muted holistic emotional expression.

The study findings also reveal that students' cognitive engagement is defined as students' conceptual understanding of learning contents with limited deep and reflective thinking. Regarding this, the quantitative findings indicate that students rated themselves as cognitively engaged. The qualitative findings further explain the quantitative results in two ways. On the one hand, students feel confident in their theoretical and conceptual understanding of their learning. In the meantime, they struggle with applying the knowledge they received to real-world situations as well as engaging in deep and reflective thinking. This reflects the inconsistency between perceived understanding of learning content and actual depth, indicating that cognitive engagement is developing but still limited in some areas. This finding converges with previous studies, which show that students often overestimate their perceived conceptual understanding while lacking higher-order and reflective thinking skills (Kuhlmann et al., 2024; Xue et al., 2025). This kind of perspective, however, cannot be totally underestimated because there are some theoretical frameworks which highlight similar ideas. For example, the Interactive, Constructive, Active, and Passive (the ICAP) theoretical framework illustrates that "as students become more engaged with the learning materials, from passive to active to constructive to interactive, their learning will increase" (Chi & Wylie, 2014, p. 219). The current study findings, hence, correspond with the ICAP theoretical insight, indicating that students are primarily engaged at passive or active levels (e.g., perceived understanding of concepts) with limited opportunities for constructive and interactive engagement, which are essential for deep learning.

This study's findings regarding students' agentic engagement also reveal that students' voices were constrained by cultural and contextual factors. The quantitative findings indicate that students rated their perceived agentic engagement relatively lower than that of other dimensions. The qualitative findings also further support this and show that students rarely express their

opinions, provide feedback, and positively influence the learning process due to several factors. These include fear of retaliation, cultural norms that emphasise respect for teachers, and limited teacher encouragement. This reflects that students' agency is constrained by psychological and contextual factors. Compared with that of earlier empirical literature, the current study's findings are consistent with some previous studies, showing that hierarchical relationships and power distance between teachers and students limit student voice and their contributions to the learning process (Laiche, 2023; Masuku et al., 2024). Similarly, Reeve (2012) and Reeve and Jang (2022) emphasise that students require psychological safety and autonomy support, including from teachers, to meaningfully engage in contributing to the instruction process. From a theoretical perspective, agentic engagement theory further highlights that students' contributions are shaped by instructional environments (Klemenčič, 2023; Reeve & Jang, 2022). In this study, the lack of autonomy-supportive practices constrains further students' ability to act as active contributors to the instructional process and institutional decision-making as a source of feedback.

The last finding of the current study on student engagement dimensions concerns sociocultural engagement. The quantitative results show that students well perceived their sociocultural engagement. The qualitative findings also illustrate that students have good cultural awareness and appreciation of diverse perspectives within the learning community. However, their cognitive ability and the learning environment provide limited opportunities for them to actively connect learning content with personal and broader sociocultural experiences. From a sociocultural theoretical perspective, it is understood that learning is co-constructed and mediated through social interaction and cultural context (Nasir et al., 2026; Wheaton et al., 2024). The limited integration observed in the current study suggests that learning remains

decontextualised due to constraints related to students' ability as well as teachers and environmental support, reducing learning relevance and depth for students.

Overall, across all dimensions discussed above, a clear pattern emerges: student engagement is shaped by several conditions. As compared with global literature, the study findings converge with previous studies showing that: students' behavioural engagement is visible but often superficial (Bond & Bedenlier, 2019; Wang et al., 2025); emotional engagement is complex and relational context-dependent (Pekrun, 2006; Pekrun & Linnenbrink-Garcia, 2022); cognitive engagement is frequently limited to surface level learning activities (Kuhlmann et al., 2024; Xue et al., 2025); agentic engagement is sensitive to power relations between students and teachers (Laiche, 2023; Masuku et al., 2024); and sociocultural engagement is characterised by simply awareness of diverse sociocultural backgrounds and requires intentional integration with learning (Nasir et al., 2026; Wheaton et al., 2024).

At the same time, the study diverges in highlighting: stronger reliance on behavioural engagement is often externally regulated; limited learning enthusiasm and motivation on emotional engagement; greater impact of resource and support limitations on cognitive engagement; more pronounced cultural constraints on agency; and the homogeneousness of students' personal and sociocultural experience on sociocultural engagement. These findings reinforce the view that engagement is not merely an individual student's attribute but a contextually shaped phenomenon (Bond & Bedenlier, 2019; Kahu & Nelson, 2018; Picton & Kahu, 2022). Moreover, this study's findings show that student engagement in Ethiopian higher education is characterised by interrelated patterns and paradoxes, where observable participation coexists with limitations across all engagement dimensions that call for pedagogical and institutional adjustments to foster more meaningful and holistic student engagement.

5.2. Transformational Teacher Leadership Behaviours: A Driver for Improving Student Engagement and Trust in Teachers

Transformational teacher leadership behaviours, defined by teachers' actions such as ideally influencing, intellectually stimulating, inspirationally motivating, and individually considering students, are widely associated with increased teacher-student educational relationships, enhanced student engagement and improved related academic outcomes (DeDeyn, 2021; Jiang & Jia, 2018; Pachler et al., 2019). The present study's both quantitative and qualitative findings highlight the positive influence of teachers demonstrating transformational leadership behaviours on student engagement and trust in teachers. This signals the efficacy of these behaviours in creating a learning environment that is conducive to supporting students. This perspective is consistent with the FRLM (Bass & Riggio, 2006), which holds that by establishing a vision, providing intellectual stimulation, acting morally, and recognising each individual's needs, transformational leaders influence followers to put forth extra effort.

A comparison of the study findings with those of related studies on the relationship between teachers' transformational leadership and various student outcomes indicates mixed and sometimes contradictory results. On the one hand, several studies (e.g., Cruz & Kim, 2023; Erdel & Takkaç, 2020a; Harrison, 2011; Noland & Richards, 2014; Trigueros et al., 2020) reported a significant and positive association between transformational teacher leadership behaviours and student outcomes such as satisfaction, motivation, teachers' trustworthiness, and academic performance. On the other hand, some studies (e.g., Balwant, 2016; Kim et al., 2023) revealed that transformational teacher leadership did not significantly predict student outcomes like motivation, class engagement and academic performance.

Such inconsistency of findings in the empirical literature reviewed above, therefore, raises questions about the generalizability of previous findings across different educational contexts. In conformity with the findings of studies (e.g., Cruz & Kim, 2023; Erdel & Takkaç, 2020a; Harrison, 2011; Noland & Richards, 2014; Trigueros et al., 2020), the present study's quantitative findings support the position that students' perceptions of their teachers' use of transformational leadership behaviours have a practically important and positive influence on enhancing their engagement. Congruently, the qualitative findings illustrate that most of the transformational teacher leadership behaviours have vital implications in improving student engagement in academic and institutional activities. For example, teachers' idealised influence, characterised by respectful interaction that earns students' trust, being open and transparent with students, understanding and listening to students' situations, and demonstrating ethical conduct that maintains students' emotional safety, enables students to feel secure enough in the teachers' support to participate more in learning activities. Teachers' inspirational motivation and future-oriented support through demonstrating personal experiences, and communicating expected world of work competencies, help students invest their mental energy in linking current academic effort to long-term goals. Likewise, teachers showing their consideration for students during challenging times help students to continue their learning, as teachers' understanding and support of each student's learning problems can strengthen students' persistence in their learning participation despite challenges.

Taking the above-discussed empirical materials, this study's findings are consistent with other related studies in higher education, which reported that teachers utilising transformational leadership are linked to higher levels of students' self-esteem and activity participation (Kim et al., 2023; Sánchez-García et al., 2024) as well as deep involvement and academic drive (Balwant

et al., 2019; Cruz & Kim, 2023). This emphasises the benefits of integrating teachers' transformational behaviours during instructional practices to foster the engagement of students in the learning process (Bollampally, 2022; Pachler et al., 2019). Therefore, such perspectives may help the Ethiopian higher education institutions and even other comparable contexts to rethink how to support teachers in adopting transformational competences to improve student engagement. Additionally, the study findings add some empirical evidence to the educational leadership literature from the Ethiopian perspective, aiming to expand the understanding of the higher-level influence of teachers utilising transformational leadership on student engagement.

The study findings also depict that teachers demonstrating transformational leadership behaviours have a meaningful influence on students' perceptions of trust in their teachers' support. In this regard, the quantitative findings show that students' perception of trust in teachers' ability, benevolence, and integrity is strongly associated with and can be predicted by teachers' demonstration of transformational behaviours. Moreover, the qualitative findings explain that all kinds of teachers' transformational leadership behaviours likely strengthen students' confidence in their teachers' intention to support them in improving and sustaining their engagement in learning tasks. These perspectives relate to existing theoretical frameworks, such as Mayer et al.'s (1995) integrative trust model and Hiatt et al.'s (2023) ABI trust model, which conceive that trust acts as a psychological bridge to convert teachers' actions into students' academic efforts. This implies that teachers who demonstrate transformational behaviours are truly committed to the overall development of students and gain credibility.

Though limited, a couple of studies by Kim et al. (2023) and Pachler et al. (2019) show that students' perceptions of trust in teachers rose when teachers use transformational leadership behaviours in the classroom. Likewise, Lewicka and Bollampally (2022) highlighted that when

teachers exhibit transformational leadership behaviours like supporting students' vision and future decisions, inspiring them towards learning, and giving them more time or attention, students' perceptions of trust in teachers' support increase. These perspectives suggest that the current study's findings are consistent with earlier studies that support teachers' use of transformational behaviours, which are likely to have a positive influence on enhanced students' perceptions of trust in their teachers, leading them to benefit from teachers' support. Hence, the findings reported in the current study add some evidence to the pertinent literature from the context of Ethiopia's higher education to reinforce the arguments on how teachers' transformational leadership behaviours enhance student trust.

Moreover, the observed teachers' transformational leadership behaviours as a potential predictor of student engagement and trust in teachers within the current study context may have some important worth. It, for example, offers a chance for rethinking change within the Ethiopian higher education context, where conventional hierarchical and occasionally tyrannical approaches that give priority to authority, which lead to a low level of student engagement, still exist (Abay & Marishane, 2023; Bahru et al., 2024; Minaye et al., 2024; Tadese et al., 2022). Transformational behaviours can balance out the dominant top-down approaches by encouraging a more inclusive and participatory learning environment where teachers not only increase student trust in them to feel comfortable from their support but also cultivate an environment where learning is seen as a cooperative and empowering activity in which both teachers and students engage together (Balwant, 2016; Bolkan & Goodboy, 2009; DeDeyn, 2021). This may inform Ethiopian higher education institutions to rethink and recognise the importance of teachers adopting transformational competences to improve student learning progress and outcomes.

5.3. Transactional Teacher Leadership Behaviours: A Pragmatic but Limited Potential for Student Engagement and Trust in Teachers

The current study shows paradoxical findings regarding the influence of teachers' demonstrating transactional teacher leadership behaviours, which often involve reward-based systems for students for learning task accomplishment and, at times, punitive measures to reduce students' inappropriate behaviours, on student engagement and trust in teachers. Both the quantitative and qualitative findings reveal that teachers exhibiting transactional leadership behaviours have little influence on student engagement and trust in teachers.

Regarding the influence of transactional teacher behaviours on student engagement, the quantitative findings of the study indicate a non-significant relationship, suggesting that teachers' utilisation of transactional leadership behaviours likely lacks a practical influence in fostering student engagement. The qualitative findings also affirm that teachers' use of achievement-based reward approaches and taking corrective actions enable students to show superficial participation in learning activities while being rooted in exchange logic. For example, teachers clarifying task requirements and rewarding desirable outcomes lead students to participate in learning tasks often driven by getting what the teachers promise, as their participation has a reward. This trend suggests that the tiny importance of teachers' demonstrating transactional behaviours, because participation seems to be based on only receiving the rewards, not on learning. In addition to this, the findings show that teachers' practice of monitoring students' learning gives emphasis to organised supervision, while students need support to focus on process-oriented monitoring of their learning. Taking these findings, therefore, it is prevalent to conceive that teachers using transactional leadership behaviours lack practical importance to improve the engagement of students in their learning within the current study context.

A comparison of this finding contradicts those of previous empirical studies, which emphasise that teachers who consistently and fairly use transactional behaviours increase students' participation (e.g., DeDeyn, 2021; Erdel & Takkaç, 2020). A notable negligible influence observed in the current study may suggest that the predominant experience of teachers' transactional behaviours may be overly focused on contingent rewards, monitoring, and corrective actions without enough connection to deeper learning motivation. This could suggest that although the use of rewards and sanctions can offer clear behavioural guidelines (Bass & Riggio, 2006; Lindberg, 2022; Northouse, 2021), students may perceive teachers' excessive use of these transactional behaviours as authoritarian and controlling, which inhibits students' learning and creativity, and eventually results in diminished engagement (Zhang & Qi, 2024).

Perhaps, in this case, when teachers use contingent rewards as a transactional strategy to clarify task requirements and reinforce desired outcomes (DeDeyn, 2021; Lindberg, 2022), students may prioritise compliance over fostering genuine interest in learning. Similarly, when teachers use management-by-exception, which involves, for example, corrective criticism and negative reinforcement of students' inappropriate behaviours (Bogler, 2013; Jiang & Jia, 2018), students may see teachers' approach as frequent error detection and corrections as micromanagement that undermines their sense of autonomy (Ryan & Deci, 2020), even if this transactional approach minimises behavioural escalation. These trends may lead to superficial student compliance rather than deep engagement. Also, in a situation where students may already be subject to external demands (e.g. learning for fulfilling the requirements of obtaining a job), teachers' excessive transactional practice could make instrumentalism worse rather than encourage real intellectual curiosity. Based on these perspectives, therefore, this study's findings

highlight that while transactional strategies are effective in maintaining order, their use by teachers may lack the emotional resonance needed to generate sustained student engagement.

Regarding the influence of transactional teacher behaviours on student trust in teachers, the quantitative findings reveal a modest association. The qualitative findings provide evidence that the reported modest influence is likely to have stemmed from the core elements of transactional leadership behaviours: clarifying expectations, providing contingent rewards, or punishment. That means, when teachers often establish clear expectations about rewarding behaviours and consistently enforce regulations, students may regard these teachers' actions as consistent, fair and transparent because they can be predictable. Such trends may lead students to trust in their teachers' predictable behaviours. In support of this, some studies (e.g., Burke et al., 2007; Kim et al., 2023; Lewicka & Bollampally, 2022) showed that when students view teachers' transactional leadership behaviour as clear, consistent and fair, a trustworthy relationship between teacher and students is expected to flourish. However, the benefits of clarity may be outweighed by the negative emotional impact that rigorous transactional practices often produce. In line with this, a couple of empirical studies (e.g., Prickett, 2016; Zhang & Qi, 2024) reported that consistently and clearly communicating expectations with associated rewards and mild sanctions for misconduct can enhance perceived trustworthiness by clarifying behavioural expectations. But overly punitive measures significantly undermine trust by reducing students' perceptions of their teachers' benevolence and integrity.

Moreover, it is prevalent in several empirical studies (e.g., DeDeyn, 2021; Erdel & Takkaç, 2020a, 2020b) and theoretical literature (e.g., Bass & Riggio, 2006; Lindberg, 2022; Northouse, 2021) that transactional teacher behaviours are less effective than transformational ones in optimising student learning. However, the negligible and modest influences of

transactional teacher behaviours on student engagement and trust in teachers, respectively, reported in the current study, are less commonly described in the literature with such strength. Perhaps, this may be due to teachers' use of transactional behaviours lacking the relational depth required to support sustained students' investment in learning within this study context.

Even though the current study findings demonstrate the negligible influences of transactional teacher leadership behaviours, their importance for student engagement, trust in teachers, and related learning outcomes in higher education should not be completely disregarded. The existing empirical literature in this respect backs up the benefits of transactional teacher behaviours, particularly in the educational contexts where accountability, structure, and performance clarity are crucial for enhancing student outcomes such as learning satisfaction (Erdel & Takkaç, 2020a), class engagement and academic performance (Kim et al., 2023). This perspective is supported by social exchange theory (Cropanzano & Mitchell, 2005), which views the teacher–student relationship as a reciprocal interaction in which both of them seek to maximise rewards and observed outcomes. In that, teachers' implementation of transactional strategies like establishing clear expectations, offering contingent rewards, and upholding regular classroom routines during course offerings has been shown to improve students' short-term task fulfilment and academic results (Dedyn, 2021; Northouse, 2021).

Therefore, the present study findings should be interpreted cautiously. The limited influence seen in the current study may not be totally due to teachers' use of transactional behaviours that did not help students become more engaged and trusting, but rather because of other factors in the environment. For example, the rigid and instrumental nature of transactional actions may make it harder for students to get more involved (Northouse, 2021; Zhang & Qi, 2024). This is especially true in higher education, where most students choose to be independent

instead of having their behaviour managed by someone else. Hence, the complex and context-sensitive profile of teachers' transactional behaviours must be revitalised with a well-balanced framework that fosters student engagement and trust. For example, by striking a balance between structure and relational, motivational, and ethical aspects of teaching and leading practices, Ethiopian higher education can overcome the drawbacks of transactional leadership behaviours.

5.4. Passive/Avoidant Teacher Leadership Behaviours: Negligible Influence on Student Engagement and Trust in Teachers

The current study findings disclose a negligible influence of passive/avoidant teacher leadership behaviours—marked by passive management and laissez-faire approaches—on both student engagement and trust in teachers. While the quantitative findings reveal a non-significant, modest positive influence of passive/avoidant leadership behaviours on student engagement, it yields a negative link with student trust in teachers.

See specifically the link between passive/avoidant teacher leadership behaviours and student engagement; the quantitative findings suggest a negligible role of these leadership behaviours in supporting student engagement. In spite of this quantitative finding, the qualitative ones show that teachers demonstrating passive/avoidant behaviours seem to be situational reactions rather than stable dispositions that have a different impact on student learning. In this context, two contradictory but related passive/avoidant behaviours were reported. On the one hand, there are situations where teachers do not intervene when they notice that students are faced with learning problems. This kind of neglect could be a sign that students perceive teachers who do not have enough support for them. On the other hand, there is an inconsistent teachers' intervention due to the reason that they partly leave things for students alone for any reason. This

suggests that passive/avoidant teacher leadership behaviours are not always seen as a bad thing, but sometimes they may encourage students' autonomy and taking charge of their own learning.

A comparison of this finding with those of related studies on the relationship between passive/avoidant teacher leadership behaviours and various student learning outcomes indicates mixed results. On the one hand, several empirical studies (e.g., Balwant, 2016; Bogler et al., 2013; Jiang & Jia, 2018) highlighted that teachers exhibiting passive/avoidant behaviours show negative consequences on several student outcomes. This suggests that teachers who demonstrate passive/avoidant leadership behaviours do not encourage students to engage in learning activities that are meaningful to them. On the other hand, a couple of studies (e.g., Kamal & Kesuma, 2024; Yang et al., 2022) discussed that there are situations where passive/avoidant teacher behaviours can promote some students' initiatives like self-directed learning, which are critical conditions for temporal engagement. Additionally, in learning settings that are characterised by established routines of autonomy support and robust peer collaboration, for example, teachers' laissez-faire behaviours may not negatively affect student involvement and may even foster student initiative through autonomy support (Siacor et al., 2024; Yang et al., 2022). These highlight the unjust assertion that passive/avoidant teacher leadership behaviours hold no significance for students.

In comparing findings, the present study slightly aligns with those studies which highlight that sometimes passive/avoidant behaviours may be related to some student outcomes, depending on the contexts. Hence, the observed non-significant modest positive association may therefore be a reflection of some contextual factors rather than the full ineffectiveness of teachers' demonstrating passive/avoidant leadership behaviours in enhancing student engagement. For example, some compensatory factors that were not considered in the current

study, like students with high intrinsic motivation, strong peer support networks, and the presence of prior knowledge, may influence and sustain student engagement despite the teacher's passivity and conditional withdrawal. Hence, these study findings should be understood as counterintuitive but warrant further exploration by considering the critical importance of context. Like that of what Kamal and Kesuma (2024) emphasised, and while acknowledging the drawbacks of passive/avoidant leadership, the current study does not totally underestimate the availability of some rooms that indicate the possible benefits of teachers exhibiting passive/avoidant leadership behaviours for students in specific situations.

In addition, regarding the link between passive/avoidant teacher leadership behaviours and student trust in teachers, the quantitative findings reveal that passive/avoidant leadership behaviours negligibly influence student trust in teachers. Similarly, the qualitative findings reinforce the quantitative findings that teachers exhibiting passive/avoidant behaviours characterised by perceived absence, inconsistent intervention, and conditional withdrawal decrease students' perceptions of confidence in their teachers' support. With a belief to compare this finding with those of relevant empirical studies, the literature was examined, but it shows few findings on this aspect. Although limited, this study finding converges with Chhom et al.'s (2024) study, which reported that while teachers exhibiting passive/avoidant behaviours may provide students short-term flexibility, it eventually erodes student trust in them because of perceived teachers' lack of support in long-term academic success.

5.5. The Central Nexus Between Student Trust in Teachers and Student Engagement

The other key finding of the study shows that students perceived that trust in teachers influences their engagement, independent of the specific teachers' full-range leadership behaviours. The quantitative findings showed that students' perceptions of trust in their teachers'

ability, benevolence and integrity were strongly related to student engagement in academic and institutional activities. The qualitative findings also reinforce the quantitative results. It highlights that when students have a positive perception in their teachers' ability (e.g., linking course content and application to local situations through real-world examples), benevolence (e.g., teachers kindness in considering each student's circumstances including learning problems and supporting accordingly), and integrity (e.g., teachers honouring a strong sense of justice and congruence between their actions and words), they are more likely to be confident in the teachers' intentions and willingness towards their learning success.

Such intentions lead students to make extra efforts, be active and endure in the face of adversity in learning (Hiatt et al., 2023; Svare et al., 2020; Zhou, 2023). This means that students who are confident in teachers' support and intentions towards their learning goals may feel free to engage more in learning tasks. For example, perceived teachers' ability not only encourages observable participation and effort (behavioural engagement) but also stimulates students' understanding and mastery of learning content in their academic process (cognitive engagement). Perceived teachers' benevolent behaviours enable students to have a strong emotional bond with teachers (emotional engagement). Furthermore, perceived teachers' integrity, such as upholding equity and equality among varied student groups and backgrounds, strengthens students' willingness to participate and share their personal experiences within their learning communities, which can help to enhance emotional, behavioural and sociocultural engagement.

Comparison of these findings, shown in the current study, with those of previous studies yields consistent perspectives. The study by Pachler et al. (2019), for example, highlights the importance of an increased level of students' trust in teachers in predicting changes in their study engagement, creativity, and task performance. Additionally, Özer et al. (2018) and Şirin et al.

(2022) portrayed that student trust in teachers serves as an important factor in enhancing student class engagement. These perspectives altogether underscore that student trust in their teachers has a relational element that serves as not only a fundamental driver for optimising student engagement but also a potential predictor of several learning outcomes in higher education (Felten et al., 2023; Hiatt et al., 2023; Macfarlane, 2009; Platz, 2021). Hence, in the Ethiopian higher education—where disparities in teaching quality and student-teacher rapport persist (see Abay & Marishane, 2023; Minaye et al., 2024), it is possible to understand from the current study's evidence that building a trustworthy relationship between students and teachers can be a powerful lever for improving the engagement of students in learning activities.

5.6. Towards a Relational-Driven Teachers' Full-Range Leadership for Student

Engagement: Student Trust in Teachers as a Bridge

The other key findings of this study show that students' trust in teachers plays a pivotal mediating role in explaining the influences of effective teachers' full-range leadership behaviours, particularly the transformational behaviours and, to some extent, the transactional ones, on student engagement. The quantitative findings suggest that student trust in teachers plays a significant partial mediating role in explaining the influence of transformational teacher behaviours on student engagement. According to this partial mediation, it can be possible to comprehend that teachers who demonstrate transformational leadership behaviours not only directly improve student engagement but also indirectly do so through getting students' trust in teachers' support. The qualitative findings also provide additional evidence that helps to understand more of what the quantitative findings imply. It showed that, for example, when teachers make clear students about the importance of having a strong sense of duty (idealized influence), talk excitedly about the future that students envisioned (inspirational motivation),

suggest students with looking learning problems from different dimensions (intellectual stimulation), and considers each student has different learning needs, abilities, and aspirations (individualized consideration), students are more likely to perceive these teachers' behaviours as deliberate and credible efforts to support their learning success (Kim et al., 2023). These trends in turn increase students' confidence in their teachers' support, and this may stimulate willingness and effort to actively engage in academic and institutional activities (Burke et al., 2007; Hiatt et al., 2023). This indicates that, in addition to the direct influence, the mechanisms by which transformational teacher leadership enhances student engagement appear to operate through the cultivation of student trust in teachers.

Comparison of this finding with earlier studies, although scanty in terms of coverage in the empirical literature, the current study's findings correspond with those of Pachler et al.'s (2019) and Zuo et al.'s (2024) studies conducted on this topic in the higher education context. Those study findings highlight that teachers exhibiting transformational leadership behaviours promote several learning outcomes, such as student engagement, creativity, and task performance mediated by student trust in teachers and self-efficacy. This shows how the relational aspect of educational interaction between teachers and students—which are crucial elements of transformational behaviours—cultivates student trust development in teachers' academic support, which in turn optimises student engagement and associated student outcomes.

For the case of transactional one, the study's quantitative findings indicated a modest, partial, but inconsistent mediating role of student trust in teachers' play in transforming the influence of teachers' demonstrating transactional leadership behaviours on student engagement. This implies that although teachers exhibiting transactional behaviours are beneficial for student outcomes if practised consistently (Burke et al., 2007; Lewicka & Bollampally, 2022; Northouse,

2021), in the current study case, it may not work more through its instrumental channels, such as rewarding appropriate behaviours mediated by relational dynamics. For example, rewarding students' performance can encourage compliance but lacks the emotional resonance needed to develop trust as a mediator in this relationship (Zhao et al., 2020; Zhang & Qi, 2024). In relation to a similar pattern, the current study findings underline that student trust in teachers does not play any mediating role in explaining the influence of passive/avoidant teacher leadership on student engagement. This implies that teachers' use of passive/avoidant behaviours neither meaningfully fosters student engagement directly nor indirectly through cultivating trust.

The overall findings of this study on the influence of teachers' full-range leadership on student engagement mediated by student trust in teachers must be understood within the cultural and institutional context of the Ethiopian higher education system. In educational systems like Ethiopia, marked with top-down educational relationship dynamics between teachers and students, trust in authority figures plays an outsized role in shaping student behaviours. When teachers adopt transformational behaviours that align with students' expectations of the teachers' authority, the resulting students' perceptions of trust in teachers' support in terms of ability, benevolence and integrity act as a catalyst for increased engagement. Conversely, transactional and non-transactional approaches exacerbate feelings of disconnection or emotional detachment in contexts which traditionally relied on exchange-based teacher-student relationships.

Based on the study findings, therefore, the current study constructs a relational-driven teachers' full-range leadership ecosystem framework for the Ethiopian higher education by integrating the study's empirical findings with those of the relevant theories, such as FRLM (Bass & Riggio, 2006), the integrative-based ABI trust model (Hiatt et al., 2023; Mayer et al., 1995), and the integrative approach of viewing student engagement (Kahu, 2013). The relational-

driven teachers' leadership ecosystem framework enclosing that effective teachers' full-range leadership—as a dynamic combination of mostly transformational behaviours and to some extent transactional one—synergistically involve trust dynamics, can optimise student engagement. In this sense, for example, teachers' transformational behaviours (e.g., through coordinating course objectives with students' learning needs and potentials) can cultivate both intellectual and emotional ties between teachers and students. Likewise, teachers' transactional behaviours (e.g., establishing and maintaining clear exchanges for students' observed performance) contribute to students' positive perceptions of teachers' predictability and fairness. These, altogether, in turn, facilitate students' involvement in meaningful academic and institutional activities.

This can be facilitated through at least three key channels. First, perceived trust in teachers' support and intention can improve students' emotional safety, allowing them to express themselves freely and seek any help they need from their teachers without fear of being judged (Lewicka & Bollampally, 2022; Macfarlane, 2009; Zhou, 2023). Second, when students develop a trusting relationship with teachers, they become more confident in academic risk-taking behaviours by reducing the fear of failure (Collins, 2023; Thornberg et al., 2022). This may lead students to develop a greater commitment to perform challenging assignments and difficult learning tasks. Third, students' development of trust in teachers increases the perceived importance of learning when teachers competently align pedagogical objectives with students' interests using transformational approaches while maintaining clarity and communicating expectations through transactional procedures (Kim et al., 2023; Pachler et al., 2019; Svare et al., 2020). Together, these trust-based teachers' leadership behaviours nurture a relational ecosystem in which students view teachers as supportive mentors and credible guides, catalysing the growth of their engagement and its related benefits to their academic success.

CHAPTER SIX: CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS, AND FUTURE RESEARCH DIRECTIONS

6.1. Conclusion

The primary purpose of this study is to investigate the influences of teachers' full-range leadership on student engagement in public universities located in the regional state of Amhara, Ethiopia, alongside focusing on examining the mediating role of student trust in teachers. The specific focuses also centre on examining how teachers demonstrate the specific leadership behaviours: transformational, transactional and passive/avoidant related to the engagement of students in academic and institutional activities. It also considers how student trust in teachers' intentions to support them towards their learning success facilitate these relationships.

The key study findings reveal that transformational teacher leadership behaviours show a significant moderate positive influence on student engagement and a strong positive influence on student trust in teachers. This suggests that a meaningful and practical association with student engagement and trust in teachers, respectively, occurs when teachers demonstrate transformational leadership. To the contrary, teachers exhibiting transactional and passive/avoidant behaviours do have negligible influence on both conditions. Transactional teacher leadership behaviours show a non-significant influence with a very small negative influence on student engagement and a modest positive influence on student trust in teachers, suggesting their limitations in fostering students' motivation and rational aspects crucial for engagement in learning activities. This highlights that teachers' utilisation of transactional leadership behaviours has a negligible contribution to improving student engagement and developing student trust in teachers as compared to that of transformational leadership. Passive/avoidant teacher leadership behaviours, on the other hand, show a non-significant,

negligible positive influence on student engagement and a negative influence on student trust in teachers. This results in creating a fragile learning environment that is not conducive to sustained student engagement and student trust in teachers.

In addition, the study highlights student trust in teachers as both a critical outcome of the specific teachers' full-range leadership behaviours and a predictor variable for explaining student engagement. Perceived student trust in teachers shows a significantly large and positive influence on student engagement, reflecting a very strong relationship. It also plays a partial mediating role in facilitating the influences of transformational teacher leadership behaviours and a suppressor mediating role in transactional teacher leadership behaviours on student engagement. Nevertheless, no mediating roles do student trust in teachers play in explaining the influence of passive/avoidant teacher leadership behaviours on student engagement. This suggests that the presence of student trust in teachers as a mediator mainly enhances the effectiveness of transformational leadership behaviours in promoting student engagement. On the other hand, while transactional strategies can be effective in maintaining order and passive/avoidant behaviours give some autonomy support, their use by teachers may lack the emotional resonance needed to get students' trust and sustained student engagement.

These findings underscore the importance of nurturing trust-based student-teacher relationships as a pathway for translating effective teachers' full-range leadership behaviours, particularly the transformational and, to a lesser extent, the transactional ones, into meaningful student engagement. Therefore, the study suggests a relational-driven teachers' full-range leadership framework within the Ethiopian higher education, where teachers' use of transformational and balanced transactional leadership behaviours interacts with student trust in teachers to enhance student engagement. This has a profound implication for the Ethiopian

higher education ecosystem. This may inform higher education practitioners and policy-level decision makers to rethink how to systematically support teachers in adopting transformational competences to improve student learning experiences. That is because effective teaching to improve student engagement in Ethiopian higher education is not merely transactional-based content delivery but fundamentally should involve relational dynamics. Thus, it is important to reframe teachers' roles as a relational activity in which their transformational leadership, supported with balanced use of transactional behaviours and efforts to gain students' trust, interacts together to empower students rather than simply instructing them towards the achievement of learning goals.

6.2. Recommendations

Based on the major findings of the study, several recommendations are proposed to improve teachers' full-range leadership, strengthen student trust in teachers, and improve student engagement in higher education institutions. The recommendations primarily target university teachers and administrators, who play important roles in creating supportive teaching and learning environments. The specific recommendations are presented below.

6.2.1. *For higher education teachers*

Drawing on the findings of the study, the following actionable recommendations are forwarded to the Ethiopian higher education teachers, with the belief that they will promote a motivating learning environment that can boost student engagement and trust in their academic support. The suggestions are structured into three focusing areas.

First, the study findings underlie that teachers who demonstrate transformational leadership behaviours significantly influence student engagement and trust in teachers. This suggests that teachers' effective educational practice that aims to enhance student learning

outcomes in the Ethiopian higher education setting extends beyond subject-matter expertise to include the transformational leadership behaviours that teachers could bring to the learning process. To stimulating learning environment that sustains student engagement, higher education teachers should scale up and integrate the specific transformational leadership behaviours (e.g., ethical and respectful conduct, inspirational motivation and future-oriented support, and intellectual stimulation and openness) with their day-to-day instructional practices. Though the study findings indicate teachers slightly demonstrate individualised learning support (individualised consideration), especially in paying attention to each student's learning needs. Criticism often arises when teachers adopt a one-size-fits-all approach to student learning, viewing students as a group of learners rather than considering individual learning needs and struggles. To minimise such kinds of restraints, therefore, teachers should introduce early-semester diagnostic activities to better understand each student's academic readiness, learning preferences, and support needs. Such kind of evidence may help teachers identify which students need what support and provide targeted guidance throughout the course/s they teach accordingly.

Second, the findings showed that transactional teacher leadership behaviours had negligible influences on both student engagement and trust in teachers. Although teachers' transactional leadership behaviours can help maintain behavioural order and clarify expectations, the present study revealed that excessive reliance on these behaviours has limited value and negligibly influences student engagement and trust in teachers. This suggests that teachers relying too heavily on transactional approaches, such as focusing only on compliance, monitoring, and contingent rewards, can undermine engagement by making learning-related student efforts conditional. Also, teachers' strict corrective reactions to students' non-compliance make students feel scared instead of guided. Therefore, teachers should avoid excessive reliance

on such kinds of transactional behaviours. Instead, teachers' transactional behaviours should be used cautiously and only to clarify expectations and provide constructive feedback. In practice, teachers can, for example, use positive reinforcement such as verbal praise, recognition during class, or letters of recommendation for outstanding contributions. Likewise, instead of punishing students severely for missing a deadline, teachers could ask students to submit a brief reflection on how they plan to improve their time management. Such balanced measures can increase student responsibility, reduce conflicts, and promote a consistent academic effort, while maintaining trustworthy relationships between students and teachers within the class.

Third, the study findings showed that teachers' passive/avoidant leadership behaviours show negligible influence on both student engagement and trust in teachers. Thus, the study suggests teachers should avoid passive/avoidant leadership behaviours, such as delaying responses to students' learning concerns, avoiding delaying of feedback and important decisions important for student learning progress, and failing to address students' academic as well as personal difficulties promptly. Instead, reducing these behaviours, taking timely action and addressing students' academic needs promptly may help reduce the negligible effects of passive/avoidant leadership and may help prevent declines in student trust and engagement.

Fourth, the other contribution of the study is the identification of student trust in teachers as both a critical outcome of the specific teachers' full-range leadership behaviours and a predictor variable for explaining student engagement. This suggests that trust-building should not be seen as secondary to teaching effectiveness, but an integral part of it. Therefore, higher education teachers are encouraged to consider further building and sustaining students' perceptions of trust in their support as a strategic path to increase student engagement. This can be achieved by, for example, a teacher may set up an advisory and participatory forum composed

of the students he/she teaches. Such an advisory forum can provide information on what students think about the teachers' competence, kindness and integrity in relation to student learning. If teachers genuinely use such information, they may be able to be in a way that makes the students feel comfortable with them. This may facilitate long-term teacher-student partnerships, and by adopting such trust-building mechanisms, those teachers in higher education who operationalise them can see further gains in terms of maintaining student engagement.

6.2.2. *For higher education administrators*

In the Ethiopian higher education setting, educational administrators have a key role to play in creating conditions that allow effective teaching and learning to take place. The following four recommendations provide practical insights for higher education administrators in strengthening institutional capacity for effective relational teachers' leadership development to strengthen a trustworthy student-teacher relationship that can improve the engagement of students in their academic and institutional activities.

First, the study stresses that to increase the effectiveness of specific teachers' full-range leadership behaviours in optimising student engagement and trust in teachers, continuous professional development is vital. Hence, top-level higher education administrators should revitalise existing and upcoming teacher training and development programs in a way that equips teachers with advanced transformational and balanced transactional leadership competences and their importance as pedagogical resources in improving student engagement and trust in teachers. This can be done through either incorporating with existing teacher training and development programs, like the Higher Diploma in Teaching in Ethiopian Higher Education Program (traditionally known as HDP), or designing a special, designated leadership program. Such an

emphasis can help to empower teachers with effective leadership qualities to act as agents of change in promoting relational trust, student engagement, and associated long-term success.

Second, given its significant mediating function between transformational as well as, to some extent, transactional teacher leadership practices and student engagement, student trust in teachers can be seen as a strategic intervention that requires a deliberate investment by higher education administrators at the highest institutional level. The study, therefore, recommends that top-level higher education administrators institutionalise a relational teachers' full-range leadership framework within teacher development, evaluation, promotion, and tenure systems, recognising its potential to improve student learning and institutional effectiveness. This can be done through institutional policy-level decisions and reforms aimed at institutionalising the relational dynamics in teacher-student educational interaction. For example, incorporating relational metrics—such as student evaluation of trust in their teachers, mentorship quality assessment, and perceived teachers' investment in students—into tenure and promotion requirements can encourage teachers to prioritise relational work. Likewise, higher education may require, for example, proof of evidence from teachers of the comprehensive mentoring effects on students in their tenure track portfolios, indicating that teachers' relational skills are valued in the same way as teaching, research and community service accomplishments. This not only reinforces the value of relational pedagogy but also provides actionable feedback to teachers to strengthen their trustworthiness for students. Such regulatory mechanisms can facilitate a trust-driven student-teacher collaboration that strives to improve an institutional culture of student retention, engagement, and academic success.

Third, the study forwards advice for middle- (college deans) and lower- (department heads) level higher education leaders to empower teachers through sustainable mentorship and

peer collaboration initiatives. This is because establishing and promoting structured mentorship and peer collaboration among teachers is essential for reinforcing teachers' exhibiting transformational leadership behaviours and addressing the limited pedagogical importance of transactional and passive/avoidant teacher leadership behaviours. They should work to shift their traditional rhetorical commitment to observable action. For example, by focusing on teachers' full-range leadership practices and the outcomes observed, department heads (lower-level leaders) and college deans (middle-level leaders) can facilitate sharing of best practices through establishing peer-learning and observation programs, regular teaching circles, departmental workshops and related approaches. Additionally, peer mentoring programs could be applied in strengthening formal mentoring programs, for example, where experienced and exemplary teachers support novice teachers in developing transformational and balanced transaction leadership competencies through leadership reflection, trust-building strategies, and student engagement techniques. Such kind of efforts not only support the professional growth and development of individual teachers but also promote collective improvement across departments and teachers, which helps to improve student engagement.

Fourth, the study underlines the need for higher education administrators at all levels to strengthen practical monitoring and feedback mechanisms that recognise effective practices and enable timely corrective action for inappropriate behaviours. This is essential to assess the effectiveness of teachers' full-range leadership and inform ongoing improvement in fostering student engagement and trust. Therefore, higher education administrators starting from lower- to higher-level should capture both quantitative and qualitative data on teachers' effort in trust-building, engagement, and classroom dynamics by designing and implementing relevant assessment tools such as student evaluations, peer reviews, and leadership self-assessment

surveys. Such assessments should be embedded in a non-punitive, formative framework that favours reflection and adjustment rather than compliance. These approaches help teachers to align pedagogical and leadership approaches with institutional goals and students' needs.

6.3. Limitations of the Study and Future Research Directions

While this study provides a notable strength in understanding teachers' full-range leadership and the potential influence on student engagement and trust in teachers, it is important to acknowledge its limitations that warrant consideration in future research efforts.

Conceptual limitations: The current study theoretically framed the key study variables: teachers' full-range leadership, student trust in teachers and student engagement based on the FRLM, integrative trust model, and the integrative approach of viewing student engagement, respectively. The conceptual framework of the study is therefore based on the interaction of these variables with reference to their stated theoretical groundings. Such a theoretical and conceptual scope may result in neglecting other relevant variables, for example, perceived classroom climate, institutional support, student satisfaction, student motivation, and other related variables that may influence the study's findings in several ways. Hence, future research may conduct a comprehensive study on the current topic by developing a broader conceptual framework that considers additional potential mediating variables (e.g., student self-efficacy, motivation), moderating factors (e.g., classroom environment, institutional support), and any important variables that might elucidate the relationship between teachers' full-range leadership, student engagement and trust in teachers to gain a more comprehensive understanding.

Data collection period and nature of the study data: The current study data were collected at a specific point in time. Hence, the cross-sectional nature of data was taken into account to answer the study's basic research questions. However, it is noted that this plan

fundamentally limits the ability to examine potential changes and causal relationships among the study variables over time, for example, what the change and progress in student engagement look like from the time when they were in the first year, second year... and fourth year. Longitudinal research that collects data over a long period could provide more nuanced insights into the dynamic nature of these events and potentially increase causal inference. Therefore, future research projects that take a longitudinal approach may be necessary to complement the conclusions that were drawn by the current study. Such a study approach and design could clarify the causal mechanisms and developmental patterns of these relationships over time.

Self-reported data: The current study collected both quantitative and qualitative data from participants. Particularly, the quantitative data were gathered from the student sample group through sets of self-reported questionnaires. The qualitative data were also obtained from both selected students and teachers through semi-structured interviews. Although these methods offer advantages in terms of collecting data from a large sample in time and ease of administration (particularly, the quantitative one) and gaining in-depth insight from participants (the qualitative one), it is important to recognise that self-reported data can contain a variety of biases, including social desirability. In particular, social desirability bias may lead participants to provide answers to questions that are considered more socially acceptable. For example, students evaluated teachers' full-range leadership, which may be influenced by personal preferences, grades, or emotions. Hence, future research efforts should consider incorporating additional data gathering tools along with objective measures, such as direct classroom observations, academic performance metrics, and related triangulation of findings. Such approaches may help to collect data from diverse angles and give the opportunity to cross-check the collected data, which may also help to minimise the issue of social desirability in participants' responses.

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APPENDIX A: SUPPLEMENTARY RESULTS

Supplementary Table 1

Results of normality and distribution assessments

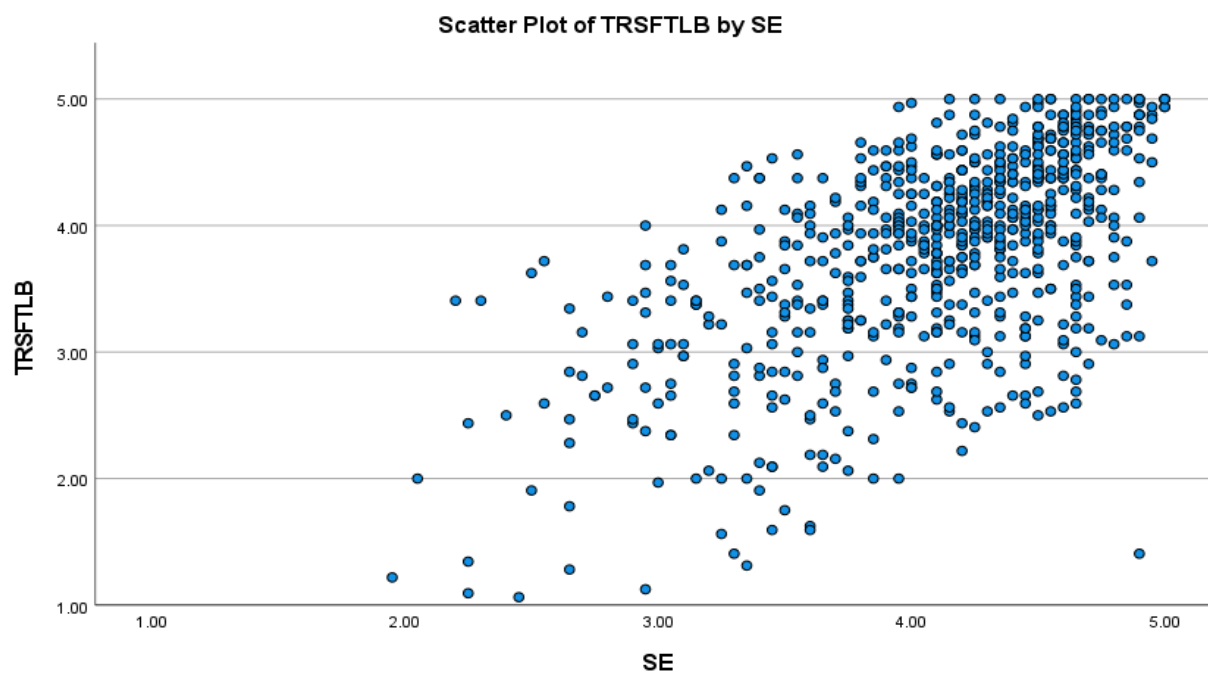
Items	Minimum	Maximum	Skewness	Critical Ration	Kurtosis	Critical Ratio
BE1	1.000	5.000	-0.937	-10.259	0.854	4.674
BE2	1.000	5.000	-1.481	-16.217	2.290	12.536
BE3	1.000	5.000	-1.367	-14.967	2.132	11.671
BE4	1.000	5.000	-1.277	-13.983	2.026	11.091
EE1	1.000	5.000	-1.435	-15.707	2.437	13.337
EE2	1.000	5.000	-1.234	-13.508	1.337	7.318
EE3	1.000	5.000	-1.118	-12.236	1.038	5.679
EE4	1.000	5.000	-1.230	-13.463	1.312	7.184
CE1	1.000	5.000	-0.866	-9.485	0.535	2.929
CE2	1.000	5.000	-0.889	-9.730	0.584	3.197
CE3	1.000	5.000	-0.963	-10.536	0.570	3.121
CE4	1.000	5.000	-1.028	-11.251	1.117	6.116
AE1	1.000	5.000	-1.037	-11.350	0.800	4.378
AE2	1.000	5.000	-1.198	-13.114	0.895	4.899
AE3	1.000	5.000	-0.704	-7.702	-0.160	-0.874
AE4	1.000	5.000	-0.784	-8.583	-0.251	-1.374
SCE1	1.000	5.000	-1.114	-12.197	0.947	5.182
SCE2	1.000	5.000	-1.027	-11.244	0.656	3.588
SCE3	1.000	5.000	-0.962	-10.533	0.705	3.859
SCE4	1.000	5.000	-1.188	-13.009	1.011	5.535
IFB1	1.000	5.000	-0.981	-10.743	0.188	1.031
IFB2	1.000	5.000	-1.049	-11.480	0.491	2.686
IFB3	1.000	5.000	-0.901	-9.859	0.180	0.987
IFB4	1.000	5.000	-1.028	-11.255	0.424	2.321
IFA1	1.000	5.000	-1.261	-13.805	0.749	4.099
IFA2	1.000	5.000	-0.918	-10.046	-0.160	-0.877
IFA3	1.000	5.000	-1.161	-12.705	0.524	2.866
IFA4	1.000	5.000	-1.130	-12.375	0.477	2.610
IM1	1.000	5.000	-0.854	-9.344	0.005	0.027
IM2	1.000	5.000	-0.995	-10.892	0.246	1.344
IM3	1.000	5.000	-0.805	-8.811	-0.194	-1.064
IM4	1.000	5.000	-0.894	-9.788	-0.127	-.693
IS1	1.000	5.000	-0.705	-7.719	-0.388	-2.126
IS2	1.000	5.000	-0.751	-8.224	-0.191	-1.047
IS3	1.000	5.000	-0.776	-8.495	-0.155	-.848
IS4	1.000	5.000	-0.774	-8.471	-0.318	-1.741
IC1	1.000	5.000	-0.597	-6.530	-0.645	-3.530
IC2	1.000	5.000	-0.777	-8.509	-0.348	-1.906

IC3	1.000	5.000	-0.873	-9.558	0.396	2.170
IC4	1.000	5.000	-0.809	-8.856	0.016	0.085
CR1	1.000	5.000	-0.454	-4.971	-0.750	-4.108
CR2	1.000	5.000	-0.303	-3.321	-1.059	-5.798
CR3	1.000	5.000	-0.470	-5.141	-0.734	-4.016
CR4	1.000	5.000	-0.329	-3.601	-0.912	-4.989
MEA1	1.000	5.000	-0.342	-3.745	-0.958	-5.246
MEA2	1.000	5.000	-0.406	-4.446	-0.939	-5.141
MEA3	1.000	5.000	-0.199	-2.174	-1.033	-5.656
MEA4	1.000	5.000	-0.249	-2.724	-1.044	-5.715
MEP1	1.000	5.000	0.627	6.867	-0.919	-5.033
MEP2	1.000	5.000	0.586	6.415	-0.999	-5.469
MEP3	1.000	5.000	0.462	5.053	-1.191	-6.521
MEP4	1.000	5.000	0.325	3.556	-0.934	-5.114
LF1	1.000	5.000	0.799	8.747	-0.680	-3.725
LF2	1.000	5.000	1.043	11.422	-0.281	-1.541
LF3	1.000	5.000	1.040	11.390	-0.346	-1.896
LF4	1.000	5.000	1.161	12.707	-0.097	-0.531
AB1	1.000	5.000	-1.255	-13.741	0.974	5.330
AB2	1.000	5.000	-1.080	-11.827	0.471	2.577
AB3	1.000	5.000	-1.103	-12.070	0.707	3.872
AB4	1.000	6.000	-1.187	-12.990	0.857	4.689
AB5	1.000	5.000	-1.072	-11.734	0.646	3.538
BN1	1.000	5.000	-1.198	-13.110	0.819	4.481
BN2	1.000	5.000	-0.923	-10.109	0.137	0.752
BN3	1.000	5.000	-1.119	-12.245	0.300	1.642
BN4	1.000	5.000	-1.068	-11.697	0.685	3.750
BN5	1.000	5.000	-0.898	-9.832	0.190	1.040
IN1	1.000	5.000	-1.307	-14.313	1.821	9.969
IN2	1.000	5.000	-1.113	-12.183	1.001	5.479
IN3	1.000	5.000	-1.175	-12.865	0.996	5.453
IN4	1.000	5.000	-1.407	-15.405	1.968	10.774
Multivariate					988.165	131.957

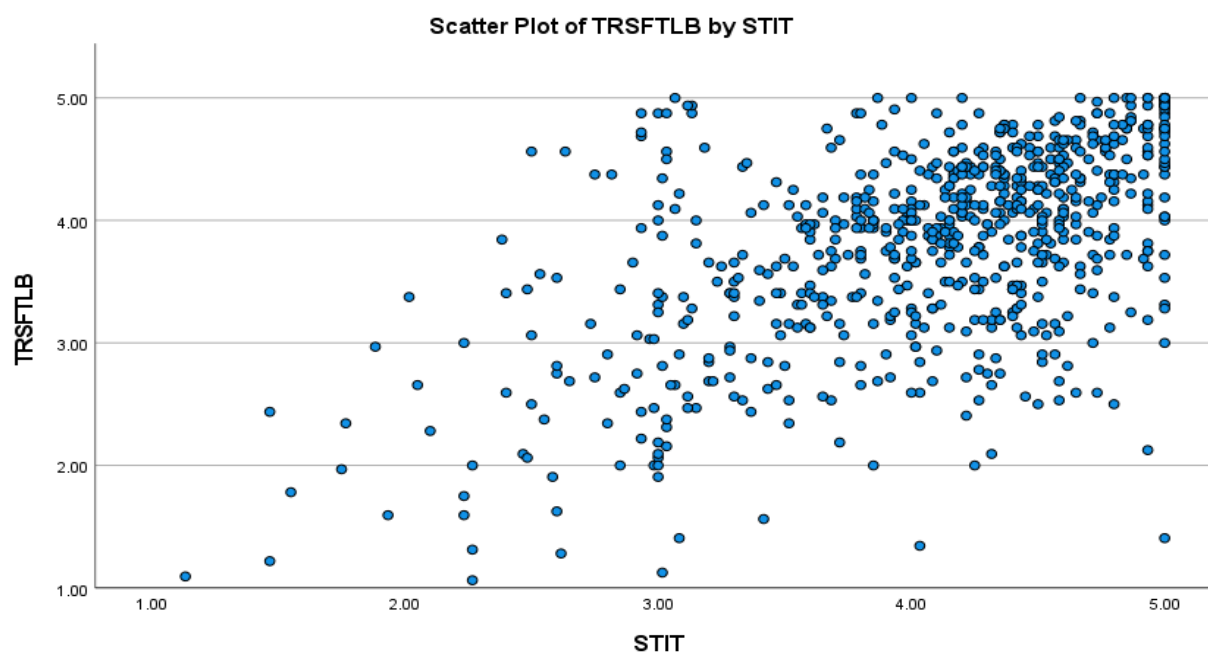
Note: IFB= Idealized influence behaviour; IFA = Idealized influence attributed; IM = Inspirational motivation; IS = Intellectual Stimulation; IC = Individualized consideration; CR= Contingent reward; MEA= Management exception active; MEP = Management exception passive; LF = laissez fair; AB = Ability; BN = Benevolence; IN = Integrity, BE = Behavioural engagement; EE = Emotional engagement; CE = Cognitive engagement; AE = Agentic engagement; SCE = Sociocultural engagement.

Supplementary figures: Linearity (scatter plot) and homoscedasticity (residual analysis)
checking

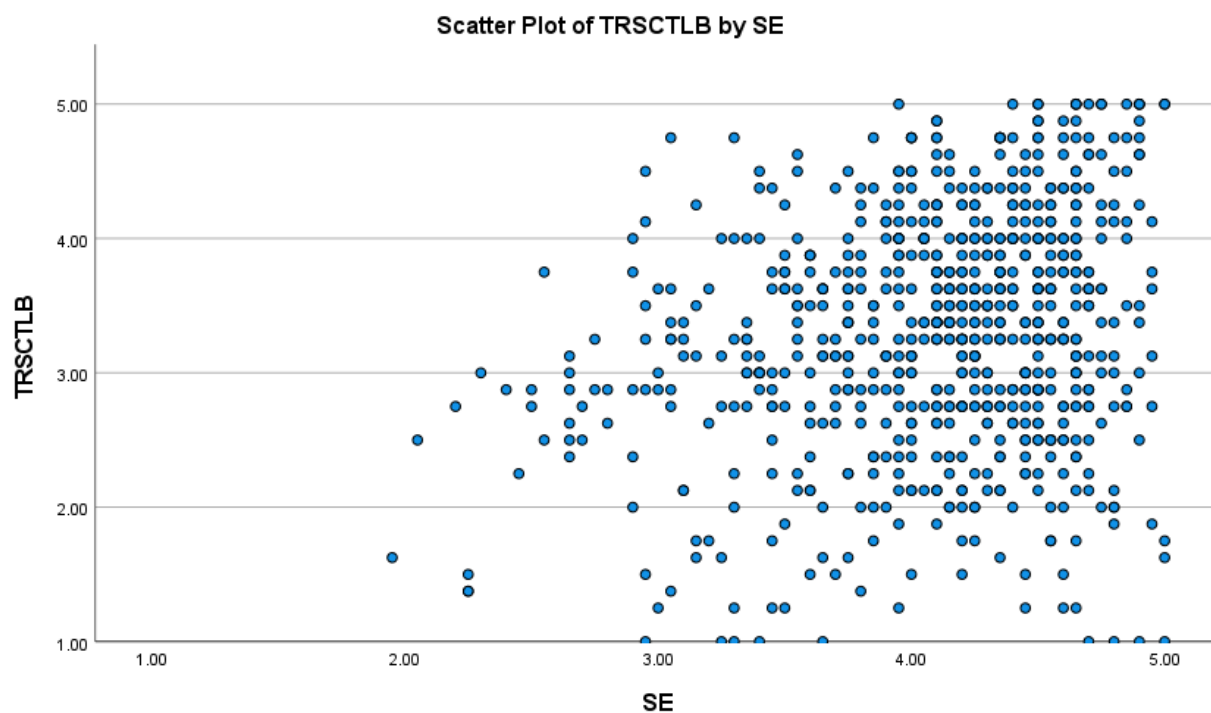
Linearity checking of transformational teacher leadership and student engagement



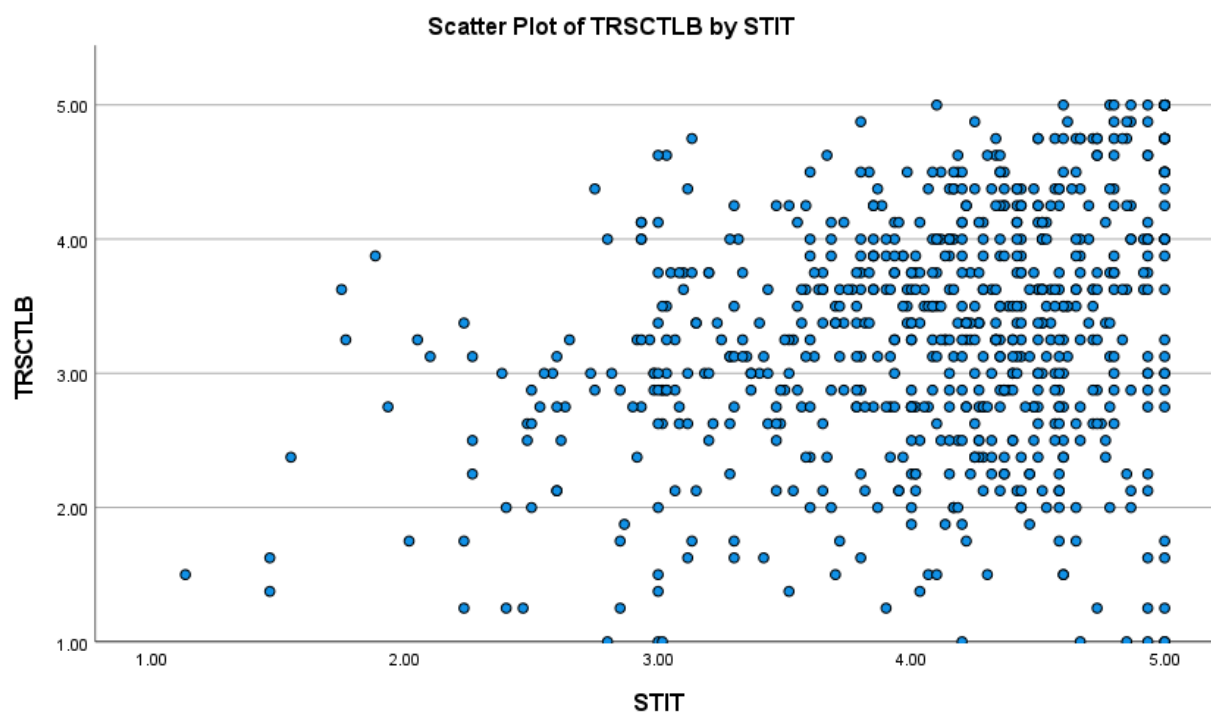
Linearity checking of transformational teacher leadership and student trust in teachers



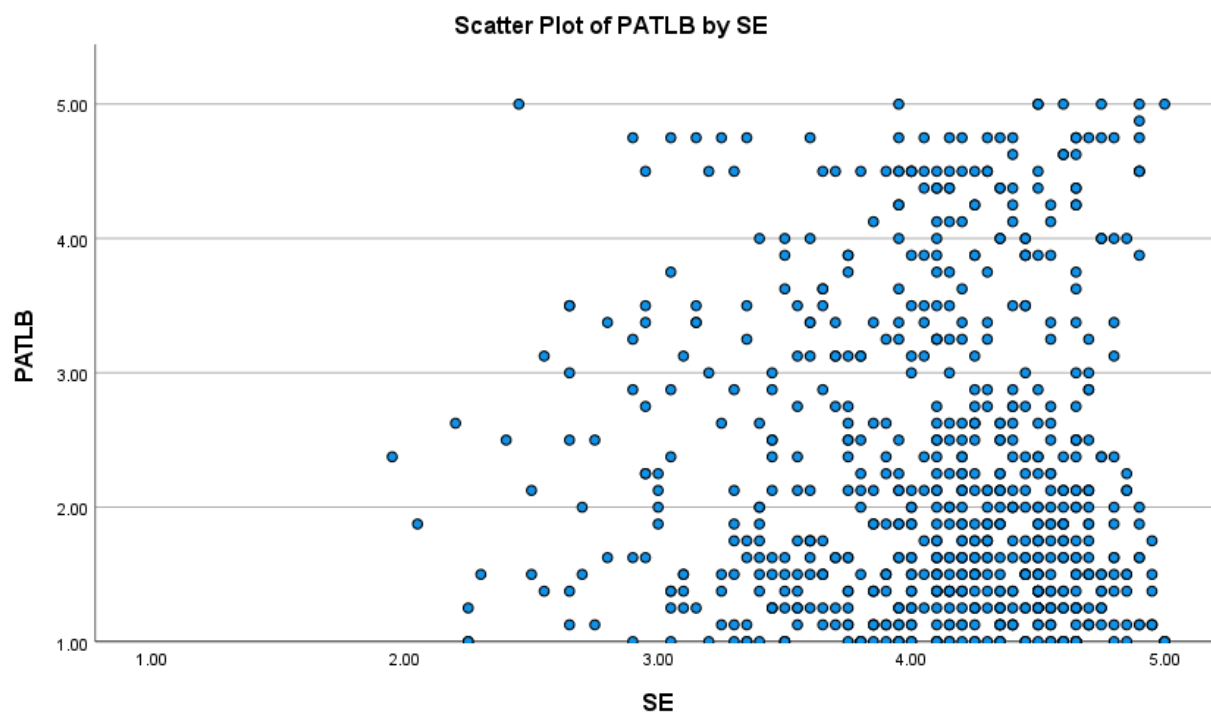
Linearity checking of transactional teacher leadership and student engagement



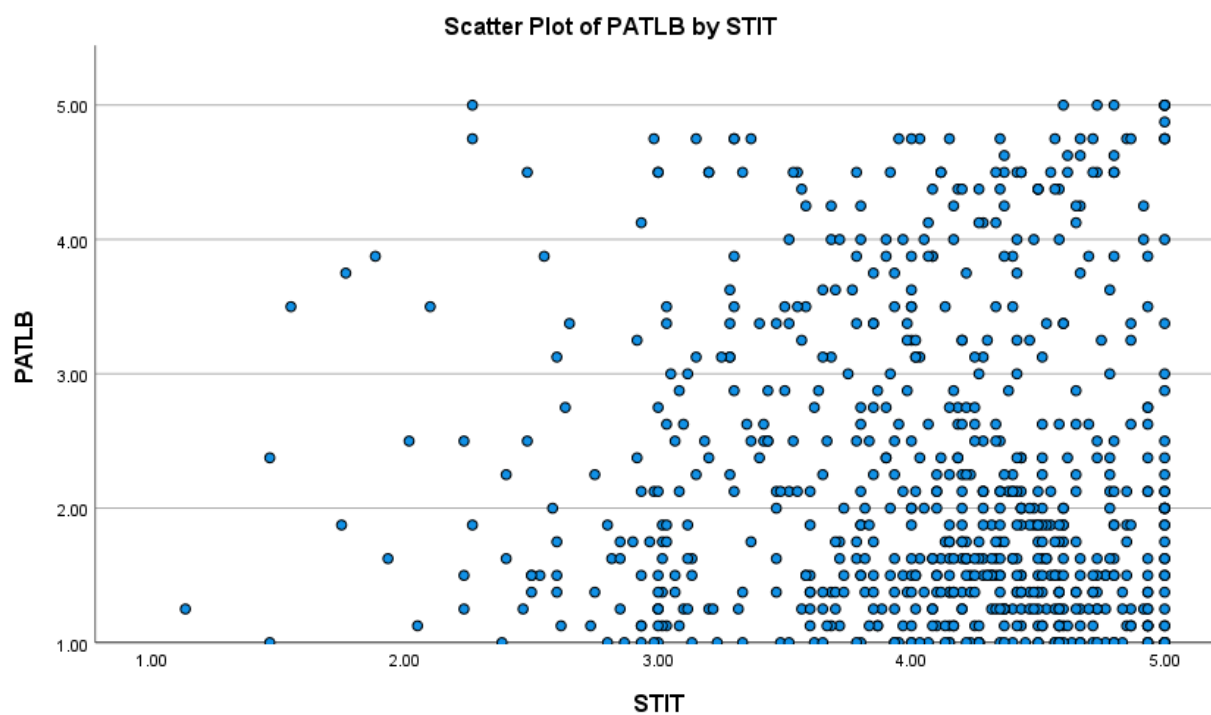
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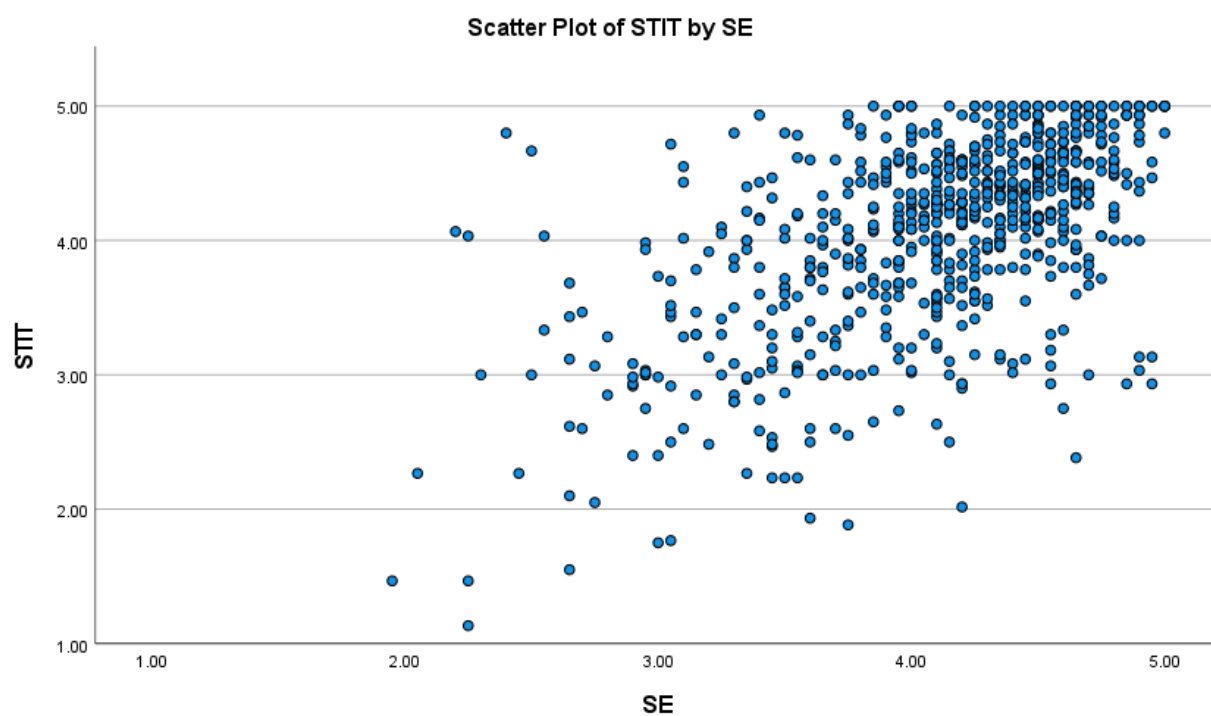
Linearity checking of passive/avoidant teacher leadership and student engagement



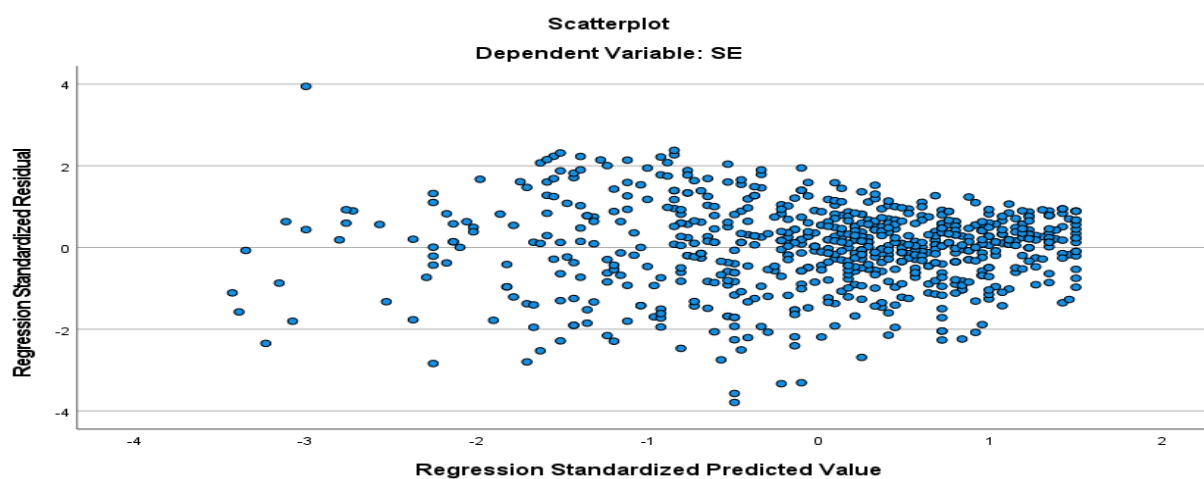
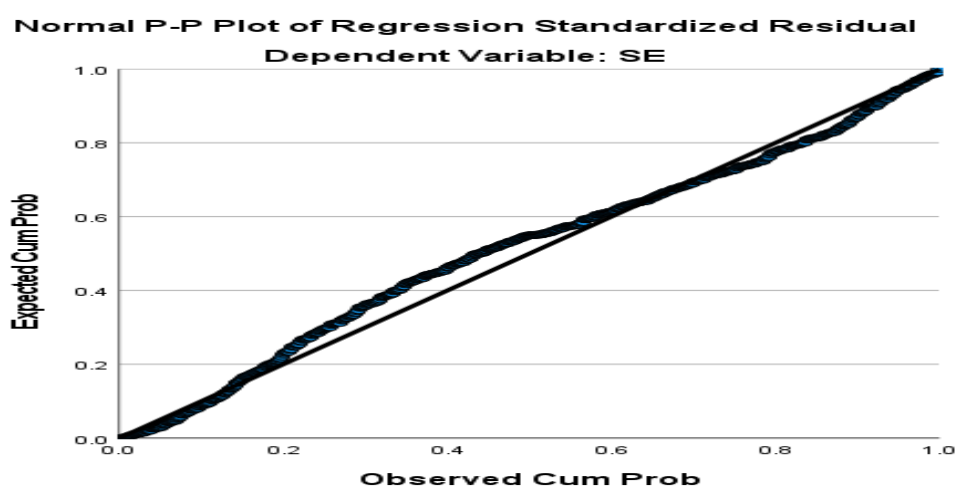
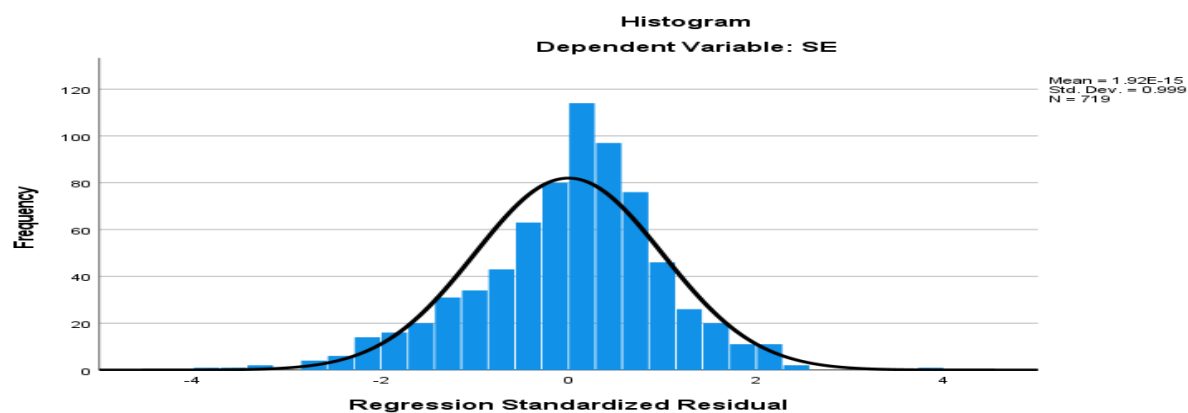
Linearity checking of passive/avoidant teacher leadership and student trust in teachers



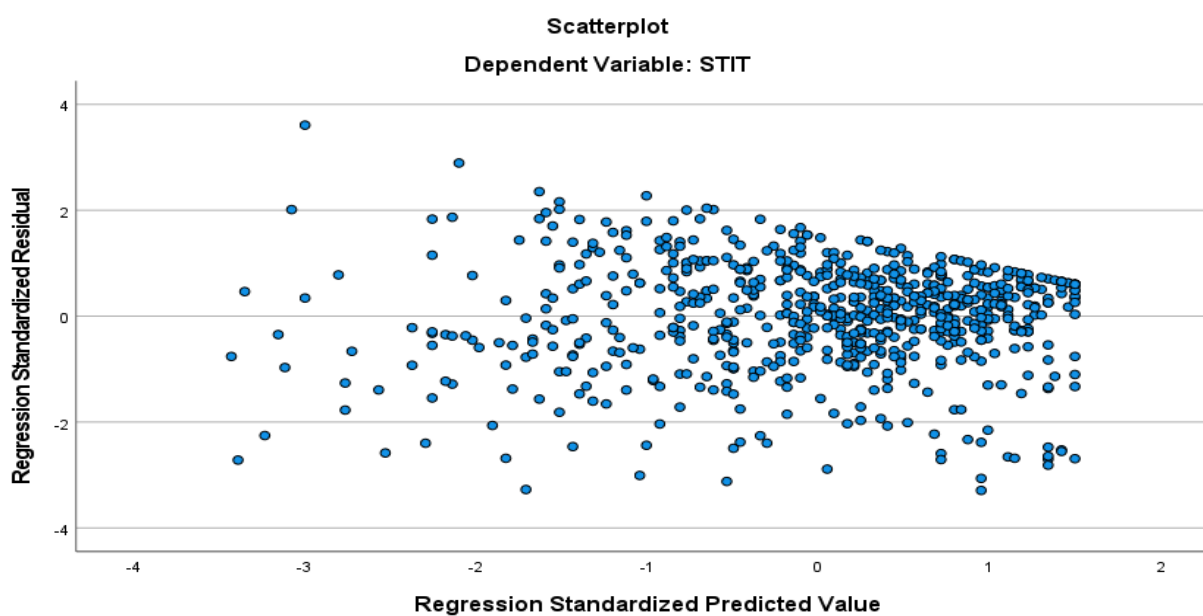
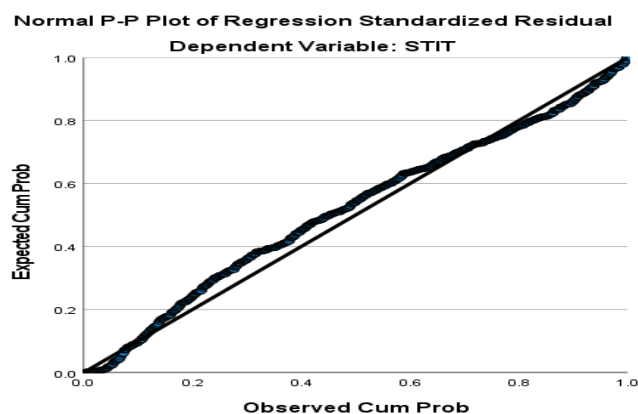
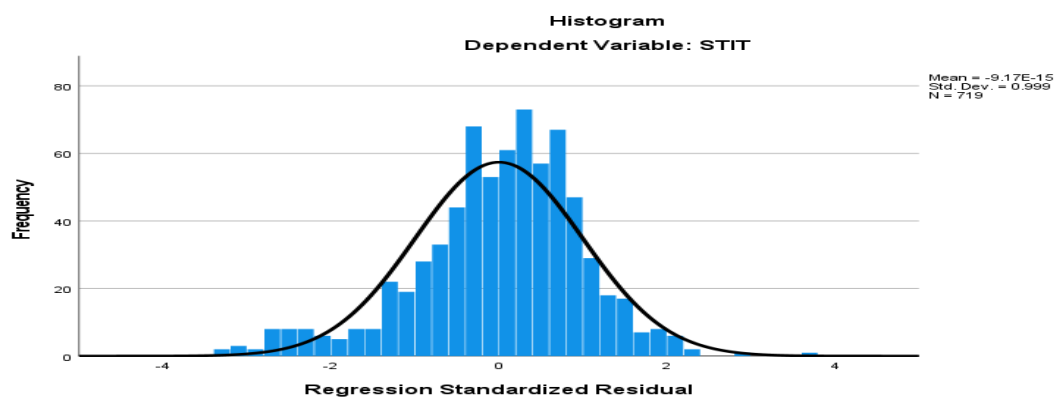
Linearity checking of student trust in teachers and student engagement



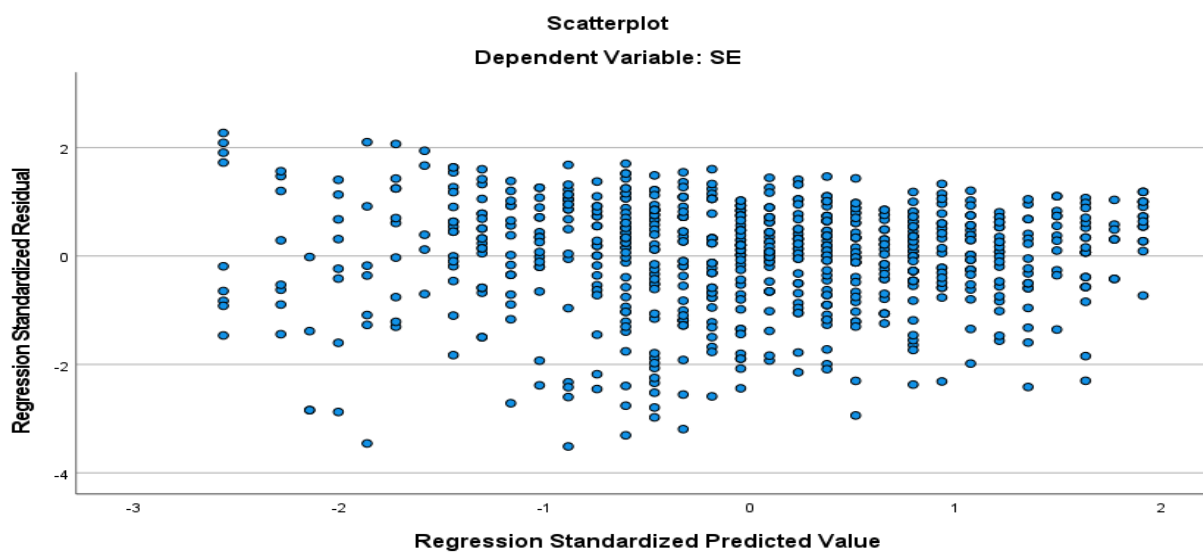
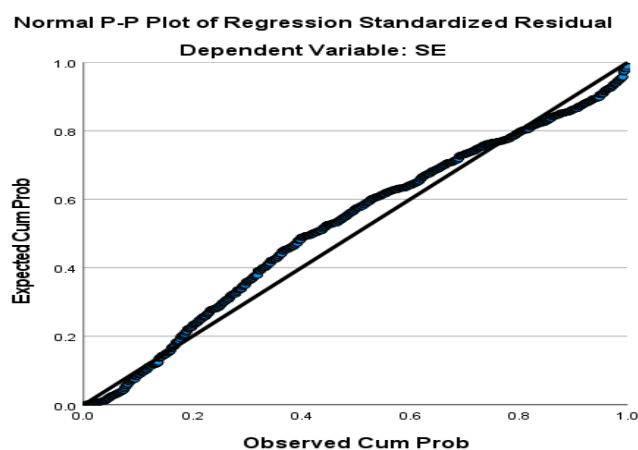
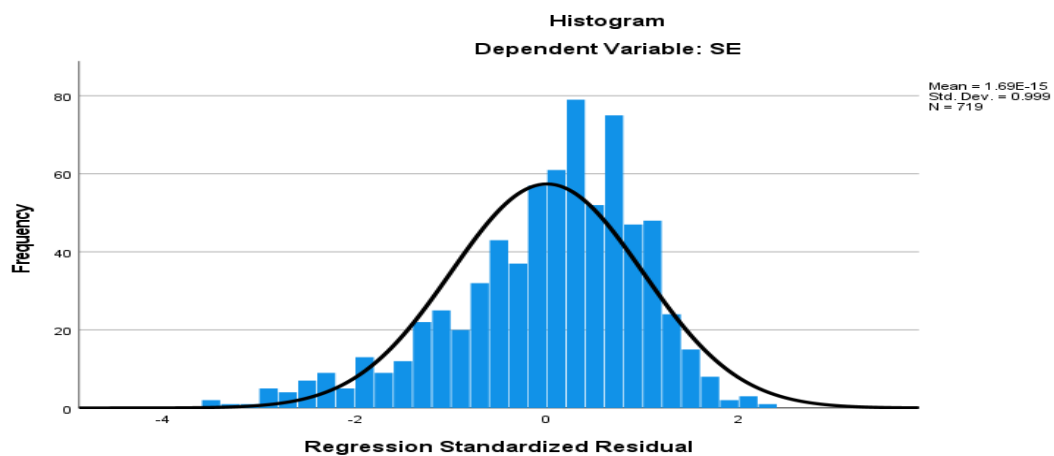
Homoscedasticity checking of transformational teacher leadership and student engagement



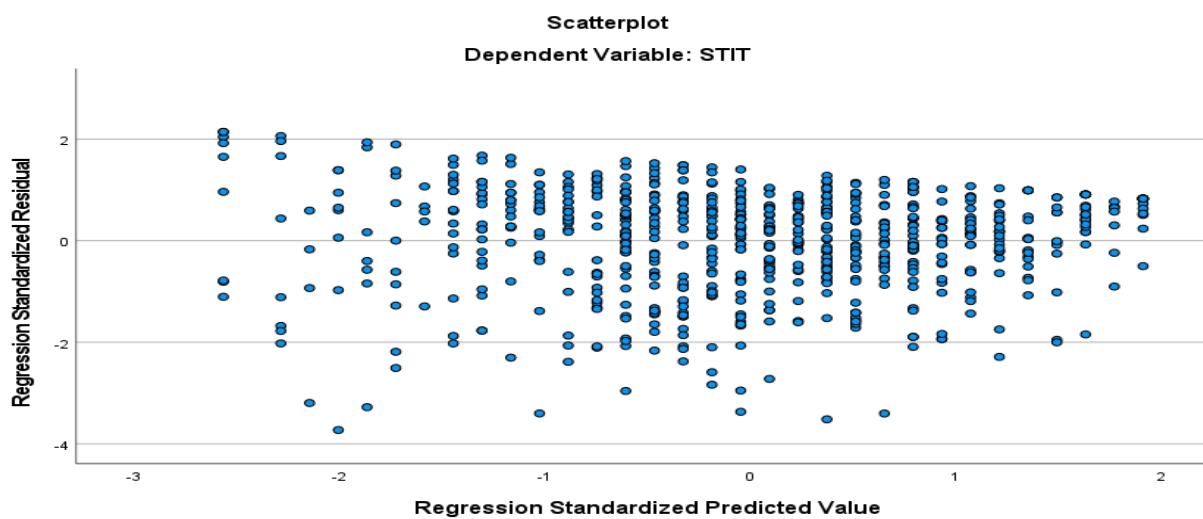
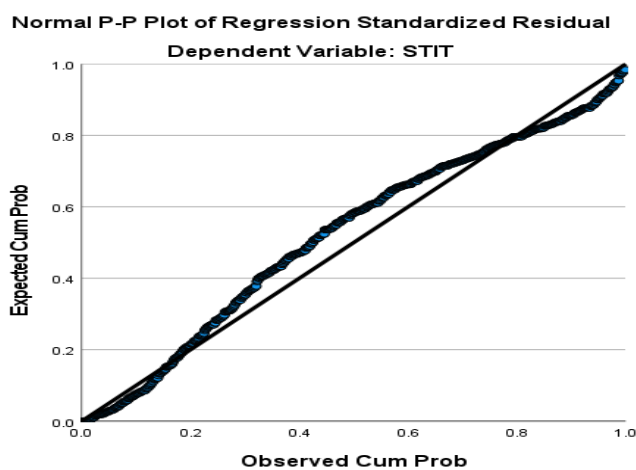
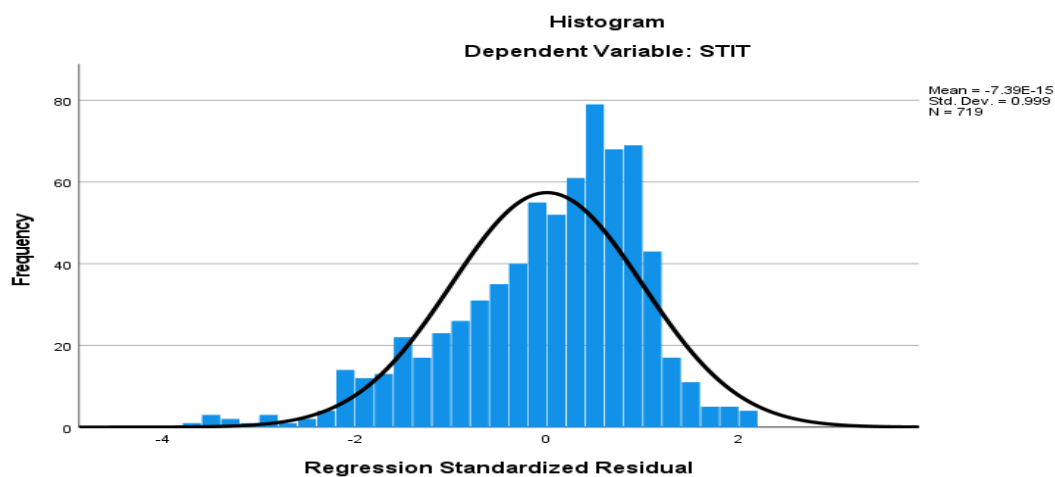
Homoscedasticity checking transformational teacher leadership and student trust in teachers



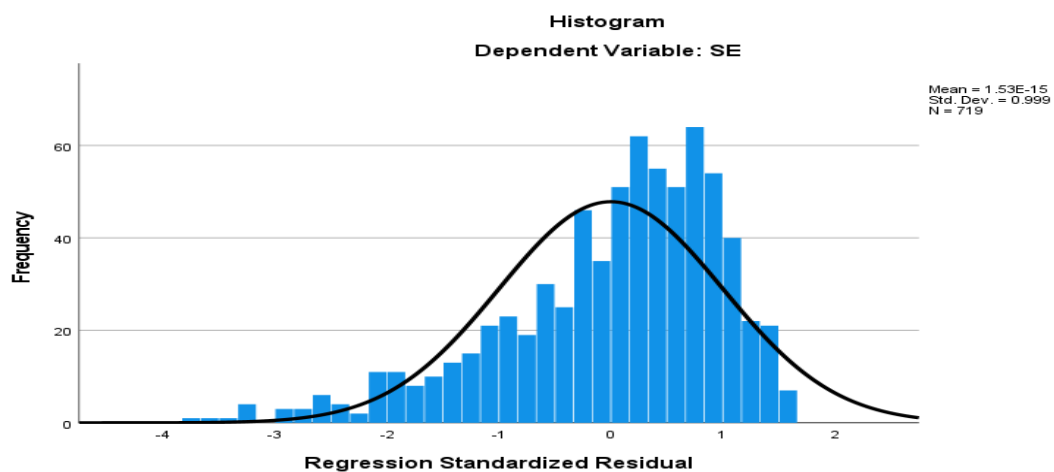
Homoscedasticity checking of transactional teacher leadership and student engagement



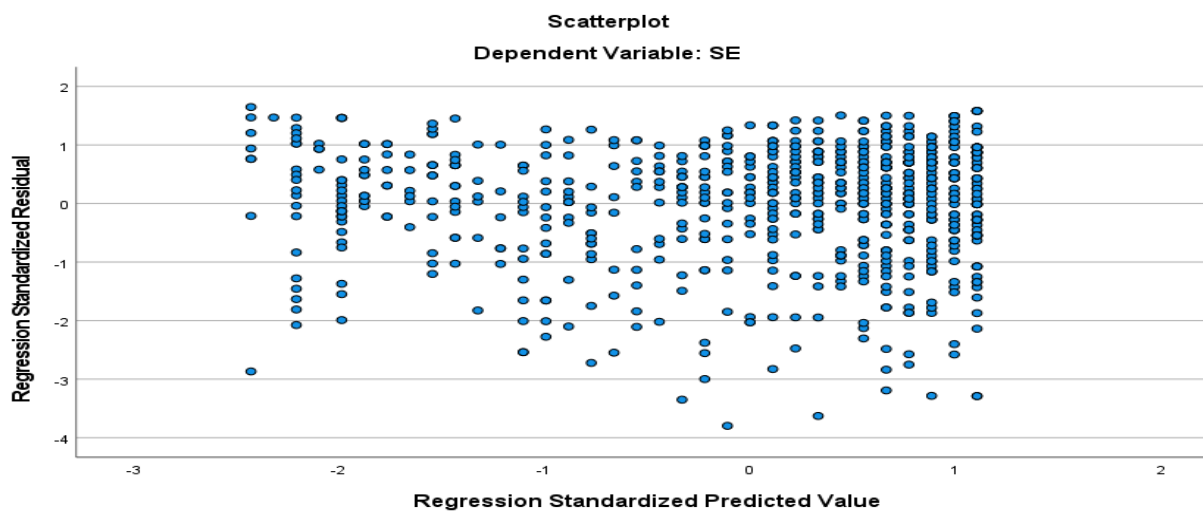
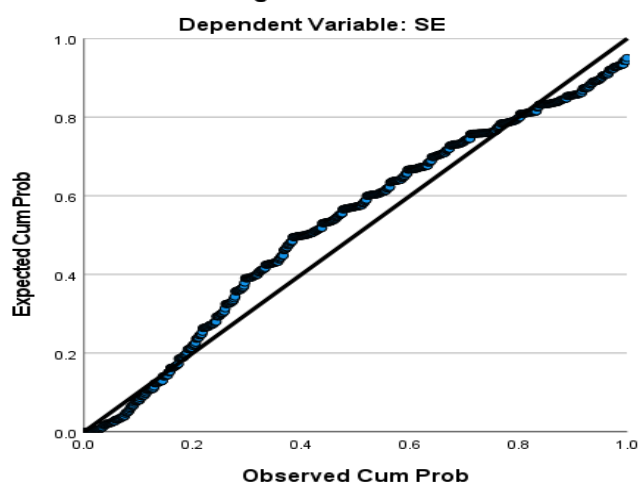
Homoscedasticity checking of transactional teacher leadership and student trust in teachers



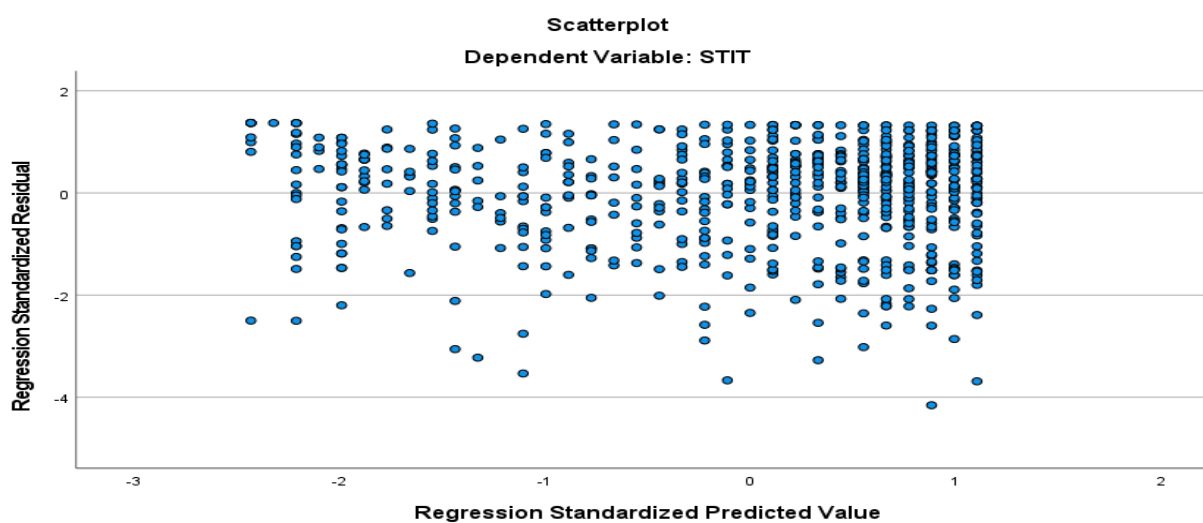
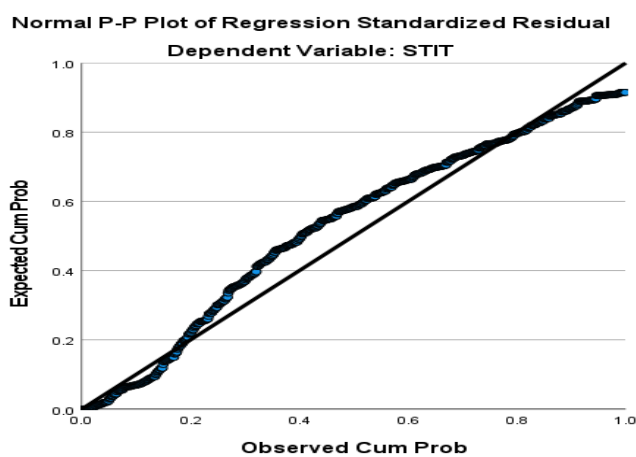
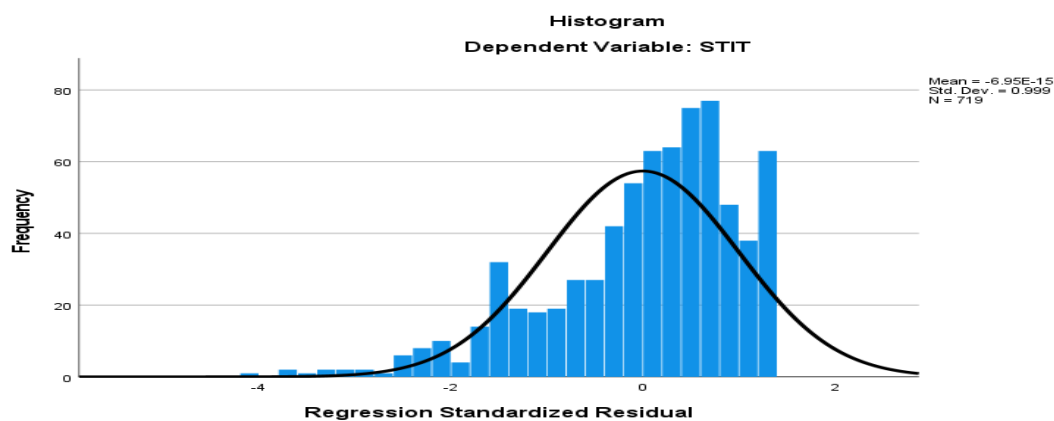
Homoscedasticity checking of passive avoidant teacher leadership and student engagement



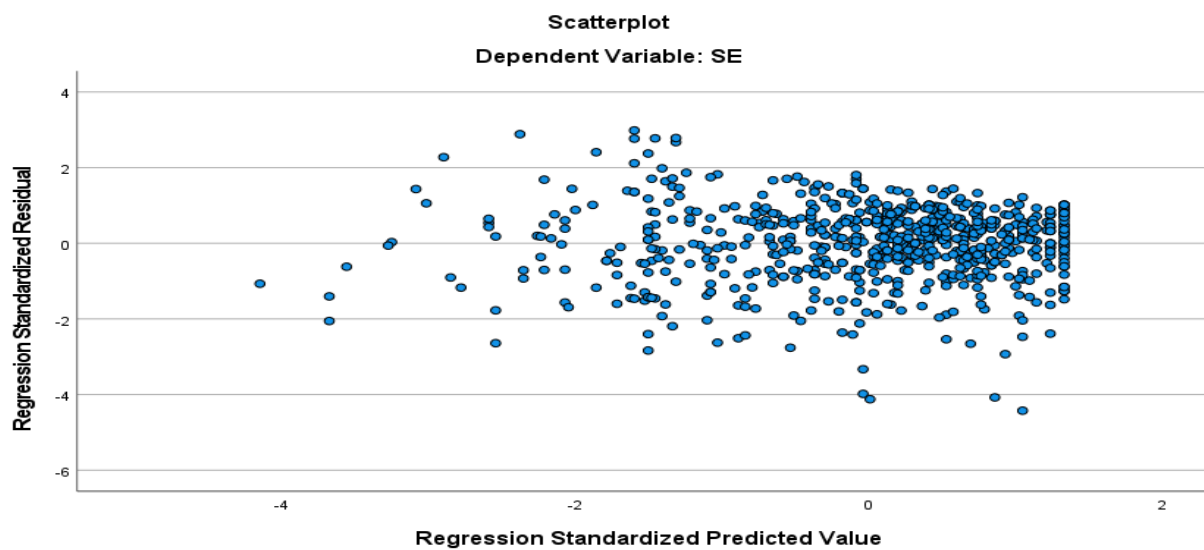
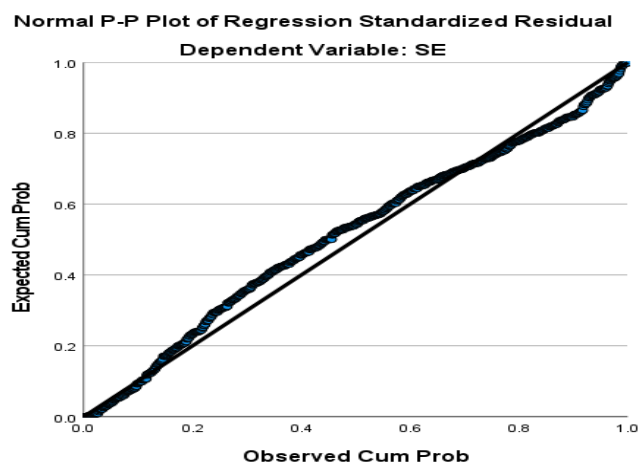
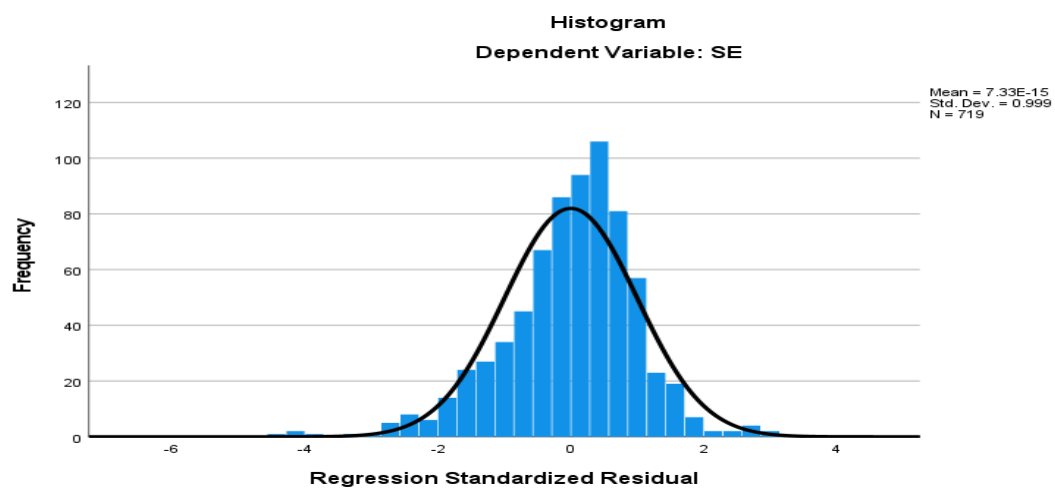
Normal P-P Plot of Regression Standardized Residual



Homoscedasticity checking of passive avoidant teacher leadership and student trust in teachers



Homoscedasticity checking of student trust in teachers and student engagement



Supplementary Table 2

Results of factor loading

Student Engagement		Teacher Leadership Behaviours		Student Trust in Teachers	
Item	Factor loading	Item	Factor loading	Item	Factor loading
BE1	0.69	IFB1	0.74	AB1	0.77
BE2	0.67	IFB2	0.73	AB2	0.79
BE3	0.72	IFB3	0.72	AB3	0.77
BE4	0.65	IFB4	0.70	AB4	0.81
EE1	0.64	IFA1	0.79	AB5	0.75
EE2	0.77	IFA2	0.82	BN1	0.83
EE3	0.80	IFA3	0.81	BN2	0.75
EE4	0.71	IFA4	0.83	BN3	0.64
CE1	0.71	IM1	0.81	BN4	0.59
CE2	0.68	IM2	0.85	BN5	0.60
CE3	0.73	IM3	0.82	IN1	0.77
CE4	0.64	IM4	0.84	IN2	0.79
AE1	0.81	IS1	0.82	IN3	0.75
AE2	0.67	IS2	0.83	IN4	0.63
AE3	0.69	IS3	0.82		
AE4	0.83	IS4	0.81		
SCE1	0.68	IC1	0.68		
SCE2	0.80	IC2	0.66		
SCE3	0.69	IC3	0.73		
SCE4	0.67	IC4	0.80		
		CR1	0.65		
		CR2	0.58		
		CR3	0.74		
		CR4	0.72		
		MEA1	0.69		
		MEA2	0.77		

MEA3	0.80
MEA4	0.78
MEP1	0.87
MEP2	0.84
MEP3	0.81
MEP4	0.70
LF1	0.85
LF2	0.90

Note: BE = Behavioural Engagement; EE = Emotional Engagement; CE = Cognitive Engagement; AE = Agentic Engagement; SCE = Sociocultural Engagement; IFB= Idealized influence behaviour; IFA = Idealized influence attributed; IM = Inspirational motivation; IM = Intellectual Stimulation; IC = Individualized consideration; CR= Contingent reward; MEA= Active management exception; MEP = Passive management exception; LF = laissez fair; AB = Ability; BN = Benevolence; IN = Integrity.

Supplementary Table 3

Results of path analysis on the sub-dimensional relationships between the key study

constructs

Regression weight	β	S.E.	p	95% CI
<i>Direct paths</i>				
Transformational → Behavioural engagement	0.423	0.039	0.000	0.345, 0.498
Transformational → Emotional engagement	0.480	0.040	0.000	0.400, 0.559
Transformational → Cognitive engagement	0.369	0.039	0.000	0.290, 0.442
Transformational → Agentic engagement	0.392	0.037	0.001	0.315, 0.460
Transformational → Sociocultural engagement	0.524	0.034	0.000	0.458, 0.589
Transformational → Ability	0.288	0.009	0.000	0.271, 0.306
Transformational → Benevolence	0.492	0.037	0.000	0.416, 0.561
Transformational → Integrity	0.480	0.039	0.000	0.400, 0.552
Transactional → Behavioural engagement	-0.029	0.041	0.475	-0.109, 0.051
Transactional → Emotional engagement	-0.008	0.042	0.874	-0.086, 0.077
Transactional → Cognitive engagement	-0.013	0.041	0.749	-0.093, 0.066
Transactional → Agentic engagement	0.055	0.041	0.192	-0.028, 0.134
Transactional → Sociocultural engagement	0.034	0.036	0.345	-0.038, 0.102
Transactional → Ability	0.322	0.008	0.000	0.307, 0.336
Transactional → Benevolence	0.092	0.040	0.030	0.011, 0.168
Transactional → Integrity	0.068	0.041	0.091	-0.013, 0.150
Passive/avoidant → Behavioural engagement	-0.009	0.037	0.816	-0.081, 0.066
Passive/avoidant → Emotional engagement	-0.021	0.040	0.641	-0.098, 0.061
Passive/avoidant → Cognitive engagement	0.029	0.040	0.463	-0.049, 0.108
Passive/avoidant → Agentic engagement	-0.049	0.037	0.184	-0.122, 0.025
Passive/avoidant → Sociocultural engagement	-0.001	0.033	0.971	-0.067, 0.063
Passive/avoidant → Ability	0.047	0.39	0.229	-0.029, 0.123
Passive/avoidant → Benevolence	-0.006	0.035	0.865	-0.075, 0.062
Passive/avoidant → Integrity	-0.065	0.034	0.065	-0.131, 0.005
Ability → Behavioural engagement	0.315	0.008	0.000	0.300, 0.332

Ability → Emotional engagement	0.077	0.052	0.130	-0.021, 0.181
Ability → Cognitive engagement	-0.048	0.052	0.360	-0.150, 0.052
Ability → Agentic engagement	-0.142	0.049	0.004	-0.235, -0.045
Ability → Sociocultural engagement	-0.069	0.045	0.120	-0.158, 0.018
Benevolence → Behavioural engagement	0.301	0.005	0.000	0.290, 0.311
Benevolence → Emotional engagement	0.235	0.050	0.001	0.135, 0.333
Benevolence → Cognitive engagement	0.351	0.054	0.000	0.245, 0.455
Benevolence → Agentic engagement	0.433	0.049	0.001	0.337, 0.527
Benevolence → Sociocultural engagement	0.343	0.044	0.000	0.258, 0.431
Integrity → Behavioural engagement	0.271	0.007	0.000	0.257, 0.284
Integrity → Emotional engagement	0.284	0.044	0.000	0.197, 0.371
Integrity → Cognitive engagement	0.117	0.049	0.015	0.023, 0.216
Integrity → Agentic engagement	0.120	0.048	0.016	0.025, 0.212
Integrity → Sociocultural engagement	0.347	0.046	0.000	0.258, 0.436
<i>Indirect path (Ability as mediator)</i>				
Transformational → Ability → Behavioural engagement	0.277	0.009	0.000	0.260, 0.295
Transformational → Ability → Emotional engagement	0.150	0.023	0.000	0.103, 0.191
Transformational → Ability → Cognitive engagement	0.089	0.030	0.005	0.026, 0.145
Transformational → Ability → Agentic engagement	0.030	0.032	0.351	-0.033, 0.094
Transformational → Ability → Sociocultural engagement	0.096	0.025	0.001	0.046, 0.142
Transactional → Ability → Behavioural engagement	0.309	0.008	0.000	0.295, 0.325
Transactional → Ability → Emotional engagement	0.168	0.025	0.000	0.115, 0.214
Transactional → Ability → Cognitive engagement	0.100	0.034	0.005	0.030, 0.163
Transactional → Ability → Agentic engagement	0.034	0.036	0.351	-0.037, 0.105
Transactional → Ability → Sociocultural engagement	0.107	0.028	0.001	0.051, 0.159
Passive/avoidant → Ability → Behavioural engagement	0.392	0.010	0.000	0.373, 0.411
Passive/avoidant → Ability → Emotional engagement	0.213	0.032	0.000	0.145, 0.271

Passive/avoidant → Ability → Cognitive engagement	0.126	0.043	0.005	0.039, 0.207
Passive/avoidant → Ability → Agentic engagement	0.043	0.046	0.355	-0.047, 0.133
Passive/avoidant → Ability → Sociocultural engagement	0.136	0.035	0.001	0.066, 0.201
<i>Indirect path (Benevolence as mediator)</i>				
Transformational → Benevolence → Behavioural engagement	0.373	0.034	0.000	0.304, 0.439
Transformational → Benevolence → Emotional engagement	0.134	0.023	0.000	0.093, 0.182
Transformational → Benevolence → Cognitive engagement	0.134	0.025	0.023	0.086, 0.187
Transformational → Benevolence → Agentic engagement	0.130	0.024	0.024	0.086, 0.181
Transformational → Benevolence → Sociocultural engagement	0.144	0.023	0.022	0.104, 0.193
Transactional → Benevolence → Behavioural engagement	0.069	0.030	0.030	0.008, 0.129
Transactional → Benevolence → Emotional engagement	0.025	0.012	0.025	0.004, 0.049
Transactional → Benevolence → Cognitive engagement	0.025	0.012	0.023	0.004, 0.052
Transactional → Benevolence → Agentic engagement	0.024	0.011	0.024	0.004, 0.050
Transactional → Benevolence → Sociocultural engagement	0.027	0.012	0.022	0.005, 0.053
Passive/avoidant → Benevolence → Behavioural engagement	-0.004	0.026	0.865	-0.057, 0.047
Passive/avoidant → Benevolence → Emotional engagement	-0.002	0.010	0.859	-0.020, 0.017
Passive/avoidant → Benevolence → Cognitive engagement	-0.002	0.010	0.865	-0.021, 0.017

Passive/avoidant → Benevolence → Agentic engagement	-0.001	0.009	0.861	-0.021, 0.016
Passive/avoidant → Benevolence → Sociocultural engagement	-0.002	0.010	0.858	-0.022, 0.018
<i>Indirect path (Integrity as mediator)</i>				
Transformational → Integrity → Behavioural engagement	0.349	0.035	0.000	0.280, 0.417
Transformational → Integrity → Emotional engagement	0.136	0.023	0.000	0.094, 0.185
Transformational → Integrity → Cognitive engagement	0.072	0.024	0.002	0.027, 0.123
Transformational → Integrity → Agentic engagement	0.057	0.023	0.006	0.014, 0.106
Transformational → Integrity → Sociocultural engagement	0.154	0.027	0.000	0.106, 0.210
Transactional → Integrity → Behavioural engagement	0.050	0.030	0.090	-0.010, 0.110
Transactional → Integrity → Emotional engagement	0.019	0.012	0.076	-0.003, 0.045
Transactional → Integrity → Cognitive engagement	0.010	0.007	0.055	0.000, 0.028
Transactional → Integrity → Agentic engagement	0.008	0.006	0.049	0.000, 0.025
Transactional → Integrity → Sociocultural engagement	0.022	0.013	0.080	-0.003, 0.050
Passive/avoidant → Integrity → Behavioural engagement	-0.047	0.025	0.066	-0.096, 0.004
Passive/avoidant → Integrity → Emotional engagement	-0.018	0.010	0.054	-0.039, 0.000
Passive/avoidant → Integrity → Cognitive engagement	-0.010	0.006	0.033	-0.023, -0.001
Passive/avoidant → Integrity → Agentic engagement	-0.008	0.005	0.032	-0.021, -0.001
Passive/avoidant → Integrity → Sociocultural engagement	-0.021	0.011	0.052	-0.044, 0.000

Supplementary Table 2

Summary table of the codebook of emerged themes and codes

No.	Themes	Definition	Codes
1	Behavioural engagement	Students' observable participation in learning activities, including effort, attention, and involvement in class tasks.	• Participation in academic activities and attending class • Completing classwork and individual assignments on time • Participating and working with peers during group tasks and assignments • Asking and answering questions related to tasks
2	Emotional engagement	Students' emotional connection to learning, the teacher, and classmates, including positive and negative feelings within the learning environment.	• Sense of belonging with teachers • Sense of belongingness with their peers, • Feeling of enjoyment and pride in the learning process • Feeling motivated by the class atmosphere/learning environment
3	Cognitive engagement	Students' depth of mental effort and investment in learning, including independent thinking, strategy use, and extending understanding beyond requirements.	• Exploring learning content outside of the curriculum • Applying learning to real-life situations • Thinking deeply, reflective or metacognitive thinking
4	Agentic engagement	Students' proactive involvement in shaping their learning experience, including initiative,	• Sense of taking responsibility for one's own learning

		feedback to teachers, and self-directed goal setting.	• Giving feedback to the teacher and suggesting alternative learning approaches • Involvement in the university administration as a source of feedback
5	Sociocultural engagement	Students' efforts in bringing personal, cultural, and social experiences into learning and how they interact across diverse backgrounds within their learning communities.	• Connecting course content to cultural or personal experiences, • Sharing perspectives shaped by identity or background. Respectful interaction across cultural differences, • Learning from peers with different experiences, • Reflecting on social issues relevant to learning.
6	Ethical and respectful conduct	Student perceptions of teachers' fairness, ethical behaviour, respect, consistency, and moral conduct.	• Modelling ethical conduct, • Transparency in decisions, • Emotional safety • Consistent treatment.
7	Motivation and future-oriented support	Students' perception of teachers' behaviours that encourage effort, persistence, future focus, and confidence.	• Linking work to long-term goals, • Highlighting progress, • Encouraging perseverance, • Belief in student potential
8	Intellectual stimulation and openness	Students' perceptions of teacher behaviours that promote questioning, alternative viewpoints, and deep thinking.	• Encouraging questions, • Stimulating deeper thinking, • Valuing diverse opinions, • Openness to challenge

9	Individualised learning support	Students' perceptions of teachers' behaviours that provide personalised academic or emotional support tailored to their needs.	• Recognising individual needs, • Personalised feedback, • Adaptation to learning style, • Emotional support
10	Recognition and reinforcement	Students' perceptions of teachers' use of rewards, praise, grading clarity, and performance-based reinforcement.	• Praise for achievement, • Rewarding improvement, • Clear assessment criteria, • Public recognition, and • Grade-linked motivation
11	Monitoring, corrective action, and guidance	Students' perceptions of teachers' behaviours on monitoring of progress and timely intervention when problems arise.	• Monitoring learning, • Correcting repeated misbehaviours, • Preventing repeated mistakes • Guidance for improvement,
12	Leadership gaps and avoidant behaviour	Students' perceptions of teachers' withdrawal, passivity, or delayed/inconsistent action in the learning process.	• Avoiding issues, • Inconsistent intervention, • Unclear expectations, and • Emotional or physical distance
13	Trust in the teacher's ability	Students' judgment of their teachers' knowledge, expertise, clarity, and instructional ability. Ability reflects whether students believe the teachers are capable of helping them learn.	• Clear explanations of complex content, • Confidence in the teacher's subject-matter knowledge, • Effective instructional strategies, • Preparedness for lessons, • Awareness of students' learning progress.
14	Trust in teacher benevolence	Students' perceptions that the teacher cares about their well-being, success, and personal	• Showing care and kindness, • Willingness to help beyond academic requirements,

		growth. Benevolence reflects whether students believe the teacher holds positive intentions toward them.	• Understanding personal struggles, • Showing interest in students as individuals.
15	Trust in teacher integrity	Students' perceptions that the teacher is honest, consistent, reliable, and fair. Integrity reflects whether the students believe that the teacher aligns words with actions and acts in a principled way.	• Fairness in treatment and grading, • Transparency in decisions, • Keeping promises, • Consistency in rules and expectations, • Reliability across situations

Note: 1-5 are themes categorised under student engagement; 6-9 are themes categorised under transformational teacher leadership behaviours; 10-11 are themes categorised under transactional teacher leadership behaviours; 12 is a theme categorised under passive/avoidant leadership teacher behaviours; and 13-15 are themes categorised under student trust in teachers.

APPENDIX B: QUESTIONNAIRE (ENGLISH VERSION)

Bahir Dar University
College of Education
School of Educational Sciences
Department of Educational Planning and Management

Questionnaire to be filled by students

Dear Students,

My name is Yalalem Assefa. I am a PhD candidate in Educational Policy and Leadership at Bahir Dar University. I am conducting a dissertation entitled “*The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers*” as a partial fulfilment of my doctoral studies. I respectfully request you to participate in this study by completing this questionnaire. Therefore, the effectiveness, integrity and accuracy of the study depend on your reliable response. So, I kindly ask you to respond to the items listed ethically and responsibly. Above all, please read the instructions carefully before responding. This gives you clear direction on how to respond to each item. Additionally, you are not required to write your name in any part of the paper regarding your privacy.

Thank you for your cooperation in advance!

Part I: Questions of participants’ demographic information

Instruction: The following questions are about your personal data. Please read them and give your answer by putting a thick mark (“√”) in the boxes and by writing a short answer in the space provided.

1. Sex: Male ☐ Female ☐
2. Age:
3. Department
4. Year of Study.....

Part II: Items on student engagement, student trust in teachers and teacher leadership

Instruction: In the subsequent table below, a series of item statements is provided to assess students' perceptions and experiences regarding their engagement in academic and institutional activities. Consider the extent of your engagement at your university, and then please answer all of the item statements provided in the table below. After reading each item, please properly circle your agreement by selecting only one of the five options. Given that: 1 = Strongly disagree, 2 = Disagree, 3 = unable to decide, 4 = Agree, and 5 = Strongly agree.

Item	Statement	Agreement/scale				
Student Engagement						
Behavioural Engagement						
1	I actively participate in class by asking and answering questions.	1	2	3	4	5
2	I take notes effectively during class.	1	2	3	4	5
3	I do my classwork and assignments on time.	1	2	3	4	5
4	I participate actively in group assignments.	1	2	3	4	5
Emotional Engagement						
5	I feel a sense of belongingness to my classmates.	1	2	3	4	5
6	I feel a sense of belongingness to my teachers.	1	2	3	4	5
7	I am passionate about the learning process I am attending.	1	2	3	4	5
8	I feel proud of my academic achievements.	1	2	3	4	5
Cognitive Engagement						
9	I spend my free time looking for more information on topics discussed in class.	1	2	3	4	5
10	I attempt to integrate subjects from different disciplines into my general knowledge.	1	2	3	4	5
11	I review my notes regularly, even if a test is not coming up.	1	2	3	4	5
12	I apply my knowledge to solve problems.	1	2	3	4	5
Agentic Engagement						
13	I set goals for my learning and track my progress.	1	2	3	4	5

14	I take responsibility for my learning.	1	2	3	4	5
15	I offer suggestions to teachers about how to improve classes.	1	2	3	4	5
16	I tell my teacher what I like and what I don't like.	1	2	3	4	5
Sociocultural Engagement						
17	I connect my learning to my personal and cultural experiences in class.	1	2	3	4	5
18	I share my perspectives and experiences with others.	1	2	3	4	5
19	I attempt to learn from others with diverse perspectives and backgrounds.	1	2	3	4	5
20	I appreciate cohesion with my peers to facilitate respectful interactions at the university.	1	2	3	4	5

Instruction: In the table below, a series of item statements is provided to assess students' perceptions of the leadership behaviours of their teachers. Consider the teacher who is teaching a course that you are currently attending. Then answer the items listed in the table below regarding the extent to which the teacher demonstrates leadership behaviours toward improving students' success. After reading each item, please properly circle your agreement by selecting only one of the five options. Given that: 1 = not at all, 2 = once in a while, 3 = sometimes, 4 = often, and 5 = always.

Teacher Leadership						
Transformational Teacher Leadership						
Idealized influence-behaviour						
1	My teacher asserts to us about the importance of having moral values.	1	2	3	4	5
2	My teacher makes clear to us the importance of having a strong sense of duty.	1	2	3	4	5
3	My teacher regards the ethical and moral consequences of his/her decisions.	1	2	3	4	5
4	My teacher highlights to us how important it is to respect others and work as a team.	1	2	3	4	5
Idealized influence-attribute						

5	I am proud that he/she is my teacher.	1	2	3	4	5
6	My teacher goes beyond his/her interest to benefit the students.	1	2	3	4	5
7	My teacher acts in a way that earns my respect.	1	2	3	4	5
8	My teacher demonstrates to us a great sense of confidence.	1	2	3	4	5
Inspirational motivation						
9	My teacher talks excitedly about the future that we envisioned.	1	2	3	4	5
10	My teacher talks enthusiastically about the goals we have to achieve.	1	2	3	4	5
11	My teacher presents a vision of the future that motivates us.	1	2	3	4	5
12	My teacher demonstrates confidence in us that we will achieve the learning objectives.	1	2	3	4	5
Intellectual stimulation						
13	My teacher takes criticism into account and evaluates whether it is appropriate for us.	1	2	3	4	5
14	My teacher seeks different perspectives when solving problems.	1	2	3	4	5
15	My teacher gets students to see problems from different points of view.	1	2	3	4	5
16	My teacher suggests new ways of looking at how to complete tasks.	1	2	3	4	5
Individualized consideration						
17	My teacher dedicates his/her time to serving students individually.	1	2	3	4	5
18	My teacher treats me more like a person than a member of a group.	1	2	3	4	5
19	My teacher considers that each student has different needs, abilities, and aspirations.	1	2	3	4	5
20	My teacher helps me develop my capacity.	1	2	3	4	5
Transactional Teacher Leadership						
Contingent rewards						
21	My teacher only supports me when I do my tasks and activities well.	1	2	3	4	5
22	My teacher only highlights students who complete the tasks correctly.	1	2	3	4	5
23	My teacher always remembers that our grades will depend on whether we meet the objectives.	1	2	3	4	5
24	My teacher is satisfied with only those students who do all the tasks in the course well.	1	2	3	4	5

Active management by exception						
25	My teacher gives attention to students' failures and non-compliance with the rules.	1	2	3	4	5
26	My teacher focuses our attention on errors, complaints, and failures.	1	2	3	4	5
27	My teacher reminds us of all the failures.	1	2	3	4	5
28	My teacher makes me direct my attention to failures when carrying out tasks.	1	2	3	4	5
Passive/Avoidant Teacher Leadership Behaviours						
Passive management by exception						
29	My teacher doesn't do something until the problems are serious, or he/she reacts to problems if they are serious.	1	2	3	4	5
30	My teacher waits for things to go wrong before acting, or he/she reacts to problems if they are chronic.	1	2	3	4	5
31	My teacher shows that he/she believes in the saying "Do not touch what is OK", or if not broken, he/she doesn't fix it.	1	2	3	4	5
32	My teacher shows that problems must be important before he/she acts or 'reacts to failure'.	1	2	3	4	5
Laissez-fair leadership						
33	My teacher avoids getting involved in any important issue.	1	2	3	4	5
34	My teacher doesn't do anything when he/she's needed.	1	2	3	4	5
35	My teacher avoids making decisions on important issues.	1	2	3	4	5
36	My teacher does not provide clear guidance or direction to resolve problems.	1	2	3	4	5

Instruction: In the subsequent table below, a series of item statements is provided to assess students' perceptions regarding their trust in teachers. Hold with the teacher who is teaching a course that you are currently taking. Then answer all of the items listed in the table below about a trusting relationship that exists between you and the teacher, in which you are willing and confident to rely on the teacher's intentions to help you achieve your goals. After reading each item, please properly circle your agreement by selecting only one of the five

options. Given that: 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree.

Ability						
1	My teacher is very capable of performing his or her job.	1	2	3	4	5
2	I feel very confident about my teacher's skills.	1	2	3	4	5
3	My teacher is well qualified.	1	2	3	4	5
4	My teacher has a lot of knowledge about the course material.	1	2	3	4	5
5	My teacher has specialised knowledge that can increase my understanding of the course material.	1	2	3	4	5
Benevolence						
6	My teacher is very concerned about my welfare in this course.	1	2	3	4	5
7	My needs and desires are very important to my teacher.	1	2	3	4	5
8	My teacher would not knowingly do anything to negatively affect my grade in this course.	1	2	3	4	5
9	My teacher really looks out for what is important to me.	1	2	3	4	5
10	My teacher will go out of his or her way to help me.	1	2	3	4	5
Integrity						
11	My teacher tries hard to be fair in dealings with students in the course.	1	2	3	4	5
12	Sound principles seem to guide my teacher's behaviour.	1	2	3	4	5
13	I never have to wonder whether my teacher will stick to his or her word.	1	2	3	4	5
14	I do like my teacher's values.	1	2	3	4	5

APPENDIX C: QUESTIONNAIRE (AMHARIC VERSION)

ባህር ዳር ዩኒቨርሲቲ

የትምህርት ኮሌጅ

የትምህርት እቅድ እና ስራ አመራር ትምህርት ክፍል

በተማሪዎች የሚሞላ መጠይቅ

ውድ ተማሪዎች፤

ስሜ ያለዓለም አሰፋ እባላለሁ፡፡ በባህር ዳር ዩኒቨርሲቲ በትምህርት ፖሊሲ እና አመራር የ3ኛ ዲግሪ ተማሪ ስሆን፤ የ3ኛ ዲግሪ ጥናቴን ለማሟላት “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers” «በአማራ ክልል የመንግስት ዩኒቨርሲቲዎች ውስጥ የመምህራን አመራር በተማሪዎች ተሳትፎ ላይ ያለው ተጽእኖ፡ የተማሪዎች እምነት በመምህራን ላይ ያለው የጣልቃገብነት ሚና» በሚል ርዕስ የመመረቁያ ጥናትና ምርምር እያዘጋጀሁ እገኛለሁ፡፡ የዚህ መጠይቅ ዋና ዓላማ ከላይ የተጠቀሰውን ጥናት ለማጥናት ተገቢውን መረጃ መስብስብ ነው፡፡ ስለሆነም፤ የጥናቱ ውጤታማነት፤ ታማኝነትና ትክክለኛነት የሚወሰነው እርስዎ በሚሰጡት ምላሽ ሲሆን፤ ይህን መጠይቅ በከፍተኛ ኃላፊነት እንዲሁም ተገቢውንና ትክክለኛውን መልስ በመስጠት እንዲተባበሩኝ በአክብሮት እጠይቃለሁ፡፡ ለጥያቄዎች ምላሽ ከመስጠትዎ በፊት፤ መመሪያዎቹን በጥንቃቄ ያንብቡ፡፡ ይህም ለእያንዳንዱ ጥያቄ እንዴት ምላሽ መስጠት እንዳለብዎት አቅጣጫ ይሰጣል፡፡ በተጨማሪም፤ የሚሰጡት ምላሽ ምስጢራዊነት የተጠበቀ መሆኑን እያረጋገጥኩ በየትኛውም የመጠይቁ ክፍል ስምዎትን እንዲጽፉ/አስፈላጊም አይደለም፡፡

ስለትብብርዎ ከልብ አመሰግናለሁ!

ክፍል አንድ ፤ የጥናቱ ተሳታፊዎች ግላዊ መረጃ

መመሪያ፤ የሚከተሉት ጥያቄዎች ስለእርስዎ የግል መረጃ የሚመለከቱ ናቸው፡፡ እባክዎትን በትክክል በማንበብ አጭር መልስ ለሚፈልጉ ጥያቄዎች በተዘጋጀው ቦታ ላይ አጭር መልስ በመጻፍ እንዲሁም ምርጫ ለተቀመጠላቸው ጥያቄዎች ደግሞ በሳጥኖቹ ውስጥ የ “ራይት” (“√”) ምልክት በማስቀመጥ መልስ ይስጡ፡፡

1. ጾታ፡ (1) ወንድ ☐ (2) ሴት ☐
2. እድሜ
3. ትምህርት ክፍል፡
4. ዓመት፡ (1) 3^ኛ ዓመት ☐ (2) 4^ኛ ዓመት ☐ (3) 5^ኛ ዓመት እና በላይ ☐

ክፍል ሁለት፤ የተማሪዎች ተሳትፎ፤ የመምህራን አመራር እና የተማሪዎች እምነት በመምህራን ላይ የሚመለከቱ ጥያቄዎች

መመሪያ፤ ከዚህ በታች ባለው ሠንጠረዥ ውስጥ የተማሪዎችን በትምህርት እና በተቋማዊ እንቅስቃሴዎች ላይ ያላቸውን ተሳትፎ ለመገምገም የሚረዱ ጥያቄዎች ቀርበዋል። በዩኒቨርሲቲያችሁ ውስጥ ያለዎትን የተሳትፎ መጠን ከግምት ውስጥ በማስገባት እባክዎ ከዚህ በታች ባለው ሠንጠረዥ ውስጥ የቀረቡትን ሁሉንም ጥያቄዎች በአግባቡ ይመልሱ።

እያንዳንዱን ጥያቄ ካነበቡ በኋላ ከቀረቡት አምስት አማራጮች ውስጥ አንዱን ብቻ በመምረጥ ያክብቡ። አማራጮቹም፡- 1 = በፍጹም አልስማማም፤ 2 = አልስማማም፤ 3 = እርግጠኛ አይደለሁም፤ 4 = እስማማለሁ፤ 5 = በጣም እስማማለሁ።

ተ. ቁ	ጥያቄዎች(ዐረፍተነገር)	አማራጮች				
የተማሪ ተሳትፎ (Student Engagement)						
ባህሪያዊ/ተግባራዊ ተሳትፎ (Behavioural Engagement)						
1	በክፍል ውስጥ ውይይቶች ላይ ጥያቄ በመጠየቅ እና በመመለስ በንቃት እሳተፋለሁ።	1	2	3	4	5
2	በክፍል ውስጥ በትምህርት ጊዜ ማስታወሻዎችን በሚገባ እይዛለሁ።	1	2	3	4	5
3	የክፍል ስራዎቼን እና አሳይመንቶቼን በሰዓቱ እሰራለሁ።	1	2	3	4	5
4	በቡድን ስራዎች ላይ በንቃት እሳተፋለሁ።	1	2	3	4	5
ስሜታዊ/ቀልባዊ ተሳትፎ (Emotional Engagement)						
5	ከክፍል ጓደኞቼ ጋር የአብሮነት (የወዳጅነት) ስሜት ይሰማኛል።	1	2	3	4	5
6	ከአስተማሪዎቼ ጋር የአብሮነት(የወዳጅነት) ስሜት ይሰማኛል።	1	2	3	4	5
7	እየተማርኩበት ባለው የመማር-ማስተማር ሂደት በጣም ደስተኛ ነኝ።	1	2	3	4	5
8	በትምህርት ውጤቴ ስኬታማ እንደሆንኩ ይሰማኛል።	1	2	3	4	5
እእምሮአዊ ተሳትፎ (Cognitive Engagement)						
9	ትርፍ ጊዜዬን በክፍል ውስጥ በተማርኩት ርዕስ ጉዳዮች ላይ ተጨማሪ መረጃ በመፈለግ አሳልፋለሁ።	1	2	3	4	5
10	ከተለያዩ ትምህርቶች የማገኘውን ሃሳብ ከራሴ ጠቅላላ እውቀት ጋር ለማገናኘት እሞክራለሁ።	1	2	3	4	5
11	ምንም እንኳን የፈተና ጊዜ ባይደርስም ትምህርቴን (ማስታወሻዎቼን) በየጊዜው እከልሳለሁ (አነባለሁ)።	1	2	3	4	5
12	በትምህርቴ ላይ የሚያጋጥሙኝን ችግሮች ለመፍታት ያለኝን እውቀት እጠቀማለሁ።	1	2	3	4	5
ግላዊ/ወኪላዊ ተሳትፎ (Agentic Engagement)						
13	በትምህርቴ ውጤታማ ለመሆን ግብ አስቀምጣለሁ፤ ለውጤትም እከታተባለሁ።	1	2	3	4	5
14	ለትምህርቴ ሃላፊነት እወስዳለሁ(ይሰማኛል)።	1	2	3	4	5

15	የመማር ማስተማር ሂደቱን ለማሻሻል ለአስተማሪዎቹ አስተያየቶችን እስጣለሁ።	1	2	3	4	5
16	በመማር ማስተማር ሂደቱ ላይ የሚመቻችን እና የማይመቻችን ነገር ለአስተማሪዎቹ እናገራለሁ።	1	2	3	4	5
ማኅበረባህላዊ ተሳትፎ (Sociocultural Engagement)						
17	በክፍል ውስጥ ትምህርቴን ካሉኝ የግል እና ባህላዊ ልምዶች ጋር አገናኘዋለሁ።	1	2	3	4	5
18	በትምህርቴ ያለኝን አመለካከት እና ልምድ ለሌሎች ጓደኞቼ አካፍላለሁ።	1	2	3	4	5
19	የተለያዩ አመለካከት እና ሃሳብ ካላቸው ሰዎች ለመማር እሞክራለሁ።	1	2	3	4	5
20	በዩኒቨርሲቲ ውስጥ መከባበር እና ወዳጅነት እንዲጠናከር ከጓደኞቼ ጋር ጥረት እናድርጋለን።	1	2	3	4	5

መመሪያ፤ ከዚህ በታች ባለው ሠንጠረዥ ውስጥ ተማሪዎች ስለ መምህሮቻቸው የአመራር ባህሪያት ያላቸውን ግንዛቤ ለመገምገም የሚረዱ ጥያቄዎች ቀርበዋል። በዚህ ወሰን ትምህርት እየተማራችኋቸው ካሉ ኮርሶች መካከል [----- የሚባለውን ኮርስ] የሚያስተምሩትን መምህር ታሳቢ በማድረግ እንዲሁም መምህሩ/ሯ የተማሪዎችን ውጤት ለማሻሻል የተለያዩ የአመራር ባህሪያትን ምን ያህል እንደሚተገብሩ ከግምት ውስጥ በማስገባት እባክዎ ከዚህ በታች ባለው ሠንጠረዥ ውስጥ የቀረቡትን ሁሉንም ጥያቄዎች በአግባቡ ይመልሱ። እያንዳንዱን ጥያቄ ካነበቡ በኋላ ከቀረቡት አምስት አማራጮች ውስጥ አንዱን ብቻ በመምረጥ ያክብቡ። አማራጮቹም፦

1 = በጭራሽ፣ 2 = በትንሹ (በመጠኑ)፣ 3 = አንዳንድ ጊዜ፣ 4 = ብዙውን ጊዜ (በአብዛኛው)፣ 5 = ሁል ጊዜ (ዘወትር)።

የመምህራን አመራር (Teacher Leadership)						
ለውጣዊ የመምህራን አመራር (Transformational Teacher Leadership)						
1	መምህራችን የሥነ ምግባር እሴቶችን ማዳበር ያለውን አስፈላጊነት እና ጠቀሜታ ይነግረናል/ትነግረናለች።	1	2	3	4	5
2	መምህራችን ጠንካራ የሆነ ስራን የመፈጸም ስሜት አስፈላጊነት በግልፅ ይነግረናል/ትነግረናለች።	1	2	3	4	5
3	መምህራችን በውሳኔው ምክንያት የሚከሰቱ ሥነምግባራዊ እና ሞራላዊ ውጤቶችን ግምት ውስጥ ያስገባል/ታስገባለች።	1	2	3	4	5
4	መምህራችን ሌሎችን ማክበር እና በቡድን መስራት ምን ያህል አስፈላጊ እንደሆነ በጉልህ ያሳየናል/ታሳየናለች።	1	2	3	4	5
5	እሱ/እሷ የዚህ ኮርስ መምህራ በመሆኑ/ኗ እኮራለሁ።	1	2	3	4	5
6	መምህራችን ተማሪዎችን ለመጥቀም ሲባል ከራሱ/ሷ ፍላጎት ይልቅ ለተማሪዎች ፍላጎት ቅድሚያ ይሰጣል/ትሰጣለች።	1	2	3	4	5

7	የመምህራችን ተግባራት እሴት/እሷን እንዳከብረው/እንዳከብራት ያደርጉኛል።	1	2	3	4	5
8	መምህራችን ታላቅ የሆነ በራስ መተማመን ስሜት እንዲኖረን ያሳየናል/ታሳየናለች።	1	2	3	4	5
9	መምህራችን ወደፊቱ ስለምናስበው (ህልም) በደስታ ይነግረናል/ትነግረናለች።	1	2	3	4	5
10	መምህራችን ልናሳካቸው ስለሚገቡ ግቦች በጥሩ ስሜት ይነግረናል/ትነግረናለች።	1	2	3	4	5
11	መምህራችን እኛን የሚያነሳሳ የወደፊት ራዕይ ያቀርብናል/ታቀርብናለች።	1	2	3	4	5
12	መምህራችን የትምህርት ግቦቻችንን እንድናሳካ በራስ የመተማመን ስሜት እንድናሳድግ ያደርገናል/ታደርግናለች።	1	2	3	4	5
13	መምህራችን ትችትን ከግምት ውስጥ በማስገባት ለእኛ ተገቢ መሆኑንና አለመሆኑን ይገመግማል/ትገመግማለች።	1	2	3	4	5
14	መምህራችን ችግሮችን ለመፍታት የተለያዩ አስተያየቶችን ይመለከታል/ትመለከታለች።	1	2	3	4	5
15	መምህራችን ተማሪዎች ችግሮቻቸውን ከተለያዩ አቅጣጫዎች ወይም ሁኔታዎች አንፃር እንዲያዩ ያደርጋል/ታደርጋለች።	1	2	3	4	5
16	መምህራችን ተግባራትን እንዴት ሰርቶ ማጠናቀቅ እንዳለብን አዳዲስ መንገዶችን ይጠቁመናል/ትጠቁመናለች።	1	2	3	4	5
17	መምህራችን ተማሪዎችን በተናጠል (በግል) ለማገልገል ጊዜውን/ዋን ይሰጣል/ትሰጣለች።	1	2	3	4	5
18	መምህራችን እኔን እንደ ቡድን አባል ብቻ ሳይሆን እንደ ሰው (ግለሰብ) ይመለከተኛል/ትመለከተኛለች።	1	2	3	4	5
19	መምህራችን እያንዳንዱ ተማሪ የተለያዩ ፍላጎቶች፣ ችሎታዎች እና ምኞቶች እንዳላቸው ይገነዘባል/ትገነዘባለች።	1	2	3	4	5
20	መምህራችን አቅሜን እንዳዳብር ይረዳኛል/ትረዳኛለች።	1	2	3	4	5
ግብይታዊ የመምህራን አመራር (Transactional Teacher Leadership)						
21	መምህራችን የሚደግፈኝ/የምትደግፈኝ የትምህርት ተግባራትን በሚገባ ስፈጽም ብቻ ነው።	1	2	3	4	5
22	መምህራችን ትኩረት የሚሰጠው/የምትሰጠው የትምህርት ተግባራትን በትክክል ለሚያጠናቅቁ ተማሪዎች ብቻ ነው።	1	2	3	4	5
23	መምህራችን ሁሉም የሚነግረን/የምትነግረን ውጤታችን የሚለካው (የሚወሰነው) የትምህርቱን አላማዎች/ግቦች ስናሟላ መሆኑን ነው።	1	2	3	4	5
24	መምህራችን የሚደሰተው/የምትደሰተው በኮርሱ (በትምህርቱ) ውስጥ ያሉትን ሁሉንም ተግባራት በሚገባ በሚሰሩ ተማሪዎች ብቻ ነው።	1	2	3	4	5

25	መምህራችን ውድቀት ለሚያሳዩ (በትምህርታቸው ዝቅተኛ ለሆኑ) እና የትምህርት ህጎችን ለማያከብሩ ተማሪዎች ትኩረት ይሰጣል/ትሰጣለች።	1	2	3	4	5
26	መምህራችን ትኩረታችን በስህተቶቻችን እና በውድቀቶቻችን ላይ እንዲሆን ይነግረናል/ትነግረናለች።	1	2	3	4	5
27	መምህራችን ሁሉንም ውድቀቶች (ድክመቶቻችንን) ያስታውሰናል/ታስታውሰናለች።	1	2	3	4	5
28	መምህራችን የትምህርት ተግባራትን በምስራብ ጊዜ ትኩረቴን በቀጥታ ድክመቶቼ ላይ እንዳይተኩር ያደርገኛል/ታደርገኛለች።	1	2	3	4	5
አመራር ያልሆኑ የመምህራን ባህሪያት (Passive/avoidant Teacher Leadership Behaviours)						
29	ችግሮቹ ከባድ እስኪሆኑ ድረስ መምህራችን ምንም ነገር አያደርግም/አታደርግም (መፍትሄ የሚሰጠው/የምትሰጠው ችግሮች ከባድ ከሆኑ ነው)።	1	2	3	4	5
30	መምህራችን እርምጃ ከመውሰዱ/ደጋ በፊት ችግሮች እስኪከሰቱ ድረስ ይጠብቃል (መፍትሄ የሚሰጠው/የምትሰጠው ችግሮች ስር የሰደዱ ከሆኑ ነው)።	1	2	3	4	5
31	መምህራችን በመማር ማስተማሩ ሂደት ላይ የተለመዱ አካሄዶችን ከመቀየር ይቆጠባል (ሁኔታዎች/ችግሮች ከቁጥጥር ውጪ ካልሆኑ በስተቀር ጣልቃ መግባት የለብኝም ብሎ/ብላ ያምናል/ታምናለች)።	1	2	3	4	5
32	መምህራችን እርምጃ (መፍትሄ) የሚወስደው/የምትወስደው ችግሩ አንገብጋቢ ሲሆን ነው።	1	2	3	4	5
33	መምህራችን በማንኛውም አስፈላጊ ጉዳይ ውስጥ ከመሳተፍ ይቆጠባል/ትቆጠባለች።	1	2	3	4	5
34	መምህራችን የእሱ/የእሷ ተግባር በሚያስፈልግበት ጊዜ ምንም አያደርግም/አታደርግም።	1	2	3	4	5
35	መምህራችን አስፈላጊ በሆኑ ጉዳዮች ላይ ውሳኔ ከማድረግ ይቆጠባል/ትቆጠባለች።	1	2	3	4	5
36	መምህራችን ችግሮችን ለመፍታት ግልጽ መመሪያ ወይም አቅጣጫ አይሰጥም/አትሰጥም።	1	2	3	4	5

መመሪያ: ከዚህ በታች ባለው ሠንጠረዥ ውስጥ ተማሪዎች በመምህራቸው ላይ ያላቸውን እምነት ለመገምገም የሚረዱ ጥያቄዎች ቀርበዋል። በዚህ ወሰን ትምህርት እየተማራችኋቸው ካሉ ኮርሶች መካከል [-----የሚባለውን ኮርስ] የሚያስተምሩትን መምህር/ት አስቡ። ከዚያም በአንተ/ቺ እና በአስተማሪያችሁ መካከል ስላለው በመተማመን ላይ የተመሰረተ ግንኙነት ማለትም የትምህርት አላማችሁን ለማሳካት በምታደርጉት ጥረት እናንተን ለመርዳት በአስተማሪያችሁ ፍላጎትና ፈቃደኝነት ላይ ምን ያህል እንደምትተማመኑ ከግምት ውስጥ በማስገባት ከዚህ በታች ባለው ሠንጠረዥ ውስጥ የቀረቡትን

ሁሉንም ጥያቄዎች በአግባቡ መልሱ። እያንዳንዱን ጥያቄ ካነበባችሁ በኋላ ከቀረቡት አምስት አማራጮች ውስጥ አንዱን ብቻ በመምረጥ ያክብቡ። አማራጮቹም፦

1 = በጣም አልስማማም፣ 2 = አልስማማም፣ 3 = መወሰን አልችልም፣ 4 = እስማማለሁ፣ እና 5 = በጣም እስማማለሁ።

ተማሪዎች በመምህራን ላይ ያላቸው እምነት (Student trust in Teachers)						
ችሎታ (Ability)						
1	መምህራችን ስራውን/ስራዋን ለመስራት ጥሩ ችሎታ አለው/አላት።	1	2	3	4	5
2	በመምህራችን የማስተማር ክህሎት በጣም እተማመናለሁ።	1	2	3	4	5
3	መምህራችን ጥሩ የማስተማር ብቃት አለው/አላት።	1	2	3	4	5
4	መምህራችን ስለሚያስተምረን/ስለምታስተምረን ኮርስ በቂ እውቀት አለው/አላት።	1	2	3	4	5
5	መምህራችን ስለሚያስተምረን/ስለምታስተምረን ኮርስ ግንዛቤዬን (መረዳቴን) ሊጨምር የሚችል ልዩ እውቀት አለው/አላት።	1	2	3	4	5
በጎነት (Benevolence)						
6	መምህራችን በሚያስተምረው/በምታስተምረው ኮርስ ጥሩ ውጤት እንዳመጣ ትኩረት ይሰጣል/ትሰጣለች።	1	2	3	4	5
7	የእኔ ፍላጎቶች ለመምህራችን በጣም አስፈላጊ ናቸው።	1	2	3	4	5
8	መምህራችን በሚያስተምረን/በምታስተምረን ኮርስ ሆን ብሎ/ላ ዝቅተኛ ውጤት እንዳስመዘግብ ምንም ነገር አያደርግም/አታደርግም።	1	2	3	4	5
9	መምህራችን ለእኔ አስፈላጊ የሆነውን ነገር ያደርጋል/ታደርጋለች።	1	2	3	4	5
10	መምህራችን እኔን ለመርዳት ከሚገባው በላይ ይሄዳል/ትሄዳለች።	1	2	3	4	5
ታማኝነት (Integrity)						
11	መምህራችን በኮርሱ ውስጥ ለሁሉም ተማሪዎች ፍትሃዊ ለመሆን ጠንክሮ/ራ ይሰራል/ትሰራለች።	1	2	3	4	5
12	የመምህራችን ባህሪ በትክክለኛ የሥራ መርሆዎች የሚመራ ይመስለኛል።	1	2	3	4	5
13	መምህራችን ቃሉን/ቃሏን አያከብርም/አታከብርም ብዬ አልጠራጠርም (መምህራ ቃሉን/ቃሏን አከባሪ ነው/ናት)።	1	2	3	4	5
14	የመምህራችንን እሴቶች አከብራለሁ።	1	2	3	4	5

APPENDIX D: INTERVIEW PROTOCOL FOR STUDENTS

Introduction: My name is Yalalem Assefa. I am a PhD candidate in Educational Policy and Leadership at Bahir Dar University. I am conducting a dissertation entitled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers” as a partial fulfilment of my doctoral studies. I respectfully request you to participate in this study by providing your response to this interview session. Therefore, the effectiveness, integrity and accuracy of the study depend on your reliable response. So, I kindly ask you to respond to the interview questions responsibly.

Instruction: The following interview guiding questions are designed to ask you to explore your perceptions and experiences on your engagement in academic and institutional activities, teachers’ leadership behaviours (transformational, transactional, and passive/avoidant), and trust in teachers. Consider your engagement and the teacher who is teaching [the course] that you are currently taking. Then share your experiences based on the following guiding questions.

Guiding questions related to student engagement:

1. How do you feel about your behavioural engagement in learning activities?
2. What does your emotional engagement with your learning environment look like, including feeling connected to your classmates and teachers?
3. How do you engage cognitively (mentally and intellectually) in the learning process beyond class requirements?
4. How do you describe your agentic engagement in taking the initiative for your learning?
5. How do you explain your sociocultural engagement in relating your learning to your personal, cultural, and social experiences?

Guiding questions related to transformational teacher leadership behaviours:

6. How do you describe your teacher demonstrating ethical behaviours or moral values in the learning process that you want to model?
7. How does the teacher inspire you and the class to take full advantage of the learning process?
8. How does the teacher intellectually stimulate you and the class to understand and think creatively about a topic you are attending with him/her?
9. How does the teacher consider and address your and your classmates' learning needs, strengths, and weaknesses?

Guiding questions related to transactional teacher leadership behaviours:

10. How does the teacher recognise and honour your achievement in this course?
11. How does the teacher monitor your and the class learning process and take appropriate action when you face any issues?

Guiding questions related to passive/avoidant teacher behaviours:

12. Based on your experiences, can you think of any situations where the teacher noticed you were not engaging well in the course but chose not to intervene? If so, how did [this] experience affect your learning or your feelings about the course?

Guiding questions related to students' perceptions of trust in their teachers:

13. Considering the teacher's expertise in the course or anything else that you feel is important to you, how do you describe the teacher's ability to support your goals?
14. How does your teacher show benevolence towards you? In other words, how does your teacher show you and the class that he/she cares about your learning well-being or success?
15. How do you think that the teacher shows integrity to you and the class in the learning process?

APPENDIX E: INTERVIEW PROTOCOL FOR TEACHERS

Introduction: My name is Yalalem Assefa. I am a PhD candidate in Educational Policy and Leadership at Bahir Dar University. I am conducting a dissertation entitled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers” as a partial fulfilment of my doctoral studies. I respectfully request you to participate in this study by providing your response to this interview session. Therefore, the effectiveness, integrity and accuracy of the study depend on your reliable response. So, I kindly ask you to respond to the interview questions responsibly.

Instruction: Dear teacher, the following interview guiding questions are designed to ask you to provide your perceptions and observations on student engagement, experiences regarding your leadership behaviours (transformational, transactional, and passive/avoidant) and their implications in establishing a trusting relationship with your students and fostering student engagement. Consider the course that you are currently teaching students, then share your perceptions and experiences based on the following guiding questions.

Guiding questions related to student engagement:

1. How do you describe students’ behavioural engagement in completing learning tasks?
2. How do you observe and describe students’ emotional engagement with the learning environment, including feeling connected with you and their peers?
3. How do you describe students’ cognitive (mentally and intellectually) engagement in the learning process beyond class requirements?
4. How do you describe students’ agentic engagement in taking the initiative for their learning?
5. How do you explain your students’ sociocultural engagement in academic and institutional activities, such as relating learning to their personal and sociocultural experiences?

Guiding questions related to transformational teacher leadership behaviours:

6. How do you model ethical behaviours or moral values with students in your teaching?
7. How do you inspire students and the class to take full advantage of the learning process?
8. How do you intellectually stimulate students and the class to understand and think creatively about a topic that you are teaching them?
9. How do you consider and address the individual learning needs, strengths, and weaknesses of each student?

Guiding questions related to transactional teacher leadership behaviours:

10. How do you recognise and honour the students' achievements in this course?
11. How do you monitor students and the class learning process and take appropriate action when you notice that students or the class face any issues (e.g., difficulty in understanding a topic, staying motivated, managing time, accessing necessary resources, and others)??

Guiding questions related to passive/avoidant teacher leadership behaviours:

12. From your experiences, can you share any situations where or when you noticed that students were not engaging in the course that you are teaching them or struggled with issues, but you chose not to intervene?

Guiding questions related to trust:

13. How do you demonstrate your expertise as a teacher in the subject to build student confidence in your support? Consider your ability as a teacher, subject matter expertise and anything else that you feel is important as it relates to your students.
14. How do you show benevolence behaviour to your students? In other words, how do you show students that their welfare and success matter to you?
15. How do you show or exhibit integrity to your students in the learning process?

APPENDIX F: VERBAL CONSENT FORM

Script: Dear participants, my name is Yalalem Assefa. I am a PhD candidate in Educational Policy and Leadership at Bahir Dar University. I am conducting a dissertation entitled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers” as a partial fulfilment of my doctoral studies.

Now, I am approaching you to respectfully request your participation in this study. If you agree to participate, you will be asked to participate in this study by filling out questionnaires. Filling out the questionnaire will take about 20-35 minutes. Your participation is completely voluntary. You can choose not to participate or withdraw at any time. All the information you provide will be kept confidential and used only for this study purpose, and any reporting will be anonymous.

Do you consent to participate in this study?

[Pause for verbal agreement]

Thank you very much for your participation.

APPENDIX G: WRITTEN CONSENT FORM

Dear participant, my name is Yalalem Assefa. I am a PhD candidate in Educational Policy and Leadership at Bahir Dar University. I am conducting a dissertation entitled “The Influence of Teachers’ Full-Range Leadership on Student Engagement in Public Universities of the Regional State of Amhara: The Mediating Role of Student Trust in Teachers” as a partial fulfilment of my doctoral studies. I respectfully request you to participate in this study by answering questions in an interview. Your participation will take about 60-90 minutes.

Your participation is completely voluntary. You can choose not to participate or withdraw at any time. All the information you provide will be kept confidential and used only for this research. Your name or identity will not appear in any reports.

If you agree to participate, please sign below.

Participant name: -----

Signature: -----

Date: -----

APPENDIX H: ETHICAL CLEARANCE



Bahir Dar University

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College of Education

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Institutional Research Review Committee (IRRC)

IRRC'S Decision

Meeting No. 7 / 24

Date(D/M/Y): 12/06/2025

Protocol number: 001964

Assigned No: 025

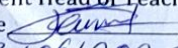
Protocol title: The Influence of Teachers' Full-Range Leadership Behaviours on Student Engagement in Public Universities of the State of Amhara: The Mediating Role of Student Trust in Teachers			
Name of Principal investigator: Yalalem Assefa Zeleke			
Institution of principal investigator: Bahir Dar University			
Version of elements reviewed	Protocol version:	<u>2</u>	Attached: yes ☒ No ☐
	Consent form version:	<u>2</u>	Attached: yes ☒ No ☐
Decision of the board:	Approved ☒	Resubmission ☐	Disapproved ☐
	Sent to National Ethics Review Committee ☒		
Obligations of the Principal investigator: 1. Complies with the standard international & national scientific and ethical guidelines 2. Gets IRB approval for all amendments and changes required to be made in the protocol and consent form 3. Reports SAE within 10 days of the event 4. Report send of the study, including manuscripts and thesis works 5. Reports non-compliance and unanticipated events			
Approval Period (12 Jun. /2024-11 Jun. /2025)			
Follow up report expected in:	3months ☐	6months ☐	
	9months ☐	12months ☒	

Jerusalem Yibeltal Yizengaw (PhD)

Associate Professor of International & Comparative Education

Chair Person for College of Education Institutional Research Review Committee (CoEIRRC)

Department Head of Teacher Education & Curriculum Studies, Bahir Dar University, Ethiopia

Signature 
Date 12/06/2025

