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Examining Student-Lecturer Relationships at a Tanzanian University: An Understudied Dimension in Higher Education

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Abstract. Student-lecturer relationships are vital to students' learning, yet research in higher education, particularly within Tanzanian universities, remains limited. This study examined the nature of student-lecturer relationships, differences across student demographic variables, and the factors influencing these relationships. A quantitative survey design was employed. Participants were selected through a two-step process: stratified random sampling by year of study, followed by simple random sampling from student lists, using random number generation. 1,483 undergraduates completed the Questionnaire on Teacher Interaction (QTI), which measures eight relationship dimensions: "leadership", "friendly", "understanding", "student freedom", "uncertain", "dissatisfied", "reprimanding", and "strict". Results indicated an overall moderate level of student-lecturer relationships, with leadership and understanding scoring the highest among the positive dimensions. However, "uncertain" and "reprimanding" ranked highest among negative dimensions. T-tests and ANOVA analysis revealed no significant differences based on gender, age, year of study, high school attended or GPA. Nevertheless, significant differences appeared in training type and study programme, with in-service students and those enrolled in BA. Ed. and BSc. Ed. programmes reporting stronger relationships than BEd (Sc.) students. Regression analysis revealed that training type and study programme significantly predicted student-lecturer relationships. Lower scores in friendliness and student freedom suggest limited relational engagement. The findings highlight the need for lecturers to foster greater friendliness and student autonomy while reducing "uncertain" and "reprimanding" behaviours.

Keywords: Higher education; Interpersonal behaviours; Relational competence; Student-lecturer relationships; Tanzanian universities

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1. Introduction

Student-lecturer relationships (S-LRs) play a crucial role in shaping the academic journeys and learning outcomes of university students, with academic success being closely linked to S-LRs (Pervin et al., 2021). Although extensively studied in primary and secondary education (Liu, 2024), S-LRs in higher education, especially within Tanzanian universities, remain largely underexplored. S-LRs encompass both social and academic interactions and are influenced by lecturers' personal and instructional traits (Hagenauer et al., 2023). Effective learning environments require such qualities as trust, care, a secure environment, classroom management, and motivation (Hagenauer et al., 2023; Mallik, 2023). Strong, positive S-LRs enhance student involvement, participation and engagement (Mallik, 2023; Pervin et al., 2021), motivating students to work harder and pay closer attention, thereby fostering meaningful educational experiences.

S-LRs depend not only on students' individual traits but also on lecturers' interpersonal behaviours (Pervin et al., 2021). Effective lecturers prioritise students' needs and foster supportive relationships to create a conducive learning environment (Pervin et al., 2021). Such S-LRs influence both academic achievement (Pervin et al., 2021) and students' social development (Xie & Derakhshan, 2021). Students who experience positive relationships with lecturers are more motivated and less likely to disengage from their studies (Pervin et al., 2021; Xie & Derakhshan, 2021). Conversely, negative relationships cause anxiety and stress, undermining academic success (Hagenauer et al., 2024). Collectively, these findings highlight that strong S-LRs are essential in shaping students' educational experiences.

Pre-service students warrant particular attention because they are not only current learners but also future teachers. Their interactions with lecturers can influence their professional identity and expectations for future S-LRs. Anecdotal evidence indicates that past experiences and behaviours shape later attitudes and practices (Yeh et al., 2026). Positive or negative S-LRs experienced during teacher training may influence how pre-service students later relate to their own students in professional practice. Therefore, nurturing positive S-LRs is essential for helping students develop a well-rounded professional identity and promoting positive future relationships with students.

Despite their importance, evidence indicates that S-LRs are weak in some universities (Uleanya, 2020). Kanyangale and Sibanda (2021) identified poor relationships arising from ineffective leadership and teaching styles that paid little regard to students' welfare. Students reported difficulty approaching lecturers, which undermined their confidence and hindered meaningful interaction with lecturers. Similarly, Doan et al. (2025) reported that poor S-LRs, characterised by students' fear of approaching lecturers, contributed to disengagement and student attrition. Such concerns underscore the need to examine the nature of S-LRs, differences across students' demographics, and the factors that influence them.

Although strong S-LRs are vital for quality education, studies suggest they remain weak in some universities (Uleanya, 2020). Moreover, S-LRs continue to be an understudied area within higher education (Hagenauer et al., 2023; Tormey, 2021), with few studies focusing on the outcomes of these relationships (Hagenauer et al., 2023; Mallik, 2023). In particular, S-LRs in Tanzanian universities are particularly limited, making this study vital. This study therefore seeks to examine the nature of S-LRs, their differences across students' demographics, and the factors that influence them.

It is guided by the following research questions and hypotheses:

- i. What is the nature of S-LRs in universities?
H1: S-LRs in universities are generally negative across dimensions.
- ii. What is the nature of S-LRs across different students' demographic variables?
H2: Statistically significant differences exist in S-LRs across students' demographic variables (e.g. gender, year of study, and academic programme).
- iii. What factors influence S-LRs in universities?
H3: Students' gender significantly predicts S-LRs.
H4: Students' age significantly predicts S-LRs.
H5: Students' year of study significantly predicts S-LRs.
H6: Nature of training (pre-service or in-service students) significantly predicts S-LRs.
H7: Type of high school attended significantly predicts S-LRs.
H8: Students' programme of study significantly predicts S-LRs.
H9: Students' academic performance (GPA) significantly predicts S-LRs.

This study addresses the limited scholarly attention given to S-LRs in Tanzanian higher education, despite their impact on students' engagement and academic experiences. By examining the nature of these relationships, demographic differences, and their predictors, the study redirects attention from solely educational outcomes to the relational processes that shape the university learning environment. The findings will provide context-specific insights into how student characteristics, lecturers' interpersonal and instructional practices, and institutional conditions influence interaction patterns, offering guidance for teaching practices, student support programmes, and university policies in fostering meaningful learning.

2. Literature Review

2.1 Nature of S-LRs in Universities

S-LRs in universities play a vital role in promoting effective classroom management and engagement (Tormey, 2021). They encompass professional and interpersonal qualities such as approachability, care, trust, and support, which enhance teaching and learning (Hagenauer et al., 2023). Research generally characterises S-LRs as positive, fostering open communication, trust, motivation and student engagement (Olayide et al., 2024). High quality S-LRs are also linked to greater course satisfaction and lower dropout intentions. Evidence suggests that positive S-LRs are multidimensional, culturally sensitive, and closely linked

to academic success, strengthening engagement, trust, and the connection between teaching practices and learning outcomes.

However, S-LRs in some African universities are reportedly weak or negative, adversely affecting students' academic and social experiences. For example, Okoye (2024) found that some lecturers appeared disengaged, unfriendly and uncaring. Negative lecturer behaviours, such as poor guidance, delayed feedback, and low commitment, are associated with negative S-LRs. Particularly, delayed feedback weakens S-LRs (Uleanya, 2021). Weak S-LRs have been found to erode trust and negatively affect students' learning outcomes (Okoye, 2024). These insights underscore the importance of institutional initiatives to foster positive relationships through training and improved communication strategies.

The quality of S-LRs is influenced by cultural, institutional, and individual factors. In African universities, S-LRs are further shaped by structural challenges such as classroom design, large class sizes, student behaviour, and limited contact time (Uleanya, 2020). Furthermore, cultural norms that emphasise formal hierarchies between elders and students can influence S-LRs (Kavenuke, 2024). These factors are reinforced by the traditional power dynamics inherent in S-LRs.

2.2 Factors influencing S-LRs

Several variables may influence S-LRs, including gender, year of study, type of high school attended, programme of study, age, nature of training, and academic performance. These variables were selected because prior research suggests that demographic characteristics, educational experiences, academic background, professional status, and academic achievement can affect how students perceive and interact with lecturers.

2.2.1 Gender

The literature yields mixed results on gender and S-LRs (Bai et al., 2022; Goldie & O'Connor, 2021; Mundelsee & Reschke, 2025). In particular, Bai et al. (2022) found that males scored higher than females on intimacy, care, and interaction, suggesting stronger S-LRs. Hagenauer et al. (2024) found that anxiety reduces the quality of female students' relationships. Conversely, Goldie and O'Connor (2021) report that males experience less closeness with lecturers, which affected learning. Mundelsee and Reschke (2025) found no significant gender differences in oral participation and communication with lecturers, suggesting gender does not influence S-LRs. However, Hagenauer et al. (2023) observed that lecturers perceived male students as easier to relate to because they appeared more open in social interactions.

2.2.2 Year of study

Bai et al. (2022) found significant differences in S-LRs across years of study, with third-year students scoring highest. Pinto et al. (2025) note that younger students, especially recent high school graduates, depend more on lecturers for support. Older students are more independent and view lecturers as mentors or colleagues, resulting in relationships that vary by year of study. Conversely, Endedijk et al. (2022) found no significant association between year of study and S-LRs. These

mixed results indicate that the year of study is not a consistent predictor of S-LRs, and may be context-dependent.

2.2.3 Type of high school attended

The type of high school attended may affect S-LRs. Private schools often have smaller classes, allowing more personalised interactions and stronger student-teacher relationships (Bondebjerg et al., 2023). Private school teachers may also have greater independence and resources to adopt innovative methods that enhance student engagement. In contrast, many public schools have larger classes, reducing teachers' ability to connect individually (Abizada & Seyidova, 2024). Kavenuke (2026) noted that students frequently bring their previous educational experiences into higher education, highlighting that those from private schools expect university instructors to teach small, manageable classes. Consequently, prior relationships with high school teachers can influence students' expectations, interactions, and relationships with university lecturers.

2.2.4 Programme of study

Huong et al. (2023) found that large undergraduate class sizes decrease one-on-one interactions, whereas smaller, seminar-style postgraduate classes foster closer contact. Similarly, Aleru and Nwovuhoma (2024) argue that intensive programmes can create more authoritative relationships, while less rigorous programmes promote a more relaxed mentoring dynamic. Research also indicates that programmes emphasising discussion and active participation result in stronger S-LRs. Conversely, disciplines such as Mathematics and Engineering prioritise independent study, which reduces direct student-lecturer interaction (Fox & Docherty, 2019). However, Lisio et al. (2025) observed no significant differences across disciplines, suggesting that the field of study does not consistently influence S-LRs.

2.2.5 Age

Age may influence S-LRs through differences in maturity, experience and communication skills. For instance, Hagenauer et al. (2023) noted that lecturers often perceived younger students as immature and harder to engage, while older students were seen as more responsible and independent. Mohd and Haque (2024) noted that age gaps can cause cultural and social barriers. Older students may interact more with lecturers, whereas younger students may view them as distant authority figures. Consequently, older students may develop stronger S-LRs than their younger counterparts.

2.2.6 Nature of training

In this study, the nature of training refers to whether students are pre-service or in-service. Pre-service students are university students preparing to become teachers. In contrast, in-service students are practising teachers who are employed in schools while pursuing further academic qualifications or professional development. Studies indicate that pre-service and in-service students experience different relationships with lecturers. Kervinen et al. (2022) found that pre-service students view lecturers as authority figures within a hierarchical relationship. On the other hand, in-service students tend to engage more collaboratively and regard lecturers as colleagues or mentors. Similarly, Näykki et al. (2021) reported

that pre-service students generally see themselves as learners seeking guidance from lecturers, whereas in-service students view themselves as experienced professionals and engage with lecturers more as peers. These differences between pre-service and in-service students underscore the need for further research across diverse contexts, including Tanzania.

2.2.7 Student academic performance (GPA)

Studies suggest a positive association between S-LRs and academic performance. For instance, Schimmelpfennig (2025) found that students with stronger S-LRs demonstrated higher motivation to learn, often leading to good academic outcomes. Similarly, Mallik (2023) reported that students felt lecturers paid more attention to those with good grades than to those with lower grades. Low-achieving students also reported more unfavourable S-LRs. Thus, higher student performance appears to be associated with stronger S-LRs.

2.3 A theoretical framework

Various scholars (Wei et al., 2009; Wubbels & Brekelmans, 2012; Wubbels, 2017) have examined S-LRs using the Model for Interpersonal Teacher Behaviour (MITB). Originating in clinical psychology and psychotherapeutic settings, this model provides a framework for understanding human interaction in educational contexts (Wubbels, 2017; Wubbels & Brekelmans, 2012). It identifies behaviours such as clarity and humour as important for effective learning, with clarity aiding understanding and humour encouraging positive emotional engagement. Furthermore, the MITB offers a structured lens for analysing the relational dynamics between lecturers and students. In this study, it is used to examine how interpersonal behaviours shape the quality and nature of S-LRs.

The model is organised along two dimensions: Influence (Dominance-Submission) and Proximity (Opposition-Cooperation). It classifies teacher behaviour into eight categories: leadership, friendly, understanding, student freedom, uncertain, dissatisfied, reprimanding, and strict (Wei et al., 2009; Wubbels, 2017). These dimensions are represented within a coordinate system (see Figure 1). The model conceptualises interpersonal behaviour along complementary dimensions of influence and proximity rather than opposing traits.

For instance, “understanding” and “student freedom” reflect cooperation and submission, while “reprimanding” and “strict” reflect dominance and opposition. In this model, teachers rarely display both positive (leadership, friendly, understanding and student freedom) and negative (strict, reprimanding, dissatisfied and uncertain) traits simultaneously (Wubbels, 2017; Wubbels & Brekelmans, 2012). The influence dimension captures the level of control the lecturer exercises over students, whereas proximity reflects students’ perceptions of cooperation, care, and friendliness (Wubbels, 2017).

These dimensions enable a systematic interpretation of S-LRs as patterns of interaction defined by both authority and relational closeness. In addressing the first research question, the model allows the nature of relationships to be conceptualised through identifiable interpersonal profiles. The second research

question provides a basis for examining how personal and contextual factors may shape these interpersonal behaviours. Applying the MITB in the Tanzanian university context extends its empirical relevance beyond predominantly Western settings and addresses the limited research on S-LRs in African higher education.

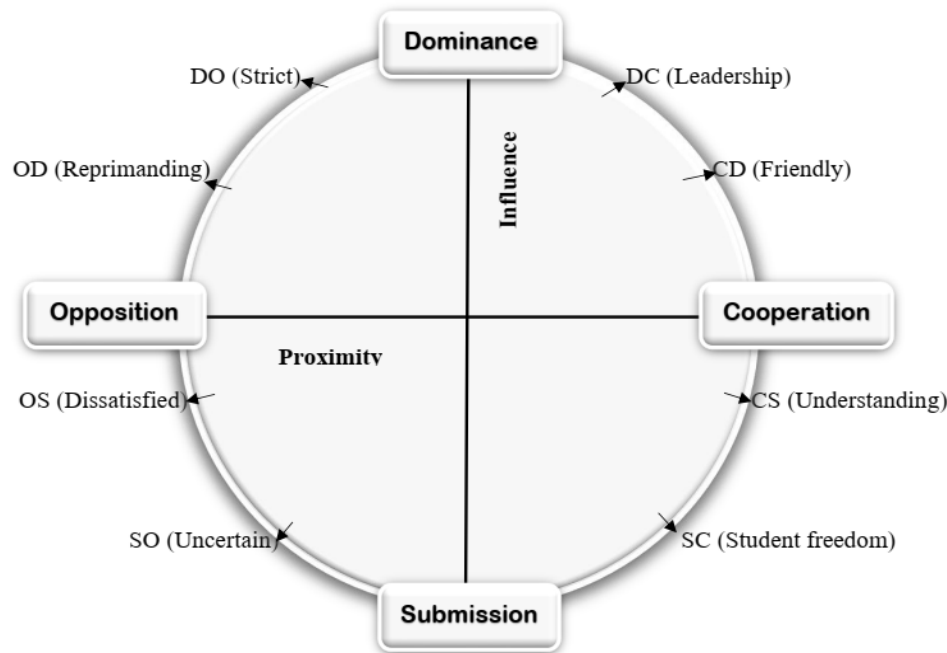


Figure 1: MITB Modified from Wubbels (2017) and Wei et al. (2009)

3. Methodology

3.1 Research approach and design

This study employed a quantitative survey to examine S-LRs at a Tanzanian university. A quantitative approach was selected because it enables the numerical measurement of students' perceptions, facilitating statistical analysis and broader generalisation (Creswell & Creswell, 2023). The survey design was selected for its ability to systematically collect data from many participants and identify patterns and differences in S-LRs (Agneessens & Labianca, 2022).

3.2 Study area and participants

The study was conducted at a university in Tanzania, involving undergraduate students from various years. 1,483 students participated, comprising 749 males and 727 females from among 5,389 registered undergraduate students. The sample included 439 first-year, 448 second-year, and 592 third-year students. Table 1 provides more demographic details.

Table 1: Demographic characteristics of the sample

Variable	Category	Frequency (N)	Percentage (%)
Gender	Male	749	50.5
	Female	727	49.0
	Missing	7	0.5
Age group	18 -20	81	5.5
	21-23	1012	68.2
	24-26	332	22.4
	27+	46	3.1
	Missing	12	0.8
Year of study	First Year	439	29.6
	Second Year	448	30.2
	Third Year	592	39.9
	Missing	4	0.3
Nature of training	Pre-service	1229	82.9
	In-service	170	11.5
	Missing	84	5.7
Programme of study	Bachelor of Education in Arts (BEd Arts)	198	13.4
	Bachelor of Education in Science (BEd (Sc.))	237	15.9
	Bachelor of Arts with Education (BA.Ed.)	643	43.4
	Bachelor of Science with Education (BSc. Ed.)	392	26.4
	Missing	14	0.9
High school attended	Private	262	17.7
	Public	1167	78.7
	Missing	55	3.7
GPA	First Class	106	7.1
	Upper Second	661	44.6
	Lower Second	422	28.5
	Pass	93	6.3
	Failure	17	1.1
	Missing	184	12.4

3.3 Sampling procedure

Participants were selected through stratified random sampling, with study year (first, second, and third) as the strata. This method guaranteed proportional representation across academic levels, enhancing the sample's overall representativeness. Simple random sampling was then conducted within each group, using student lists and random-number generation, ensuring all students an equal probability of selection. This procedure minimised selection bias and increased the validity of the results.

3.4 Data collection instrument and procedure

The study employed the Questionnaire on Teacher Interaction (QTI) to assess the nature of S-LRs. The original QTI, designed in Dutch, comprised 77 items across eight scales (Wei et al., 2009). A later Australian adaptation reduced the

instrument to 48 items, while maintaining its validity. Since its development, the QTI has been widely applied in various educational contexts (Wubbels & Brekelmans, 2012; Pervin et al., 2021; Tormey, 2021; Wei et al., 2009; Wubbels, 2017). For this study, items were primarily adopted from Wei et al. (2009) and modified for the Tanzanian university context, resulting in a 54-item instrument.

3.4.1 *Dependent variables*

The dependent variables reflect the eight dimensions of lecturer interpersonal behaviour as conceptualised in the QTI. All dimensions were assessed using a Likert scale ranging from 1=strongly disagree to 4=strongly agree. A neutral response option was omitted to encourage respondents to share their perceptions of lecturer interpersonal behaviours and to minimise central tendency responses. "Leadership" was measured using seven items. The internal consistency (Cronbach's α) was .98.

In this study, Cronbach's α for this dimension was .75. "Friendly" was measured using eight items. Cronbach's α was .95, but in this study, it was .72. Moreover, "understanding" was measured using seven items. Cronbach's α was .98, but in this study, it was .79. "Student freedom" was measured using seven items. Cronbach's α was .81, and in this study, it was .82. "Uncertain" was measured using six items. The scale's Cronbach's α was .60, whereas in this study it was .80. Additionally, "dissatisfied" was measured using six items. Cronbach's α was .92, and in this study, it was .88. "Reprimanding" was measured using six items. Cronbach's α was .66, but in this study, it was .82. Lastly, "strict" was measured using seven items. Cronbach's α was .82, and in this study, it was .76.

To establish the validity and reliability of the adapted QTI, an educational research expert assessed the relevance, clarity, and contextual appropriateness of the modified instrument. Exploratory factor analysis (EFA) was subsequently performed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .937, indicating excellent suitability for factor analysis. Bartlett's Test of Sphericity was statistically significant ($\chi^2 = 18,497.66$, $p < .001$), indicating sufficient inter-item correlations. The factor analysis supported the instrument's multidimensional structure, and the item loadings were generally strong. Reliability analysis showed Cronbach's alpha coefficients ranging from .72 to .88 across the eight dimensions, indicating acceptable reliability.

3.4.2 *Independent variables*

The study included several independent variables capturing demographic and academic characteristics. Gender was recorded as male or female, and four categories were used to measure age. The nature of training distinguished pre-service from in-service students. Participants reported their study programme, including BEd (Arts), BEd (Sc.), BA.Ed., and BSc. Ed. High school type (public or private) was also recorded. Academic performance was measured using the participants' GPA for the relevant academic year, based on the Tanzanian university grading system, where a GPA of 4.4–5.0 indicates First Class, 3.5–4.3 Upper Second Class, 2.7–3.4 Lower Second Class, and 2.0–2.6 Pass (University of Dar es Salaam, 2025).

3.4.3 Data collection procedures

Data were collected using the QTI, which was distributed in classrooms after lectures. To maximise participation, arrangements were made with instructors teaching courses that included students from all study programmes. Participants were informed of the study's purpose, instructed to answer independently, and assured that participation was voluntary. These procedures helped ensure systematic data collection while preserving data quality and reliability. The questionnaire was distributed to 1,500 undergraduates, and 1,483 responses were returned, yielding a 98.87% response rate.

3.5 Data analysis

Data were analysed using SPSS version 30. Statistical procedures were selected based on the research questions and the nature of the variables. Descriptive statistics were used to summarise students' perceptions of S-LRs. Independent-samples t-tests and one-way analysis of variance (ANOVA) examined differences in mean relationship scores across demographic groups, while linear regression analysis was used to identify demographic predictors of S-LRs. For descriptive analysis, mean scores below 2 were interpreted as indicating negative relationships, scores between 2 and 3 as moderate, and scores of 3 or more as positive relationships (Taherdoost, 2021). The theory used in this study portrays positive and negative dimensions.

For the positive dimensions, higher scores indicate more positive relationships and vice versa. Conversely, in the negative dimensions, higher scores indicate less positive relationships and vice versa. To compare differences between groups, independent-samples t-tests and one-way ANOVA were conducted. Where ANOVA results were statistically significant, post hoc analyses were performed to identify specific differences between groups. Furthermore, linear regression analysis was used to identify factors affecting S-LRs, thereby pinpointing significant predictors in the model.

3.6 Ethical considerations

Ethical standards were rigorously upheld throughout the study. Permission was obtained from the relevant authorities prior to data collection. Participants were guaranteed confidentiality and anonymity, and no identifiable information about them or the institution was collected or shared. Participation was entirely voluntary.

4. Results

The results of the present study are presented according to the research questions.

4.1 The nature of S-LRs in universities

The first research question examined the nature of S-LRs. Overall, the findings reveal a moderate relationship, indicating that students feel some degree of support but that there is room for improvement. This highlights the need for strategies to strengthen S-LRs, particularly for students who feel less supported. Mean scores for each dimension are presented in Table 2.

Table 2: Mean scores for dimensions measuring the nature of S-LRs

	Leadership	Friendly	Understanding	Student freedom	Uncertain	Dissatisfied	Reprimanding	Strict
Mean	3.0231	2.5768	3.1355	2.3758	3.0227	2.3599	3.0367	2.4980
SD	0.45891	0.51876	0.45812	0.57967	0.46570	0.61826	0.47635	0.56421

Results indicate that “leadership” and “understanding” received the highest scores among the positive dimensions of S-LRs. “Friendly” and “student freedom” received moderate scores. On the other hand, “uncertain” and “reprimanding” received the highest mean scores among the negative dimensions of S-LRs, indicating negative S-LRs, while “dissatisfied” and “strict” received moderate mean scores. Thus, H1 is supported only for the negative dimensions of S-LRs.

4.2 The nature of S-LRs across student demographic variables

Independent-samples t-test and one-way ANOVA were conducted to examine differences in mean scores across demographic variables. The independent-samples t-test showed no significant differences by gender or high school type (Table 3), suggesting that neither is associated with S-LRs.

Table 3: Independent-samples t-test results for S-LRs across demographic variables

Demographic Variables	N	Mean	SD	t	df	p(sig.)
Gender						
Male	749	2.77	0.40			
Female	727	2.74	0.37	1.364	1474	.217
Nature of Training						
Pre-service	1226	2.74	0.37			
In-service	169	2.86	0.52	-3.55	1393	.000*
High School Attended						
Private	261	2.77	0.39			
Public	1165	2.75	0.39	0.738	1424	.880

*p< .05

In contrast, a significant difference was found in training type, with in-service students ($p < .001$) reporting higher relationship scores than pre-service students (Table 3). This finding suggests that in-service students experience stronger S-LRs. Therefore, H2 is supported for the nature of training. One-way ANOVA analysis revealed no significant differences in S-LRs across years of study, age groups, or GPA. These findings suggest that these variables are not significantly associated with S-LRs. However, a significant difference was observed across programmes

of study ($p < .001$) (Table 4). Therefore, H2 is accepted for the study programme variable.

Table 4: One-way ANOVA results for S-LR scores across academic and demographic variables

Demographic Variables	N	Mean	SD	df	F	p(sig.)
Year of Study						
First Year	439	2.76	0.38			
Second Year	448	2.78	0.43			
Third Year	592	2.73	0.35	1476	2.688	0.68
Programme of Study						
BEd Arts	198	2.71	0.38			
BEd (Sc.)	237	2.63	0.33			
BA.Ed.	643	2.79	0.42			
BSc. Ed.	392	2.79	0.35	1466	8.644	.000*
Students' Age						
18-20	81	2.73	0.47			
21-23	1012	2.75	0.39			
24-26	332	2.77	0.37			
27+	46	2.76	0.35	1467	0.295	0.829
GPA						
4.4-5.0	106	2.69	0.41			
3.5-4.3	661	2.75	0.38			
2.7-3.4	422	2.78	0.38			
2.0-2.6	93	2.76	0.44			
0-1.9	17	2.64	0.42	1291	1.582	0.177

* $p < .05$

ANOVA results show a significant difference among the group means, but they do not reveal which groups differ. With four programmes, the significant result suggests that at least one pair has notably different mean scores regarding S-LRs. Therefore, a post hoc test was performed to identify the specific groups that differed significantly and contributed to the overall ANOVA results.

Table 5: Post hoc comparisons of programme of study and S-LRs

The first group in the comparison (I)	The second group, compared to the first group (J)	Mean Difference (I-J)	Std. Error	Sig.	95% CI Lower	95% CI Upper
BEd Arts	BEd (Sc.)	.0798	.0351	.106	-.0107	.170
	BA.Ed.	-.0749	.0323	.096	-.158	.008
	BSc. Ed.	-.0817	.0329	.065	-.166	.003
BEd (Sc.)	BEd Arts	-.0798	.0351	.106	-.170	.010
	BA.Ed.	-.1547*	.0273	.000	-.225	-.084
	BSc. Ed.	-.1615*	.0281	.000	-.234	-.089
BA.Ed.	BEd Arts	.0749	.0323	.096	-0.008	.158
	BEd (Sc.)	.1547*	.0273	.000	0.084	.225
	BSc. Ed.	-.0067	.0245	.993	-0.069	.056
BSc. Ed.	BEd Arts	.0817	.0329	.065	-0.003	.166
	BEd (Sc.)	.1615*	.0281	.000	0.089	.234
	BA.Ed.	.0067	.0245	.993	-0.056	.069

* The mean difference is significant at the .05 level

Post hoc results indicated that BEd (Sc.) students reported significantly lower average scores than other groups, suggesting their S-LRs are perceived as negative (Table 5). This suggests that the overall significant difference is primarily attributable to the lower scores reported by BEd (Sc.) students.

4.3 Factors influencing S-LRs

Linear regression analysis was conducted to examine whether variables including gender, age, training type, high school, year of study, programme of study, and GPA predict S-LRs. Results indicate that gender, age, year of study, school type, and GPA do not significantly predict S-LRs (see Table 6). Therefore, H3, H4, H5, H7 and H9 are rejected.

Table 6: Regression analysis results for H3 to H9, showing the predictive effects of independent variables on the dependent variable (S-LRs)

Hypotheses	Predictor variables	R ²	p-value	Results
H3	Gender	.001	.173	Rejected
H4	Age	-.001	.829	Rejected
H5	Year of Study	.001	.131	Rejected
H6	Nature of training	.008	.000**	Accepted
H7	Type of High School Attended	.000	.461	Rejected
H8	Programme of study	.020	.000**	Accepted
H9	GPA	.000	.209	Rejected

** $p < .05$ (Regression analysis results)

Furthermore, results from the regression analysis (Table 6) indicate that the nature of training ($R^2 = .008$, $p < .001$) and programme of study ($R^2 = .020$, $p < .001$) show statistically significant relationships with the dependent variable (S-LRs), though

both effect sizes (R^2) are small. Based on these results, H6 and H8 are accepted. Overall, the findings indicate that training type and study programme significantly influence S-LRs.

5. Discussion

The findings of this study provide a nuanced view of S-LRs, indicating a trend that is neither positive nor negative, but generally moderate across various aspects. This challenges the notion that S-LRs are merely positive or negative, instead highlighting a more complex interactional environment within universities. These results support previous studies (Bai et al., 2022; Kavenuke, 2024; Wei et al., 2009; Wubbels, 2017) that indicate lecturers seldom exhibit both positive and negative traits simultaneously. This is consistent with MITB, which states that lecturers are not expected to possess opposing behaviours (Wubbels, 2017), as the model conceptualises interpersonal behaviour in terms of complementary aspects of influence and proximity, rather than opposing traits.

The moderate nature of S-LRs suggests that students experience some degree of academic and personal support, although their S-LRs are not as positive as in highly effective learning environments. This aligns with previous studies (Abizada & Seyidova, 2024; Huong et al., 2023; Uleanya, 2020), which have highlighted that structural issues, such as classroom design and large class sizes, further affect S-LRs in universities in developing countries. Notably, “leadership” and “understanding” were rated highest among the positive dimensions, indicating that lecturers are supportive of students and somewhat responsive. This supports Olayide et al. (2024), who argued that lecturers promote engagement, foster trust, and act as a crucial link between effective teaching and positive learning outcomes.

Within the MITB framework, these dimensions reflect positive influence (leadership) and closeness (understanding), both of which are linked to stronger S-LRs (Wei et al., 2009). Conversely, moderate ratings for “friendly” and “student freedom” point to limited relational depth and student-centred engagement. This highlights a vital issue, as effective teaching requires both instructional leadership and relational accessibility, which seem underdeveloped. These findings align with those of Hagenauer et al. (2023), who stated that S-LRs encompass both professional and personal factors—such as approachability, care, trust, and support—which improve teaching and learning outcomes.

More critically, analysis of the negative dimensions reveals a key contradiction. Although behaviours such as “uncertain” and “reprimanding” generally received high ratings, the MITB framework suggests that higher scores in negative aspects indicate negative relationships. These findings suggest that behaviours such as hesitation and direct corrective relationships are still evident in lecturer behaviour. According to the MITB, such behaviours reflect lower levels of proximity and, in some cases, imbalanced influence, possibly contributing to less effective S-LRs (Wubbels, 2017). Overall, the relationship climate appears to be functionally adequate but not optimal, highlighting the need to reduce negative interpersonal behaviours to enhance S-LRs.

Contrary to expectations, gender, age, year of study, high school type, and GPA did not significantly predict S-LRs. This suggests that S-LRs are quite consistent across these student characteristics. The absence of gender differences supports the findings of Mundelsee and Reschke (2025) but contrasts with those of Bai et al. (2022). These results challenge the common assumption that personal or academic backgrounds significantly shape students' relational experiences (Bai et al., 2022; Hagenauer et al., 2023; Mallik, 2023). A possible explanation is that institutional and lecturer-related factors may have a stronger impact than individual student characteristics.

Lecturer-related factors that may equally shape S-LRs include area of expertise and professional experience, workload, teaching style, years of experience, and participation in training courses. Similarly, Hagenauer et al. (2023) noted that S-LRs involve both professional and interpersonal elements, such as approachability, care, trust, and support qualities that are mainly associated with lecturers rather than students. This aligns with the MITB, which emphasises teacher interpersonal behaviour as the key factor influencing relationship quality over student background characteristics (Wubbels & Brekelmans, 2012).

Findings related to the study programme, particularly the lower scores among BEd (Sc.) students, raise important concerns that S-LRs may not be solely interpersonal but may also be influenced by structural and epistemological aspects of academic programmes. These results align with previous research (Aleru & Nwovuhoma, 2024), which indicates a statistically significant programme-related difference in S-LRs. Within the MITB, such structural constraints may indirectly affect how lecturers relate to students in the classroom. This finding highlights the need for programme-specific strategies to strengthen S-LRs.

The results further showed that the nature of training and the study programme predicted S-LRs. The notable difference between pre-service and in-service students suggests that prior exposure to professional or educational environments influences how students interact with lecturers. In-service students, often with practical experience, might engage more confidently or perceive lecturers differently, leading to stronger reported relationships with lecturers. This observation supports the findings of Kervinen et al. (2022), who noted that pre-service students view lecturers as authoritative figures within a hierarchy, whereas in-service students view them as mentors or colleagues.

From an MITB perspective, the shift from pre-service perceptions to in-service perceptions on S-LRs may indicate a move from greater dominance with less proximity towards a more balanced influence and increased closeness in S-LRs (Wei et al., 2009). This suggests the need for strategies that promote more collaborative interactions between students and lecturers among pre-service students.

6. Conclusion

This study found that S-LRs in Tanzanian universities are generally moderate, indicating that relationships are functional but not fully effective. Although leadership and understanding are evident, limited friendliness and student freedom suggest a need for deeper engagement. Tanzanian universities should focus on strengthening lecturers' interpersonal skills to foster more positive S-LRs. Furthermore, the study indicates that most demographic variables do not significantly affect S-LRs, which are more influenced by institutional factors. While training types and study programmes were found to be significant predictors, their influence is limited, indicating that other factors may be more important.

This finding highlights the need for institutions to focus on improving S-LRs rather than focusing solely on student characteristics. Theoretically, this study extends the MITB by demonstrating that S-LRs in higher education are shaped not only by lecturers' interpersonal behaviours but also by students' educational positioning and programme-specific factors. Unlike previous research, which has mainly focused on relationship outcomes or on contexts outside Tanzania, this study applies the MITB to a Tanzanian university setting. It reveals that the programme of study and the nature of training are more influential than most student demographics, thereby enriching understanding of the factors that shape S-LRs in higher education.

6.1 Implications for practice and future research

The findings suggest that universities should improve learning environments by strengthening lecturers' relational skills, particularly in areas where S-LRs are weaker. Lecturers should be encouraged to foster greater friendliness, promote greater student freedom, and reduce "uncertain" and "reprimanding" behaviours to improve student engagement. Future research should explore institutional, structural and lecturer-related factors that may affect S-LRs.

6.2 Limitations of the study

The findings may be generalisable to other public universities with characteristics similar to those of the sampled university. Therefore, a similar study could be conducted at universities with differing characteristics from the sampled university. Moreover, this study was quantitative, limiting students' opportunities to express their views regarding S-LRs. Thus, a qualitative study could be conducted to further explore students' lived experiences of S-LRs.

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