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The Role of Educational Institutions in Shaping Student Self-Perception

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ABSTRACT

Purpose: This research aims to explore the various aspects of educational environments that shape how students perceive themselves, with a focus on the interactions and experiences that contribute to their self-concept and academic engagement.

Methodology: This qualitative study was conducted using semi-structured interviews with 21 participants who were either currently enrolled in educational institutions or had recently graduated. Data collection continued until theoretical saturation was achieved, ensuring a comprehensive understanding of the phenomena. The interviews were transcribed and analyzed using NVivo software to identify recurring themes and patterns related to the educational environment and its impact on student self-perception.

Findings: Four main themes were identified: Institutional Environment, Educational Practices, Student Engagement, and Self-Perception Development. Each theme comprised various categories that elucidated the influence of educational settings on students: Institutional Environment included Physical Infrastructure, Social Climate, Academic Atmosphere, Administrative Support, and Extracurricular Activities. Educational Practices focused on Teaching Methods, Evaluation Techniques, and Teacher-Student Relationships. Student Engagement highlighted Participation in Class, Engagement in School Governance, Peer Collaboration, and Identification with School. Self-Perception Development covered Identity Formation, Self-Efficacy, Career Aspirations, Academic Self-Concept, and Emotional Resilience.

Conclusion: The study concluded that educational institutions play a pivotal role in shaping student self-perception through various environmental and interactional aspects. These elements not only influence students' academic engagement but also significantly impact their self-concept and future aspirations. The findings underscore the need for educational policies and practices that enhance positive student experiences and support comprehensive development.

Keywords: Student Self-Perception, Educational Environment, Qualitative Research, Academic Engagement, Self-Efficacy, Educational Practices.

1. Introduction

The role of educational institutions in shaping student self-perception is a multifaceted area of inquiry that integrates elements of psychological well-being, academic engagement, and overall educational experiences. These elements collectively contribute to shaping how students perceive themselves within and beyond academic settings. Understanding the dynamics of educational environments is crucial as it affects not only academic success but also impacts long-term personal and professional life outcomes (Campbell & Li, 2007; Jager & Baard, 2019; Mayya & Roff, 2004; Mohamed et al., 2015; Noreen et al., 2018; Owojori et al., 2022; Soliman et al., 2017; Tamire et al., 2022).

Research has increasingly focused on how students perceive their educational environments and the effects of these perceptions on their self-efficacy and identity formation. Aghamolaei and Fazel (2010) provide insights into how the educational environment impacts medical students' perceptions, emphasizing the significance of a supportive learning atmosphere in fostering positive academic identities (Aghamolaei & Fazel, 2010). Similarly, the work by Kohli and Dhaliwal (2013) and Patil and Chaudhari (2016) using the Dundee Ready Education Environment Measure (DREEM) underscores the importance of evaluating educational climates to understand their influence on student perceptions and learning outcomes (Kohli & Dhaliwal, 2013; Patil & Chaudhari, 2016).

Studies such as those by Bista et al. (2020) and Shah et al. (2019) explore specific aspects of the educational environment, including infrastructural and instructional factors, and their correlation with student satisfaction and academic performance. These studies suggest that both the physical and pedagogical elements of educational settings are critical in shaping students' educational experiences and their self-perceptions (Bista et al., 2020; Shah et al., 2019).

From a psychological perspective, the relationship between educational environments and student self-perception is often mediated by self-efficacy. Artino (2012) discusses academic self-efficacy and posits that students' beliefs in their capabilities significantly affect their academic behaviors and motivations (Artino, 2012). This connection is further explored by Peng, Tsai, and Wu (2006), who argue that students' perceptions of their internet skills, as a component of their educational environment, enhance their self-efficacy related to academic pursuits (Peng et al., 2006).

The impact of educational environments on minority and at-risk students offers another vital dimension to this discussion. Hughes, Gleason, and Duan (2005) and Maduwanthi, Mudalige, and Atapattu (2015) both examine how minority students perceive their educational environments and the consequent effects on their academic self-concept and performance. These studies highlight that perceptions can vary significantly among students from different ethnic and socioeconomic backgrounds, thereby influencing their academic engagement and achievements (Hughes et al., 2005; Maduwanthi et al., 2015).

Moreover, the literature also reflects on how specific educational practices such as feedback mechanisms, as highlighted by Brown, Williams, and Lynch (2011), and the broader academic climate can foster or hinder student engagement and self-perception (Brown et al., 2011). The role of teacher expectations and perceptions in shaping student self-perception is critically analyzed by Rubie-Davies (2010) and Timmermans, Boer, and Werf (2016), who discuss the psychological and behavioral implications of these dynamics (Rubie-Davies, 2010; Timmermans et al., 2016).

This study aims to build on the existing literature by employing a qualitative methodology that captures the nuanced ways in which students perceive their educational environments and how these perceptions influence their self-view and academic engagement. Through this exploration, the study endeavors to provide actionable findings that can inform educational practices and policies aimed at fostering environments that enhance student self-perception and academic success.

2. Methods and Materials

2.1. Study Design and Participants

This qualitative study was designed to explore the role of educational institutions in shaping student self-perception. The study employed semi-structured interviews to gain deep insights into the experiences of students, focusing on how their interactions and experiences within educational settings influence their self-perceptions.

Participants were selected using purposive sampling to ensure a diverse range of experiences and backgrounds were represented. The criteria for inclusion required participants to be currently enrolled in educational institutions or to have recently graduated. Efforts were made to include individuals from various educational levels, cultural backgrounds, and

age groups to capture a broad spectrum of student experiences.

The process of data collection continued until theoretical saturation was achieved, meaning no new themes or insights were emerging from the interviews. This approach ensured that the collected data were sufficient to construct a comprehensive understanding of the phenomena under study.

The study was conducted in accordance with ethical standards for research involving human subjects. Prior to participation, all participants were informed about the purpose of the research, the procedures involved, and their rights as research subjects, including the right to withdraw from the study at any point without penalty. Informed consent was obtained from each participant. Confidentiality and anonymity were strictly maintained throughout the study, with all data being de-identified to protect the identity of the participants.

2.2. Measures

2.2.1. Semi-Structured Interview

Data collection was conducted through semi-structured interviews, which were designed to allow participants the flexibility to express their thoughts and experiences in an open-ended manner while still providing enough structure to address the research questions. Each interview lasted approximately 45 to 60 minutes and was conducted by

trained interviewers who followed a guide prepared with themes related to educational experiences, self-perception, and the perceived influence of educational institutions. Interviews were audio-recorded with the consent of the participants.

2.3. Data Analysis

The audio recordings from the interviews were transcribed verbatim. Data analysis was conducted using NVivo software, which facilitated the organization and thematic analysis of the qualitative data. The analysis involved coding the transcripts to identify recurring themes and patterns. Initial codes were generated based on the interview guide, and as the analysis progressed, additional codes were developed inductively as new themes emerged from the data.

3. Findings and Results

The demographic composition of the sample included 12 females and 9 males, reflecting a diverse range of experiences and backgrounds. Participants varied in age from 18 to 24 years, with the majority (14 participants) falling within the 20-22 age range. The sample represented a variety of educational levels: 8 participants were high school students, 10 were undergraduate students, and 3 were graduate students.

Table 1

The Results of Qualitative Analysis

Categories	Subcategories	Concepts
Institutional Environment	Physical Infrastructure	Classroom size, Library facilities, Sports facilities, Accessibility, Safety
	Social Climate	Peer interactions, Teacher support, Inclusivity, Bullying incidents, Competition
	Academic Atmosphere	Curriculum rigor, Academic pressure, Learning resources, Innovation in teaching
	Administrative Support	Guidance counseling, Academic advising, Financial aid availability
	Extracurricular Activities	Clubs and societies, Sports teams, Art programs, Leadership opportunities
Educational Practices	Teaching Methods	Lecture styles, Interactive learning, Use of technology, Group projects, Feedback
	Evaluation Techniques	Standardized tests, Performance assessments, Continuous assessment, Feedback timeliness
	Teacher-Student Relationships	Mentorship, Availability, Respectfulness, Encouragement, Conflict resolution
Student Engagement	Participation in Class	Question asking, Discussion involvement, Presentation, Peer teaching
	Engagement in School Governance	Student council roles, Committee involvement, Policy input, School improvement
	Peer Collaboration	Study groups, Team projects, Peer mentoring, Social learning
	Identification with School	School spirit, Loyalty, Pride, Alumni interaction
Self-Perception Development	Identity Formation	Self-awareness, Role models, Peer influence, Family background
	Self-Efficacy	Mastery experiences, Verbal persuasion, Vicarious experiences, Psychological arousal
	Career Aspirations	Professional goals, Influential courses, Teacher advice, Real-world applications
	Academic Self-Concept	Subject strengths, Learning style, Academic challenges, Self-improvement efforts
	Emotional Resilience	Coping strategies, Stress management, Support systems, Emotional intelligence

The analysis of the semi-structured interviews revealed four main themes related to the role of educational institutions in shaping student self-perception: Institutional Environment, Educational Practices, Student Engagement, and Self-Perception Development. Each of these themes comprised several subthemes, detailed as follows:

1. Institutional Environment: This theme encapsulates the physical and social settings of educational institutions, which play a critical role in student experiences and perceptions.

Physical Infrastructure: Students noted the impact of their physical environment on their educational experience. For instance, one student mentioned, "Having access to a well-equipped library and modern classrooms makes learning much more inviting and easier."

Social Climate: The general interpersonal atmosphere within the institution was highlighted, with another student reflecting, "The support from teachers and the friendliness of peers create a welcoming school climate."

Academic Atmosphere: This subtheme relates to the academic standards and pressures students face, where a participant stated, "The rigorous curriculum pushes us to our limits but sometimes at the cost of immense stress."

Administrative Support: Students appreciated effective administrative support, as indicated by one remark: "The academic advising here has helped me stay on track and feel less overwhelmed."

Extracurricular Activities: The availability and quality of extracurricular activities were seen as vital for holistic development, with a student expressing, "Joining clubs has not only developed my skills but also boosted my confidence."

2. Educational Practices: This theme covers the methods and interactions that directly influence learning experiences and student development.

Teaching Methods: Diverse teaching approaches were discussed, where one student noted, "Interactive and technologically integrated classes tend to engage us more effectively."

Evaluation Techniques: Assessment methods were crucial in shaping academic self-view, as another remarked, "Continuous assessments help me understand my progress and areas needing improvement without the final exam pressure."

Teacher-Student Relationships: Strong, supportive relationships with teachers were deemed essential, with a participant sharing, "My teacher's encouragement significantly boosts my confidence."

3. Student Engagement: This theme reflects the level and manner of student involvement in both academic and non-academic activities.

Participation in Class: Active participation was linked to enhanced self-perception, exemplified by, "Speaking up in class discussions makes me feel more confident about my ideas."

Engagement in School Governance: Involvement in governance allowed students to feel more connected to the institution, as indicated by, "Having a say in school policies through the student council makes me feel valued and responsible."

Peer Collaboration: Collaboration with peers was frequently mentioned as a beneficial aspect of school life, with a student commenting, "Working in study groups has not only helped me academically but also improved my social skills."

4. Self-Perception Development: This theme explores how students' perceptions of themselves are influenced by their experiences within educational settings.

Identity Formation: The role of the educational environment in shaping personal identity was emphasized, with remarks like, "School has been a major factor in developing who I am and how I see myself."

Self-Efficacy: Students discussed how certain experiences boosted their belief in their abilities, for example, "Successful project completions have made me realize my potential."

Career Aspirations: The influence of educational experiences on career goals was noted, with a student stating, "Guidance from my teachers has been crucial in shaping my career aspirations."

Academic Self-Concept: How students view their academic abilities was significantly affected by their experiences, illustrated by, "My successes and failures in school have profoundly shaped my academic self-image."

Emotional Resilience: The ability to cope with challenges was a critical part of self-perception development, as one student expressed, "Learning to manage school stress effectively has made me emotionally stronger."

4. Discussion and Conclusion

This qualitative study identified four main themes that illustrate how educational institutions influence student self-perception. The themes are: Institutional Environment, Educational Practices, Student Engagement, and Self-Perception Development. Each theme encompasses various

categories that detail specific aspects of how educational settings affect students. Under Institutional Environment, the categories included Physical Infrastructure, Social Climate, Academic Atmosphere, Administrative Support, and Extracurricular Activities. For Educational Practices, the categories were Teaching Methods, Evaluation Techniques, and Teacher-Student Relationships. Student Engagement was broken down into Participation in Class, Engagement in School Governance, Peer Collaboration, and Identification with School. Lastly, Self-Perception Development comprised categories such as Identity Formation, Self-Efficacy, Career Aspirations, Academic Self-Concept, and Emotional Resilience.

The Institutional Environment theme captures the physical and social settings within educational institutions that influence students' perceptions. Categories such as Physical Infrastructure emphasized the role of classroom size, library facilities, and accessibility in shaping the learning experience. Social Climate was crucial, with factors like peer interactions and teacher support fostering a sense of community and belonging. Academic Atmosphere involved elements like curriculum rigor and academic pressure, influencing students' academic self-esteem. Administrative Support, including academic advising and financial aid, was noted for its role in supporting student success. Lastly, Extracurricular Activities such as sports and clubs were highlighted for enhancing students' engagement and personal growth.

Under the theme of Educational Practices, Teaching Methods such as interactive learning and use of technology were found to significantly affect student engagement and learning outcomes. Evaluation Techniques included standardized tests and performance assessments, where fair and continuous assessment methods contributed positively to student motivation and perception of academic competence. Teacher-Student Relationships were vital, with mentorship and availability of teachers enhancing students' academic confidence and emotional support.

Student Engagement was identified as a key theme, where Participation in Class included activities like question asking and involvement in discussions, directly affecting students' confidence and academic participation. Engagement in School Governance showed that involvement in policy-making and school improvement initiatives gave students a sense of responsibility and inclusion. Peer Collaboration pointed to the benefits of study groups and team projects in fostering social and academic skills. Identification with

School captured feelings of school spirit and pride, reinforcing students' connection to their institution.

Finally, the Self-Perception Development theme reflected on how educational experiences influence students' self-concept and future aspirations. Identity Formation highlighted the impact of role models and peer influence on students' self-awareness. Self-Efficacy discussed how experiences like successful project completions bolster students' beliefs in their abilities. Career Aspirations showed how educational experiences shape professional goals and aspirations. Academic Self-Concept involved students' perceptions of their strengths and challenges in learning, while Emotional Resilience emphasized the importance of coping strategies and emotional intelligence in managing academic and personal challenges.

The physical infrastructure and social climate of educational institutions were repeatedly emphasized by participants as pivotal to their learning experiences and self-perception. Consistent with findings from Bista et al. (2020), the quality of physical resources such as libraries and classrooms significantly affects students' perceptions of their educational environment and, by extension, their self-efficacy and engagement (Aghamolaei & Fazel, 2010; Bista et al., 2020). Moreover, the importance of a supportive and inclusive social climate as highlighted in our study aligns with the observations of Brown, Williams, and Lynch (2011), who found that a positive academic learning environment enhances students' perceptions of their academic capabilities and overall satisfaction with their educational experiences (Brown et al., 2011).

Our findings regarding the impact of teaching methods and evaluation techniques on student self-perception echo the work of Artino (2012), who argues that academic self-efficacy is greatly influenced by educational practices (Artino, 2012). Effective teaching methods, which foster interaction and engagement, can significantly boost students' confidence in their academic abilities (Kohli & Dhaliwal, 2013). Similarly, fair and continuous assessment methods as highlighted in our study correlate with increased academic self-concept and are supported by Dahl and Smimou (2011), who assert that appropriate evaluation techniques can enhance student motivation and academic self-esteem (Dahl & Smimou, 2011).

The role of student engagement in class activities and school governance was identified as a crucial factor for enhancing students' self-perception. This finding is in line with the research by Peng, Tsai, and Wu (2006), which indicates that active participation in educational activities

directly correlates with increased self-efficacy (Peng et al., 2006). Moreover, the engagement in peer collaboration reflects findings from Hughes, Gleason, and Duan (2005), showing that cooperative learning and peer interactions can reinforce students' academic self-concepts and promote a sense of belonging and competence (Hughes et al., 2005).

Significantly, the development of self-perception was profoundly influenced by students' experiences within their educational environments. The findings related to identity formation and self-efficacy are corroborated by Rubie-Davies (2010) and Timmermans, Boer, and Werf (2016), who discuss how teacher expectations and the educational climate can impact students' self-perceptions (Rubie-Davies, 2010; Timmermans et al., 2016). Moreover, the influence of career aspirations on self-perception aligns with the observations by Dahl and Smimou (2011), highlighting the role of educational environments in shaping future professional self-concept (Dahl & Smimou, 2011).

This qualitative study explored the impact of educational institutions on shaping student self-perception through semi-structured interviews. The findings revealed four main themes: Institutional Environment, Educational Practices, Student Engagement, and Self-Perception Development. Each theme provided insights into the various ways educational settings influence students' self-perceptions. Specifically, the physical and social climates were found to be critical in enhancing students' educational experiences and self-views. Educational practices, including teaching methods and assessment strategies, significantly affected students' academic self-efficacy. Additionally, active student engagement in both academic and extracurricular activities was crucial for fostering positive self-perception. Lastly, the development of self-perception was influenced by interactions within these educational environments, impacting students' identity formation and career aspirations.

This study underscores the profound influence of educational institutions on student self-perception. The integration of supportive environments, effective educational practices, and opportunities for meaningful engagement are essential for nurturing positive self-perception among students. These findings contribute to a deeper understanding of the complex interplay between educational environments and student psychology, emphasizing the role of these institutions in not only imparting knowledge but also in shaping individuals' self-concepts and future aspirations.

The study, while insightful, has several limitations. The sample size of 21 participants, although adequate for qualitative saturation, limits the generalizability of the findings. Additionally, the study focused solely on semi-structured interviews, which may not capture the full spectrum of students' experiences and perceptions. The reliance on self-reported data also introduces potential biases in the findings, as participants may present themselves in a more favorable light or may not fully recall their experiences accurately.

Future research should aim to address the limitations noted by expanding the sample size and possibly incorporating a mixed-methods approach to corroborate qualitative data with quantitative analysis. Further studies could explore longitudinal tracking of students' perceptions over time to understand the long-term impact of educational environments on self-perception. Additionally, comparative studies across different educational settings and cultures would enhance the understanding of contextual influences on student self-perception.

The findings from this study offer valuable implications for educational practice. Institutions should strive to improve their physical and social environments, ensuring they are conducive to positive student experiences and interactions. Educators and administrators should also consider adopting more interactive and student-centered teaching methods and fair assessment practices to boost students' self-efficacy and academic achievement. Finally, fostering a culture of engagement and participation within schools can significantly enrich students' educational experiences and contribute to their overall personal and academic development. These strategies not only benefit students' self-perception but also prepare them more effectively for future challenges.

Authors' Contributions

The first author was responsible for conducting the interview and collecting data, and the other authors were responsible for analyzing the data and writing the article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

References

- Aghamolaei, T., & Fazel, I. (2010). Medical Students' Perceptions of the Educational Environment at an Iranian Medical Sciences University. *BMC Medical Education*, 10(1). <https://doi.org/10.1186/1472-6920-10-87>
- Artino, A. R. (2012). Academic Self-Efficacy: From Educational Theory to Instructional Practice. *Perspectives on Medical Education*, 1(2), 76-85. <https://doi.org/10.1007/s40037-012-0012-5>
- Bista, A. P., Sharma, K., Tamrakar, N. K., Sharma, M., & Bhattarai, T. (2020). Students' Perception on Educational Environment of the Postgraduate Programme in Selected Nursing Colleges of Nepal. *Journal of Chitwan Medical College*, 10(3). <https://doi.org/10.54530/jcmc.237>
- Brown, T., Williams, B., & Lynch, M. (2011). The Australian DREEM: Evaluating Student Perceptions of Academic Learning Environments Within Eight Health Science Courses. *International Journal of Medical Education*, 2, 94-101. <https://doi.org/10.5116/ijme.4e66.1b37>
- Campbell, J. O., & Li, M. (2007). Asian Students' Voices: An Empirical Study of Asian Students' Learning Experiences at a New Zealand University. *Journal of Studies in International Education*, 12(4), 375-396. <https://doi.org/10.1177/1028315307299422>
- Dahl, D. W., & Smimou, K. (2011). Does Motivation Matter? *Managerial Finance*, 37(7), 582-609. <https://doi.org/10.1108/03074351111140243>
- Hughes, J. N., Gleason, K. A., & Duan, Z. (2005). Relationship Influences on Teachers' Perceptions of Academic Competence in Academically at-Risk Minority and Majority First Grade Students. *Journal of School Psychology*, 43(4), 303-320. <https://doi.org/10.1016/j.jsp.2005.07.001>
- Jager, E. d., & Baard, R. (2019). Does "Free" Higher Education in South Africa Make Economic Sense? Views of Commerce Students. *South African Journal of Higher Education*. <https://doi.org/10.20853/33-6-3084>
- Kohli, V., & Dhaliwal, U. (2013). Medical Students' Perception of the Educational Environment in a Medical College in India: A Cross-Sectional Study Using the Dundee Ready Education Environment Questionnaire. *Journal of Educational Evaluation for Health Professions*, 10, 5. <https://doi.org/10.3352/jeehp.2013.10.5>
- Maduwanthi, W. T. S., Mudalige, S. K. K., & Atapattu, N. S. B. M. (2015). Academic Performance and the Perception About the Educational Environment: A Comparison Between Ethnic Minority and Majority Students Following Three Degree Programs. *Tropical Agricultural Research and Extension*, 18(3), 107. <https://doi.org/10.4038/tare.v18i3.5333>
- Mayya, S. S., & Roff, S. (2004). Students' Perceptions of Educational Environment: A Comparison of Academic Achievers and Under-Achievers at Kasturba Medical College, India. *Education for Health*, 17(3), 280-291. <https://doi.org/10.1080/13576280400002445>
- Mohamed, R. A., Hashish, E. A. A., & El-Bialy, G. (2015). Academic Nursing Educators and Students Perception of Institutional Quality. *Journal of Nursing Education and Practice*, 5(12). <https://doi.org/10.5430/jnep.v5n12p111>
- Noreen, K., Khan, K. A., & Nehra, R. A. (2018). Students' Perception of Learning Environment Using Dundee Ready Education Environment Measure (Dreem) Inventory. *Pakistan Journal of Public Health*, 8(2), 112-116. <https://doi.org/10.32413/pjph.v8i2.154>
- Owojori, O. M., Mulaudzi, R., & Edokpayi, J. N. (2022). Student's Knowledge, Attitude, and Perception (KAP) to Solid Waste Management: A Survey Towards a More Circular Economy From a Rural-Based Tertiary Institution in South Africa. *Sustainability*, 14(3), 1310. <https://doi.org/10.3390/su14031310>
- Patil, A. A., & Chaudhari, V. L. (2016). Students' Perception of the Educational Environment in Medical College: A Study Based on DREEM Questionnaire. *Korean Journal of Medical Education*, 28(3), 281-288. <https://doi.org/10.3946/kjme.2016.32>
- Peng, H. Y., Tsai, C. C., & Wu, Y. T. (2006). University Students' Self-efficacy and Their Attitudes Toward the Internet: The Role of Students' Perceptions of the Internet. *Educational Studies*, 32(1), 73-86. <https://doi.org/10.1080/03055690500416025>
- Rubie-Davies, C. M. (2010). Teacher Expectations and Perceptions of Student Attributes: Is There a Relationship? *British Journal of Educational Psychology*, 80(1), 121-135. <https://doi.org/10.1348/000709909x466334>
- Shah, D. K., Piryani, S., Piryani, R. M., Islam, M. N., Jha, R. K., & Deo, G. P. (2019). Medical Students' Perceptions of Their Learning Environment During Clinical Years at Chitwan Medical College in Nepal. *Advances in Medical Education and Practice*, Volume 10, 555-562. <https://doi.org/10.2147/amep.s203377>
- Soliman, M., Sattar, K., Alnassar, S., Alsaif, F., Alswat, K., Alghonaim, M., Alhaizan, M., & Al-furaih, N. (2017). Medical Students' Perception of the Learning Environment at King Saud University Medical College, Saudi Arabia, Using DREEM Inventory. *Advances in Medical Education and Practice*, Volume 8, 221-227. <https://doi.org/10.2147/amep.s127318>
- Tamire, T., Eshete, M. T., & Hanago, G. A. (2022). Anesthesia Students' Perception of the Educational Environment and Academic Achievement at Debre Tabor University and University of Gondar, Ethiopia: A Comparative Cross-

Sectional Study. *BMC Medical Education*, 22(1).
<https://doi.org/10.1186/s12909-022-03611-4>

Timmermans, A., Boer, H. d., & Werf, G. v. d. (2016). An Investigation of the Relationship Between Teachers' Expectations and Teachers' Perceptions of Student Attributes. *Social Psychology of Education*, 19(2), 217-240.
<https://doi.org/10.1007/s11218-015-9326-6>