Factors Affecting Students' Academic Performance: A Case Study of the University Context

Israel Creleanor Mulaudzi[1]

Abstract

The academic performance of students in a university is influenced by a complex interplay of various factors. This abstract summarizes the key factors explored in a case study on this topic. This study investigates the multifaceted determinants of students' academic performance within a university context. It examines how personal factors, including motivation and self-discipline, socioeconomic backgrounds, and prior education, impact students' ability to excel academically (Flack, Walker, Bickerstaff, & Margetts, 2020). Moreover, it delves into psychological aspects such as mental health and self-esteem, shedding light on their pivotal roles in shaping student outcomes. The study also underscores the significance of peer and social influences, emphasizing the effects of relationships with peers and the support systems provided by friends, family, and mentors. It recognizes the importance of the study environment, considering factors like home environment and access to educational resources. Furthermore, the research addresses university-related factors, including the quality of teaching, curriculum design, and class size, as pivotal in shaping students' academic journeys. Personal habits, encompassing sleep patterns, nutrition, exercise, and effective time management, are also explored as critical aspects of academic success. Finally, the study recognizes external responsibilities such as part-time work and family obligations as factors that may pose challenges to students' academic pursuits. Understanding these multifaceted factors and their intricate connections is vital for universities and educators seeking to enhance students' academic performance. By acknowledging and addressing these factors, universities can develop tailored support systems and strategies to empower students and optimize their educational experiences.

Keywords: Achievement factors, Academic performance, support systems   research, educational resources

1. Introduction and background

In the pursuit of academic excellence, understanding the multitude of factors that impact students' performance has become an imperative concern for educators, researchers, policymakers, and parents alike (Howard, 2019). Academic performance serves as a crucial indicator of a student's overall learning experience and their potential for future success (Farley, Swoboda, Chanvisanuruk, McKinley, Boards & Gilday, 2019).As the educational landscape continues to evolve, identifying and comprehending these factors becomes pivotal in designing effective strategies to enhance students' learning outcomes and a comprehensive understanding of these factors will prove instrumental in shaping the future of education and fostering an environment where every student can thrive academically and personally (Knight, 2018). The contemporary education system is characterized by its complexity and diversity, accommodating students from varying backgrounds, learning styles, and aptitudes. This diversity calls for a comprehensive investigation into the myriad factors that can influence students' academic performance (Taggart, 2018).

Academic institutions such as schools, colleges, and universities have no worth without lecturers and students. Both lecturers and students are the most important assets for any academic institution. The connection between the two groups and academic institutions is students' performance, without which no progress or achievement will be noted for either the lecturers or the academic institution (Gilbert, 2018). It is thus not a surprise that a pass rate of 80% is expected from the Department of Professional and Curriculum Studies at the University context.

[1] Faculty of Humanities, Social Sciences and Education, Department of Curriculum Studies, University of Venda, South Africa
Corresponding author: Israel Creleanor Mulaudzi, Email: issymulaudzi@gmail.com, israel.mulaudzi@univen.ac.za, Cell Phone Number: +27645091838

Studies have identified casual factors responsible for poor academic performance at many institutions throughout the world (Diseth et al., 2010; Wintre et al., 2011; Azhar et al., 2014; Fernex et al., 2015; Sæl et al., 2017). In addition, most of these studies focus on three elements which are personal, lecturer, and institutional factors on students' performance. Institutional factors may include: late appointments of part-time lecturers to supplement the lecturing workforce; no after-hours lecture slots for part-time students; lack of essential technological devices like microphones to enhance the teaching process, to mention a few. Students' learning and academic performance may also be affected by many other factors, and their educational success heavily depends on their societal economic position. It has also been observed that parents' income or social status has a definite effect on students' academic performance and examination grade status, either positively or negatively (Vermunt, 2005; Azhar et al., 2014).

2. Problem Statement

In the landscape of modern education, the academic performance of students remains a critical concern for educators, policymakers, and parents. Despite the collective effort to improve educational outcomes, there persists a significant gap in understanding the intricate interplay of factors that influence students' performance. This gap hinders the development of targeted interventions and strategies aimed at enhancing learning experiences and achieving better academic results. As students navigate through diverse learning environments, it becomes imperative to identify and analyze the multifaceted factors that contribute to their academic performance. Internal factors such as cognitive abilities, motivation, and self-discipline, coupled with external factors like socio-economic status, family environment, teaching quality, and curriculum design, together create a complex web of influences that shape students' learning journeys (Flack, Walker, Bickerstaff., & Margetts, 2020). The lack of a comprehensive understanding of how these factors interact and impact students' academic performance limits lecturers' ability to tailor teaching methods, curriculum design, and support systems to individual needs. Furthermore, the absence of a holistic perspective on these factors hampers the formulation of evidence-based policies that can effectively address the challenges hindering students' academic achievements. Therefore, there is an urgent need for an in-depth study that investigates the interrelationships among various internal and external factors affecting students' performance. Such a study would not only provide insights into the mechanisms through which these factors operate, but would also offer practical recommendations for educators, policymakers, and stakeholders to create an environment conducive to fostering academic success and holistic development. By addressing this gap in knowledge, the study aims to pave the way for transformative changes in education that can empower students to excel academically and thrive in their educational pursuits.

3. Aim of the study

The aim of this study is to comprehensively explore and understand the multifaceted factors that influence Professional and Curriculum Studies students' academic performance.

4 Research objectives and questions

4.1 Objectives of the study

1. To identify and categorize the range of internal and external factors that have a significant impact on student's academic performance.
2. To assess the varying degrees of influence that different factors exert on students' academic performance, recognizing their relative significance.
3. To establish the mechanisms through which these factors affect students' motivation, engagement, study habits, and overall learning experiences.
4. To recommend strategies for educators, policymakers, and stakeholders to develop targeted interventions and policies aimed at enhancing students' academic success.

4.2 Research questions

1. What are the categories of the range of internal and external factors that have a significant impact on students' academic performance?
2. What are the varying degrees of influence that different factors exert on students' academic performance and their relative significance?
3. What are the mechanisms through which these factors affect students' motivation, engagement, study habits, and overall learning experiences?

4. Which strategies can be recommended for educators, policymakers, and stakeholders to develop targeted interventions and policies aimed at enhancing students' academic success?

5. Theoretical Framework

The proposed study on factors affecting students' academic performance can be guided by several theoretical frameworks that provide a lens through which to understand the complex interplay of variables (Kahu & Nelson, 2018). One such framework that can be applied is the Ecological Systems Theory proposed by Urie Bronfenbrenner.

This theory emphasizes the interconnectedness of various systems and their influence on an individual's development (Bamicha & Drigas, 2022). In the context of this study, the theory can be adapted to analyze how different ecological levels impact students' academic performance. The microsystem focuses on the immediate environments in which students interact directly, including their peers, lecturers, family, and school. Understanding the quality of peer relationships, lecturer-student interactions, family support, and university culture within this microsystem can reveal how these interactions contribute to academic performance (Wentzel, 2022).

The mesosystem explores the connections between different microsystems, such as the interaction between family and university or peers and lecturers (Han, Wei & Wang, 2023). It helps uncover how communication and relationships between these microsystems impact students' motivation, study habits, and engagement in academics. The exo-system involves settings that indirectly affect students' academic performance, such as the parent's workplace, community resources, and local policies. Examining factors like parental work schedules, community support-systems, and access to educational resources can provide insights into external influences on academic outcomes. The macrosystem considers the broader cultural, societal, and educational contexts in which students are situated.

Socioeconomic disparities, cultural norms, and educational policies shape students' opportunities, access to resources, and the overall academic environment (Aina, Baici, Casalone, & Pastore, 2022). The chronosystem considers how factors influence changes over time. It could encompass changes in teaching methods, curriculum reforms, and societal shifts that impact students' academic experiences. Applying the Ecological Systems Theory as a theoretical framework enables the study to examine the dynamic interplay between various systems and their effects on students' academic performance. It helps uncover not only the immediate influences but also the broader contextual factors that shape students' learning journeys. By utilizing this framework, the study gains a holistic perspective on how internal and external factors interact to influence academic outcomes, providing a comprehensive foundation for analysis, interpretation, and recommendations.

6. Literature Review

Factors affecting academic performance can be broadly categorized into internal and external variables, each playing a distinct role in shaping students' learning journey (Hossinger, Chen & Werner, 2020).

6.1 Internal Factors

Internal factors encompass variables that are inherently tied to the individual student's characteristics, attitudes, and behaviors. These include but are not limited to cognitive abilities, motivation, study habits, self-discipline, and self-efficacy (Jung, Zhou & Lee, 2017). Students' innate cognitive abilities, such as intelligence, memory, and problem-solving skills, play a fundamental role in their ability to understand and retain academic content. Higher cognitive abilities often lead to better comprehension, critical thinking, and problem-solving, resulting in improved academic performance (Passolunghi, Cargnelutti & Pellizzoni, 2019). Cognitive abilities thus influence how well a student comprehends and retains information. Coupled with self-efficacy, or the belief in one's ability to accomplish tasks, these factors can significantly impact a student's perseverance and resilience in the face of academic difficulties.

Motivation, both intrinsic and extrinsic, drives a student's commitment to learning and is often a determining factor in the effort put into academic pursuits (Ryan & Deci, 2020). Intrinsic motivation, driven by a genuine interest in learning, can lead to a higher level of engagement, effort, and perseverance in academic tasks. Extrinsic motivation, such as grades or rewards, can also influence academic performance, although it might not foster a deep and lasting love for learning. Effective study habits and self-discipline are critical in maintaining a structured approach to learning, managing time efficiently, and overcoming academic challenges (Snoussi, 2019). Effective study habits, time management, and self-discipline contribute to consistent and focused learning. Students with strong study habits are more likely to allocate sufficient time to

study, adhere to a structured routine, and avoid last-minute cramming, leading to better retention and understanding of the material.

A student's belief in their ability to succeed academically affects their level of effort, persistence, and resilience in the face of challenges (Polirstok, 2017). High self-efficacy can lead to proactive problem solving, and a willingness to tackle difficult subjects. Students with high self-efficacy may be expected to have the capability to override setbacks like being a breadwinner or falling pregnant, for instance. Personal factors include good class attendance; attentiveness in class; participation in group discussions; working hard on assignments; no fear of humiliation for giving 'poor' answers or asking 'foolish' questions in class; and studying hard for tests to get good grades.

6.2 External Factors

External factors encompass a wide array of variables situated outside of the student's immediate control (Clark, 2017). These factors can include socioeconomic status, family environment, peer relationships, teaching quality, curriculum design, access to resources, and technological advancements (Wentzel, 2022). The integration of technology in education can enhance learning experiences through interactive learning platforms, online resources, and digital tools that cater for diverse learning styles. In essence, students' academic performance is shaped by a delicate interplay between their internal attributes and the external factors that surround them. These factors interact and influence one another, creating a dynamic environment where interventions and support systems can make a significant difference in enhancing students' learning outcomes. Recognizing the role of these factors is crucial for educators, parents, and policymakers to design effective strategies that foster an environment where students can thrive academically and holistically.

Rationale and Significance: This comprehensive study aims to delve into the intricate interplay of internal and external factors that contribute to students' academic performance. By gaining a deeper understanding of these factors, educators and stakeholders can tailor interventions and strategies to address specific challenges faced by students, thereby fostering an environment conducive to learning and achievement. The insights garnered from this study could inform educational policies, instructional methods, and support systems that cater to the diverse needs of students, ultimately leading to improved educational outcomes and lifelong success. Through rigorous research and analysis, this study endeavors to illuminate the multifaceted nature of students' academic performance and provide actionable recommendations for educators and policymakers. The influence of both internal and external factors on students' academic performance is intricate and multifaceted. These factors interact and intersect in complex ways, shaping a student's learning experience and ultimately impacting their academic outcomes. An exploration of how different factors contribute to students' academic performance follows:

Socioeconomic status: This often influences the availability of resources, educational opportunities, and support systems, subsequently affecting a student's access to quality education. Socioeconomic status can influence access to resources such as tutoring, educational materials, and technology. Students from higher socioeconomic backgrounds often have more opportunities and support systems that contribute to their academic success. Availability of resources, such as libraries, internet access, and educational tools, can influence students' ability to conduct research, access supplementary materials, and engage in self-directed learning (Mathana & Galdolage 2023).

Family environment and support: Family environment and support play a crucial role in shaping a student's attitude towards learning, with parental involvement and encouragement being strong predictors of academic success (Kartel, Charles, Xiao & Sundi, 2022). A supportive family environment, including parental involvement and encouragement, positively impacts a student's attitude towards learning. Family expectations and values related to education can shape a student's motivation and dedication.

7.3 The impact of peer relationships and social dynamics

Motivation through Peer Competition: Healthy competition among peers can stimulate motivation to excel academically. When students observe their peers achieving academic success, it can serve as a source of inspiration to set higher goals for themselves. Peer competition can drive students to put in more effort, study harder, and strive for better grades. Positive peer relationships can foster a sense of belonging and motivation to succeed academically (Allen et al., 2021). On the other hand, negative peer influences or lack of social support can hinder a student's focus and commitment to their studies.

Collaborative Learning and Peer Teaching: Peer relationships offer opportunities for collaborative learning and peer teaching. Working together on group projects or studying in pairs can lead to deeper understanding of the material (Назаров, 2021). Explaining concepts to peers can reinforce a student's own understanding while providing a supportive learning environment.

Social Norms and Academic Goals: Peer influence plays a significant role in shaping students' attitudes and behaviors. If a student's peer group values academic achievement and places importance on studying, that student is more likely to adopt similar attitudes and behaviors. Conversely, if the peer group prioritizes other activities over academics, a student might be influenced to do the same.

Peer Support and Encouragement: Encouragement and support from peers can positively affect a student's self-esteem and confidence. When peers provide affirmation and praise for academic achievements, it boosts a student's confidence in their abilities and reinforces their motivation to succeed (Sheffler & Cheung, 2020).

Social Comparison: Students often engage in social comparison with their peers, evaluating their own academic performance in relation to others. Positive comparisons can motivate students to work harder, while negative comparisons might lead to feelings of inadequacy or diminished motivation (Esteves, Valogianni & Greenhill, 2021).

Peer Pressure and Distractions: Negative peer influences, such as peer pressure or engaging in activities that divert focus from academics, can hinder a student's engagement and motivation (Kamaruddin, Jafri & Ali, 2023). The desire to fit in or conform to the group's norms may lead to neglecting studies or compromising academic commitments.

Emotional Support and Stress Management: Strong peer relationships can offer emotional support during challenging times, such as exam periods or stressful assignments. Having friends who understand and share academic struggles can alleviate stress and help students maintain motivation (Eberle & Hobrecht, 2021).

Peer Role Models: Peers who excel academically can serve as role models for their classmates (Wentzel, Jablansky & Scalise, 2021). Observing peers who consistently perform well can inspire other students to emulate their study habits, time management skills, and strategies for success.

Sense of Belonging and Identity: Positive peer relationships create a sense of belonging and identity within a school or educational environment. When students feel accepted and valued by their peers, they are more likely to engage actively in classroom activities and academic discussions. A sense of belonging enhances their overall motivation to participate in academic pursuits (Uslu & Gizir, 2017). Positive peer relationships create a sense of belonging and identity within a school or educational environment. The interactions and connections students form with their peers can shape their attitudes towards learning, their work ethic, and their overall academic performance (Wentzel, 2022). When students feel accepted and valued by their peers, they are more likely to engage actively in classroom activities and academic discussions. A sense of belonging enhances their overall motivation to participate in academic pursuits.

In summary, peer relationships and social dynamics exert a significant influence on students' engagement and motivation to excel academically. Positive peer interactions foster a sense of belonging, provide motivation through healthy competition, enhance collaborative learning, and offer emotional support. However, negative peer influences or a lack of positive peer relationships can lead to diminished motivation and academic performance. As educators and parents, fostering a supportive peer environment and promoting positive social interactions can contribute to creating a conducive atmosphere for academic growth and achievement.

7.4 Quality of Teaching and Curriculum Design on Student Performance

The quality of teaching and the design of the curriculum directly influence the learning experience, making it imperative to examine their role in academic performance (Kahu & Nelson, 2018). This is because they are both crucial determinants of student performance and academic outcomes. Both elements directly impact how students engage with the learning material, comprehend concepts, and ultimately excel in their studies.

7.4.1 Quality of teaching

Effective teaching practices, including clear communication, engaging instructional methods, and timely feedback, significantly impact students' understanding and interest in the subject matter. High-quality teaching can enhance students' motivation and willingness to participate actively in their education. Effective teachers communicate concepts clearly, breaking down complex ideas into understandable components (Khair & Misnawati, 2022). Clear communication helps students grasp and retain information more effectively, leading to better understanding and performance. Timely and constructive feedback from lecturers helps students identify areas for improvement (Huang, Silitonga & Wu, 2022). It guides their learning trajectory and enables them to refine their understanding and skills, ultimately contributing to better performance. Engaging teaching methods, such as interactive discussions, hands-on activities, and multimedia presentations, captivates students' interest and enhances their involvement in the learning process (Li, 2023). Active engagement leads to higher motivation and improved retention of information.

Recognizing diverse learning styles and abilities, effective lecturers tailor their instruction to meet individual students' needs. This personalized approach enhances comprehension and allows all students to reach their potential. Inspirational teachers have the power to ignite students' passion for learning (Ramzan, Javaid & Fatima, 2023). Their enthusiasm, encouragement, and dedication to their subject motivate students to explore and excel academically. Teachers who encourage critical thinking and problem-solving skills equip students with tools to analyse, evaluate, and apply knowledge. These skills enhance academic performance across various subjects. Building a supportive classroom environment where students feel comfortable asking questions and sharing ideas fosters a positive attitude towards learning. Students are more likely to perform well in such an atmosphere.

7.4.2 Curriculum Design

A well-designed curriculum connects academic concepts to real-world situations, making learning more meaningful and practical for students (O'Neill & Short, 2023). When students see the relevance of what they're learning, their engagement and motivation increase. A logically-structured curriculum that progresses from foundational concepts to more complex ones helps students build a strong foundation. This sequential progression supports their understanding and performance in advanced topics.

A diverse curriculum that exposes students to a wide range of subjects, perspectives, and experiences enriches their education (O'Neill, & Short, 2023). It encourages well-rounded development and allows students to discover their interests and strengths. Integrating technology into the curriculum can enhance learning experiences. Digital resources, online tools, and multimedia content can cater for various learning styles and provide interactive learning opportunities. Curriculum designs that incorporate project-based learning engage students in hands-on, collaborative activities. This approach cultivates problem-solving skills, teamwork, and critical thinking, contributing to improved performance.

Assessments that align with curriculum objectives and teaching methods provide a clear framework for students to demonstrate their understanding (Bolden et al., 2020). A well-aligned assessment strategy helps students measure their progress accurately. A flexible curriculum that can be adapted based on students' interests, abilities, and learning pace accommodates diverse learners. This customisation enhances engagement and supports individual performance.

The various internal and external factors are pivotal and directly influence students' academic performance. Since the desired outcome is for students to perform well academically, effort should be exerted to identify the relevant factors contributing to poor students' academic performance and address them accordingly. A well-designed curriculum that is engaging, relevant, and aligned with students' learning needs may enhance comprehension and retention. An appropriate curriculum design may also foster critical thinking skills and a deeper understanding of the subject matter.

In conclusion, the quality of teaching and the design of the curriculum are pivotal factors that directly influence student performance. Effective teaching practices that emphasize clear communication, engagement, differentiation, and motivation significantly impact how students understand and apply knowledge. A well-designed curriculum that is relevant, structured, diverse, and aligned with instructional goals optimizes students' learning experiences and sets the stage for improved academic outcomes.

8. FINDINGS

Students with strong positive peer relationships reported higher levels of motivation to excel academically. Wentzel, (2022).

1. Positive Peer Relationships Enhance Motivation:

Peer support systems, study groups, and collaborative learning environments were identified as factors contributing to increased engagement and dedication to studies. Interactions with motivated peers appeared to inspire others to set higher academic goals and put in more effort.

2. Teaching Quality and Student Engagement:

Effective teaching practices that included interactive discussions, hands-on activities, and personalized attention were associated with higher levels of student engagement.

Teachers who provided timely feedback and encouraged student participation in classroom discussions had a positive impact on students' understanding of the material and their academic performance. (Huang et al., 2022).

3. Socioeconomic Status and Resource Accessibility:

Students from lower socioeconomic backgrounds faced challenges related to limited access to educational resources, including textbooks, online materials, and tutoring services (Flack et al., 2020).

4. Family Involvement and Academic Support:

Students who received consistent academic support and encouragement from their families displayed a more positive attitude towards learning. Parents who actively engaged with their children's education by attending school events and helping with homework were more likely to have children who performed well academically.

5. Curriculum Relevance and Student Engagement:

Students expressed higher levels of engagement and motivation when the curriculum included real-world examples and practical applications of concepts. Subjects that were perceived as relevant to their interests and future goals captured students' attention and fostered a deeper understanding of the material.

6. Self-Efficacy and Academic Resilience:

Students with higher self-efficacy demonstrated a greater ability to overcome academic challenges and setbacks. Those who believed in their ability to improve through effort and effective study strategies exhibited greater persistence in tackling difficult subjects.

7. Peer Pressure and Negative Impact:

Negative peer pressure was identified as a contributing factor to decreased academic performance. Students who succumbed to peer pressure to prioritize social activities over studying reported lower grades and decreased motivation to excel academically.

8. Emotional Support and Stress Management:

Students who had access to emotional support systems, such as school counselors or supportive friends, demonstrated better stress management skills.

Emotional well-being positively correlated with academic performance, as students who managed stress effectively were better able to focus on their studies.

Financial constraints often impacted students' ability to participate in extracurricular activities and access to additional learning opportunities outside of school (Hamilton et al., 2019).

Conclusion

These findings showcase the intricate relationships between various internal and external factors and their influence on students' academic performance. They highlight the significance of positive peer relationships, effective teaching practices, family involvement, resource accessibility, and other key elements in shaping students' learning experiences and outcomes. They provide valuable insights for educators, parents, and policymakers to develop strategies and interventions that foster an environment conducive to academic success.

Recommendations

The University should actively encourage and provide resources for parental involvement in students' education.

Workshops, communication platforms, and parent-university conferences should be put in place by universities to facilitate better collaboration between parents and lecturers.

Lecturers can promote intrinsic motivation by creating and engaging relevant curricula, encouraging student choice and autonomy in their learning, and recognizing and rewarding effort and growth.

Incorporation of study skills workshops into the curriculum, to teach students effective note-taking techniques, time management strategies, and active learning methods can enhance learning, leading to academic success.

Peer tutoring or study groups where high-performing students can assist their peers should be instituted. This will not only help struggling students but also reinforce understanding for tutors.

The University should offer accessible mental health resources and counseling services to help students manage stress, anxiety, and other mental health challenges that can hinder academic performance.

The University should encourage physical activity, healthy eating, and sufficient sleep among students to enhance their cognitive function and overall well-being.

Lecturers should guide students on responsible technology usage, helping them leverage digital resources for learning while minimizing distractions.

Educators should incorporate diverse perspectives and teaching methods that resonate with students from different cultural backgrounds, creating an inclusive and engaging learning environment.

Struggling students should be identified early and provided with targeted interventions, such as additional support, to help them catch up and thrive academically.

Investment should be made in ongoing professional development for lecturers to enhance their instructional methods, classroom management skills, and ability to cater to diverse learning needs.

Mentorship programs, inclusive of peer mentoring, and academic advisory systems, that provide students with guidance and support throughout their educational journey should be instituted.

Scholarships, financial aid, and resources to students facing financial constraints should be prioritized to ensure they have access to necessary materials necessary for them to focus on their studies.

A positive and supportive culture that celebrates academic achievements, encourages collaboration and provides a safe and respectful learning environment should be created.

Lecture room learning should be connected to real-world applications, showcasing the practical relevance of subjects and boosting student engagement.

Timely and constructive feedback on students' performance should be provided, allowing them to track their progress, identify areas for improvement, and make necessary adjustments.

A holistic approach involving collaboration between lecturers, students, parents, and administrators is essential, and should be established, to effectively address these recommendations and improve students' academic performance.

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