Investigating the impact of institutional support services on student retention in a university in the Eastern Cape Province of South Africa

Regina Stofile[1], Prince Chukwuneme Enwereji[2]

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Regina Stofile[1], Prince Chukwuneme Enwereji[2]

[1]Faculty of Economic and Financial Sciences Walter Sisulu University South Africa.

[2]Department of Management Sciences Faculty of Management and Public Administration Sciences Walter Sisulu University South Africa

Abstract

This study investigated the impact of institutional support services on student retention at a higher education institution in South Africa. A quantitative research approach and a descriptive research design were employed to address the problem of the study. Kuh's student engagement theory was adopted as it provides valuable insights into how institutions can foster learning and enhance academic achievement and persistence. Data were collected from 660 third-year students using structured questionnaires. The findings reveal a significant positive relationship ($r = 0.78$; $p<0.05$) between academic support and student satisfaction, with academic support contributing 78% of factors influencing satisfaction. Key support services, including academic writing assistance, time management skills development, tutorials, and peer mentoring, were identified as crucial in enhancing student satisfaction and retention. Furthermore, demographic factors like campus and funding sources significantly influenced satisfaction levels, while gender and residential status did not. The study concludes that proactive and intrusive academic support strategies are essential for fostering student engagement, confidence, and success. Recommendations include early intervention in the first year, personalised support services, and improved staff-to-student ratios to ensure effective delivery of academic support.

Keywords: Academic support; Student retention; Higher education; Student satisfaction; Institutional support services; South Africa

1. **Introduction**

Student retention has emerged as a central concern in higher education globally, as institutions strive to ensure that students enrol and progress through to successful completion of their academic programs (Adlof, Kim & Crawley, 2023). Retention is particularly critical in contexts where students come from diverse backgrounds, such as in the Eastern Cape, where they encounter a range of socio-economic, cultural, and academic challenges (Kohli, 2023). In South Africa in general, this issue is exacerbated by the legacy of inequality in the country, with many students coming from historically disadvantaged communities (Bass, 2022). The retention rates in universities are often influenced by factors such as financial constraints, academic preparedness, and personal challenges, making it essential for universities to offer robust support mechanisms to help students overcome these barriers.

South African universities offering both academic and vocational programs are crucial in the higher education sector in the country. These institutions serve a diverse student population, which includes a significant number of first-generation students who often face unique challenges. To support these students, universities provide a range of institutional services such as academic advising, tutoring, career counselling, financial aid, health care, and psychological support (Martin & Davies, 2022). These services aim to enhance student engagement, address barriers to learning, and improve academic performance. Despite these efforts, student attrition remains a pressing issue, particularly in rural provinces like the Eastern Cape, where socio-economic hardships, limited access to resources, and inadequate support systems exacerbate the problem. Addressing these challenges requires a focused approach to ensure that institutional support services effectively meet the challenging needs of students (Rotar, 2022).

The Eastern Cape Province, which is home to some of South Africa's most under-resourced communities, faces challenges such as student retention. The socio-economic challenges faced by many students, coupled with limited resources in some universities, create a complex environment where institutional support services must play a pivotal role in mitigating these challenges (Boyd, Liu & Horissian, 2022). Yet, there is limited research exploring the specific impact of these support services on student retention within the province. Understanding how and to what extent these services contribute to student retention is critical for developing interventions that can improve student success rates and reduce dropout rates. In this regard, this study seeks to fill this gap by investigating the impact of institutional support services on student retention at a university in the Eastern Cape Province. Through this research, the study aims to provide insights that can inform policy and practice and to enhance the support mechanisms available to students and improve retention rates in the region.

2. **Problem Statement**

Despite the wide range of institutional support services offered by universities in South Africa, student retention rates remain a persistent challenge, particularly in provinces like the Eastern Cape (Megbowon, Palesa, Bongiwe & Sipokazi, 2023). Universities in this region, which serve a diverse and often disadvantaged student population, face significant difficulties in keeping students enrolled through to graduation. Many students struggle with academic, financial, and personal challenges that are not adequately addressed by existing support services, leading to high dropout rates (Skakane-Masango, Mtshali & Ngcobo, 2023). While institutional support services such as academic advising, financial aid, tutoring, and counselling are designed to assist students, there is a lack of empirical evidence on their effectiveness in enhancing student retention in universities at the Eastern Cape. Without a clear understanding of the impact of these services, universities may be unable to enhance their support strategies to meet the specific needs of their student populations. This study aims to address this gap by investigating the role and effectiveness of institutional support services in improving student retention. This study seeks to identify areas for improvement and provide recommendations for enhancing student support strategies to ensure greater academic success and retention.

3. Theoretical background

This study adopts Kuh's student engagement theory. This theory originated from the work of George Kuh, an influential scholar in higher education research. The theory builds on earlier frameworks like Astin's Theory of Student Involvement and Tinto's Model of Student Retention. Kuh emphasised the critical role of active participation in academic and co-curricular activities in shaping student success (Pike & Kuh, 2005). Kuh introduced the concept of "engagement" to capture how time and effort invested by students, alongside institutional practices designed to foster learning, contribute to academic achievement and persistence (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008). The theory is foundational in studies related to higher education quality and is closely associated with the development of the National Survey of Student Engagement (NSSE), which measures key engagement indicators.

The core concepts of Kuh's student engagement Theory include the extent to which students invest their time and effort in meaningful educational activities and the institutional actions that create conditions for such engagement. Engagement is shaped by two primary dimensions: the time and effort students devote to educationally purposeful activities, such as attending classes, participating in discussions, or collaborating on projects, and the policies, practices, and support services provided by the institution to encourage learning and development (Kuh, 2009). These include academic advising, mentoring, tutoring programs, and extracurricular activities. The theory highlights the reciprocal relationship between student behaviours and institutional interventions in fostering student success.

In a context where students often face socio-economic, academic, and cultural challenges, the engagement theory highlights the importance of institutional support services in creating an inclusive and supportive learning environment. Through the facilitation of engagement through tailored services

such as academic advising, financial aid, and wellness programs, institutions can address barriers to student success and enhance retention rates. This theoretical framework provides a structured way to examine how institutional efforts interact with student behaviours to influence persistence, making it a robust underpinning for the study.

4. Literature Review

Satisfaction with academic support services has the potential to increase student retention and lift academic standards (Hoyt, 2023). According to Adams (2006), academic support is defined as programmes that attempt to optimise the academic performance of students disadvantaged by secondary education. The academic achievement of students and their approach to study have been found to be critical factors affecting both retention and attrition in first year students (Nieuwoudt & Pedler, 2023). Students often cite their reason for withdrawing from tertiary studies as their lack of academic literacy skills, particularly in research and writing (Goldfinch & Hughes, 2007). Students may be poorly prepared for higher education and struggle to make the transition into the HEI learning environment. Under-preparedness in this context refers to students' lack of the necessary academic skills as well as insufficient personal understanding of the academic culture and of what is required to be successful in the post-school or higher education environment (Boyd, Liu & Horissian, 2022). Students may lack basic skills, fail to adjust to the university approaches of learning and teaching, struggle with academic discipline, fail assessments and feel unable to ask staff or peers for help (Martin & Davies, 2022).

Disadvantaged groups demonstrate significantly higher rates of attrition, and these students often need support programs to be successful in their transition to university studies (McCulloh, 2022). Gale *et al.* (2010) is of the view that academic support programs can increase aspiration, access and retention rates amongst students, particularly those from disadvantaged and lower socio-economic backgrounds. Academic support has also been defined as a condition that promotes success (Hilsdon 2013). Androushchak, Poldin,and Yudkevich, (2013) reiterates that the availability of academic support, for instance, in the form of developmental education courses, tutoring, study groups and other programs such as supplemental instruction, is an important condition for students' continuation in the university.

The main purpose of academic support is to serve students' needs, and especially the needs of those students who are underprepared or have difficulty adjusting to the academic environment (Madni, 2008). Academic support is meant to address students' deficiencies by offering perceived relevant support programmes to ensure that students would perform well in their studies. Boughey (2005) highlights several activities characteristic of early academic support initiatives, many of which remain relevant today. One key focus was on access and admissions, aiming to identify students with the "potential" to thrive in higher education despite their disadvantaged backgrounds and low matriculation scores. Efforts in this area persist and have led to innovations such as the development of the National Benchmark Tests (NBTs), which are designed to assess students' readiness for higher education.

The second area of work identified by Boughey (2005) relates to attempts to address the phenomenon of 'disadvantage' or 'under preparedness'. Widely held conceptions of 'disadvantage' or under preparedness tend to rely on the assumptions that students are lacking skills, experiencing gaps in conceptual knowledge areas; in need of language development and lacking the ability to think critically. There is also some acknowledgment of the impact of social and personal factors in learning, resulting in attempts to address 'personal growth' through the development of 'life skills'. In the academic support phase, dominant assumptions remain that these elements of 'disadvantage' could be addressed independently of mainstream learning by means of additional classes and tutorials and special courses.

Adam (2006) posits that students often experience university offering personal and intellectual freedom, while at the same time they are being overwhelmed by the new social environment, academic culture and demands of study, for example, pace of work, task complexity, and volume of work. Fortes, Latham, Vaughn and Preston (2022) argue that this has a disempowering effect on student academic progress. A special intervention is needed for such students to develop their language proficiency, study and academic skills and knowledge base (Garriott, Ko, Grant, Jessen, & Allan, 2023). Warren (1998) categorises student support interventions into two types: semi-integrated or separate interventions and integrated interventions. Semi-integrated interventions function as standalone programs, such as workshops or remedial classes, which students must seek out independently to address specific needs. In contrast, integrated interventions are embedded within the curriculum and academic activities, ensuring support is readily accessible as part of the learning process, such as peer mentoring or embedded tutoring. Integrated approaches tend to be more effective as they reduce barriers to access and provide widespread support, fostering better retention and academic success.

Academic support involves curriculum design to facilitate the retention and success of marginalised students to progress from 'more time more tuition' separate or bridging approach and semi-integrated or foundational approach, to the integrated and holistic approach (Crosling *et al.* 2009; Kloot, Case & Marshall 2008; Megbowon, Palesa, Bongiwe & Sipokazi, 2023). Separate or bridging approaches provide academic support and aim to improve an inadequate secondary education. Semi-integrated or foundational approaches focus on academic development by establishing essential skills such as cognitive, communication, and study abilities to support further learning. In contrast, integrated and holistic approaches embed academic development within mainstream programs, fostering a range of competencies. These include cognitive, practical, reasoning, and critical thinking skills, as well as conceptual understanding, language proficiency, communication abilities, life skills, and study techniques, all taught through disciplinary content (Kloot *et al.,* 2008; Jones, 2023). Subsequently, the various types of programmes that an institution can use to facilitate student academic support are expounded upon.

4.1 Semi-integrated or foundational programme

The semi-integrated or separate form of educational intervention targets non-traditional students. In South Africa, this means learners from historically disadvantaged settings (Megbowon, Palesa, Bongiwe & Sipokazi, 2023). The programme consists of supplementary tutorial programmes (STPs); extended programmes and separate language-based courses. Supplementary tutorial programmes (STPs) comprises additional weekly tutorial or workshops, usually voluntary. The intervention runs concurrently with the mainstream course to which it is linked (Jones, 2023). The aim of the Supplementary Tutorial Programme (STP) model includes, among other things, assisting students from underprivileged backgrounds to cope with the mainstream course; providing a separate, safe space for addressing their learning difficulties; developing study and writing skills; clarifying key concepts; and elements of content (Jones, 2023)

Warren's (1998) experience with the extended model highlights both its challenges and benefits. Key challenges include erratic attendance and inadequate preparation by students, particularly during peak periods of assignments, tests, or exams. The model's limited time for interventions, coupled with the demanding pace and volume of mainstream work, restricts opportunities for deeper learning and meaningful cognitive or linguistic development. Furthermore, students already struggling academically often face additional burdens from non-credit-bearing tutorials across multiple courses, exacerbating their workload without yielding direct credit. Taylor (2008) highlights the systemic issues of student persistence, completion, and meaningful learning, attributing these challenges to under-preparedness or inappropriate curricula. These issues strain students and their families financially and contribute to a national skills shortage, prompting institutions to introduce extended programmes funded by the Department of Education. These programmes, designed to spread first-year teaching over two years, provide foundational support to improve retention and academic success.

The extended model, often referred to as a 'slow intensive' programme, offers significant advantages but comes with notable drawbacks. It is credit-bearing, allowing students from disadvantaged backgrounds to remain partially integrated into mainstream classes while providing additional time and space to develop background knowledge and essential skills (Warren, 1998). The model also facilitates alternative access to disciplines and supports academic integration. However, drawbacks include the extended time required to complete the programme, which delays opportunities for students to major in specific subjects. Additionally, separate language-based courses, while addressing critical reading, writing, and concept formation, face challenges such as students' limited access to these resources and the integration of skills across disciplines. These programmes aim to demystify academic discourse and provide small group interactions to build confidence, but their benefits may be undermined by students' resentment toward being placed in separate courses and the limited transfer of skills across varying academic contexts (Warren, 1998).

4.2 Integrated Interventions

The integrated and holistic approach incorporates academic development into mainstream programmes by instilling cognitive, practical, reasoning, conceptual, and critical thinking skills. It also focuses on developing language, communication, life, and study skills through disciplinary content (Kloot *et al*., 2008). This approach reveals that the issue of student learning in higher education is a complex social cognitive process of discovering, contesting sub-cultural roles and knowledge making rules. The model also recognises the importance of cognitive and social processes in learning and thus prepares students for the specific demands of Higher Education (HE).

Supplementary instruction (SI) is defined by Barkley (2010) as an academic support system that has used peer advising to facilitate review sessions to students in challenging courses. SI facilitates the mastery of content in the process of developing and integrating learning and study skills in high risk courses and aims to improve student performance, retention and completion/graduation rates (Skoglund, Wall & Kiene, 2018). SI is a peer-assisted study session which are regularly scheduled, informal review sessions where students compare notes, discuss readings, develop organizational tools, and predict test items (Paloyo, Rogan & Siminski, 2016). SI Sessions are conducted by leaders who are students who have previously done well in the course and who attend all lectures, take notes, and act as model students (Stanich, Pelch, Theobald & Freeman, 2018). SI is targeted at historically difficult courses and is available to all students. Attendance at SI is voluntary; therefore, there is no stigma attached, and it is not remedial but is proactive (Skoglund *et al.,* 2018). Supplemental Instruction (SI) emphasizes the integration of academic skills development with course content mastery, focusing on the learning process through cooperative small group activities (Paloyo *et al*., 2016). The SI leader facilitates these sessions but is not involved in assessing students. Attendance records for SI sessions are kept confidential, and the program is overseen by a trained staff member. Programs based on SI are designed to give students opportunities to discuss and process course material collaboratively, enhancing their understanding and engagement with the content (Kirkham & Ringelstein, 2008).

Personal tutoring is a key strategy in higher education for fostering a sense of belonging and supporting academic development (Lochtie, McIntosh, Stork & Walker, 2018). It provides students with individualised guidance and help them go through academic and personal challenges (Yale, 2019). According to Grey and Osborne (2020), personal tutors act as the first point of contact that offer academic and pastoral support and discuss assignments, providing feedback, and helping students develop study skills. Personal tutors play a critical role in identifying at-risk students, integrating them into the university experience, and offering support to those considering leaving (Lochtie *et al.,* 2018). Research highlights the benefits of smaller tutorial groups for fostering deeper discussions and meaningful relationships with staff, which enhances student engagement and reduces dropout intentions (Yale, 2019; Grey & Osborne, 2020).

Peer mentoring, on the other hand, involves experienced students guiding less experienced ones, aiding their transition into higher education, and fostering integration (Lunsford, Crisp, Dolan, & Wuetherick, 2017). Kalpazidou Schmidt and Faber (2016) attest that it provides support and empowerment for both mentors and mentees. Unlike Supplemental Instruction (SI), which focuses primarily on academic content, peer mentoring also addresses personal and psychosocial development, enabling students to overcome challenges and build confidence (Brown, 2020). Peer mentoring has been recognised as a transformative strategy, helping to improve retention rates, facilitate induction, and provide holistic support for students traversing the demands of university life.

Despite the above approaches, Thomas (2012) also suggested the following effective approaches to providing academic development and support. Firstly, students prefer to receive their academic development and support within their academic department. Secondly, sharing concerns allows students to realise that many of their worries about studying are normal and/or shared by others. Thirdly, investing time to enable students to understand academic development, to reflect on their learning, and to undertake follow-up work. Fourthly, tutoring emerges as a popular and effective way of receiving academic development and support. Lastly, mentoring can also provide students with access to useful academic development and support, especially as a mentor can appear more accessible to students than members of staff.

Academic support programs are very important in enhancing student's academic performance, especially with students from previously disadvantage universities like the one under study. In addition, without the adequate support of students, facilitators, coordinators, and lecturers from different departments, it will be difficult for any support programs to achieve their results. Academic support as a variable has been identified to address the under-preparedness of students and to construct the appropriate intervention programmes which will allow students to engage effectively with the institution. To achieve this, it is of essence to invest time and effort in students in areas such as skill development, mentoring and tutoring. It is envisioned that this will foster confidence among students to continue in their chosen course of study with the aspiration of completing it.

5. Research methods

This section details the methodology employed to investigate the impact of institutional support services on student retention at a higher education institution (HEI) in the Eastern Cape Province of South Africa. The HEI, a prominent institution with four active campuses (A, B, C, and D), serves a diverse student population and offers a variety of academic programs across multiple disciplines. Its commitment to academic excellence, inclusivity, and student engagement highlights its role in advancing higher education in the region.

The study adopted a quantitative research approach with a descriptive design to collect and analyse data. Quantitative research was chosen for its ability to objectively measure variables and identify patterns and relationships through statistical analysis (Mohajan, 2020). A total of 660 participants were selected from a population of 6,600 third-year students across various faculties and campuses using stratified random sampling. A structured questionnaire served as the sole data collection instrument due to its efficiency in gathering information from large groups (Hodge, 2020; Sürücü & Maslakci, 2020). The following hypothesis was investigated:

H_a: There is no significant positive relationship between academic support and students' satisfaction.

Data were analysed using the Statistical Package for the Social Sciences (SPSS), a widely recognized software for statistical analysis. The responses were coded and entered into SPSS, where descriptive and inferential statistical tests were performed to examine the hypothesized relationships and uncover meaningful patterns. Ethical considerations were rigorously observed throughout the research. Informed consent was obtained from participants, ensuring they were fully aware of the study's purpose and their rights. Anonymity and confidentiality were safeguarded by assigning unique identifiers to questionnaires and securely storing the data. The study adhered strictly to ethical guidelines to protect participants' privacy and well-being.

6. Presentation of research results

This section presented the results, which were based on the hypothesis 'There is no significant positive relationship between academic support and students' satisfaction.

6.1 Academic support and student satisfaction

Student satisfaction with any form of academic support is very important because students are the primary stakeholders and beneficiaries of higher education, and their degree of satisfaction should be a concern of every institution. The study adopted Pearson Product-Moment correlation analysis to find out the relationship between a predictor variable of academic support and the target variable of student satisfaction. Table 1 shows that there is a clear relationship present between academic support and student satisfaction.

Table 1: Summary of Pearson Product-Moment Correlation Showing Relationship between Academic Support and Students' Satisfactions

Variables	N	Mean	Std. D	R	Sig.	Remark
Academic Support	648	28.006	6.115	.775	.000	Significant
Students' Satisfaction	648	167.849	33.689			

Table 1 reveals that there is a significant positive relationship between academic support and students' satisfaction (r = 0.78; p<0.05). Therefore, the hypothesis is rejected. The positive relationship implies that the increase in academic support brings about an increase in students' satisfaction and vice versa. A t-test on demographic variables of gender, campuses, residential status, and source of funding was performed to establish their relationship with academic support. The results are presented in Tables 2 to 5.

Table 2 presents the findings between gender and the students' level of satisfaction with academic support.

Table 2: Difference between Male and Female Students Satisfaction with academic support

	Gender	N	Mean	Std. Deviation	T	Df	Sig.	Remark
Satisfaction with academic support	Male	257	27.6304	5.82756	1.335	648	.182	NS
	Female	393	28.2850	6.29100				

Table 2 shows that gender has no significant influence on satisfaction with academic support (t = 1.34; df = 648; p>0.05). This implies that the gender of a student does not influence the student's level of satisfaction with academic support. Both female and male student perceived that satisfaction with academic support influences their decision to stay within the university.

A t-test was performed to show the influence of campus on students' level of satisfaction with academic support.

Table 3: Influence of Campus on satisfaction with academic support

Satisfaction with academic support	Buffalo city	167	27.5329	6.52408				
	Butterworth	125	26.9120	5.33252				
	N.M.D.	332	28.5934	6.14431	3.107	3, 646	.026	Sig.
	Queestown	26	29.3077	5.80186				
	Total	650	28.0262	6.11580				

Table 3 reveals that campus has a significant influence on students' satisfaction with academic support (F(3, 646) = 3.11; p<0.05), where Queenstown has the highest satisfaction means score (29.31), followed by Nelson Mandela Drive (28.59), then Buffalo City (27.53), and Butterworth has the lowest

mean score (26.91). This implies that campus influences the level of student satisfaction with academic support and their decision to stay within the institution.

A t-test was also undertaken to show the influence of residential status on the student's level of satisfaction with academic support. The results are presented in Table 4

Table 4: Influence of residential status on students areas of satisfaction with academic support

Table 4: Influence of Residential Status on Students Areas of Satisfaction with academic support

	Res. Status	N	Mean	Std. Deviation	t	df	Sig.	Remark
Satisfaction with academic support	On campus	323	28.2074	6.11969				NS
	Off campus	326	27.8466	6.12544	.751	647	.453	

Table 4 reveals that residential status has no significant influence on student satisfaction with academic support (t = 0.75; df = 647; p>0.05). This means that students' decision to stay within the institution was influenced by the perceived level of student's satisfaction with academic support, irrespective of whether the student resides on or off campus. Table 5 presents the influence of sources of funding on academic support.

Table 5: Influence of Source of Funding on academic support

		N	Mean	Stt. D	F	Df	Sig.	Remark
Satisfaction with academic support	Personal loan	19	25.2632	5.91460				
	Scholarship	81	29.3210	5.47683				
	NSFAS	472	28.2055	6.03019	4.441	5, 644	.001	Sig.
	Self-financed	21	28.2381	6.39457				
	Parent/relatives	42	26.5476	6.73615				
	Others	15	22.7333	6.71317				
	Total	650	28.0262	6.11580				

Table 5 reveals that source of funding has significant influence on satisfaction with academic support (F(5, 644) = 4.44; p<0.05) where students on scholarship have the highest satisfaction means score

(29.32), followed by self-financed students (28.24) followed by students on NSFAS (28.21), followed by those on parents/relative (26.55), followed by those on personal loan (25.26) while those on undisclosed source of funding have the lowest mean score (22.73). Satisfaction about student assessment ($F(5, 644) = 2.99$; $p<0.05$) where students on self-financed have the highest mean score (29.29) followed by students on scholarship (29.23), followed by those on parents/relatives (28.38) followed by students on NSFAS (28.05), followed by those on personal loan (27.05) while those on undisclosed sources of funding have the lowest mean score (25.87).

7. Discussion of Results

The empirical result reveals that there is a significant positive relationship between academic support and students' satisfaction ($r = 0.78$; $p<0.05$). Therefore, the hypothesis is not supported but rejected. Academic support constitutes about 78% of all factors affecting student satisfaction. The positive relationship implies that an increase in academic support brings about an increase in students' satisfaction. This also means that 78 percent of students strongly agreed that satisfaction with academic support impacts the decision to stay at the university. Students believed that being assisted with different skills (academic writing, study, examination preparation, and time management skills) influenced their satisfaction levels. Students further believed that having a system to detect their academic performance on time and given an opportunity to attend tutorials to complement lectures increase the level of student satisfaction. Having lectures available for consultation and given an opportunity to participate in study groups and peer programmes were viewed as important for student satisfaction. The results of the study also showed that demographic variables influenced the level of satisfaction with academic support. Demographic variables of campus and source of funding revealed a significant influence on academic support while gender and residential status did not have an effect. Students strongly agreed that satisfaction with academic support influenced their decision to stay in the university.

The study supports the view that development of students both academically and socially while they are members of the campus community is tantamount to the university's success. Astin (1968), the first researcher who wrote about the campus setting more than thirty years ago, postulated that individual achievement, behaviour, self-esteem, and feelings of loneliness and alienation are often the result of a mismatch between the student and the environment. Tinto (1975) also argued more intensely that the individual and the institution must be compatible and integrable to produce a successful, supportive relationship. Murray (2014) one of the first South African authors to investigate the factors affecting graduation and dropout, found that residence and financial aid status are important determinants for both dropout and graduation. Kuh's student engagement theory emphasises how time and effort invested by students, alongside institutional practices designed to foster learning, contribute to academic achievement and persistence (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008).

Androushchak *et al.* (2013) further confirmed that the availability of academic support, for instance in the form of developmental education courses, tutoring, study groups and other programs such as supplemental instruction is an important condition for students' engagement and satisfaction. In most cases academic support and development is provided by higher education institutions to address issues around student retention, progression and success (Kohli, 2023). Student satisfaction with any form of academic support is very important because students are the primary stakeholders and beneficiaries of higher education, and their degree of satisfaction should be a concern of every institution (Bass, 2022).The results from this study supported the results from previous studies which indicated that there is a positive relationship between academic support and student satisfaction. Academic support programmes aim to assist under-prepared students and students from poorly resourced senior secondary schools to cope with university academic work.

Students feel empowered and engaged with the institution when they develop supporting relationships. Higher education institutions are reminded that the student is on an academic journey and the institution's assistance is needed to help them arrive at their destinations (Skoglund *et al.,* 2018). If the higher education system is to promote effective learning and prevent learning breakdown, it is essential that mechanisms whose aim is to break down barriers to learning be structured into the education system. Such mechanisms must promote the development of an effective learning and teaching environment (Skakane-Masango *et al.,* 2023).Institutions considering taking advantage of academic support for student success must consider a staff-to-student ratio much like the faculty-to-student ratio. McDonald (2013) found with faculty-to-student ratios, sometimes it is more about the quality of the interactions and the institutions are to ensure that there is enough support staff to engage and support students. To overcome these challenges, institutions should deliver academic support intrusively, by initiating contact with students and aggressively bringing support services to them, rather than offering services passively and hoping that students will come and take advantage of them on their own accord (Martin & Davies, 2022). Secondly, institutional support should be delivered proactively, early in the first year of study to intercept potential first-year attrition, rather than responding reactively to student difficulties after they occur (Boyd *et al*., 2022). Students who earn good grades during their first term are far more likely to persist to graduation than are first-term students who do not experience initial academic success (Hoyt, 2023). Considering the above findings one can conclude that learning in higher education is a challenge for most students, thus need to be supported to develop their confidence and skills to be effective learners in higher education.

8. **Conclusion and recommendations**

The findings of this study revealed the critical role of academic support in influencing student satisfaction and retention in higher education institutions. The significant positive relationship between

academic support and student satisfaction highlights the importance of providing students with resources such as academic writing, study skills, time management, and tutorial programs. The study also emphasises that demographic factors, such as campus and funding source, significantly influence students' satisfaction levels, while gender and residential status do not. This indicates the need for tailored support mechanisms that account for these demographic variations. The integration of academic and social development, as well as the fostering of supportive relationships between students and the institution, aligns with theories like Kuh's student engagement theory and Tinto's model which emphasise the compatibility between students and their environment for successful academic outcomes.

To address the challenges identified, higher education institutions should facilitate intrusive academic support strategies to students. Institutions must ensure that they support earlier in their career, particularly in the first year, to mitigate potential attrition and foster a culture of engagement and achievement from the onset. Expanding staff-to-student ratios and ensuring quality interactions are essential for effective support. Moreover, institutions should actively monitor students' academic performance and initiate timely interventions. Enhanced support services, such as peer mentoring, developmental education courses, and supplemental instruction, should be made readily accessible and integrated into students' academic journeys. HEIs in South Africa and beyond can break these barriers to learning by fostering a supportive academic environment to enhance student satisfaction, retention, and success.

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