

Mapping the Global Landscape of Student Support Services in Higher Education: A Scoping Review

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Received: Sep. 1, 2025 Accepted: November 2, 2025 Published: November 11, 2025

doi:10.5296/jse.v15i4.23203 URL: <https://doi.org/10.5296/jse.v15i4.23203>

Abstract

This scoping review examines the provision and outcomes of student support services in higher education institutions. The search was conducted on Web of Science and the Education Resource Information Center databases. Empirical studies published between 2019-2023 in English were included. Thirty-nine studies were eligible for inclusion. We categorised student support services into academic (advising, tutoring, mentoring, library, IT) and non-academic services (career, health/well-being, disability, financial aid, student organizations, and accommodation). Geographically, most studies originated from the United States (31%), Australia (26%), and China (8%), Germany and the UK each contributed 3% while studies from developing countries comprised 25%. Data synthesis and thematic analysis revealed that while 54% of studies addressed non-academic support, 77% focused on academic services, often using student perceptions as outcome measures. From the review, disparities in awareness, access, and utilization among diverse student populations were evident, alongside insufficient emphasis on non-academic provisions. Based on these findings, there is a need for tailored services to enhance academic success and student well-being. We therefore

recommend that higher education institutions develop comprehensive non-academic support services to address diverse and complex student needs.

Keywords: Academic support services, support services, non-academic support services, higher education, quality education

Subject classification codes: I20, I21, I29

Introduction

Providing high-quality student support services is vital to quality education, promoting success, and enhancing degree completion rates (Johnson et al., 2022). For many students, enrolment in university is a significant life transition with many challenges and uncertainties. Universities offer various support services to help students navigate this transition successfully. Student support services are also important for student success and well-being in higher education institutions (Kaur, 2016). The growing number of students in higher education has resulted in a university student body with diverse needs, expectations, and support preferences based on factors such as age, socioeconomic status, prior education, and ethnicity (Hall, 2002; Jaffar, 2025).

Students face considerable obstacles in higher education, necessitating robust university support systems to help them navigate these challenges. Student support services are critical in enriching the educational experience and enhancing the competencies required for academic success and timely degree completion (Okpych et al., 2020). Given the ongoing shifts in technology, socioeconomic dynamics, and demographic trends, it is imperative for educational institutions to implement tailored programs and services that address both academic and non-academic student needs. Academic support services comprise interventions to support student performance, and include academic advising, library access, peer mentoring, and tutoring. Non-academic support services encompass initiatives that, while indirectly related to academic content, promote student success. These include structured programs such as career services, health and well-being, disability, and financial aid services (Dominguez-Whitehead, 2018). Although both academic and non-academic support services significantly influence student satisfaction (Kalim et al., 2022), there has been a marked emphasis on the quality of academic support services (Bell & Frost, 2012). This underscores the need for a holistic approach to support service provision, addressing the multifaceted nature of student experiences in higher education.

Given the change in the composition of a 'traditional' student population and the increased need for help and resources, universities have been making concerted efforts to improve the delivery of student support services. However, there are concerns regarding student support services quality, adequacy, and access. Previous literature has highlighted issues and gaps in the quality, adequacy, accessibility, and integration of the academic curriculum with student support services (Nsamba & Makoe, 2017). The disparity in quality, availability, and accessibility of student support services across institutions and the different ways universities provide them necessitates further investigation of student support services to ensure the services meet student needs.

There are ongoing debates regarding the importance of academic and non-academic services in higher education. Some argue that these services significantly impact student satisfaction (Kalim, 2022), while others emphasise their influence on academic success, student well-being, successful university operation, and student achievement (Furr & Elling, 2002; Dominguez-Whitehead, 2018; Pitaloka & Hapsoro, 2020). While both academic and non-academic student support provisions contribute to student outcomes, they exhibit

differing relationships with various outcomes. Previous research has examined academic support (see Perry, et al. 2020; Pantelich, 2021; Ren et al., 2022) with some studies generalising across diverse service types (e.g., Thangavelu, 2019; Valenzuela, 2021; Zhang and Zhu, 2022), while others note that non-academic support services remain significantly underexplored in the literature (Dominguez-Whitehead, 2017). This creates an imbalance and a gap in understanding the combined effect of academic and non-academic support services. This study addresses this research gap by examining the provision and outcomes of student support services in higher education institutions, as distinct yet complementary components. As higher education institutions increasingly adopt integrated, holistic support models, evaluation of academic and non-academic services offers crucial insights into student support services. This study contributes to the body of research by offering a specific attribution of outcomes to specific interventions, thereby offering actionable insights for institutional decision-making regarding resource allocation and the development of holistic student support services.

Methods

This study uses a scoping review approach to assess the provision and outcomes of student support services by reviewing scientific literature published between 2019 and 2023 in the Web of Science and the Education Resource Information Center (ERIC) databases which provide comprehensive coverage for the student support services in higher education research domain. We distinguished between academic student support services and non-academic student support services.

Search Strategy

To map existing literature on student support services in higher education, the search terms "support services," "student support services," "academic support services," and "non-academic support services" were used and returned a wide range of documents on student support services in higher education. This strategy incorporated current, validated, and scholarly insights into the various support services offered to students in higher education settings. Boolean operators (AND, OR) were utilised to refine and expand the search, ensuring a balance between specificity and inclusivity.

Eligibility criteria

Inclusion Criteria: Articles deemed relevant for the study met the following criteria

- Peer-reviewed studies based on original data
- Published between 2019 and 2023
- Publications in English language

Exclusion Criteria: Articles were excluded on the basis of the following factors

- Publications in any language other than English
- Studies that solely focused an individual support service

We focused on the years 2019 to 2023, a period marked by a COVID-19-induced educational transformation in higher education. This period involved a rapid shift from face-to-face to online delivery, which had a significant impact on student needs and support services, thus necessitating an investigation of the student support services landscape.

Search and selection process

The search and selection process was conducted in December 2023 and involved two stages. An extensive search was conducted in electronic databases using the abovementioned parameters, yielding many potentially relevant articles. After removing duplicates, the titles and abstracts of the remaining articles were screened for their relevance, and those that were deemed relevant underwent further full-text screening based on the inclusion criteria.

Two independent authors (KJ & KM) screened the titles, abstracts, and full articles, applying the inclusion and exclusion criteria. Two other authors (ETC & AS) reviewed articles meeting the inclusion criteria. In cases of disagreement, all four reviewers engaged in a discussion to determine inclusion or exclusion based on the inclusion and exclusion criteria.

Data analysis was guided by Rahi's (2017) recommended procedures on the analysis of data on the methodological approaches or distribution patterns in studies on a particular subject or phenomenon. Findings from the articles were grouped into categories reflecting trends in yearly distributions, country representations, study population, type of support service and study outcome as shown in Table 1. Analysis and discussions were done based on themes raised through an iterative process of comparison and consensus discussions among all four team members.

Data Extraction and Synthesis of Results

Data extraction was undertaken using a form designed to systematically extract information relevant to the study aim. Information collected included publication title, author, and year of publication, country of study, study population, methodology, type of student support services, and main study outcome. Non-academic services categories included career services, health and wellbeing, disability, financial aid, student organizations, and accommodation. We also identified academic services, including academic advising, tutoring, study abroad, peer mentoring, library services, and IT & digital skills (Table 1). The extracted data was summarised in tables and a thematic review. The final dataset comprised 39 articles allowing capturing of diverse perspectives (Purssell & McCrae, 2020) to provide a comprehensive overview of academic and non-academic support services in higher education, forming the foundation for in-depth analysis and nuanced insights. Figure 1 shows the PRISMA Extension for Scoping Reviews (PRISMA-ScR) flow diagram for the scoping review process and article selection. This is a modified version of the Joanna Briggs Institute reviewers' manual 2015 (Tricco et al., 2018). Table 1 was used to systematically organise key data from each study, enabling the identification of recurring patterns and thematic clusters. By mapping these findings side-by-side, the table facilitated comparative analysis and helped highlight gaps and draw broader conclusions on the provision and outcomes of student support services.

Results

A total of 10,024 records were identified from ERIC and Web of Science databases. Only 312 records were included after the first screening of titles and abstracts. A second round of title and abstract screening resulted in 73 records being excluded as they mainly focused on vocational colleges, virtual learning, distance learning, or international students only. Sixty articles were assessed for eligibility, and 21 articles focusing on online learning, non-traditional students, and mental health issues only were removed. Following this, 39 papers were identified and included in the final review to assess the provision and outcomes of student support services in higher education institutions.

Most studies were from different countries and primarily focused on state universities, except for one study focused on public and private institutions. While some studies focused on both academic and non-academic support services (Kalim et al., 2022), some focused on specific student populations and services (Cong, 2019; Kakada, 2019; Alshuaybat, 2021; Ammigan, 2022). Of the 39 studies included in the review, 13% discussed student support services broadly or generalised without specifying, naming, or focusing on specific academic or non-academic services (Thangavelu, 2019; Pitaloka and Hapsoro, 2020; Wilson et al., 2020; Valenzuela, 2021; Zhang and Zhu, 2022).

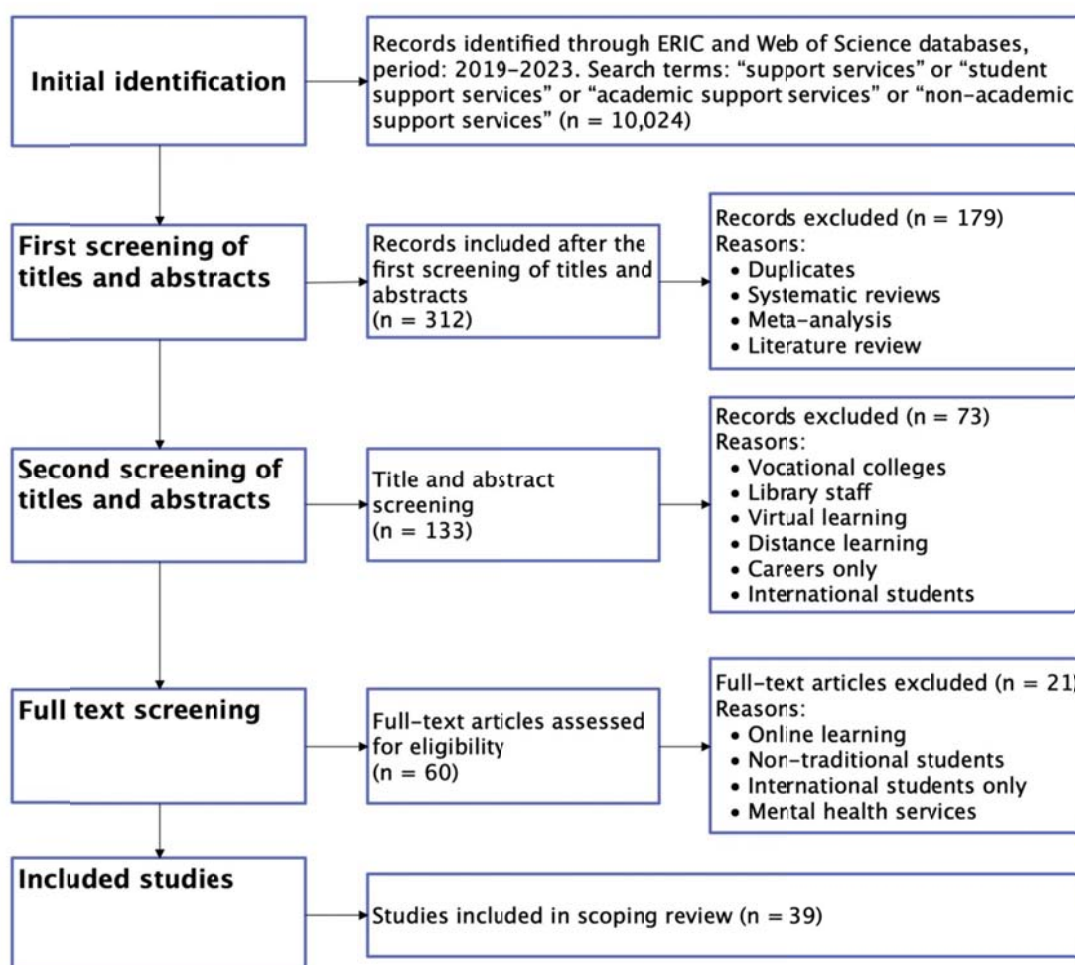


Figure 1. PRISMA Extension for Scoping Reviews (PRISMA-ScR) flow diagram for the scoping review process and article selection. Modified: The Joanna Briggs Institute reviewers' manual 2015 (Tricco et al., 2018).

Table 1. Characteristics of the included studies (n =39)

Authors	Country	Study Population	Student Level	Academic support services measured or addressed	Non-academic support services measured or addressed	Main outcome measure(s)
Alshuzybat, 2021	Jordan	Students only	Undergraduate and Postgraduate	Academic advising Tutoring	Generalised*	Student satisfaction
Ammigan, 2022	Mauritian students in the UK and Australia	Students only	Undergraduate and Postgraduate	Academic advising, Tutoring, Study Abroad, Peer mentoring, Library services, IT & Digital Skills	Career services, Health & Wellbeing, Disability services, Financial aid, Student Orgs, Housing/Residential	Student satisfaction
Balzer and London, 2019	US	Students Only	Undergraduate	Academic advising Tutoring Peer mentoring	Generalised*	Student retention and success
Baik 2019	Australia	Students only	Undergraduate and Postgraduate	Academic advising Peer mentoring	Health & Wellbeing Student Orgs	Perceptions of support services
Bornschlegl and Caltabiano, 2022	Australia	Students only	Undergraduate	Generalised*	None	Access to and engagement with student support services
Conroy 2022	US	Students and staff	Undergraduate	Peer mentoring	Career services	Evaluation of support services
Cong 2019	US	Students only	Undergraduate and Postgraduate	Academic advising Tutoring Peer mentoring IT & Digital Skills	Financial aid	Student satisfaction
Cipolletta 2022	Italy	Students only	Undergraduate and Postgraduate	Tutoring	Health Wellbeing	Perceptions of support services
Gleeson et al, 2019	Australia	Students only	Undergraduate	Tutoring	Generalised*	Evaluation of support services

Hoyt, 2023	US	Students only	Undergraduate	Peer mentoring	Career services	Student retention
Kalim et al, 2022	Chira	Students only	Undergraduate and Postgraduate	Academic advising, Tutoring, Study Abroad, Peer mentoring, Library services, IT & Digital Skills	Career services, Health& Wellbeing, Disability services, Financial aid, Student Orgs, Housing/Residential	Student satisfaction
Kakada 2019	India	Students only	Undergraduate	Academic advising Tutoring Library services IT & Digital Skills	Health Wellbeing	Student satisfaction
Pitaloka and Hapsoro, 2020	Indonesia	Students only	Not clear	Generalised*	Generalised*	Student satisfaction
Lee et al, 2022	US	Students only	Undergraduate and Postgraduate	Academic advising; Peer mentoring	Career services, Student Orgs	Perceptions of support services
Madden-Dent 2019	US	Students and staff	Undergraduate and Postgraduate	Peer mentoring	Health Wellbeing Student Orgs Housing/Residential	Evaluation and support services
Moissac, 2020	Canada	Students only	Undergraduate	Generalised*	Health Wellbeing	Perceptions of support services
Mah, 2020	Germany	Students only	Undergraduate	Academic advising Tutoring Library services	Career services Health Wellbeing Financial aid Student Orgs	Student retention
Martirosyan, et al. 2019	US	Students only	Undergraduate and Postgraduate	Academic advising Tutoring	Career services Housing/Residential	Evaluation of support services
Martirosyan et al, 2022	US	Students only	Undergraduate and Postgraduate	Academic advising Library services IT & Digital Skills	Health Wellbeing Financial aid Housing/Residential	Evaluation of support services

Niehaus et al, 2020		Students only	Undergraduate	Academic advising Peer mentoring	Career services Health Wellbeing Student Orgs	Student development
Perez and Sabato, 2023	US and Canada	Students and Staff	Undergraduate	Academic advising Tutoring Peer mentoring	Career services Health & Wellbeing Disability services Financial aid Student Orgs	Perceptions of student support
Picton and Kahu 2022	Australia	Students only	Undergraduate	Academic advising Tutoring	Career services Health Wellbeing	Student engagement
Power et al, 2020	Australia	Staff only	No	Library services IT & Digital Skills	Health Wellbeing	Student success
Perry et al. 2020	US	Students only	Undergraduate and Postgraduate	Academic advising Tutoring	Generalised*	Perceptions of support services
Pantelich, 2021	Australia	Students only	Undergraduate and Postgraduate	Academic advising Peer mentoring	Generalised*	Evaluation of support service
Ren et al., 2022	China	Students Only	Undergraduate and Postgraduate	Library services	Generalised*	Perceptions of support services
Raby, 2020	United Kingdom	Students only	Undergraduate and Postgraduate	Academic advising Library Tutoring	Career services Health Wellbeing Financial aid	Perceptions of support services
Suresh et al, 2021	Canada	Students Only	Undergraduate and Postgraduate	Peer mentoring	Health & Wellbeing	Evaluation of support services
Sithaldeen and Pletzen, 2022	South Africa	Students and staff	Undergraduate	Academic advising Peer mentoring	Career services	Perceptions of support services
Shadowena et al., 2019	US	Students Only	Undergraduate and Postgraduate	Generalised*	Health Wellbeing	Evaluation of support services
Thangavelu, 2019	Australia	Students only	Undergraduate	Generalised*	Generalised*	Student-retention and Success
Voisin et al, 2023	Canada	Students only	Undergraduate and Postgraduate	Academic advising Tutoring Peer mentoring	Health & Wellbeing	Evaluation of support services

Valenzuela, 2021	Chile	Students only	Undergraduate	Generalised*	Generalised*	Utilization of support services
Wolfa and Phung, 2019	US	Students Only	Postgraduate	Academic advising Tutoring	Generalised*	Evaluation of support services
Woolcott et al, 2021	Australia	Students and staff	Undergraduate	Tutoring Peer mentoring	Generalised*	Evaluation of support services
Weuifen, et al 2021	Australia	Students and staff	Undergraduate	Generalised*	None	Student retention
Westbrock and Cox, 2020	US	Students Only	Undergraduate and Postgraduate	Academic advising Tutoring Peer mentoring Library services	Generalised*	Evaluation of support services
Wilson, et al. 2020	Australia	Students Only	Undergraduate	Generalised*	Generalised*	Evaluation of support services
Zhang and Zhu, 2022	China	Students only	Undergraduate and Postgraduate	Generalised*	Generalised*	Evaluation of support services

*Papers that did not identify specific academic or non-academic services

Characteristics of included studies

The 39 studies included in this study span five continents and thirteen countries, including Europe (Germany, Italy, United Kingdom (UK)), Asia (China, India, Indonesia, Jordan), North America (Canada, United States of America), South America (Trinidad and Tobago), Australia, and Africa (Mauritius, South Africa). Most of the studies were from the United States (31%), Australia (26%), and China (8%). Notably, only 25% of the studies were undertaken in developing countries. Germany and the UK each accounted for only 3% of the studies, a relatively low proportion compared to other developed countries (Figure 3). Notably, the highest number of studies were published in 2019 and 2022 (Figure 2), indicating peak periods of scholarly activity within the review timeframe.

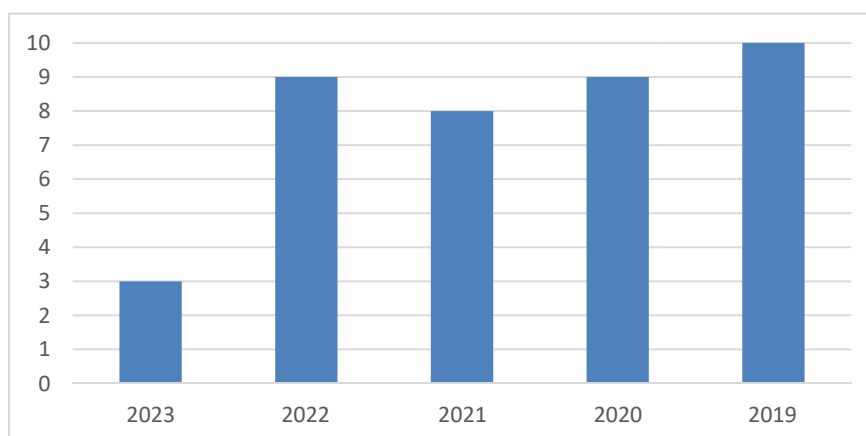


Figure 2. Studies by Publication Year

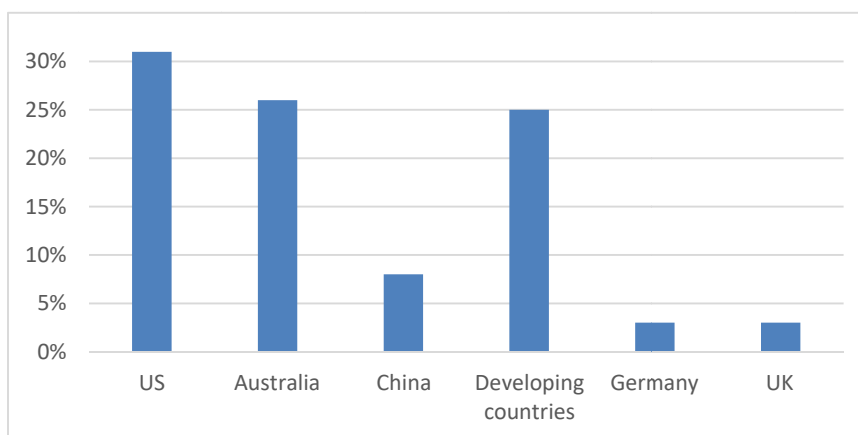


Figure 3. Distribution of Studies by Countries

Of the 39 studies, 37 (94%) had undergraduate students as part of their study population, while only 19 (49%) included postgraduate students. Additionally, staff members were included in roughly 21% of the studies, whereas only about 18 (46%) of the studies included international students.

Provision of Student Support Services

Of the studies that evaluated non-academic support services, 16 (41%) discussed health and well-being (Kakada, 2019; Niehaus et al., 2020; Kalim et al., 2022; Suresh et al., 2021; Cipolletta, 2022; Perez and Sabato, 2023). Student organizations were assessed in eight (21%) of the studies. Financial aid was another important consideration in different studies, with seven studies (18%) evaluating it. However, accommodation and disability services received far less attention, with only five studies (13%) and three studies (8%) assessing them, respectively. Eleven studies (28%) covered career services (Hoyt, 2023; Sithaldeen and Pletzen, 2022; Conroy, 2022). While all eleven studies focused on undergraduate students, only five included undergraduate and postgraduate students. There is a predominant focus on home students as only four studies included international students (Martirosyan et al., 2019; Kalim et al., 2022; Ammigan, 2022). The studies addressed students' perceptions on satisfaction, engagement, and evaluation of services, with only one focusing on evaluating international students' support needs (Martirosyan et al., 2019).

For academic support services, of the 39 reviewed studies, twenty (51%) focused on academic advising, with a third of the studies examining it alongside tutoring. Tutoring ranked second, alongside peer mentoring, with 17 (43%) of the studies reviewed discussing them. While almost half of the studies on tutoring included international students, three papers examining tutoring also included staff perceptions of the service provided. Most studies that examined peer mentoring discussed it in conjunction with academic advising (Sithaldeen and Pletzen, 2022; Baik, 2019; Perry, 2020; Lee et al., 2022; Perez and Sabato, 2023). Peer mentoring aims to improve student engagement (SAU Report, 2018). However, all studies investigating peer mentoring included undergraduate students, and only nine papers included postgraduate students, with a further nine also including international students in their study population. Results show that peer mentoring, academic advising, and

tutoring are complementary, as twelve and eight of the seventeen papers examine peer mentoring alongside these two support services, respectively.

Nine studies (23%) included library services in their analysis (Ren et al., 2022; Power et al, 2020; Raby, 2020; Westbrook & Cox, 2020; Kakada, 2019; Martirosyan et al, 2022; Ammigan, 2022; Mah, 2020). Eight studies focused on undergraduate students, with a narrower focus on first-year students in two studies (Ren et al., 2022; Mah, 2020). When studied with other support services, library services were most frequently combined with academic advising and tutoring (each in six studies), closely followed by health and well-being services (also in six studies). Results show a limited focus on IT and digital services, as only six studies (15%) examined them (Power et al, 2020; Cong, 2019; Kakada, 2019; Martirosyan et al, 2022; Ammigan, 2022). This is surprising, given the digital emphasis in higher education. The outcome assessment focus varied across the studies on academic support services. Most studies focused on student perceptions, evaluation of support services, retention, and student satisfaction with only one study focusing on student development (Niehaus et al, 2020).

Discussion

Academic Support Services

Our evaluation of academic support services highlights a predominant focus on three support services- peer mentoring, academic advising, and tutoring, whose combined assessment suggests significant synergies on their impact on student journey or student outcomes. The impact of peer mentoring, particularly in shaping the development of undergraduate students, has become an important area of interest for higher education institutions seeking insights into the effectiveness of student-focused strategies for fostering engagement (Flores and Estudillo, 2018) and facilitating the uptake of additional services.

With regard to the academic and non-academic services combinations, findings show that health and well-being, career guidance, and tutoring are frequently assessed together, and alongside peer mentoring. Effective peer mentoring supports student engagement and success and encourages students to explore additional support services aligned with shared academic and personal development goals. These results corroborate Bunting & Williams' (2017) contention that high-quality mentoring programs provide students with transformative experiences, particularly opportunities for peer modelling, self-reflection, and interpersonal skill development, and this is further supported by Irby (2014). Additionally, while students approach their tutors for various reasons, personal tutors are also the first point of contact for students seeking advice, particularly when they have problems (Raby, 2020). Libraries serve as a central hub on campus, offering various services, and rank highly among the most helpful forms of academic support, particularly for international students (Raby, 2020; Power et al., 2020; Westbrook & Cox, 2020; Martirosyan, 2022).

Non-academic support services

Despite the predominant focus on academic support services in most studies, non-academic services have also received attention, particularly during and after the COVID-19 pandemic.

Non-academic support services play a significant role in promoting different student outcomes. There is a predominant focus on health and wellbeing, and student organizations, as well as home and undergraduate students. Regarding access and practical use of support services, results indicate the need for partnership, promotion, and customization of the services to the international student community, particularly for disability services (Ammigan, 2022).

Overall, findings show that the current provision of student support services may suffice; however, students do not understand or are unaware of the services available, and many do not take advantage of or fully utilize university offerings (Perry et al., 2020). The underutilization of support services may be due to a lack of awareness of services available, unsuitable session times, and not wanting to be seen as someone needing help, which may lead to underutilization and diminished perceived value of these services (McDonald, 2014; Perez and Sabato, 2023; Picton & Kahu, 2022). As such, Sithaldeen et al. (2022) argue that student support services must be tailored to students' needs.

Findings show that many students need greater awareness of the university support services and require assistance in understanding how to effectively utilize them (Perry, 2020; Ren et al., 2021; Perez and Sabato, 2023). One of the reasons for this may be that student support functions, and their structures often operate independently, resulting in challenges in communication and flow of information. Therefore, support services need to be designed for seamless integration and holistic provision (Sithaldeen and Pletzen, 2022).

Impact of student support services on student outcomes

Student Retention and Success

The reasons for student attrition are complex and can differ from student to student and from one academic institution to another (Berger et al., 2012; Blazer and London, 2019). Academic skills development helps students transition to higher education and positively impacts student-retention as students feel a sense of belonging and safety within the university culture (Weuffen et al., 2021). However, less than 13% of the studies reviewed focused on academic support services and their impact on student retention. Much of the research has not been primarily on why students leave their programs but rather on understanding why certain students withdraw when faced with challenges. While retention is regarded as a campus-wide effort in which both student affairs and academic support services play important roles, there is a difference in how staff and students perceive these services (Hoyt, 2023). Staff often view student support programs from a deficit perspective, while students see them as empowering (Weuffen et al., 2021). However, by making retention a priority and fostering a caring culture through support services, small increases in retention can lead to significant improvements in student success (Crosling et al., 2009). Therefore, it is important for support services to actively reach out to those who are most likely to benefit from them. While it is important to identify students with at-risk profiles for follow-up, it is equally important to ensure that support is readily accessible to those perceived as being at lower risk (Barefoot, 2004).

This aligns with arguments from scholars who argue that student support services should be considered a necessity (Lotkowski, 2004; Drake, 2011; Voisin et al, 2023). When support services are inadequate, it negatively impacts student behaviour. However, students may not always directly link their decision to drop out to insufficient support. On the contrary, when support services are sufficient, students who benefit from them often attribute their success to internal factors such as self-motivation. Once robust support systems are established, students may not overtly acknowledge them but regard them as silent facilitators of personal motivation, operating in the background while directly contributing to retention. Students readily notice when support services are lacking but may not always appreciate their presence, even when they significantly improve student outcomes.

Student Engagement & Utilization of Support Services

Student engagement is crucial to student and institutional success. However, students' awareness, engagement with, and utilization of support services may be more essential than specific delivery models. Student support services must be flexible and adaptable to be fit for purpose and serve diverse student needs. Integrating enrolment support into the student support service model positively impacts student experience and engagement and helps identify and address specific student needs (Thangavelu, 2019).

Focusing on the reasons for, timing of use, and influence on the overall experience of first-year students' use of student support services, Picton & Kahu (2022) found that student support services influenced engagement and success by increasing self-efficacy and belonging, improving well-being, fostering positive emotions, and enabling students to engage more deeply with their learning while countering negative emotions. Although the overall student perception was satisfaction with support services, findings show a low uptake of services. This was particularly for health and well-being services, despite students experiencing stress and poor well-being throughout their academic journeys. These results are in support of Picton & Kahu (2022) and Stallman (2010), who found that although 84% of university students experienced psychological distress, only 34% sought help from a health professional. Some students prefer support from other sources such as the internet, friends, family, and tutors.

Perceptions of Student Support Services

There is a positive relationship between students' academic performance and the effective use of support systems (Kaur, 2016). As universities invest resources in student support services, there must be a mechanism for feedback loops on availability, delivery, access, and effectiveness from a student's perspective. While the library is mainly perceived as a 'one-stop' service point for various student services (Power et al., 2020; Raby, 2020), perceptions of library services vary across specific student groups. First-year students, who may have different information needs as they are new to the university, were satisfied with library services. However, they do not use the full range of services (Ren et al., 2021). Although students are satisfied with the library services and hardware facilities, the number and structure of books in the collection, and the lack of targeted information literacy training impact perceptions of the service provided.

Although there may be student population or discipline-cohort differences in students' needs and preferences (Baik et al., 2019), studies mainly focus on examining undergraduate students' perceptions of non-academic support services: all nine papers included them in their investigation. While health and well-being, career services, and student organizations are among the most commonly covered services in studies reviewed, they were not investigated as stand-alone services but alongside other academic or non-academic services (Baik et al., 2019; Lee et al., 2022; Perez & Sabato, 2023). Students mainly perceived student organizations as extracurricular support for student services promoting inclusivity and well-being (Baik et al., 2019; Perez & Sabato, 2023). This indicates that although necessary, they may be perceived as auxiliary support services. None of the studies sought to examine students' perceptions of accommodation services. This is surprising as accommodation services are essential to student university life. This may be because accommodation services may be external to the universities, and perceptions may be sought from external providers.

Regarding perceptions of well-being support services, mental health, risk behaviour, resources, and strategies for improving student well-being emerged as major areas of focus (Moissac et al., 2020). Further, although there is a high correlation between awareness, use, and perceived value, studies show that students do not understand, are unaware of where or how to ask for help, may suffer in silence, and may not take advantage of the services (Baik et al., 2019; Perry et al., 2020). Moreover, despite being an ongoing tool, health and wellbeing services were perceived as remedial services only utilised in crisis.

Among the factors that may help enhance students' health and well-being, financial counselling, adequate financial aid resources, sports, peer interactions (friends and informal peer mentorship) and spiritual or cultural-related services or events were viewed as beneficial for better mental health (Moissac et al., 2020; Perez and Sabato, 2023). Cultural factors can play a role in student utilization of resources, particularly mental health care (Perez & Sabato, 2023). Due to the diverse range of services on which studies are focused, the perceptions of student support services may not be concluded as positive or negative. Most studies sought perceptions on access, understanding utilization, and perceived use value and offer recommendations for improvement (which will be discussed later).

Student satisfaction

Although academic support services significantly impact student satisfaction (Kakada, 2019), non-academic services are equally important in influencing student satisfaction (Kalim et al., 2022). Findings show that student satisfaction is mostly examined from a customer's perspective and is considerably higher when non-academic services are satisfactory (Kalim et al., 2022; Pitaloka and Hapsoro, 2020). Students' satisfaction with academic advising is associated with students' academic performance in higher education (Martirosyan et al., 2019; Alshuaybat, 2021). Although most of the studies focused on the effects of academic services on student satisfaction on balance, student satisfaction is affected by both academic and non-academic services and need to be given equal importance by higher educational institutions (Kalim et al., 2022).

Factors affecting student satisfaction differ among student groups. International students are

viewed as consumers who expect high-quality services and outcomes (Kakada, 2019; Elsharnouby, 2016). Hence, their evaluation of student support services is considered necessary. For international students, non-academic services, particularly those related to social integration, arrival, learning, and adjustment to a new environment, are influencers of student satisfaction (Cong, 2019; Ammigan, 2022). Language proficiency, friendships with peers, educational, social and campus support services, and welcoming institutional attitude are some of the factors that were found to have a significant influence on student satisfaction and international students' adjustment in both state and private universities (Kakada, 2019; Cong, 2019).

Further, besides academic support, availability of social activities and facilities, internet access and IT support, and chaplaincy were also crucial for international students (Ammigan, 2022). However, the dominance of non-academic services means that different aspects of student satisfaction need to be considered. This is especially true when comparing the academic advising process and training in developed countries to the situation in developing countries (Alshuaybat, 2021).

Challenges and Recommendations for Student Support Services Provision

The challenges and difficulties students face in utilizing support services offered by higher education institutions are diverse. Compared to home students, international students encounter more challenges in effectively utilizing support services (Shadowena et al., 2019). However, most studies highlight personal reasons, referred to as the 'learner effect,' as key challenges international students face in accessing support services, impacting their perceptions of access and satisfaction with student support services. These include language barriers, different teaching and learning expectations, curriculum concerns, adherence to academic rules in foreign academic environments, lack of confidence, and lack of organization and time (Bornschlegl & Caltabiano, 2022; Shadowena et al., 2019; Madden-Dent-2019; Pantelich, 2021; Martirosyan, et al., 2019). Despite the above-mentioned challenges and international students' perception of their well-being to be poorer than that of the general student body, international students do not fully utilize the support services offered by universities. Reasons for this include a lack of awareness of the support services, the perception that their problems are not severe enough to require action, feelings of doubt, discomfort, and stigma associated with seeking help (Bornschlegl and Caltabiano, 2022; Madden-Dent, 2019). Ethnicity, religion, prior enrolment, socioeconomic status, and subject discipline were also found to influence use of services (Niehaus et al, 2020). Given the demographic differences among students, the above factors may be important in designing student support services.

The responsibility for student retention has increasingly shifted from the student to higher education institutions (Tight, 2020). While students may withdraw from studies due to personal reasons such as academic failure, financial difficulties, a lack of sense of belonging or community on campus, or a poor fit between the student and the institution, some students withdraw because the institution has not created an environment that adequately supports their learning and educational needs (Weuffen et al., 2021). This emphasizes the importance

of support services in today's data-driven decision-making environment and the need to evaluate the effectiveness of student support services on student outcomes.

First-year students are often uncertain about what is expected of them academically, and this lack of clarity can lead to difficulties in meeting academic requirements, which may be the reason some discontinue higher education (Heublein, 2014). Academic staff, however, frequently assume that first-year students are well-prepared for higher education and capable of meeting its demands based on their prior schooling. This disconnect in expectations and communication can contribute to student retention issues (Mah, 2019). Recommendations for improvement emphasize fostering positive faculty-student relationships and intercultural friendships through co-curricular programs. This focus on social support aligns with the finding that a robust support infrastructure outside the classroom contributes more to student satisfaction than specific teaching methods (Cong, 2019; Pitaloka and Hapsoro, 2020). Other recommendations include establishing clear goals for student support, implementing training programs for all support staff, establishing feedback mechanisms, and appointing a centrally located student support coordinator responsible for coordinating various student support functions (Sithaldeen and Pletzen, 2022).

While student perceptions of personal tutoring and library services are positive, challenges persist in their organization, integration, and communication. Tailoring and improving support services for specific student groups, particularly international and first-year students, is essential. Several recommendations for promoting students' health and well-being are highlighted, including psychological interventions aimed at reducing the stigma surrounding help-seeking, fostering a campus culture of well-being through increased professional support services, health promotion initiatives, and the provision of behavioural and physical healthcare resources, including access to mindfulness practices (Perez and Sabato, 2023; Baik, 2019; Moissac et al., 2020). However, international students have unique needs, as factors such as length of stay and cultural background significantly influence their help-seeking behaviour and perceptions of social support. Therefore, it is recommended that readily accessible and culturally sensitive health and well-being counselling services be provided (Baik, 2019). Other recommendations include instructional seminars for new students to navigate university resources and services, and training student support advisors to strengthen their capacity to provide effective support (Alshuaybat, 2021). These findings suggest that although academic services are essential, universities should also prioritize investing in non-academic services that build a supportive environment and empower students to succeed inside and outside the classroom.

Rather than spending more on student services, universities may need to find more cost-effective ways to promote their services (Ehrenberg & Webber, 2010). Improving student support service access and utilization can be achieved by enhancing advertisement, first day hand-outs, involving students in design and implementation (since they're the users and "experts"), offering hybrid delivery, and exploring new ways to engage students rather than sticking to past approaches (Baik 2019; Moissac et al., 2020; Perry et al. 2020; Fenton-Smith & Michael, 2013).

Conclusion

This scoping review examined studies on student support services in higher education institutions, focusing on provision and outcomes from 2019 to 2023. While the U.S. and Australia dominate in terms of the number of studies, despite the UK's strong higher education sector, its representation remained low at 3%, mirroring Germany's limited inclusion. Our study findings show a predominant focus on home undergraduate students and gaps in research on postgraduate and international students' perspectives. This imbalance underscores a critical gap in understanding student support systems in underrepresented regions, particularly in developing countries where institutional structures differ significantly.

Tutoring, peer mentoring, and academic advising have consistently been linked to improved student performance, engagement, and retention. However, non-academic services play an equally significant role in student success. Despite the critical function of both support service types, disparities exist in student awareness and utilization, with academic support services generally being more widely acknowledged than non-academic ones. This disconnect underscores the need for tailored, holistic student support services strategies that integrate academic and non-academic services into a coherent support framework. This study contributes to the student support services body of literature by highlighting gaps in existing service provision and advocating for more accessible, structured, and inclusive support mechanisms that enhance student retention, engagement, and satisfaction across diverse learner demographics.

Our findings also reinforce the necessity of institutional efforts to proactively inform students about available services, ensuring they are fully utilized to maximize their impact on academic achievement and well-being. Practical recommendations include strengthening career services, health and well-being, disability, accommodations, financial aid counselling, and integration services, and refining student engagement strategies through tailored interventions. Universities need to strategically invest in the resources necessary to deliver comprehensive support that meets the evolving demands of a diverse student body in a way that ensures any support unit is equipped to triage the student's needs and connect them to the appropriate services without requiring the student to start their request over. There is a need for universities to embed support services into curriculum touchpoints, such as orientation modules and key stages throughout the student journey, to normalize help-seeking behaviour, improve visibility and uptake, and inform resource allocation and continuous improvement of all student support services. Higher education policy makers could require universities to track and publish data on student support access, effectiveness, and equity, as well as establish sector-wide benchmarks for student support services, enabling comparison and shared learning across.

This study acknowledges inherent limitations. While the study aimed for global coverage, the articles included may be geographically biased towards developing countries where student support services may be better resourced. Further, most publications focus on specific student population subgroups, which may lead to an under-representation of the needs of vulnerable or marginalized groups. Moreover, the generalisability of the findings may be constrained by

disparities in the quality and availability of student support across different institutions and countries. Future studies should address these limitations and yield targeted recommendations tailored to the unique contexts of student groups and universities.

Acknowledgments

None

Disclosure Statement

The authors declare no conflict of interest.

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