Peta International Journal of Social Science and Humanity

Peta Research Publication

www.PIJSSh.peta-research.com

Online ISSN 2830-540X

# Beyond Individual Coping: Institutional Support Accessibility and Academic Resilience Among Undergraduate Students-A Systematic Review Protocol

Li Changjie[1], Nurliza Haslin Binti Muslim[1,*]

[1]School of Postgraduate Studies, ALFA University College, Subang Jaya, Selangor, Malaysia.
240453463@qq.com; dr.nurliza@alfa.edu.my

## Abstract

Academic resilience is increasingly recognized as an important dimension of undergraduate students' adaptation to educational adversity. Although existing research has examined individual coping resources, resilience-building interventions, and university support services, how institutional support provision, accessibility, and utilization are associated with academic resilience remains insufficiently clarified. This systematic review protocol outlines a planned synthesis of empirical evidence concerning institutional support and academic resilience among undergraduate students, with particular attention to barriers and facilitators of support access, patterns of service utilization, and related academic adaptation outcomes. The review will follow a prospectively specified methodology informed by PRISMA-P, with the completed review reported in accordance with PRISMA 2020. The protocol is registered on the Open Science Framework (OSF Registration DOI 10.17605/OSF.IO/SNDU5). Scopus, Web of Science Core Collection, ERIC, and PsycINFO will be searched for empirical studies published from January 2015 to the final search date. Eligible quantitative, qualitative, and mixed-methods studies will undergo independent study selection, structured data extraction, methodological quality appraisal, and evidence synthesis. Academic resilience will be distinguished from general psychological resilience and related educational outcomes, including engagement, adjustment, and persistence. The synthesis will examine how institutional support provision, accessibility, and utilization are associated with students' responses to educational adversity and how individual and institutional conditions may shape these relationships. Narrative synthesis will be the primary approach, with quantitative synthesis considered where sufficient methodological and statistical comparability exists. As the systematic search, screening, appraisal, and synthesis have not yet been completed, no review findings are reported. The proposed review is intended to inform future research and the development of accessible, inclusive, and evidence-informed university support systems.

**Keywords**: Academic resilience; institutional support; undergraduate students; support accessibility; social-ecological resilience; service utilization; systematic review protocol.

Received on 7 Aug. 2026, Accepted on 13 Oct. 2026, Published on 2 Nov. 2026.

## 1. Introduction

Academic resilience is an important concern in higher education because undergraduate students must navigate academic demands, educational transitions, financial pressures, and other circumstances that may disrupt progress toward their academic goals. Although students' responses to these challenges are influenced by personal capacities, they also depend on the educational environments in which learning takes place. Research on student engagement has demonstrated the importance of interactions between individual characteristics and institutional conditions (Kahu & Nelson, 2018; Kahu et al., 2020). Accordingly, understanding academic resilience requires attention not only to how students respond to adversity but also to the institutional resources available to support those responses. Academic resilience refers to adaptive functioning in the context of meaningful educational adversity. Martin and Marsh (2009) distinguished academic resilience from academic buoyancy, which concerns students' responses to routine academic setbacks. Cassidy (2016) further conceptualized academic resilience through perseverance, reflecting and adaptive help-seeking, and negative affect and emotional response. These perspectives emphasize that resilience involves more than persistence or continued participation: it requires consideration of the adversity encountered and the nature of students' adaptive responses. Academic engagement, adjustment, and persistence may be associated with resilience but should not be treated as interchangeable indicators. An exclusively individual-centered approach to academic resilience risks locating responsibility for educational difficulties primarily within students while overlooking institutional conditions that contribute to those difficulties or constrain access to assistance. A social-ecological perspective offers an alternative. Ungar (2011) argued that resilience must be understood in relation to the social and physical environments that enable individuals to access resources under adversity. Applied to higher education, this perspective suggests that students' adaptive responses cannot be fully understood without examining the accessibility, appropriateness, and responsiveness of institutional support. The argument is not that individual coping capacities are unimportant, but that their relevance may depend partly on the opportunities and constraints created by educational institutions. Higher education scholarship provides a complementary institutional perspective. Tinto (2012) emphasized the responsibility of universities to establish conditions that support student participation and persistence, while Thomas (2012) highlighted the importance of institutional approaches to student engagement and belonging. Kahu and Nelson's (2018) educational interface framework further conceptualized student success through interactions between students and their educational environments. Together, these perspectives suggest that support may be especially consequential during transitions into university, periods of academic difficulty, and situations in which students experience weak academic integration. They also provide a basis for examining whether support-related barriers differ across students and institutional contexts. Empirical research has begun to investigate these relationships more directly. Awais et al. (2024) examined college support, study demands, student resilience, and adaptive behavior during a period of educational disruption. Gray et al. (2024) investigated academic advisor support in relation to resilience among postsecondary students, while Frisby et al. (2024) examined peer network quality, academic resilience, and intention to persist. Other studies have addressed related educational outcomes. Azila-Gbettor, Abiemo, et al. (2023) investigated perceived university support and online learning engagement among Ghanaian students, whereas Azila-Gbettor, Agbenyo, et al. (2023) examined university support and student adjustment during the COVID-19 pandemic. These studies establish the relevance of institutional and interpersonal resources to educational adaptation, but differences in support measures, resilience definitions, populations, and study designs complicate direct comparison. In particular, findings concerning engagement or adjustment cannot automatically be interpreted as evidence concerning academic resilience.

A further distinction concerns whether institutional support is provided, accessible, or actually used. Universities may offer advising, tutoring, counseling, mentoring, financial support, and disability-related accommodations, yet formal availability does not guarantee that students can obtain appropriate assistance. Reviews of academic help-seeking (Li et al., 2023), campus service utilization (Johnson et al., 2022), and mental health help-seeking (Lui et al., 2024; Zhao et al., 2025) suggest that provision, accessibility, and utilization should be distinguished rather than treated as equivalent measures of institutional support; Levesque et al.'s (2013) access framework, adapted in Section 2.3, provides a structure for doing so. The proposed review therefore conceptualizes institutional support through three analytical dimensions. Provision refers to the availability and organization of university-provided or formally coordinated resources. Accessibility concerns students' opportunities to identify, reach, and obtain appropriate assistance. Utilization refers to actual engagement with available services. Support may be delivered through academic advising, counseling, faculty guidance, institutionally coordinated peer mentoring, financial assistance, and accessibility services. Informal friendships or family assistance will not be classified as institutional support unless a clear university coordination or delivery component is established. These distinctions are intended to support consistent evidence classification without presuming that provision, accessibility, and utilization form a uniform causal sequence. Existing evidence syntheses address important but partly different questions. Abulfaraj et al. (2024) reviewed resilience interventions and university students' mental health and wellbeing, whereas Li et al. (2023) synthesized academic help-seeking behavior. Lui et al. (2024) examined barriers and facilitators to help-seeking for common mental disorders among university students, and Zhao et al. (2025) reviewed college students' mental health help-seeking intentions, behaviors, and barriers. These reviews inform the present topic but differ from its proposed focus on institutionally coordinated support and academic resilience under educational adversity. The intended contribution is to examine whether empirical studies distinguish support provision from accessibility and utilization, how these dimensions are measured, and what relationships are reported with academic resilience as distinct from broader adaptation outcomes. To confirm this contribution, PROSPERO, OSF Registries, the Campbell Collaboration Library, and ERIC will be searched for overlapping systematic and scoping reviews and registered protocols before screening begins; the search date, terms, and any overlapping records will be reported in the registration record and the completed review. Contextual diversity is also relevant. Institutional support arrangements may vary across public and private universities, national higher education systems, and student populations. Differences in funding, service capacity, language, educational transitions, and inclusion practices may influence students' opportunities to access support. Evidence from Ghana (Azila-Gbettor, Abiemo, et al., 2023; Azila-Gbettor, Agbenyo, et al., 2023) illustrates the importance of examining institutional resources beyond commonly studied Western settings. The planned review will therefore consider geographical region, institutional characteristics, and student-group differences where these are reported, with particular attention to the transferability of findings to Southeast Asian and other Global South higher education contexts. Transfer cannot be assumed. In Malaysia, for example, undergraduate education is delivered by public universities alongside a large private sector of universities, university colleges, and international branch campuses that enroll substantial numbers of international students, so service capacity, funding models, and language of support may differ markedly from the Western institutions in which much of the evidence has been generated. The review will therefore not presume that relationships observed in one educational system apply uniformly elsewhere. This systematic review protocol specifies a planned investigation guided by five research questions: (1) What forms of institutional support have been examined in relation to undergraduate students' academic resilience? (2) What barriers and facilitators influence access to and utilization of institutional support? (3) What associations have been

reported between institutional support and academic resilience or related academic adaptation outcomes? (4) How do individual characteristics and institutional conditions shape these relationships? and (5) What theoretical, methodological, and contextual gaps remain in the existing evidence?

## 2. Conceptual and Theoretical Background

### 2.1 Conceptualizing Academic Resilience and Educational Adversity

Academic resilience is conceptualized in this protocol as students' adaptive functioning in the presence of meaningful educational adversity. It differs from academic buoyancy, which concerns responses to routine academic setbacks such as examination pressure, temporary reductions in motivation, and ordinary assessment difficulties (Martin & Marsh, 2008, 2009). The distinction is important because students may demonstrate perseverance or effective coping without necessarily experiencing adversity of sufficient severity to warrant classification as academic resilience. For the proposed review, meaningful educational adversity (hereafter, educational adversity) will be operationalized as a documented circumstance that threatens students' academic participation, progression, or achievement beyond routine educational demands. Potential indicators include academic failure or probation, substantial financial hardship affecting study, disability-related barriers, significant educational disruption, and persistent structural disadvantage. First-generation status or socioeconomic disadvantage will not automatically be treated as evidence of adversity; studies must demonstrate a relevant risk, barrier, or adverse educational condition. Adversity may be established through validated measures, administrative indicators, documented contextual circumstances, or sufficiently described participant experiences. The review will record whether adversity was directly measured, inferred from a clearly defined context, or insufficiently established. Cohort-wide disruptions, such as pandemic-related campus closures, will qualify only when a study documents their impact on participants' academic participation or progression (for example, an enforced transition to remote learning during the study period) or measures participants' exposure to them; data collection during a pandemic period alone will not satisfy this criterion. Persistence, engagement, and adjustment may provide evidence of adaptation, but none establishes resilience without a relevant adversity context. Similarly, use of the ARS-30 (Cassidy, 2016) does not itself show that participants experienced significant adversity, so the review will distinguish the measurement of resilience-related responses from the independent documentation of adversity. A three-tier outcome hierarchy will guide evidence classification and synthesis. Tier 1 will comprise studies directly assessing academic resilience using explicitly academic measures, including the Academic Resilience Scale (ARS-30; Cassidy, 2016), Martin and Marsh's (2006) academic resilience scale, or other instruments whose items refer explicitly to academic situations and for which validity evidence in higher education samples has been published. Tier 2 will comprise studies assessing general psychological resilience in undergraduate students, for example with the Connor–Davidson Resilience Scale (Connor & Davidson, 2003) or the Brief Resilience Scale (Smith et al., 2008), when institutional support and a clearly documented educational adversity context are both examined. Tier 2 studies will be eligible for the main review but will be synthesized separately and will not be treated as direct evidence of academic resilience. Tier 3 will comprise studies examining related educational adaptation outcomes, including engagement, adjustment, persistence, and belonging, in the presence of documented educational adversity. Tier 3-only studies will be considered contextual evidence and will not contribute to conclusions about associations between institutional support and academic resilience. To maintain a reproducible selection boundary, Tier 3-only studies will be identified through the planned search and citation-search procedures but will not enter the primary included-study set; they may be summarized separately as contextual literature without being counted as included studies in the

systematic review. The synthesis will also distinguish resilience as a dynamic process from resilience measured as a relatively stable self-reported attribute. Cross-sectional scores cannot establish recovery or change after adversity, so longitudinal, repeated-measures, and person-centered studies will receive particular interpretive attention, although design alone will not determine eligibility. An additional measurement concern arises because the ARS-30 includes a reflecting and adaptive help-seeking factor. When institutional support utilization is an exposure and ARS-30 total scores are an outcome, the same or closely related help-seeking behavior may contribute to both variables. This creates a risk of construct overlap and inflated associations. The review will therefore extract total-scale and subscale findings separately wherever reported, identify studies in which exposure and outcome measures share help-seeking content, and examine whether associations remain evident for resilience dimensions that do not directly incorporate support-seeking behavior. Studies reporting only total scores will be retained where otherwise eligible, but this limitation will be explicitly considered in interpretation.

### 2.2 Understanding Institutional Support in Higher Education

Institutional support refers to resources, services, relationships, and practices provided, funded, organized, or formally coordinated by higher education institutions to support students' academic participation and development. It encompasses more than individual perceptions of encouragement and includes the organizational arrangements through which assistance is made available. Tinto (2012) emphasized institutional responsibility for creating conditions conducive to student success, while Kahu and Nelson (2018) conceptualized engagement through interactions between students and their educational environments. These perspectives support examining institutional support as a feature of educational systems rather than solely as an individual student's perceived resource. The protocol will use six provisional support domains: academic learning support, psychological and counseling services, faculty and academic advising support, institutionally coordinated peer support, financial and material assistance, and accessibility and inclusion services. Academic learning support includes tutoring, study-skills provision, and learning assistance. Psychological support includes university counseling and mental health services. Faculty and advising support includes formal academic advising, structured mentoring, and institutionally organized faculty guidance. Coordinated peer support includes university-sponsored peer mentoring, transition programs, and peer-assisted learning. Financial and material assistance includes institutional bursaries, emergency grants, and related assistance. Accessibility and inclusion services include disability accommodations, accessible learning arrangements, and targeted institutional support for students facing participation barriers. This taxonomy is an a priori coding framework developed from the institutional support literature and the review questions, not an exhaustive or mutually exclusive classification; it will be piloted during extraction and refined through documented amendments. Multicomponent programs may be coded across domains, and studies reporting only global perceived university support will be coded as general or unspecified support unless their measures permit finer classification. University-organized peer mentoring and structured support programs qualify as institutional support; informal friendships, family encouragement, and independently formed peer networks do not, although they may be extracted as contextual variables.

### 2.3 Institutional Support Provision, Accessibility, and Utilization

Institutional support will be examined through three analytically distinct dimensions: provision, accessibility, and utilization. Provision concerns the existence, organization, resourcing, and delivery of institutional assistance. Accessibility concerns whether students can recognize, reach, obtain, and meaningfully engage with appropriate services. Utilization concerns actual

contact with, participation in, or uptake of institutional support. A service may be provided but difficult to access; conversely, non-utilization may reflect limited awareness, anticipated stigma, practical barriers, a lack of perceived need, or an informed decision not to use the service. Utilization will therefore not automatically be interpreted as an indicator of either service quality or student resilience. The accessibility dimension is informed by Levesque et al.'s (2013) patient-centered access framework, which distinguishes approachability, acceptability, availability and accommodation, affordability, and appropriateness. Although originally developed for healthcare, these dimensions provide an analytical starting point for evaluating access to university services. In higher education, approachability may involve awareness of advising or counseling; acceptability may concern confidentiality, stigma, or cultural responsiveness; availability and accommodation may involve appointment capacity, service hours, or online delivery; affordability may include direct costs and opportunity costs; and appropriateness may concern the fit between student needs and the assistance provided. The framework also specifies corresponding user abilities: the abilities to perceive, seek, reach, pay for, and engage with services. The review will code both the service-side dimensions and these student abilities, which correspond closely to the equity characteristics extracted under Section 3.5. The transfer of this framework to higher education will be treated as a conceptual adaptation rather than as a previously validated university-support model. Empirical and review literature provides reasons to examine access and use separately. Johnson et al. (2022) investigated campus service utilization and its relationship with student outcomes, while Li et al. (2023) reviewed factors associated with academic help-seeking. Academic help-seeking research also distinguishes adaptive (instrumental) help-seeking, directed at developing independent mastery, from expedient help-seeking, directed at having work completed by others, and identifies perceived threat to self-esteem as a barrier to seeking assistance (Karabenick, 2004). This distinction is relevant to the ARS-30 help-seeking factor discussed in Section 2.1. King et al. (2024) examined first-year undergraduates' experiences of accessing mental health services in a multi-cohort Canadian study, and Lui et al. (2024) and Zhao et al. (2025) synthesized barriers and facilitators related to mental health help-seeking. These sources concern partly different services and outcomes. The proposed review will therefore avoid assuming that barriers identified for psychological counseling apply identically to tutoring, advising, financial assistance, or disability-related services. Accessibility will be considered in relation to both student-level factors, such as perceived need, previous service experiences, and help-seeking attitudes, and institutional factors, such as service visibility, administrative complexity, waiting times, delivery mode, and staff capacity. The review will distinguish barriers reported by participants from associations tested quantitatively and from explanations proposed by study authors.

### 2.4 Theoretical Foundations

The review draws on complementary theoretical perspectives that guide its analytical questions without establishing causal relationships. Ecological systems theory (Bronfenbrenner, 1979) and Ungar's (2011) social-ecological account of resilience situate adaptation within interconnected environments and emphasize access to contextually meaningful resources, challenging interpretations that attribute academic adaptation solely to personal determination. Conservation of resources theory (Hobfoll, 1989) frames university services as external resources that students may mobilize under stress, while implying that availability alone does not demonstrate access or benefit; it therefore supports treating resource availability and resource access as distinct. Self-determination theory (Deci & Ryan, 2000) suggests that advising, constructive feedback, and supportive relationships may matter through autonomy, competence, and relatedness; the review will examine whether primary studies measure these mechanisms rather than assume them. Study demands–resources theory (Bakker & Mostert,

2024) suggests that the relevance of support may vary with the intensity of academic demands, supporting the treatment of adversity and baseline need as potential moderators. Student-success frameworks (Tinto, 2012; Kahu & Nelson, 2018) generate the expectation that access barriers will be most salient during first-year transitions, periods of academic difficulty, and limited academic integration, and they justify the planned comparisons across student populations, institutions, and settings. Conclusions will remain constrained by the designs and findings of eligible primary studies.

## 2.5 Proposed Conceptual Framework

The proposed conceptual framework positions institutional support provision, accessibility, and utilization as three distinct but potentially related dimensions of the institutional support environment. Academic resilience is the principal outcome of interest, while general psychological resilience and related academic adaptation outcomes will be classified separately according to the predefined outcome hierarchy. The framework does not assume that support provision necessarily leads to accessibility, that accessibility necessarily results in utilization, or that utilization causes resilience. Educational adversity is conceptualized as a defining contextual condition for academic resilience and a potential moderator of support–resilience associations, rather than as a presumed cause of institutional support provision. Individual characteristics, including help-seeking attitudes, motivation, baseline support needs, and socioeconomic circumstances, and institutional characteristics, including service capacity, delivery arrangements, and inclusion practices, will be examined as potential sources of variation where primary studies provide relevant evidence. Geographic region and higher education system characteristics will also be considered when sufficient information is available.

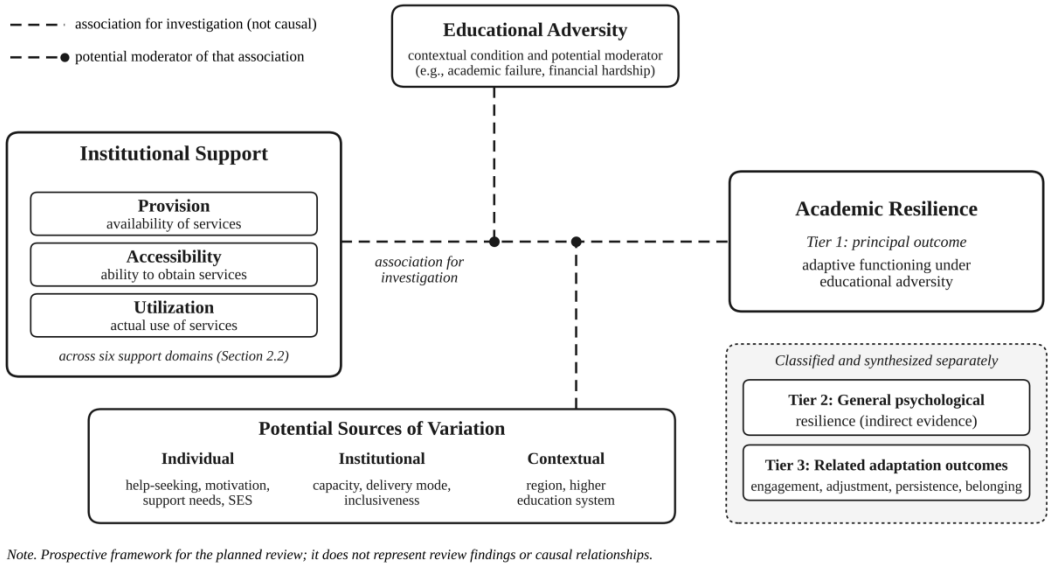



**Figure 1.** Proposed noncausal conceptual framework of institutional support and academic resilience.

Figure 1 displays institutional support provision, accessibility, and utilization as separate constructs linked to academic resilience by a dashed, bidirectional line that denotes an association for investigation rather than an established causal effect. Educational adversity is shown as a contextual condition whose dashed line meets this association, indicating its role as a potential moderator rather than as a cause or mediator. Individual, institutional, and

contextual characteristics are shown in the same way as potential sources of variation. General psychological resilience (Tier 2) and related adaptation outcomes (Tier 3) appear in separate boxes, without lines implying temporal order. A single line style is used throughout.

## 3. Research Methodology

### 3.1 Review Design and Protocol Registration

This study is designed as a systematic review protocol for identifying, appraising, and synthesizing empirical evidence concerning institutional support accessibility and academic resilience among undergraduate students. The planned review will incorporate quantitative, qualitative, and mixed-methods evidence to examine institutional support provision, accessibility, utilization, and their reported associations with academic resilience. Narrative synthesis will be the primary approach because substantial variation is anticipated in study designs, institutional support measures, educational contexts, and outcome definitions. This protocol has been developed with reference to the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P 2015; Moher et al., 2015; Shamseer et al., 2015), and the completed PRISMA-P checklist is provided as Supplementary Appendix B. The completed systematic review will be reported in accordance with PRISMA 2020 (Page et al., 2021), and the reporting of literature searches will follow PRISMA-S (Rethlefsen et al., 2021). The protocol was registered on the Open Science Framework (OSF) before any database screening (registration OSF Registration DOI 10.17605/OSF.IO/SNDU5); registered Nov 11, 202. Any amendments will be dated, justified, and recorded on the OSF registration.

**Roles and timeline.** Li Changjie (LC) will develop the search strategy with an information specialist; LC and Nurliza Haslin Binti Muslim (NHBM) will independently screen records, extract data, and appraise studies; because the review team comprises two reviewers, disagreements will be resolved by consensus as described in Sections 3.4–3.6, with NHBM, as guarantor, recording the final decision and its rationale where consensus cannot be reached. The anticipated timeline is search finalization and PRESS review in month 1, screening in months 2–3, extraction and appraisal in months 4–5, and synthesis and reporting in months 6–8 after registration.

### 3.2 Information Sources and Search Strategy

The planned electronic search will cover Scopus, Web of Science Core Collection, ERIC, and APA PsycINFO. ERIC will be searched through EBSCOhost and APA PsycINFO through Ovid; the platforms are specified because controlled vocabulary, field codes, and search operators differ across interfaces. Searches will cover studies published from January 2015 to the final search date. This period is intended to capture contemporary institutional support arrangements, including changes in digital service delivery, although potentially relevant earlier research may be omitted. The completed review will acknowledge this restriction.

The search strategy will combine three principal concepts: undergraduate higher education, institutional support, and resilience. Terms relating to higher education will include *undergraduate**, *university student**, *college student**, and *higher education*. Institutional support terms will include *student service**, *academic support*, *tutor**, *mentor**, *counsel**, *advis**, *financial aid*, *disability service**, *learning support*, *peer mentor**, *online support*, and *early alert*, with spelling variants. Resilience terms will include *academic resilien**, *student resilien**, the general term *resilien**, *academic buoyancy*, *academic adversity*, *educational adversity*, and the names of commonly used general resilience instruments (*CD-RISC*, *Brief Resilience Scale*), so that both Tier 1 and Tier 2 studies are retrieved.

The primary database searches will focus on institutional support and resilience-related outcomes eligible for the main review (Tiers 1 and 2). Studies reporting engagement, adjustment, persistence, or belonging without an eligible resilience outcome will not qualify independently. Such outcomes will be extracted as supplementary evidence when reported in eligible studies. Citation searching may identify additional relevant studies, but all records will be assessed against the same prespecified eligibility criteria. Before execution, the strategies will be piloted to confirm retrieval of known candidate studies, including Awais et al. (2024), Gray et al. (2024), and Frisby et al. (2024), and revised where necessary. Controlled vocabulary from the ERIC Thesaurus and APA Thesaurus of Psychological Index Terms will be incorporated where available, and strings will be adapted to each database's syntax. The database-specific strategies are presented in Supplementary Appendix A. Before execution, an information specialist will be invited to review them using the PRESS 2015 guideline (McGowan et al., 2016). The final executed searches, including platforms, exact syntax, search dates, limits, and record counts, will be archived and reported in the completed review. No database search is reported as completed in this protocol. Backward and forward citation searching will supplement database retrieval. Relevant reference lists, citing publications, and potentially overlapping reviews will be examined. Grey literature will be searched in ProQuest Dissertations & Theses Global and in institutional repositories through the Bielefeld Academic Search Engine (BASE). Dissertations and other grey literature will be eligible when they provide sufficient methodological detail and empirical evidence, and their inclusion will be documented by publication type (Table 1). This approach is intended to reduce reliance on published journal findings alone.

### 3.3 Eligibility Criteria

Eligibility will be determined using prespecified population, exposure, outcome, context, and study-design criteria. The review will focus on undergraduate students enrolled in higher education institutions. Studies involving mixed educational populations will qualify only when undergraduate findings are separately identifiable or undergraduate participants constitute a clearly defined analytical group. Eligible institutional support must be provided, funded, organized, or formally coordinated by a higher education institution. Informal family support and independently formed friendships will not constitute institutional support unless a university coordination component is established. Studies measuring global perceived university support will be retained where relevant but coded as general or unspecified institutional support unless the instrument permits more precise classification. The principal outcome will be academic resilience under meaningful educational adversity. Studies will be eligible for inclusion in the main review if they report either a direct academic resilience outcome (Tier 1) or a general psychological resilience outcome (Tier 2) in conjunction with institutionally provided or formally coordinated support and a clearly documented educational adversity context. Tier 1 and Tier 2 findings will be synthesized separately, with Tier 2 findings interpreted as indirect rather than direct evidence concerning academic resilience. Studies reporting only related educational adaptation outcomes (Tier 3), such as engagement, adjustment, persistence, or belonging, will not qualify for inclusion in the main review unless they also report an eligible Tier 1 or Tier 2 outcome. Tier 3 outcomes reported within otherwise eligible studies may be extracted as supplementary outcomes. Studies measuring Tier 3 outcomes alone may be discussed as contextual literature but will not be counted as included studies or used to answer the review's primary academic resilience question. Adversity must be established through a measured risk, a clearly described adverse educational condition, or a documented experience threatening academic participation or progression. Routine academic demands alone will not satisfy this criterion.

Quantitative observational studies, intervention studies, qualitative research, and mixed-methods studies will be eligible. Purely theoretical articles, commentaries, editorials, and reviews will not be included as primary evidence, although their reference lists may support citation searching. English-language publications will be included because translation resources have not been established; the potential for language bias will be acknowledged.

**Table 1:** Proposed Eligibility Criteria

| Criterion | Inclusion | Exclusion |
|---|---|---|
| Population | Undergraduate students | Exclusively postgraduate or non-university populations |
| Setting | Recognized higher education institutions | Non-higher-education settings |
| Institutional support | University-provided or formally coordinated services | Exclusively informal support |
| Adversity | Documented meaningful educational challenge or disadvantage | Routine demands without identifiable adversity, for direct resilience claims |
| Outcomes | Tier 1 academic resilience or Tier 2 general psychological resilience under documented educational adversity; Tier 3 outcomes may be extracted only from otherwise eligible studies | Studies reporting only Tier 3 outcomes (engagement, adjustment, persistence, belonging), without Tier 1 or Tier 2 resilience outcomes |
| Study design | Quantitative, qualitative, and mixed-methods empirical studies | Reviews, theoretical papers, editorials |
| Publication period | January 2015 to final search date | Publications outside the specified period |
| Publication type | Peer-reviewed journal articles, doctoral dissertations, and other grey literature with sufficient methodological detail | Conference abstracts, editorials, and reports without sufficient methodological detail |
| Language | English | Other languages, with the limitation reported |
| Reporting | Sufficient methodological and outcome information for extraction | Insufficient information after reasonable retrieval attempts |

### 3.4 Study Selection

Retrieved records will be exported to reference-management software for deduplication and then imported into a systematic review screening platform, provisionally Rayyan. Two reviewers will independently assess titles and abstracts against the eligibility criteria. Before full screening, both reviewers will pilot the criteria on an initial sample of approximately 50 records, discuss disagreements, and refine the screening guidance without altering the substantive review question. Inter-reviewer agreement during calibration will be summarized using percentage agreement and Cohen's kappa where appropriate. Potentially eligible records will undergo independent full-text assessment by both reviewers. Disagreements will be resolved through discussion with reference to the piloted screening guidance. Records that remain unresolved at the title and abstract stage will proceed to full-text assessment, so that no potentially eligible study is excluded without full review. Any full-text disagreement that remains after discussion will be decided by the guarantor (NHBM), and each such decision and its rationale will be recorded in a decision log reported with the completed review. Reasons for full-text exclusion will be recorded systematically. Study selection will be reported using a

PRISMA 2020 flow diagram only after the search and screening procedures have been completed. No illustrative or assumed screening counts will be included in the protocol.

### 3.5 Data Extraction and Coding

A standardized extraction form will be developed and piloted on a small sample of eligible studies. Two reviewers will independently extract data, compare entries, and resolve discrepancies through discussion against the source article, recording unresolved decisions in the decision log. Extracted information will include bibliographic details, country, institutional setting, study design, sample characteristics, adversity indicators, institutional support domains, support delivery mode, exposure measures, outcome instruments, relevant results, and reported limitations. The form will also record whether studies measured service provision, perceived accessibility, actual utilization, or global perceived institutional support. Accessibility will be coded using dimensions adapted from Levesque et al. (2013), including approachability, acceptability, availability and accommodation, affordability, and appropriateness. Service delivery will be categorized as face-to-face, online, hybrid, or unspecified. Where available, extraction will capture first-generation status, socioeconomic circumstances, disability, international or linguistic-minority status, mature or part-time enrollment, commuting arrangements, and other relevant equity characteristics. Baseline support needs, prior distress, and academic difficulty will also be recorded because these factors may influence both service utilization and resilience outcomes. For studies using the ARS-30, total-scale and subscale findings will be extracted separately wherever possible to identify potential overlap between adaptive help-seeking and institutional support utilization.

### 3.6 Methodological Quality Appraisal

Methodological quality will be assessed independently by two reviewers using the Mixed Methods Appraisal Tool (MMAT), version 2018 (Hong et al., 2018). The tool will be applied according to the design of each eligible study, including qualitative, randomized, non-randomized, descriptive quantitative, and mixed-methods research. Because correlational and cross-sectional studies may constitute a substantial proportion of the evidence, relevant Joanna Briggs Institute appraisal criteria for analytical cross-sectional studies will be considered as a supplementary assessment of confounding, exposure measurement, outcome measurement, and statistical analysis. Appraisal disagreements will be resolved through discussion, using the same consensus and decision-log procedure. Individual criteria and methodological limitations will be reported rather than reducing study quality to an unsupported overall numerical score. Studies will not be automatically excluded solely because of lower appraisal ratings; instead, methodological limitations will inform the interpretation and sensitivity assessment of the evidence.

### 3.7 Evidence Synthesis

A structured narrative synthesis will be conducted using principles outlined by Popay et al. (2006) and the Synthesis Without Meta-analysis (SWiM) reporting guidance (Campbell et al., 2020). Studies will first be grouped by outcome tier, institutional support dimension, service type, and research design. Quantitative findings will be summarized according to effect direction, magnitude, precision, and methodological quality. Statistical significance alone will not determine whether evidence is classified as supportive or contradictory. Where comparable estimates are unavailable, the synthesis will describe the range and consistency of reported associations without inappropriate numerical aggregation. Qualitative evidence will be synthesized using an adapted thematic synthesis approach informed by Thomas and Harden (2008). Relevant findings will be coded, organized into descriptive themes, and developed into analytical themes concerning support accessibility, utilization, adversity, and institutional

conditions. Contradictory cases and contextual differences will be retained. A meta-analysis will be considered only when at least three studies based on independent samples report sufficiently comparable populations, support exposures, direct academic resilience outcomes, and effect estimates. Where appropriate, correlations will be transformed using Fisher's z and pooled using a random-effects model before back-transformation. Heterogeneity will be examined using $I^2$ and $\tau^2$, with prediction intervals reported when estimable. Small-study effects will be assessed when at least ten sufficiently comparable studies are available. If these conditions are not met, quantitative findings will remain within the structured narrative synthesis.

### 3.8 Moderators, Sensitivity Analyses, and Certainty of Evidence

Potential sources of variation will include adversity type, baseline support need, support service type, delivery mode, student characteristics, institutional setting, and geographical region. Subgroup comparisons will be undertaken where sufficient comparable evidence exists. Formal meta-regression will be considered only when the number and distribution of studies support reliable estimation; otherwise, cross-study patterns will be interpreted descriptively, without inferring individual-level moderation from aggregate differences. Sensitivity analyses will examine whether conclusions change when studies with serious methodological limitations, indirect resilience outcomes, or overlapping exposure–outcome measures are considered separately. Confidence in quantitative evidence will be assessed using relevant GRADE principles, with explicit consideration of observational designs, risk of bias, inconsistency, indirectness, imprecision, and publication bias. Confidence in synthesized qualitative findings will be assessed using GRADE-CERQual, considering methodological limitations, coherence, adequacy, and relevance. These assessments will be applied to clearly defined synthesis findings rather than to the literature as a whole. The completed review will distinguish evidence supporting direct academic resilience from evidence concerning general resilience and related academic adaptation outcomes. Conclusions will reflect the available evidence and will not infer causal effectiveness from cross-sectional associations.

### 3.9 Ethics and Dissemination

As the review will synthesize existing published or publicly available research without collecting identifiable participant data, ethics approval is not required. The completed review will be submitted for peer-reviewed publication, and its search strategies, extraction template, and appraisal records will be deposited on OSF. Funding, competing interests, author contributions, data availability, and the use of generative artificial intelligence are reported in the Declarations section.

## 4. Planned Analyses and Evidence Outputs

### 4.1 Study Selection and Evidence Mapping

After screening, study selection will be reported in a PRISMA 2020 flow diagram (Page et al., 2021) giving the actual numbers of records identified, duplicates removed, records screened, reports assessed, exclusions with reasons, and studies included. No study-selection counts are presented in this protocol. Included studies will be mapped by publication year, region, institutional setting, design, sample, support type, adversity context, outcome tier (Section 2.1), and whether they distinguish provision, accessibility, and utilization (Section 2.3).

### 4.2 Institutional Support Types and Measurement (RQ1)

RQ1 will be addressed by classifying support into the six provisional domains (Section 2.2) and, within each domain, by whether studies measured provision, accessibility, utilization, or only global perceived support. Documented service arrangements will be distinguished from

student perceptions and reported use, and multicomponent programs will be coded across domains without attributing effects to individual components.

### 4.3 Accessibility Barriers and Facilitators (RQ2)

RQ2 will be addressed through a thematic synthesis of barriers and facilitators organized by the adapted Levesque et al. (2013) dimensions and the corresponding student abilities (Section 2.3). Barriers reported by students, associations tested quantitatively, and explanations proposed by authors will be distinguished, and access will be compared across service domains and delivery modes where evidence permits.

### 4.4 Institutional Support and Academic Resilience (RQ3)

RQ3 will be addressed by synthesizing Tier 1 (academic resilience) and Tier 2 (general psychological resilience) evidence separately, using the methods in Section 3.7. Tier 3 outcomes (engagement, adjustment, persistence, and belonging) will be summarized only as supplementary outcomes reported within included Tier 1 or Tier 2 studies; they will not form a separate evidence stream or contribute to conclusions about academic resilience. For studies using the ARS-30, total-scale and subscale results will be examined separately (Section 2.1), and whether studies measured and adjusted for baseline support needs, academic difficulty, or distress will be recorded. Cross-sectional associations will not be interpreted as evidence that institutional support improves academic resilience.

### 4.5 Individual, Institutional, and Contextual Variation (RQ4)

RQ4 will examine whether support–resilience associations vary by the individual, institutional, and contextual characteristics specified in Sections 3.5 and 3.8, including comparisons involving Southeast Asian and other Global South settings where sufficient comparable studies exist. Interaction effects tested within primary studies will be reported as moderation evidence; cross-study differences will be interpreted descriptively and not as evidence of individual-level moderation.

### 4.6 Methodological and Contextual Research Gaps (RQ5)

RQ5 will categorize gaps by conceptual definition, support measurement, design, adversity assessment, population coverage, and geographical representation, with attention to studies that conflate academic resilience with general resilience or adaptation, rely on global support measures, assess resilience without documented adversity, lack longitudinal data or adjustment for baseline need, or pair help-seeking measures with resilience outcomes. An absence of eligible evidence, inconsistent findings, and low-quality evidence will be reported as distinct types of gap.

### 4.7 Planned Evidence Outputs

The completed review will present a structured set of evidence tables and synthesis outputs corresponding to the five research questions.

**Table 2**: Planned Evidence Extraction and Synthesis Matrix

| Research question | Main analytical focus | Planned output |
|---|---|---|
| RQ1 | Institutional support types and measurement | Support-domain and measurement matrix |
| RQ2 | Accessibility barriers and facilitators | Accessibility thematic synthesis |
| RQ3 | Associations with academic resilience | Outcome-tier evidence synthesis |

| | | |
|---|---|---|
| RQ4 | Individual, institutional, and contextual variation | Subgroup and moderator evidence matrix |
| RQ5 | Conceptual, methodological, and contextual gaps | Research-gap and evidence-quality matrix |

The evidence tables will report each study's characteristics, findings, limitations, and appraisal results, organized by outcome tier and support dimension. Pooling and narrative synthesis will follow the criteria in Section 3.7. Certainty of evidence will be assessed as specified in Section 3.8, and contradictory findings will be reported explicitly. The substantive content of these outputs will be determined only after the review is completed.

## 5. Anticipated Contributions and Limitations

### 5.1 Anticipated Conceptual Contributions

The central intended contribution is the systematic differentiation of institutional support provision, accessibility, and utilization, which matters because the existence of university services does not establish that students are aware of them, can obtain appropriate assistance, or choose to use them. The review will draw on social-ecological resilience theory (Ungar, 2011), institutional approaches to student success (Tinto, 2012), and the educational interface framework (Kahu & Nelson, 2018), together with the adapted access framework described in Section 2.3, to examine how individual and institutional circumstances are represented in the empirical literature. The review is also intended to increase conceptual precision by separating academic resilience from general psychological resilience and related adaptation outcomes, clarifying the measurement limitations that future research needs to address.

### 5.2 Anticipated Methodological Contributions

The review will provide a structured assessment of how institutional support and academic resilience have been operationalized, with attention to the identification of educational adversity, the distinction between resilience as a process and as a self-reported attribute, and overlap between support utilization and help-seeking content in resilience measures. Where comparable evidence allows, differences across support domains, delivery modes, adversity contexts, and student populations will be examined; where it does not, gaps in measurement, reporting, or coverage will be documented rather than interpreted as evidence that relationships are absent.

### 5.3 Anticipated Contributions to Equity and Institutional Research

Planned attention to socioeconomic circumstances, first-generation status, disability, international student status, and other characteristics will show whether accessibility and utilization have been studied equitably across undergraduate populations. Geographical and institutional variation will also be considered, including representation of Southeast Asian and other Global South contexts (Section 1). For institutional researchers and practitioners, the review may identify which aspects of provision, accessibility, and utilization warrant evaluation; it does not presume that greater availability or use of services will improve academic resilience.

### 5.4 Anticipated Limitations

Several limitations are anticipated. Differences in how academic resilience is defined and measured may limit comparability, and the outcome hierarchy may reduce the number of studies eligible for direct synthesis. The evidence may be dominated by cross-sectional self-report designs, in which students with greater difficulty may also seek more help, creating reverse causation and confounding by need. Global perceived support measures may not separate provision, accessibility, utilization, and quality. The English-language restriction and

2015 start date may introduce language and temporal bias, which citation and grey literature searching will reduce but not remove. Finally, uneven reporting across regions and student groups may constrain subgroup analyses and pooling, in which case transparent narrative synthesis will be preferred.

## 6. Dissemination and Conclusion

The completed systematic review will be submitted for publication in a peer-reviewed higher education journal. The review will be reported in accordance with PRISMA 2020, with supplementary materials documenting the database search strategies, eligibility decisions, data extraction procedures, methodological appraisal, and synthesis methods. Where permitted, the protocol and subsequent amendments will be made publicly accessible through an appropriate registration or repository platform. By distinguishing support provision, accessibility, and utilization, and by separating direct measures of academic resilience from general resilience and related adaptation outcomes, the proposed review seeks to clarify how institutional resources have been conceptualized, measured, and investigated in relation to students' responses to educational adversity. Conclusions about the effectiveness of specific institutional interventions will be drawn only after the review is completed and the available evidence has been assessed.

## Funding.

This research received no specific grant from any funding agency

## Competing interests.

The authors declare no competing interests.

## Author contributions (CRediT).

Li Changjie: Conceptualization, Methodology, Investigation, Writing – original draft. Nurliza Haslin Binti Muslim: Conceptualization, Methodology, Supervision, Writing – review & editing.

## Data availability.

No new data were generated. The database search strategies are provided in Supplementary Appendix A and the PRISMA-P checklist in Supplementary Appendix B; the data extraction form and appraisal records will be deposited on OSF with the registered protocol.

## Use of generative artificial intelligence.

Generative AI ChatGPT was used to assist in final revising of the manuscript, including restructuring text and checking reference details. The authors reviewed and edited all content and take full responsibility for the manuscript.

## References

Abulfaraj, G. G., Upsher, R., Zavos, H. M. S., & Dommett, E. J. (2024). The impact of resilience interventions on university students' mental health and well-being: A systematic review. *Education Sciences, 14*(5), Article 510. https://doi.org/10.3390/educsci14050510

Awais, A., Fu, N., & Jones, S. (2024). Developing students' resilience during the crisis: A moderated model linking college support, study demands, student resilience, and students' change-oriented behaviours. *Higher Education Quarterly, 78*(3), 565–585. https://doi.org/10.1111/hequ.12468

Azila-Gbettor, E. M., Abiemo, M. K., & Glate, S. N. (2023). University support and online learning engagement during the COVID-19 period: The role of student vitality. *Heliyon, 9*(1), Article e12832. https://doi.org/10.1016/j.heliyon.2023.e12832

Azila-Gbettor, E. M., Agbenyo, L., Fiati, H. M., & Mensah, C. (2023). Student adjustment during COVID-19 pandemic: Exploring the moderating role of university support. *Heliyon, 9*(3), Article e13625. https://doi.org/10.1016/j.heliyon.2023.e13625

Bakker, A. B., & Mostert, K. (2024). Study demands–resources theory: Understanding student well-being in higher education. *Educational Psychology Review, 36*(3), Article 92. https://doi.org/10.1007/s10648-024-09940-8

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Campbell, M., McKenzie, J. E., Sowden, A., Katikireddi, S. V., Brennan, S. E., Ellis, S., Hartmann-Boyce, J., Ryan, R., Shepperd, S., Thomas, J., Welch, V., & Thomson, H. (2020). Synthesis without meta-analysis (SWiM) in systematic reviews: Reporting guideline. *BMJ, 368*, Article l6890. https://doi.org/10.1136/bmj.l6890

Cassidy, S. (2016). The Academic Resilience Scale (ARS-30): A new multidimensional construct measure. *Frontiers in Psychology, 7*, Article 1787. https://doi.org/10.3389/fpsyg.2016.01787

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. https://doi.org/10.1002/da.10113

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Frisby, B. N., Sidelinger, R. J., Lawrence, A., & Ribott, M. (2024). Students' peer network quality: Effects on academic resilience and intention to persist. *Review of Communication, 24*(3), 133–145. https://doi.org/10.1080/15358593.2024.2374913

Gray, A. R., Bumgardaner, S., Hall, A., Young-Jones, A. D., & Yadon, C. A. (2024). Resilience in post-secondary students: The role of academic advisor support. *NACADA Journal, 44*(1), 55–65. https://doi.org/10.12930/NACADA-23-05

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Hong, Q. N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., & Vedel, I. (2018). *Mixed Methods Appraisal Tool (MMAT), version 2018: User guide*. Registration of Copyright (#1148552), Canadian Intellectual Property Office, Industry Canada.

Johnson, C., Gitay, R., Abdel-Salam, A.-S. G., BenSaid, A., Ismail, R., Al-Tameemi, R. A. N., Romanowski, M. H., Al Fakih, B. M. K., & Al Hazaa, K. (2022). Student support in higher

education: Campus service utilization, impact, and challenges. *Heliyon, 8*(12), Article e12559. https://doi.org/10.1016/j.heliyon.2022.e12559

Kahu, E. R., & Nelson, K. (2018). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development, 37*(1), 58–71. https://doi.org/10.1080/07294360.2017.1344197

Kahu, E. R., Picton, C., & Nelson, K. (2020). Pathways to engagement: A longitudinal study of the first-year student experience in the educational interface. *Higher Education,* 79(4), 657–673. https://doi.org/10.1007/s10734-019-00429-w

Karabenick, S. A. (2004). Perceived achievement goal structure and college student help seeking. *Journal of Educational Psychology, 96*(3), 569–581. https://doi.org/10.1037/0022-0663.96.3.569

King, N., Pickett, W., Pankow, K., Dimitropoulos, G., Cullen, E., McNevin, S., Patten, S. B., & Duffy, A. (2024). Access to university mental health services: Understanding the student experience. *The Canadian Journal of Psychiatry, 69*(12), 841–851. https://doi.org/10.1177/07067437241295640

Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health, 12*, Article 18. https://doi.org/10.1186/1475-9276-12-18

Li, R., Hassan, N. C., & Saharuddin, N. (2023). College student's academic help-seeking behavior: A systematic literature review. *Behavioral Sciences, 13*(8), Article 637. https://doi.org/10.3390/bs13080637

Lui, J. C., Sagar-Ouriaghli, I., & Brown, J. S. L. (2024). Barriers and facilitators to help-seeking for common mental disorders among university students: A systematic review. *Journal of American College Health, 72*(8), 2605–2613. https://doi.org/10.1080/07448481.2022.2119859

Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools, 43*(3), 267–281. https://doi.org/10.1002/pits.20149

Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology, 46*(1), 53–83. https://doi.org/10.1016/j.jsp.2007.01.002

Martin, A. J., & Marsh, H. W. (2009). Academic resilience and academic buoyancy: Multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs. *Oxford Review of Education, 35*(3), 353–370. https://doi.org/10.1080/03054980902934639

McGowan, J., Sampson, M., Salzwedel, D. M., Cogo, E., Foerster, V., & Lefebvre, C. (2016). PRESS Peer Review of Electronic Search Strategies: 2015 guideline statement. *Journal of Clinical Epidemiology, 75*, 40–46. https://doi.org/10.1016/j.jclinepi.2016.01.021

Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., Stewart, L. A., & PRISMA-P Group. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews, 4*, Article 1. https://doi.org/10.1186/2046-4053-4-1

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, Article n71. https://doi.org/10.1136/bmj.n71

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). *Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC Methods Programme*. Lancaster University.

Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., & Koffel, J. B. (2021). PRISMA-S: An extension to the PRISMA statement for reporting literature searches in systematic reviews. *Systematic Reviews, 10*, Article 39. https://doi.org/10.1186/s13643-020-01542-z

Shamseer, L., Moher, D., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., & Stewart, L. A. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: Elaboration and explanation. *BMJ, 350*, Article g7647. https://doi.org/10.1136/bmj.g7647

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology, 8*, Article 45. https://doi.org/10.1186/1471-2288-8-45

Thomas, L. (2012). *Building student engagement and belonging in higher education at a time of change: A summary of findings and recommendations from the What Works? Student Retention & Success programme*. Paul Hamlyn Foundation.

Tinto, V. (2012). *Completing college: Rethinking institutional action*. University of Chicago Press.

Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*(1), 1–17. https://doi.org/10.1111/j.1939-0025.2010.01067.x

Zhao, R., Amanvermez, Y., Pei, J., Castro-Ramirez, F., Rapsey, C., Garcia, C., Ebert, D. D., Haro, J. M., Fodor, L. A., David, O. A., Rankin, O., Chua, S. N., Martínez, V., Bruffaerts, R., Kessler, R. C., & Cuijpers, P. (2025). Research review: Help-seeking intentions, behaviors, and barriers in college students—A systematic review and meta-analysis. *Journal of Child Psychology and Psychiatry, 66*(10), 1593–1605. https://doi.org/10.1111/jcpp.14145

Supplementary Material
Beyond Individual Coping: Institutional Support Accessibility and Academic Resilience Among Undergraduate Students—A Systematic Review Protocol

Li Changjie and Nurliza Haslin Binti Muslim

## Appendix A. Proposed Database Search Strategies

The strategies below combine three concepts: undergraduate higher education, institutional support, and resilience. The resilience block includes the general term "resilien*" and common general-resilience instrument names so that Tier 2 studies are retrieved. Controlled-vocabulary terms are proposed and will be confirmed against the current ERIC Thesaurus and APA Thesaurus of Psychological Index Terms, piloted for retrieval of known candidate studies (Awais et al., 2024; Frisby et al., 2024; Gray et al., 2024), and reviewed by an information specialist using the PRESS 2015 guideline before execution. The final executed strings, search dates and record counts will be reported in the completed review.

### A1. Scopus (Elsevier)

TITLE-ABS-KEY ( undergraduate* OR "university student*" OR "college student*" OR "higher education student*" )

AND TITLE-ABS-KEY ( "institutional support" OR "university support" OR "student service*" OR "student support*" OR "academic support" OR "learning support" OR tutor* OR mentor* OR "peer mentor*" OR counsel* OR advis* OR "academic advising" OR "financial aid" OR bursar* OR "emergency grant*" OR "disability service*" OR accommodation* OR "online support" OR "early alert" OR "help-seeking" OR "help seeking" OR "service utili*" OR "service use" )

AND TITLE-ABS-KEY ( "academic resilien*" OR "student resilien*" OR resilien* OR "academic buoyancy" OR "academic adversity" OR "educational adversity" OR "CD-RISC" OR "Connor-Davidson" OR "Brief Resilience Scale" )
AND PUBYEAR > 2014 AND ( LIMIT-TO ( LANGUAGE , "English" ) )

### A2. Web of Science Core Collection (Clarivate)

TS=( undergraduate* OR "university student*" OR "college student*" OR "higher education student*" )
AND TS=( "institutional support" OR "university support" OR "student service*" OR "student support*" OR "academic support" OR "learning support" OR tutor* OR mentor* OR counsel* OR advis* OR "financial aid" OR bursar* OR "disability service*" OR accommodation* OR "online support" OR "early alert" OR "help-seeking" OR "help seeking" OR "service utili*" OR "service use" )

AND TS=( "academic resilien*" OR "student resilien*" OR resilien* OR "academic buoyancy" OR "academic adversity" OR "educational adversity" OR "CD-RISC" OR "Connor-Davidson" OR "Brief Resilience Scale" )

Timespan: 2015-01-01 to [final search date]; Language: English; Collection: Web of Science Core Collection

### A3. ERIC (EBSCOhost)

S1 DE "Undergraduate Students" OR DE "College Students" OR TI ( undergraduate* OR "university student*" OR "college student*" ) OR AB ( undergraduate* OR "university student*" OR "college student*" )

S2 DE "Student Personnel Services" OR DE "Academic Advising" OR DE "Tutoring" OR DE "Mentors" OR DE "Counseling Services" OR DE "Student Financial Aid" OR DE "Help Seeking"

S3 TI ( "student service*" OR "academic support" OR "learning support" OR tutor* OR mentor* OR counsel* OR advis* OR "financial aid" OR "disability service*" OR "online support" OR "early alert" OR "help-seeking" ) OR AB ( same terms )

S4 DE "Resilience (Psychology)" OR TI ( resilien* OR "academic buoyancy" OR "academic adversity" OR "educational adversity" OR "CD-RISC" OR "Brief Resilience Scale" ) OR AB ( same terms )
S5 S1 AND ( S2 OR S3 ) AND S4
Limiters: Publication date 2015–[final search date]; Language: English

### A4. APA PsycINFO (Ovid)

1 exp College Students/ or (undergraduate* or "university student*" or "college student*").ti,ab.

2 Student Personnel Services/ or Educational Counseling/ or Mentor/ or Tutoring/ or Help Seeking Behavior/

3 ("student service*" or "academic support" or "learning support" or tutor* or mentor* or counsel* or advis* or "financial aid" or "disability service*" or "online support" or "early alert" or "help-seeking" or "service utili*").ti,ab.

4 Resilience (Psychological)/ or (resilien* or "academic buoyancy" or "academic adversity" or "educational adversity" or "CD-RISC" or "Brief Resilience Scale").ti,ab.

5 1 and (2 or 3) and 4

6 limit 5 to (english language and yr="2015 -Current")

### A5. Grey literature

ProQuest Dissertations & Theses Global: ab(undergraduate* OR "university student*" OR "college student*") AND ab("student service*" OR "academic support" OR tutor* OR mentor* OR counsel* OR advis* OR "financial aid" OR "disability service*") AND ab(resilien* OR "academic buoyancy"); 2015–[final search date]

BASE (institutional repositories): simplified string combining the three concepts; document types: theses and reports; 2015–[final search date]

Backward and forward citation searching of included studies and relevant reviews will supplement the database searches (Section 3.2).

## Appendix B. PRISMA-P 2015 Checklist

Item wording is abridged from Moher et al. (2015) and Shamseer et al. (2015). Section numbers refer to the revised manuscript.

| Item | Checklist item (abridged) | Location in manuscript |
|---|---|---|
| 1a | Identify the report as a protocol of a systematic review | Title |
| 1b | Update of a previous review | Not applicable |
| 2 | Registry name and registration number | Abstract; Section 3.1 Registration DOI 10.17605/OSF.IO/SNDU5 |
| 3a | Names, affiliations and email of all authors; corresponding author address | Title page |
| 3b | Contributions of protocol authors; guarantor | Declarations (Author contributions); Section 3.1 (guarantor) |
| 4 | Amendments: plan for documenting important protocol amendments | Section 3.1 |
| 5a | Sources of financial or other support | Declarations (Funding) |
| 5b | Name of funder or sponsor | Declarations (Funding) |
| 5c | Role of funder or sponsor | Declarations (Funding) |
| 6 | Rationale in the context of what is already known | Section 1 |
| 7 | Explicit statement of the questions (participants, interventions/exposures, comparators, outcomes) | Section 1 (RQ1–RQ5); Sections 2.1–2.3 |
| 8 | Eligibility criteria (study and report characteristics) | Section 3.3; Table 1 |
| 9 | Information sources with planned dates of coverage | Section 3.2 |
| 10 | Draft search strategy for at least one database | Section 3.2; Supplementary Appendix A |
| 11a | Data management mechanisms | Sections 3.4–3.5 (reference manager, Rayyan, piloted extraction form) |
| 11b | Selection process (two independent reviewers) | Section 3.4 |
| 11c | Data collection process | Section 3.5 |
| 12 | Data items and pre-planned assumptions | Sections 2.1, 3.5 |
| 13 | Outcomes and prioritization | Section 2.1 (three-tier hierarchy); Section 3.3 |
| 14 | Risk of bias in individual studies | Section 3.6 (MMAT 2018; JBI cross-sectional criteria) |
| 15a | Criteria for quantitative synthesis | Section 3.7 |
| 15b | Methods of quantitative synthesis, heterogeneity | Section 3.7 (Fisher z, random effects, $I^2$, $\tau^2$, prediction intervals) |

| | | |
|---|---|---|
| 15c | Additional analyses (sensitivity, subgroup, meta-regression) | Section 3.8 |
| 15d | Type of summary planned if quantitative synthesis not appropriate | Section 3.7 (SWiM-guided narrative; thematic synthesis) |
| 16 | Meta-bias(es) (publication bias, selective reporting) | Section 3.7 (small-study effects); Section 3.8 (GRADE publication-bias domain) |
| 17 | Confidence in cumulative evidence | Section 3.8 (GRADE; GRADE-CERQual) |