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Mental Health Among Polytechnic Students in Malaysia: A Systematic Review

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ABSTRACT

Mental health has become an increasingly important concern among students in higher education, particularly within the polytechnic context in Malaysia. This systematic literature review aims to examine mental health issues among polytechnic students, identify key factors influencing their psychological well-being, and synthesise existing literature in this area. A structured search strategy was conducted using Google Scholar and ScienceDirect, covering publications from 2020 to 2025. The initial search identified 14,513 articles, which were screened based on predefined inclusion and exclusion criteria. Following a rigorous selection process guided by the PRISMA framework, seven studies comprising both quantitative and qualitative designs were included in the final analysis. The findings indicate that mental health issues such as stress, anxiety, and psychological distress are commonly reported among students. Academic-related factors, including workload, assessment pressure, and teaching-related challenges, were identified as major contributors to psychological strain. In addition, psychosocial factors such as social support, financial difficulties, and adaptation to the learning environment were found to influence students' mental health outcomes. Overall, this review highlights the significant role of academic and psychosocial factors in shaping students' mental health. The findings provide useful insights for polytechnic institutions in developing effective strategies to support student well-being. This study also contributes to the existing literature by offering a focused synthesis of mental health issues within the polytechnic education context in Malaysia.

1. Introduction

Mental health has become an increasingly significant concern within higher education settings, particularly among students who are navigating academic demands, personal development, and future career expectations. In recent years, growing evidence has highlighted that students are vulnerable to various psychological challenges, including depression, anxiety, and emotional distress [2,9,11]. These issues have been further intensified by changes in the learning environment, increased academic competition, and the evolving demands of education systems [10,19].

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The prevalence of mental health issues among students has shown a concerning upward trend. Empirical studies indicate that a substantial proportion of students experience symptoms ranging from mild stress to severe psychological conditions. For instance, recent findings suggest that anxiety and depressive symptoms are commonly reported among student populations, reflecting the increasing psychological burden associated with academic life [13,16]. These conditions not only affect students' emotional well-being but may also influence their academic performance, engagement, and overall functioning [6].

One of the key factors contributing to these mental health challenges is the academic environment itself. Academic-related pressures such as heavy workload, continuous assessments, and high performance expectations have been widely recognised as major sources of stress among students [16]. Research has consistently shown that academic stressors are closely linked to higher levels of anxiety, burnout, and emotional exhaustion [14]. These findings suggest that mental health issues among students are not isolated phenomena but are deeply embedded within the educational context.

Within the context of polytechnic education, these challenges may be more complex due to the nature of technical and vocational training, which often requires both theoretical understanding and practical competency. Students are expected to cope with academic demands while simultaneously adapting to skill-based learning environments. However, despite the increasing recognition of mental health issues in higher education, research specifically focusing on polytechnic students in Malaysia remains relatively limited. Existing studies tend to concentrate on broader university populations, resulting in a lack of focused understanding of mental health issues within the polytechnic context.

Given this gap, there is a need to systematically examine the existing literature to provide a clearer understanding of mental health among polytechnic students. Therefore, this systematic literature review aims to:

1. To examine mental health issues among polytechnic students in Malaysia, particularly in terms of stress, anxiety, and psychological distress.
2. To identify key factors influencing students' mental health.
3. To synthesise existing literature on mental health among polytechnic students in Malaysia.

2. Methodology

This systematic literature review (SLR) adopted a structured approach to identify and analyse relevant studies on mental health among polytechnic students. A keyword-based search strategy was employed using combinations of terms related to mental health and student populations. The primary keywords included mental health, students, Malaysia, and polytechnic students, combined using Boolean operators (AND) to refine the search process.

The literature search was conducted using two major academic databases, namely ScienceDirect and Google Scholar, covering publications from 2020 to 2025. Although only two databases were used, these sources were selected due to their wide coverage of multidisciplinary and peer-reviewed studies relevant to the research topic. This approach ensured a broad yet focused retrieval of relevant studies within the scope of this review.

Inclusion and exclusion criteria were subsequently applied to ensure the selection of relevant and high-quality studies. Data extraction focused on key variables such as study design, sample characteristics, and main findings, while studies were evaluated based on relevance and methodological consistency. This process ensured the consistency and reliability of the selected studies for analysis [18,21]. The overall study selection process is illustrated in Figure 1.

2.1 Inclusion Criteria

The inclusion criteria were defined to ensure the relevance and quality of the selected studies, as summarised in Table 1.

The review focused on studies within the fields of psychology, education, and social sciences that examined mental health issues among students, particularly in relation to stress, anxiety, and psychological distress. Only peer-reviewed journal articles were selected to ensure academic credibility and reliability. The keyword search process and the number of articles identified at each stage are presented in Table 2.

Furthermore, both quantitative and qualitative studies were included in this review to provide a more comprehensive understanding of mental health issues among students. Quantitative studies offer measurable evidence of mental health patterns, while qualitative studies provide deeper insights into students' lived experiences and psychosocial challenges. The selected studies were sourced from reputable journals such as *Journal of Public Health Research, Higher Education Research & Development, Journal of Technical Education and Training, Journal of Vocational Education Studies, International Journal of Special Education, Malaysian Journal of Public Health Medicine, and Journal of Educational Development Studies*, as summarised in Table 3.

Table 1
Inclusion criteria of the systematic review

Inclusion Criteria	Particulars
Key term	Mental health
Secondary keyword	Students Malaysia
Third keyword	Polytechnic students
Year of publication	2020–2025
Language	English
Journal type	Peer-reviewed journal articles
Study design	Quantitative and Qualitative studies

The selected studies were sourced from reputable peer-reviewed journals across psychology, education, and public health disciplines, ensuring the credibility and reliability of the reviewed literature.

A keyword-based search was conducted using combinations of relevant terms related to mental health and student populations. The number of results obtained from each keyword combination is presented in Table 2.

Table 2
Search results based on keyword combinations

Keywords	Number of Results
Mental health	79,713
Mental health AND students AND Malaysia	27,559
TVET students AND mental health AND Malaysia	4,311
Polytechnics students AND stress AND Malaysia	14,513
Polytechnics students AND mental health AND Malaysia	226

The findings indicate that broader search terms yielded a higher number of results, while more specific keywords related to polytechnic students significantly narrowed the search scope.

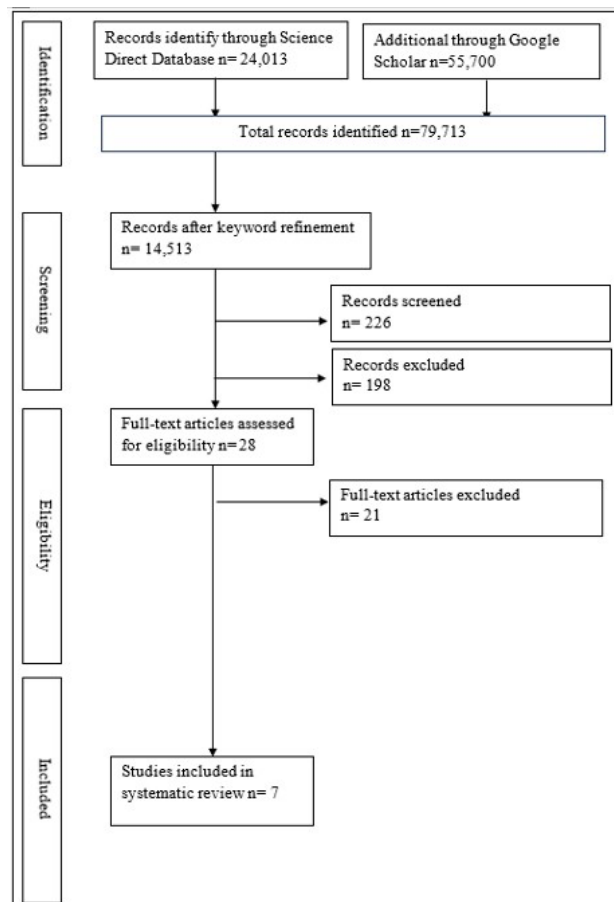
Table 3

Distribution of selected studies by journal source

Journal Source/ Subject Area	Total
Journal of Public Health Research	1
Higher Education Research and Development	1
Journal of Technical Education and Training	1
Journal of Vocational Education Studies	1
International Journal of Special Education	1
Malaysian Journal of Public Health Medicine	1
Journal of Educational Development Studies	1
Total	7

2.2 Exclusion Criteria

A total of 14,513 articles were initially identified after applying refined keyword combinations. Following the screening of titles and abstracts, 14,296 articles were excluded due to irrelevance to the research topic, particularly those not focusing on mental health or student populations within an educational context. A total of 28 articles were subsequently assessed for full-text eligibility, of which 21 were excluded due to lack of access, scope mismatch, and methodological inconsistencies. As a result, seven (7) studies met all inclusion criteria and were included in the final analysis. The relatively small number of selected studies reflects the limited availability of research specifically focusing on polytechnic students in Malaysia. This highlights the need for more focused research within the polytechnic education context. The study selection process is illustrated in Figure 1.

**Fig. 1.** PRISMA flow diagram of the study selection process

3. Findings of Literature Review

Table 4 summarises the selected studies on mental health among polytechnic students. The findings indicate that mental health issues such as stress, anxiety, and psychological distress are commonly reported among students. Evidence from the selected studies shows that a considerable number of students experience emotional and psychological challenges, particularly during demanding academic periods. In terms of specific patterns, depression and anxiety were identified as key mental health concerns. For instance, Marzo *et al.*, [13] reported that 25.1% of participants experienced severe depression, while 34.1% reported anxiety symptoms, highlighting the presence of psychological distress among students. Academic-related factors were consistently identified as major contributors to mental health issues. Studies by Nasri *et al.*, [15] and Morshidi *et al.*, [14] indicate that academic workload, assessment demands, and performance expectations are closely associated with increased stress and anxiety. Similarly, Azizan *et al.*, [3] found that a mismatch between students and their learning environment negatively affects psychological well-being and academic performance.

In addition, psychosocial factors were also found to influence students' mental health. Rusaine *et al.*, [17] highlighted that loneliness, financial difficulties, and lack of social support contribute to emotional strain. Supporting this, Yusuf *et al.*, [20] found that social support plays a significant role in reducing stress levels among students. Although this study was conducted outside Malaysia, it was included due to its relevance to polytechnic (TVET) student populations, providing additional insights into psychosocial factors influencing students' mental health. Furthermore, environmental and contextual factors also contribute to mental health outcomes. Mansor *et al.*, [12] demonstrated that external influences such as awareness and educational environment can shape students' behaviours, which may indirectly affect their psychological well-being. Overall, the findings suggest that mental health among polytechnic students is influenced by a combination of academic, psychosocial, and environmental factors, with academic-related stressors emerging as the most prominent contributors. These findings are particularly relevant in the polytechnic context, where students are required to balance both theoretical learning and practical skill-based training, which may intensify academic and psychological demands. This dual academic structure differentiates polytechnic students from conventional university students, highlighting the need for context-specific mental health interventions.

Table 4

Summary of selected studies on mental health among polytechnic students

No	Author	Title	Participant	Country	Research Design	Statistical Data/Findings
1	Marzo <i>et al.</i> , [13]	Depression and anxiety in Malaysian population during COVID-19	1554 participants (59.5% students)	Malaysia	Cross-sectional survey	25.1% severe depression, 34.1% anxiety; females more vulnerable (OR=1.44)
2	Morshidi <i>et al.</i> , [14]	Higher education expectation scale	302 tertiary students	Malaysia	Psychometric study	Academic expectations linked to stress and anxiety
3	Azizan <i>et al.</i> , [3]	Person-environment fit among polytechnic students	195 polytechnics students	Malaysia	Quantitative (SEM)	Poor fit reduces well-being and performance
4	Nasri <i>et al.</i> , [15]	Factors affecting absenteeism	289 polytechnic	Malaysia	Quantitative (PLS-SEM)	Academic workload and teaching factors

5	Rusaine <i>et al.</i> , [17]	Psychological well-being	students 3 students	Malaysia	Qualitative	increase stress Stress influence by workload, loneliness, and financial issues
6	Mansor <i>et al.</i> , [12]	STI knowledge among HE students	600 students	Malaysia	Cross-sectional	Environmental and awareness factors influence behaviour
7	Yusuf <i>et al.</i> , [20]	Social support among polytechnic students	381 students	Nigeria	Correlational	Social support reduces stress ($p < .01$)

4. Discussion

The findings of this review highlight that mental health issues such as stress, anxiety, and psychological distress are commonly reported among students, particularly within higher education settings. These results are consistent with previous studies that have identified increasing mental health concerns among student populations globally [2,11].

A key insight from this review is the strong influence of academic-related factors on students' mental health. Academic stressors such as workload, assessment demands, and performance expectations have been widely recognised as significant contributors to psychological distress [4,16]. Continuous exposure to academic pressure may lead to emotional exhaustion, reduced motivation, and increased psychological vulnerability among students [5,19].

In the polytechnic context, the nature of learning may intensify these challenges. Students are required to balance theoretical understanding with practical skill development, which increases both cognitive and emotional demands. This dual responsibility may explain why students who experience difficulty adapting to academic expectations tend to report poorer mental health outcomes.

The findings also highlight the importance of psychosocial factors, particularly social support, financial stability, and emotional well-being. Students who lack adequate support systems are more likely to experience higher levels of stress and psychological distress. Conversely, strong social support has been shown to act as a protective factor that enhances coping ability and resilience. This finding is supported by previous research, which demonstrates that social support plays a protective role in enhancing students' resilience and psychological well-being [1,8].

From a broader perspective, mental health among students can be understood as the result of an interaction between academic demands and individual coping capacity. When academic pressure exceeds students' ability to cope, it may lead to more severe psychological outcomes. Therefore, addressing mental health issues requires not only reducing academic stressors but also strengthening support systems within educational institutions.

5. Limitations

This review is subject to several limitations. First, there is a limited number of studies specifically examining polytechnic students in Malaysia, which restricts the contextual depth of the analysis. Much of the available literature focuses on broader higher education populations, potentially limiting the direct applicability of findings to polytechnic settings.

Second, most of the included studies employ cross-sectional research designs. As a result, causal relationships between academic stressors and mental health outcomes cannot be firmly established. Longitudinal approaches would provide a more comprehensive understanding of how mental health issues evolve over time.

Third, variations in research design, sampling methods, and measurement instruments across studies may affect the consistency and comparability of findings. The use of different psychological

scales and analytical techniques introduces methodological heterogeneity within the reviewed literature.

Finally, several studies included small or specialised samples, such as students with specific learning needs, which may limit the generalisability of the findings to the wider student population.

6. Future Directions

Future research should place greater emphasis on studies that specifically target polytechnic students in Malaysia, as this group remains underrepresented in the current literature. Focused investigations are necessary to better understand the unique academic and psychological challenges associated with technical and vocational education.

Longitudinal research designs are also recommended to explore the development and progression of mental health issues over time. Such studies would enable researchers to identify causal relationships and long-term effects of academic stressors on psychological outcomes.

In addition, future research should prioritise intervention-based studies aimed at reducing academic stress and enhancing students' coping strategies. The evaluation of structured mental health programmes within polytechnic institutions would provide valuable insights into effective support mechanisms.

Furthermore, there is a need to standardise measurement tools in mental health research to ensure consistency and comparability across studies. The use of validated and widely accepted instruments would enhance the reliability and robustness of future findings.

7. Practical and Theoretical Implications

7.1 Practical Implications

The findings of this review offer several practical implications for polytechnic institutions. Firstly, there is a need to critically evaluate academic structures, particularly in terms of workload distribution and assessment practices. Reducing excessive academic pressure may help minimise students' psychological strain.

Secondly, institutions should strengthen support systems that address students' mental health needs. This includes expanding access to counselling services, implementing stress management initiatives, and providing academic support programmes tailored to student needs.

Thirdly, enhancing the teaching and learning environment is essential. Supportive instructional practices, clear communication, and flexible learning approaches can facilitate better student adjustment and improve psychological well-being.

7.2 Theoretical Implications

From a theoretical perspective, the findings reinforce the understanding of mental health as a multidimensional construct influenced by both environmental and individual factors. The review supports existing theoretical perspectives that link academic stressors to psychological outcomes, highlighting the importance of contextual factors in shaping student well-being.

The concept of person–environment fit is particularly relevant in explaining students' experiences within polytechnic settings. The alignment between individual capabilities and academic demands appears to be a critical determinant of psychological outcomes.

Additionally, the review underscores the need for further theoretical development within the context of technical and vocational education, where mental health research remains relatively limited.

8. Conclusion

In conclusion, this systematic literature review demonstrates that mental health challenges among students are commonly reported, particularly in relation to depression, anxiety, and psychological distress. The findings indicate that academic-related factors, including workload, assessment pressure, and teaching challenges, play a significant role in shaping students' psychological well-being.

Moreover, students' ability to adapt to the academic environment emerges as a key determinant of mental health outcomes, where difficulties in adjustment may contribute to emotional strain and reduced academic performance. Within the polytechnic context, these challenges may be intensified due to the need to balance both theoretical learning and practical skill-based training.

Overall, this review provides a comprehensive synthesis of existing literature on mental health among polytechnic students in Malaysia and highlights a critical gap in context-specific research. The findings emphasise the importance of addressing academic stressors and strengthening institutional support systems to promote student well-being. Future research and policy initiatives should prioritise targeted interventions tailored to the unique needs of polytechnic students in Malaysia.

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