The Psychological Effects of Post COVID-19 on Health Sciences Diploma Students: An Educational Analysis

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DOI: 10.29322/IJSRP.15.11.2025.p16724
https://dx.doi.org/10.29322/IJSRP.15.11.2025.p16724

Paper Received Date: 19th October 2025
Paper Acceptance Date: 18th November 2025
Paper Publication Date: 20th November 2025

Abstract- The COVID-19 pandemic introduced profound disruptions to education systems worldwide, impacting students' psychological well-being, academic performance, and learning experiences. This study examines the psychological effects of the post-COVID-19 period on Diploma in Medical and Health Sciences (DMHS) students, focusing on levels of depression, anxiety, and stress, as well as the educational challenges that shaped these outcomes. Using a cross-sectional descriptive design, data were collected through an online survey disseminated via Google Forms. Adapted items from the Depression, Anxiety, and Stress Scales (DASS) were employed to assess emotional distress, alongside questions addressing academic performance and learning barriers. Findings revealed heightened psychological distress, with many students reporting emotional exhaustion, persistent fear, diminished motivation, and academic disruption. The rapid transition to online learning presented substantial difficulties, including limited clinical exposure, technological inequities, and reduced peer–lecturer interaction. These obstacles significantly affected students' academic confidence and perceived competency, particularly in skill-based coursework requiring hands-on clinical training. Socioeconomic disparities, including unequal access to devices and stable internet connectivity, intensified stress and frustration. The study underscores the interconnected nature of psychological health and academic outcomes, emphasizing the importance of institutional support, hybrid learning models, and robust mental health interventions. The paper concludes that higher education institutions serving health science students must adopt comprehensive strategies that address emotional well-being, strengthen digital infrastructure, and promote equitable learning environments to ensure student resilience in post-pandemic educational contexts.

Index Terms- High prevalence of psychological distress (depression, anxiety, stress). Online learning barriers and lack of clinical exposure worsened mental health. Socioeconomic inequality impacted access to digital tools. Advocates for mental health support systems, hybrid learning, and policy interventions

I. INTRODUCTION

The COVID-19 pandemic brought unprecedented shifts to educational landscapes globally, compelling institutions to restructure teaching, assessment, and student support systems. Health sciences students, whose programs rely heavily on clinical exposure and hands-on training, experienced particularly significant disruptions. The post-pandemic period, although somewhat stabilized, continues to reveal lingering psychological and academic challenges for these learners. Health sciences students faced dual pressures: the fear and uncertainty associated with the pandemic itself, and the academic stressors linked to modifying learning approaches, meeting performance expectations, and adapting to digital modes of instruction. For Diploma in Medical and Health Sciences (DMHS) students, these pressures were intensified by the reduction of clinical placements, limited access to laboratory environments, and diminished interaction with lecturers and peers. Consequently, many students reported heightened levels of emotional distress, including depression, anxiety, and stress.

This study responds to these emerging concerns by examining how the post-COVID-19 environment has shaped the psychological experiences of health sciences diploma students. It provides an educational analysis grounded in students' lived academic realities and the structural challenges within their learning environments. Drawing upon theoretical frameworks related to student mental health, stress theory, and educational resilience, the study investigates the prevalence of psychological issues and their associations with academic performance. The purpose of this research is twofold: first, to better understand the mental health outcomes among DMHS students; and second, to identify the educational difficulties that contribute to psychological distress. This analysis aims to support

institutional decision-makers, educators, and policymakers in developing supportive strategies that enhance student well-being and academic success during the post-pandemic era.

The COVID-19 pandemic has profoundly altered social systems, public health operations, and educational institutions. For students in medical and health sciences programs, the pandemic not only disrupted academic routines but also challenged their sense of stability, competency, and preparedness for future professional roles. Emerging studies show that health science students are among the groups most psychologically affected by the pandemic due to high pressure, demanding curriculum, and the expectation to internalize clinical skills that cannot be fully developed through online modalities. During the peak of the pandemic, higher education institutions relied heavily on online and remote learning methods. While online learning provided continuity, it also exposed disparities in digital access, self-regulation skills, and the ability to engage with complex health-science topics virtually. The absence of hands-on laboratory sessions and practical clinical training created significant gaps in students' learning experiences. Many students expressed concern about their competency development, a factor strongly associated with psychological distress.

As the world transitions into a post-pandemic environment, students continue to confront the academic and emotional aftermath of this period. Psychological impacts such as anxiety related to academic progression, fear of illness, and stress associated with adapting to hybrid learning environments remain prevalent. Universities must therefore examine these effects carefully to support students' overall development and professional readiness. The psychological effects of the COVID-19 pandemic continue to impact DMHS students even in the post-pandemic period. Although campuses have reopened and learning activities have resumed, many students still struggle with the consequences of prolonged remote learning, reduced clinical exposure, disrupted academic routines, and accumulated psychological strain.

The shift to online learning presented immediate challenges for DMHS students, including insufficient access to technological devices, weak internet connectivity, and limited digital literacy. These barriers were compounded by the loss of collaborative learning spaces and physical laboratory environments essential for health sciences education. As a result, students faced disruptions in learning continuity and skill development, contributing to heightened stress and anxiety. Furthermore, many students experienced increased emotional strain due to isolation, family responsibilities, or financial pressures brought about by the pandemic. These factors collectively contribute to adverse mental health outcomes, which subsequently affect academic performance, motivation, and self-efficacy. Despite these challenges, limited empirical research has focused specifically on the psychological effects experienced by health sciences diploma students in Malaysia during the post-COVID-19 period. This study seeks to address this gap by offering a focused analysis of their psychological well-being and the educational challenges that influence it.

The present study aims to assess the prevalence of psychological issues—including depression, anxiety, and stress—among health sciences diploma students in the post-COVID-19 context, examine the relationship between these psychological effects and academic performance, and identify the educational challenges that emerged during the transition from online learning to post-pandemic hybrid systems. Guided by the following research questions—(1) What is the prevalence of psychological issues such as depression, anxiety, and stress among health sciences diploma students post-COVID-19? (2) How do psychological effects relate to academic performance? and (3) What educational challenges have contributed to students' psychological distress? This study provides essential insights for higher education institutions, particularly programs requiring strong clinical competencies. Its findings inform administrators and policymakers on the need to reinforce mental health support mechanisms, enhance the quality and flexibility of teaching delivery, and develop institutional strategies that promote student resilience. For lecturers, the study underscores the importance of empathetic, student-centered teaching approaches and clearer communication, while for students, it encourages greater awareness of emotional well-being and supports positive help-seeking behaviors as they adapt to evolving academic demands in the post-pandemic era.

The COVID-19 pandemic drastically transformed the operational, psychological, and academic realities of students across the globe. Health science students, in particular, experienced intensified emotional and academic strain due to their program's reliance on practical and clinical components that cannot be replicated entirely through online formats. This literature review synthesizes global and regional research on psychological well-being, online learning transitions, academic performance, and socioeconomic challenges to contextualize the current study's findings.

The pandemic triggered considerable psychological distress among students worldwide. Studies consistently report elevated levels of depression, anxiety, and stress, particularly among those in demanding academic programs. The shift to remote learning, fear of infection, and uncertainty surrounding academic continuity have been cited as primary stressors. Brooks et al. (2020) established that quarantine and prolonged isolation often lead to emotional exhaustion, post-traumatic stress symptoms, confusion, and irritability. These symptoms were amplified for students facing academic pressures. Cao et al. (2020) similarly identified heightened anxiety among university students in China, especially those concerned about their academic futures and employability—concerns that parallel the experiences of DMHS students in the present study.

Research focusing specifically on health sciences students shows even higher distress levels, owing to the clinical nature of their courses. Son et al. (2020) reported that nursing and medical students demonstrated increased anxiety related to the inability to attend clinical

rotations, which hindered their skill mastery and professional development. Aristovnik et al. (2020) further highlighted that stressors such as uncertain assessment formats, unstructured learning environments, and fatigue from prolonged screen time contributed to declining mental health. These findings resonate strongly with the uploaded document, where students reported pervasive hopelessness, difficulty relaxing, irritability, and fear—consistent with the DASS-based indicators of emotional distress. This aligns the current study with global evidence that psychological disruptions persisted even in the post-pandemic phase.

Depression among students surged during and after COVID-19 due to continuous disruptions in personal and academic routines. According to AlHadi and Alhuwaydi (2023), emotional numbness, decreased motivation, and loss of enjoyment were common depressive symptoms in post-pandemic student populations. For DMHS students, triggers for depression include: Fear of inadequate clinical training, concerns over academic performance and delayed graduation, reduced social interaction, family economic stress caused by the pandemic. The uploaded document reports that many students struggled with hopelessness, lack of positive emotions, and the inability to enjoy previously normal activities. These experiences are consistent with depression markers identified in DASS literature. Additionally, the lack of structured clinical exposure created cognitive dissonance—students understood theoretical concepts but doubted their readiness for real-world healthcare settings. This disconnect directly correlates with depressive symptoms like helplessness and low self-efficacy.

Anxiety Among Health Science Students, anxiety is one of the most widely documented psychological outcomes of the COVID-19 pandemic. In the context of health sciences education, anxiety stems from academic performance pressure, uncertainty about the future, and the fear of not meeting program expectations. Rahman et al. (2021) found that nearly half of medical and health sciences students doubted their clinical competency. The uploaded document reflects similar findings where 47% of students indicated concerns regarding clinical readiness. These competency anxieties increased emotional distress due to: missed laboratory sessions, suspension of clinical placements, reliance on simulations instead of real patients, examination uncertainties. Further, Mustapha et al. (2021) documented that students experiencing academic disruptions were more prone to anxiety disorders. Physiological indicators such as difficulty breathing, shaking, and panic—mentioned in your document—correspond with the anxiety domain measured through DASS scales. This validates the psychological assessment method used in the study and supports the decision to apply adapted DASS items.

Stress and Academic Pressure During and After COVID-19, stress levels among students escalated due to new demands associated with online learning, including increased screen time, complex digital tasks, and lack of structured academic routines. Wattick et al. (2023) explain that students under chronic uncertainty face heightened cortisol levels, leading to cognitive overload and academic burnout. Stress manifests as anger, irritability, difficulty concentrating, and declining academic motivation—all of which were reported in your uploaded project. Stress was especially pronounced among health science students because their assessments include practical components difficult to replicate virtually. They require mastery of clinical competencies before graduation. They experience pressure to perform at high academic standards. They often come from backgrounds with unequal access to digital resources. The current study corroborates these observations by identifying high stress levels connected to inability to cope with academic demands in a post-pandemic transition period.

Educational Challenges During Online and Hybrid Learning. The transition to online learning presented significant challenges for Malaysian students, including those at UniKL MESTECH. Research by Samsudin et al. (2021) found that 56% of health sciences students believed the lack of physical practical sessions negatively affected their skill development. Key educational challenges include lack of Clinical Exposure, health sciences programs rely on practical, hands-on training. When the pandemic suspended clinical training, students lost essential opportunities to practice skills, Confidence in performing clinical procedures declined, Competency-based learning outcomes were compromised. This aligns with your document's findings that the absence of clinical immersion increased students' anxiety and self-doubt.

Technological Barriers such as Digital inequalities significantly influenced online learning experiences. Literature indicates students with unstable internet struggled to attend classes (Nagib et al., 2023). Some lacked access to laptops or tablets and many relied on smartphones, which hindered complex tasks. These issues mirror your findings on socioeconomic disparities affecting academic continuity. Reduced Peer and Lecturer Interaction such as Academic isolation contributed to loneliness, frustration, and disengagement. Mustapha et al. (2021) note that limited communication during online classes reduces academic motivation and increases stress.

Assessment challenges also contributed significantly to students' psychological distress, as many reported difficulties understanding instructions, completing online assessments, managing time during remote examinations, and adapting to unfamiliar grading formats, all of which intensified stress levels throughout their learning experience. Socioeconomic inequalities further shaped academic outcomes during the pandemic, as students from lower-income households were disproportionately affected by poor internet connectivity, limited access to digital devices often shared among family members, inadequate home learning environments, and heightened financial pressures. These conditions, also reflected in the uploaded document, revealed that students unable to afford stable internet frequently felt academically disadvantaged, those living in crowded households struggled with concentration and frustration, and financial strain heightened anxiety when essential digital tools malfunctioned or required replacement. Such socioeconomic constraints continue to influence academic resilience in the post-pandemic period. The psychological and educational difficulties experienced by students can

be further understood through online learning theoretical frameworks such as Cognitive Load Theory, which explains the cognitive overload caused by excessive online tasks, simultaneous domestic responsibilities, and the rapid adoption of multiple digital platforms; Social Presence Theory, which highlights the emotional fatigue and loneliness resulting from limited face-to-face interaction; and Transformative Learning Theory, which describes the abrupt shift to self-directed learning that reshaped students' educational experiences while also inducing emotional strain. Despite extensive global research on the psychological impacts of COVID-19 on university students, significant gaps persist regarding the post-pandemic experiences of diploma-level health sciences students, particularly those in Malaysian technical institutions such as UniKL MESTECH, and the direct connections between psychological distress and the loss of clinical exposure—gaps that the present study addresses.

II. METHODOLOGY

This study employed a structured and systematic quantitative methodology to investigate the psychological effects of the post–COVID-19 period on Diploma in Medical and Health Sciences (DMHS) students, encompassing research design, population and sampling, instrumentation, data collection, validity and reliability procedures, ethical considerations, and analytical strategies. A cross-sectional quantitative design was selected to measure depression, anxiety, and stress at a single point in time, allowing descriptive and correlational analyses that capture the prevalence of psychological issues, their relationships with academic performance, and the educational challenges contributing to emotional distress. Using a descriptive approach enabled a detailed portrayal of students' lived academic and psychological experiences without manipulating variables, thereby generating actionable insights into emotional well-being, academic disruptions, online learning difficulties, and stressors associated with transitioning from remote to hybrid learning. The population consisted of DMHS students at UniKL MESTECH, chosen due to their exposure to substantial academic and clinical training disruptions, and convenience sampling was used to ensure feasibility and accessibility, targeting 100–120 students to achieve adequate statistical power. Data were gathered through a self-administered Google Forms questionnaire divided into four sections: demographic information, DASS-based psychological measures, academic-related challenges, and broader educational barriers. Demographic items contextualized student experiences, while psychological constructs were assessed using adapted DASS items recognized for strong internal consistency and discriminant validity. Academic questions addressed online learning disruptions, loss of clinical exposure, assessment challenges, and workload issues, whereas the educational challenges section examined technological barriers, internet stability, learning environments, and communication with lecturers. Content validity was ensured through expert review, construct validity was supported by adapting items from established literature, and reliability was confirmed using Cronbach's alpha and test–retest procedures. Data collection was conducted entirely online to accommodate students' varied locations and ensure safe, accessible participation, following steps such as pilot testing, dissemination through student groups, informed consent, and anonymous completion over two to three weeks. Descriptive statistics summarized distress levels and learning difficulties, while Pearson's correlation analyses identified relationships between psychological effects, academic performance, and educational challenges; narrative interpretation was added to contextualize quantitative findings using literature and theoretical frameworks. Ethical considerations were rigorously followed: participants were provided with clear information regarding the study's purpose, voluntary involvement, and right to withdraw; confidentiality and anonymity were preserved through secure data storage and the omission of personal identifiers; and ethical approval was granted by the UniKL MESTECH institutional review board, ensuring adherence to human research guidelines.

III. FINDINGS AND DISCUSSION

This chapter presents the findings of the study and provides an extensive discussion of the psychological effects experienced by Diploma in Medical and Health Sciences (DMHS) students in the post–COVID-19 period, focusing on the prevalence of psychological distress, the relationship between emotional well-being and academic performance, and the educational challenges that contributed to students' mental health outcomes; these findings are interpreted in relation to established literature to present a comprehensive picture of student experiences during the post-pandemic transition. Overall, the results demonstrate that psychological distress remains elevated among DMHS students despite the return to hybrid and physical learning environments, with adapted DASS measures indicating significant levels of depression, anxiety, and stress. Depression emerged as a major concern, with many students reporting an inability to experience positive emotions, persistent hopelessness, diminished enjoyment of daily activities, and declining motivation toward academic work. These symptoms suggest that the emotional impact of pandemic-related disruptions persists beyond the immediate crisis, largely due to unresolved academic gaps and loss of clinical practice opportunities, which weakened students' confidence in their practical abilities. Many students expressed fears that the interruption of laboratory and clinical sessions during the pandemic left them academically unprepared, contributing to ongoing emotional withdrawal and a sense of inadequacy—symptoms consistent with findings by AlHadi and Alhuwaydi (2023), who emphasized that disrupted academic routines significantly elevate depressive tendencies. Son et al. (2020) similarly noted that uncertainty about academic progression, reduced social engagement, and feelings of disconnection from campus life contribute to long-term depressive symptoms, and these patterns were evident in the uploaded dataset, where students frequently reported difficulty experiencing positivity or regaining enjoyment in learning. Anxiety levels were also considerably heightened, reflected through both cognitive and physiological indicators such as rapid heartbeat, breathlessness, excessive worry, shaking, and fear of academic failure. A notable pattern emerged in students' concerns regarding clinical competency: many feared entering internship or the workforce without sufficient hands-on experience due to suspended or shortened clinical placements during the pandemic. This concern is consistent with findings by Rahman et al. (2021), who reported that nearly half of Malaysian medical and health sciences students doubted their clinical readiness. Anxiety was further exacerbated by sudden changes in teaching formats, uncertainties regarding assessments, fear of infection during physical sessions, and high academic workload, aligning with evidence from Cao et al. (2020) and Brooks et al. (2020), who documented heightened anxiety driven by academic uncertainty, disrupted routines, and lingering health-related fears. Stress was the third major psychological domain that appeared significantly elevated, with students reporting difficulty calming down, emotional exhaustion, irritability, and overreaction to relatively minor academic challenges. Many expressed that they felt overwhelmed by the intensified pace of learning once physical classes resumed, particularly due to compressed clinical schedules designed to "catch up" on lost time, heavier workloads, and difficulties readjusting to structured academic routines after prolonged exposure to flexible online learning environments. These findings closely mirror Wattick et al. (2023), who observed that sudden increases in task demands following remote learning periods can substantially heighten stress and burnout among students. Correlational analysis further revealed strong links between psychological distress and academic performance. Depression was found to hinder concentration, reduce motivation, impair recall of previously learned content, and diminish confidence in both theoretical and clinical tasks, affecting students' overall academic consistency. This is consistent with Nagib et al. (2023), who reported that depression disrupts cognitive engagement, leading to procrastination, avoidance behaviors, and poorer academic outcomes. Anxiety also negatively impacted academic performance by triggering avoidance tendencies, exam-related panic, and increased cognitive load, which interfered with students' ability to absorb complex scientific material, take notes effectively, or participate in class discussions. Mustapha et al. (2021) similarly found that anxious students are more likely to experience cognitive interference that undermines learning. Stress was closely associated with time-management problems, difficulty processing complex information, reduced working memory, and challenges transitioning between online and physical coursework. Supporting this, Brooks et al. (2020) and Aristovnik et al. (2020) noted that chronic stress significantly affects academic achievement by impairing focus, memory, and academic self-efficacy. Educational challenges further contributed to psychological distress, with technological barriers emerging as a major theme. Students reported unstable internet connections, insufficient access to laptops, reliance on smartphones, and frequent technical failures, all of which generated frustration, academic disengagement, and increased anxiety—especially during assessments. These findings support those of Nagib et al. (2023), who emphasized that digital inequality intensifies emotional distress and academic disadvantage. The lack of clinical exposure had one of the most profound impacts on students' psychological well-being; many felt that their practical competency was compromised, leading to fears about employability, inadequacy during hands-on sessions, and heightened anxiety during clinical evaluations. These findings align with Samsudin et al. (2021), who found that over half of health sciences students believed online learning significantly hindered their skill development. Students also reported substantial online learning difficulties, including trouble understanding complex scientific content via virtual platforms, limited lecturer interaction, reduced peer collaboration, home distractions during synchronous sessions, and fatigue from prolonged screen time. Assessment challenges compounded these difficulties, as students experienced confusion due to unclear instructions, time constraints, technical malfunctions during online exams, and uncertainty about grading criteria, all of which heightened stress and anxiety. Taken together, the findings clearly demonstrate that psychological distress among DMHS students remains significantly elevated in the post-pandemic era, with depression, anxiety, and stress deeply intertwined with academic performance and shaped by a combination of technological barriers, loss of practical exposure, assessment-related challenges, and the broader difficulties associated with transitioning from online to hybrid learning environments, illustrating a multilayered and enduring impact on students' well-being and academic functioning.

IV. CONCLUSION

This study examined in considerable depth the psychological effects of the post–COVID-19 period on Diploma in Medical and Health Sciences (DMHS) students, focusing specifically on the interconnected dimensions of depression, anxiety, stress, and the educational challenges that shaped and intensified these outcomes, ultimately revealing that despite the resumption of academic activities in physical or hybrid formats, the psychological and academic consequences of the pandemic continue to exert a profound and lasting influence on students' learning journeys. The findings demonstrate that depression, anxiety, and stress remain highly prevalent among respondents, with depressive symptoms arising from the long-term disruption of academic routines, uncertainty surrounding competency development, and extended periods of isolation that restricted social interaction and reduced opportunities for peer support—factors that collectively weaken emotional stability and academic resilience. Anxiety levels, likewise, remained elevated and were rooted in persistent concerns about practical competency, fear of academic inadequacy, worries about future clinical readiness, and lingering apprehension associated with the pandemic environment, including fear of infection and disruptions to physical classes. Stress levels were also substantially high, driven by the intensified workload students encountered after returning to campus, the pressure of catching up on missed practical sessions, the rapid transition from flexible online modes back to structured in-person learning, and continued digital and technological difficulties that interfered with learning efficiency. A central conclusion of the study is the strong and multidimensional association between psychological distress and academic performance, where students experiencing higher emotional strain reported difficulties concentrating during lectures, reduced motivation to engage in learning tasks, diminished confidence in both theoretical and clinical domains, and a noticeable decline in academic consistency and performance. These psychological effects weaken cognitive functioning, reduce focus and retention, and erode students' sense of competence and self-efficacy, all of which are essential components of successful health sciences education. Educational challenges further compounded these psychological pressures, with technological disparities—such as unstable internet, insufficient access to digital devices, and limited availability of appropriate learning platforms—creating inequitable learning environments that disadvantaged students from socioeconomically challenged backgrounds. The abrupt and unplanned transition to online learning, followed by a shift to hybrid models, exposed significant gaps in digital pedagogy, lecturer-student engagement, communication clarity, and academic support structures. These gaps created confusion, uncertainty, and frustration, especially among students who struggled to adapt to new instructional formats without sufficient guidance or technological resources. Most critically, the lack of clinical and practical exposure during the height of the pandemic created enduring competency gaps, leaving students feeling unprepared and insecure about their readiness to perform in real healthcare settings, which remains a major source of anxiety and stress even in the post-pandemic era. In summary, the findings underscore the complex, enduring, and multifaceted nature of post-pandemic psychological effects among health sciences diploma students. They highlight the urgency for educational institutions to adopt holistic, student-centered, and forward-looking strategies that simultaneously address academic, emotional, technological, and competency-related challenges—strategies that recognize the long-term impacts of the pandemic rather than treating them as temporary disturbances. Based on the results, several comprehensive recommendations are proposed. Mental health support systems should be strengthened through regular psychological screening using validated instruments, accessible counseling services, trained mentor-led peer-support groups, and workshops on stress management, emotional regulation, and resilience building, supported by proactive outreach targeting students with high workloads and clinical responsibilities. The quality of online and hybrid learning should be improved through enhanced lecturer training in digital pedagogy, streamlined and user-friendly learning management systems, and greater availability of recorded lectures, flexible resources, and multimedia instructional materials that accommodate diverse learning needs and internet access limitations. Addressing digital inequalities is critical and may involve providing loanable digital devices, offering subsidized internet packages, increasing on-campus Wi-Fi availability, and creating safe study spaces for students with limited home resources. Reinforcing clinical and practical training is essential for health sciences students and should include additional clinical hours, expanded simulation-based learning, virtual laboratory sessions, and stronger partnerships with healthcare facilities to broaden clinical placement opportunities and help students rebuild confidence in their practical competencies. Academic flexibility and communication must be prioritized through the establishment of clear assessment guidelines, transparent expectations, open communication channels, and flexible submission timelines where appropriate, to reduce academic stress and support continuous engagement. Finally, fostering supportive and collaborative learning environments through small-group tutorials, peer-assisted learning programs, and academic support centers is essential to help students rebuild social connections, strengthen motivation, and reduce feelings of isolation. In conclusion, the psychological effects of COVID-19 continue to shape students' academic and personal lives long after the formal return to normal learning conditions, particularly for health sciences students whose education is deeply intertwined with clinical skills, professional readiness, and high academic expectations. Addressing these intertwined psychological and educational challenges is crucial not only for supporting students' current academic success but also for ensuring that they develop into competent, confident, and resilient future healthcare professionals. Thus, post-pandemic educational recovery must extend beyond restoring physical classroom activities and must prioritize the emotional, technological, and academic realities students now face. By adopting comprehensive institutional interventions and student-centered policies, higher education institutions can promote holistic student development, strengthen resilience, enhance academic continuity, and contribute to a more equitable and supportive post-pandemic educational landscape.

ACKNOWLEDGMENT

I wish to express my deepest appreciation to Universiti Kuala Lumpur, Institute of Medical Science Technology (UniKL MESTECH), for providing the institutional support and academic environment that enabled the successful completion of this research. My sincere gratitude is extended to all students of the Diploma in Medical and Health Sciences (DMHS) program who participated in this study; their willingness to share their post–COVID-19 learning experiences made this work possible. I am profoundly grateful to the Faculty of Applied Sciences (FTAS), Open University Malaysia (OUM), for its continuous encouragement, administrative assistance, and academic guidance throughout the research process. I would also like to acknowledge the meaningful contributions of academic experts and lecturers who offered constructive feedback during the development and validation of the research instruments, thereby enhancing the quality and rigor of this study. My heartfelt thanks go to my co-authors—AP. Dr. Alias Bin Mahmud, Azmi Bin Ab Manan, Zuraida Bt Jorkasi, Siti Maisarah, and Mohd Azroy—for their collaboration, insights, and unwavering commitment to the successful completion of this manuscript. I further acknowledge my colleagues and peers who provided technical support, professional observations, and valuable critique during the preparation of this work. Finally, I extend profound gratitude to my family for their constant patience, encouragement, and moral support, which served as a continuous source of strength throughout this research journey.

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