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PSYCHOLOGICAL WELL-BEING AND POSTGRADUATE STUDENTS: RECOMMENDATIONS FOR HIGHER EDUCATION IN MALAYSIA

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Abstract:

In recent years, Malaysia has seen a significant increase in enrolment in postgraduate programs as part of the government's efforts to advance into a developed nation status by developing a skilled talent pool of scientists and researchers. However, despite the increasing trend of mental health issues among youths in Malaysia, the psychological well-being of postgraduate students has received limited attention in research and literature. This review paper provides a contemporary overview of the state of mental health in Malaysia to contextualise the psychological challenges faced by students in Malaysian universities. The article also highlights the lack of research on the psychological well-being of postgraduate students in Malaysia, which has led to a limited understanding of how this population is affected by their well-being. The article also discusses evidence from previous studies to illustrate how different aspects of psychological well-being are essential for not only academic success but also physical and mental health for postgraduate students. The article argues that more research involving a wider range of methods is necessary to gain a deeper understanding of the mechanisms underlying the psychological well-being of the wider postgraduate student population in Malaysia. Additionally, the paper discusses several implications for various stakeholders in higher education institutions to take appropriate action in promoting a greater sense of psychological well-being among postgraduate students on campus.

Keywords:

Psychological Well-Being, Postgraduate Students, Higher Education, Implications, Malaysia

Introduction

Enrolment in postgraduate programmes at higher education institutions in Malaysia has significantly risen in recent years as part of efforts to reform the higher education system and retain local talent (Azman et al., 2016; Ministry of Education Malaysia, 2015, 2018). To address the demands of the current global economy and the Fourth Industrial Revolution, the Ministry of Higher Education (2011) has implemented the MyBrain15 scholarship programme with the goal of producing 60,000 PhD graduates by 2023 to build a highly skilled workforce. Postgraduate students are considered as a vital source of skilled human capital, in which the Ministry anticipates that these individuals would serve as future researchers and scientists in fulfilling Malaysia's vision to transform into a knowledge-based economy and high-income nation (Azman et al., 2016; Symaco & Wan, 2017).

Nevertheless, despite large investments in funding and financing schemes for postgraduate education, it does not guarantee the development of a skilled workforce that leads to tangible economic growth if the psychological well-being of postgraduate students is not given proper attention. It has been widely acknowledged within the academic community that postgraduate students frequently encounter a range of psychological difficulties as they navigate the various challenges present during their candidature (Barry et al., 2018; Pyhältö et al., 2012). However, being overwhelmed by poor mental health not only hinders their candidature progress to graduate on time, but also further deteriorates their physical, emotional, and psychological well-being (Baydarova et al., 2021; Beasy et al., 2019; Castelló et al., 2017; Schmidt & Hansson, 2018). Hence, a healthy sense of psychological well-being is not only essential for postgraduate students' success but also for fulfilling Malaysia's aspiration to become an economically advanced nation.

The overall purpose of this article is to highlight the urgent need to examine the psychological well-being of postgraduate students as well as to address its implications for future studies and higher education institutions within the context of Malaysia. Firstly, a brief overview on the state of mental health in Malaysia is introduced to contextualise the prevalence of psychological issues faced by students in Malaysian universities. Then, recent studies on the psychological well-being of university students in Malaysia are reviewed to highlight that there is still a gap in understanding the psychological well-being among the postgraduate student population today. The importance of psychological well-being is also discussed in regard to its relevance for postgraduate students to achieve a wide range of candidature-related outcomes while maintaining their physical and mental health. Finally, the remaining section of this article discusses the implications for future research and for various stakeholders within the higher education institutions in Malaysia.

The State of Mental Health of University Students in Malaysia: An Overview

Mental health issues are a global health problem that affects almost one billion people worldwide (World Health Organisation, 2022). In Malaysia, the rate of mental health problems among adults and adolescents has been reported to be increasing in recent decades (Raaj et al.,

2021). According to the latest National Health and Morbidity Survey (NHMS) conducted in 2019 by the Institute for Public Health (IPH), it was reported that the prevalence of depression among Malaysian adults has increased from 1.8% to 2.3% within the span of nine years, thus affecting the quality of life for almost half a million of the entire Malaysian population (IPH, 2020). Chua (2020) reports that poor mental health conditions among individuals can result in increased absenteeism and decreased productivity, which can impose significant economic costs on society. Specifically, it was estimated that these costs amounted to approximately RM14.16 billion in the workplace in 2018 (Chua, 2020).

Based on the findings of the NHMS (IPH, 2015, 2020), adolescents and young adults in Malaysia are particularly susceptible to poor mental health and psychological dysfunction, although this issue does affect people across different age groups. Thus, it is not surprising that many university students in Malaysia are also experiencing some degree of psychological distress, especially during the COVID-19 pandemic which has disrupted the progress of postgraduate students' studies and research worldwide (Naumann et al., 2022, Pyhältö et al., 2022). For example, Woon et al. (2021) surveyed 316 university students from three Malaysian public universities, in which they found that the rates of depression, anxiety, and stress were found to be 36.4%, 36.7%, and 42.4% respectively, following the first COVID-19 related lockdown in 2020. In another study, Lee et al. (2022) found that 41% of 341 university students in Kuala Lumpur were experiencing mild to moderate symptoms of anxiety during the third wave of the COVID-19 infection in Malaysia. Meanwhile, Zhuang and Jenatabadi (2023) surveyed the levels of depression, anxiety, and stress of 691 music and 871 non-music tertiary students across 15 universities in Malaysia during the first half of the year 2022. Music students with medium to high levels of depression, anxiety, and stress had a prevalence of 61%, 59.3%, and 63.5% respectively, whereas non-music students had a higher prevalence of 82.5%, 74.5%, and 82.1% respectively for those same conditions (Zhuang & Jenatabadi, 2023).

Only a handful of studies in Malaysia have been conducted on the psychological well-being of postgraduate students as compared to undergraduate students, thus leaving much unknown about the psychological well-being of postgraduate students. Panahi et al. (2013) conducted a cross-sectional study on 534 postgraduate students from a public university in Malaysia. Using Ryff's (1989) Psychological Well-being Scale to measure psychological well-being, they found that the overall psychological well-being of postgraduate students who were in the engineering faculty, within the age of 19 and 23, currently in their second semester, and male were significantly lower than those who were in the science faculty, within the age of 34 and 38, currently in their first semester, and female (Panahi et al., 2013). Another study by Roslan et al. (2017) also used Ryff's (1989) Psychological Well-being Scale to measure the psychological well-being of 192 Master of Education students in Malaysia. They found that these students had high levels of psychological well-being, with those who were 41 years old and older having the highest level compared to the younger age groups. Similarly, recent studies conducted by Ch'ng et al. (2022), Yusli et al., (2021), and Zainuddin and Kutty (2022) also reported above average mean scores of flourishing and psychological well-being among postgraduate students in Malaysia.

Meanwhile, other studies have reported that postgraduate students in Malaysia experience comparable levels of stress and other mental health issues as undergraduate students. This can pose a problem if their psychological well-being is not taken seriously, and if there is a lack of understanding and practical solutions to improve their condition. Vasugi and Che Hassan's

(2019) study focused on the prevalence of depression, anxiety, and stress among 179 postgraduate students from a faculty within a public university. They found that the majority of the respondents were experiencing moderate levels of depression (37%), anxiety (29.1%), and stress (60.9%). Besides that, another study conducted by Ahmed et al. (2020) surveyed work-related stress levels of 140 postgraduate students from two academic emergency medicine centres in Malaysia. Their results revealed that 49.3% of the respondents were affected by high levels of stress that may require psychiatric care and attention. In addition, Ahmed et al. (2020) also found that higher levels of stress affected younger postgraduate students (aged 30-35) more than older students (aged 36-40) in their study.

The Importance of Psychological Well-Being for Postgraduate Students

The concept of well-being can be generally understood as a reflection of an individual's "optimal psychological functioning and experience" (Ryan & Deci, 2001, p. 142), although it is important to acknowledge that multiple perspectives of well-being do exist across different fields due to the complexity of views regarding the nature of well-being (Delle Fave, 2014, Tov, 2018). The study of psychological well-being in psychology is heavily influenced by the philosophical perspective of eudaimonia that is often associated with Aristotle's 'Nichomachean Ethics' (Heintzelman, 2018). One of the influential contemporary eudaimonic perspective of well-being is Ryff's (2014) multidimensional model of psychological well-being, in which she suggests that an individual's psychological well-being is comprised of six core dimensions: (1) autonomy, (2) environmental mastery, (3) personal growth, (4) positive relations with others, (5) purpose in life, and (6) self-acceptance. Another eudaimonic approach to psychological well-being includes a broader range of concepts such as Diener et al.'s (2010) conceptualisation of psychological flourishing, which includes the following eight aspects: (1) supportive and rewarding relationships; (2) contributing to the happiness of others; (3) being respected by others; (4) having meaning and purpose in life; (5) being engaged in one's activities; (6) having self-acceptance; (7) having optimism; as well as (8) feeling competent and capable in activities that are considered important to the self (Diener et al., 2010).

Research has found that various aspects of psychological well-being can affect academic performance and daily activity for both undergraduate and postgraduate students (Sharp & Theiler, 2018, Wyatt & Oswalt, 2013). One of the ways in which psychological well-being can promote or hinder academic success is related to postgraduate students' sense of efficacy as a competent researcher in conducting academic and research work. This relates to the environmental mastery dimension of Ryff's (2014) psychological well-being, which refers to the extent in which individuals perceive how well they could manage and control their environment. Over the years, many qualitative studies have reported that doctoral students' perceived lack of efficacy to conduct research effectively contributed to their disengaging experiences in academia (Barry et al. 2018; Vekkaila et al., 2013, 2018). When novice researchers feel inadequate about their own abilities, they may become more demotivated and less likely to continue their work when faced with difficulties in their work (Vekkaila et al., 2013, 2018). Moreover, other research has revealed that postgraduate students were more inclined to abandon their studies when they perceive a lack of personal agency and are unable to effectively address challenges encountered in their work, leading to a perception of having to face insurmountable obstacles in completing their candidature (Castelló et al., 2017; Devos et al., 2017; Litalien & Guay, 2015; Virtanen et al., 2017). In contrast, Naumann et al. (2022) reported in their study that greater self-efficacy is linked to lower burnout scores among

doctoral researchers, thus highlighting the importance for doctoral researchers to be confident in their own research abilities.

Feelings of inadequacy could also lead to the manifestation of imposter syndrome among postgraduate students, who then become fearful of being exposed as a fraud among their peers (Byrom et al., 2020; Fernandez et al., 2019; Lau, 2019; Paolucci et al., 2021). The imposter syndrome has a destructive effect on postgraduate students' self-worth and confidence in their capabilities (Chakraverty, 2019, 2020; Hands, 2018), which occurs when they perceive themselves as less competent in comparison to their peers, despite possessing the relevant skills and achievements (Clance & Imes, 1978). The erosion of confidence in one's abilities to manage academic workload and conduct research can lead to disengagement and intentions to leave academia. In a study by Barry et al. (2018), a combination of quantitative and qualitative methods was employed to investigate the psychological health profiles of 81 doctoral students and to explore how their doctoral experiences, including progress, challenges, and psychological distress, impacted their PhD progress. Results from the qualitative data, obtained through open-ended questions, revealed that stress experiences had a detrimental effect on participants' confidence, leading them to feel incompetent in completing their work (Barry et al., 2018). Specifically, some participants reported that stress impaired their ability to problem-solve, understand and apply complex theories in their work, as well as express their thoughts in writing (Barry et al., 2018).

Postgraduate students tend to have a higher likelihood of successfully completing their candidature when they develop a sense of ownership and investment in their work and perceive their research to be meaningful and worthwhile. This relates to the purpose of life dimension of Ryff's (2014) psychological well-being, which refers to the extent in which individuals perceive that their lives contain a sense of meaning, purpose, and direction. Devos et al. (2017) interviewed 21 former doctoral students and discovered a prominent theme that distinguished those who successfully completed their programme from those who did not, which was participants' perception of themselves progressing forward through their research work. In particular, the study found that participants who reported a sense that their research was meaningful and had clear direction as well as a sense of ownership and inspiration regarding the potential impact of their findings were more likely to complete their candidature (Devos et al., 2017). In comparison to PhD students who completed their research and graduated, several studies have found that postgraduate students who did not complete their PhD studies perceived that their PhD project lacked coherence and meaningful purposes to elicit any sense of intellectual curiosity, which ultimately leading to their decision to discontinue their project (Castelló et al., 2017; Devos et al., 2017; Virtanen et al., 2017).

Aside from their research work, other studies have found that it was also important for postgraduate students to feel like they are included as part of their scholarly community. This relates to the positive relations with others dimension of Ryff's (2014) psychological well-being, which refers to the extent in which individuals perceive that they have a warm and satisfying relationship with others in their social circle. In addition to fostering positive relationships with one's supervisors and peers, Morris (2021) highlighted that it is also equally important for postgraduate students to have access to a conducive physical environment and a supportive work culture so that they can feel belonged within their academic community. A recent study conducted by van Rooij et al. (2021) on a sample of 839 PhD candidates found that participants who felt a greater sense of belonging to the department reported being more

satisfied with their PhD trajectory. In contrast, those who faced difficulties in socialising and felt alienated within their scholarly community were more likely to consider quitting their PhD programme (Castelló et al., 2017; Litalien & Guay, 2015; van Rooij et al., 2021; Virtanen et al., 2017).

Socio-emotional support provided within and beyond the academic community has also been identified as an important factor for various student-related outcomes. Research has established that a higher quality of the supervisor-supervisee relationship is positively correlated with postgraduate students' success in defending their research work (Zhuchkova et al., 2022), well-being (Jackman & Sisson, 2022), and decreased intentions of dropping out (Hunter & Devine, 2016; Kis et al., 2022; van Rooij et al., 2021). Several recent studies have also reported that participating in a PhD support group or having formal and informal peer-mentoring experiences helps improve postgraduate students' subjective well-being over time by reducing their sense of isolation and anxiety while increasing their motivation and confidence in completing their PhD candidature within the given timeframe (Homer et al., 2021; Jackman et al., 2021; Panayidou & Priest, 2021, Paolucci et al., 2021). A study by McCray and Joseph-Richard (2020) interviewed eleven doctoral students and found that the successful completion of doctoral students' candidature was not solely dependent on the coping ability of the individual student and the intellectual support offered by their supervisors. In particular, they further discovered that the doctoral students' family and social network along with their institutional contexts were also important agents for providing emotional, academic, and other infrastructure support that were essential for fulfilling their academic needs (McCray & Joseph-Richard, 2020). In a recent longitudinal study, Gooding et al. (2023) investigated the moderating effect of social support resilience on the association between negative perceptions of academic challenges and anxiety among postgraduate researchers. The findings revealed a significant positive relationship between academic challenges and anxiety, but only when social support resilience was low to medium. Conversely, no significant relationship was observed when social support resilience was high. This implies that social support resilience plays a crucial role in mitigating the impact of perceived academic challenges on postgraduate researchers' anxiety levels.

Additionally, postgraduate students who become psychologically distressed during their candidature are more likely to consider discontinuing their academic programme (Devos et al., 2017; Nagy et al., 2019; Virtanen et al., 2017; Wollast et al., 2023). Few studies have reported that doctoral students who reported intentions to withdraw from their studies exhibited higher levels of anxiety, stress, and emotional exhaustion when compared to those who did not express such intentions (González-Betancor & Dorta-González, 2020; Hunter & Devine, 2016; Nagy et al., 2019). According to Gin et al. (2021) who interviewed fifty PhD students, they found that graduate students' experiences of depression affected their research progress by lowering their motivation and productivity, increases their feelings of self-doubt and self-critical behaviours, as well as causes them to become more distracted and unfocused in their research work.

Furthermore, poor mental health can also negatively affect the physical health of postgraduate students as they tend to engage in excessive consumption of food, alcohol, tobacco, and drugs as means to cope with their stressful academic lives and current mental health condition (Barry et al., 2018; Garcia-Williams et al., 2014; Sharp & Theiler, 2018; Wyatt & Oswald, 2013). According to Garcia-Williams et al. (2014), students with low quality of mental health are not

only more likely to endorse suicidal thoughts and self-harming behaviours, but also experienced greater frequency of negative emotions such as anxiety, loneliness, anger, hopelessness, and feeling out of control. A study by Gallea et al. (2021) found that postgraduate students who experience symptoms of anxiety, depression, and burnout are more likely to have an imbalance in cortisol secretion, which can increase their risk of various health conditions such as cancer, obesity, and cardiovascular diseases.

The extant literature attests to the high prevalence of stress and anxiety among university students, with postgraduate students being particularly susceptible to such negative emotions during their candidature. However, a lack of adequate support can exacerbate these feelings, thus leading to the development of maladaptive thoughts and behaviours that can impede academic progress and negatively impact postgraduate students' physical and mental health. It is therefore imperative that postgraduate students cultivate psychological well-being and develop resilience and self-efficacy in order to persevere through difficulties and achieve successful completion of their studies.

Recommendations for Research and Practice in the Malaysian Context

Recommendations for Future Research on Postgraduate Students' Psychological Well-being

Given the significant impact of mental health issues have on the productivity of postgraduate students and the potential for economic growth in Malaysia, it is crucial to prioritise research on the psychological well-being of postgraduate students in order to gain a better understanding of how to effectively manage and cultivate their psychological well-being. Despite the importance of understanding the state of psychological well-being among postgraduate students in Malaysia, there is a limited amount of research on this topic, particularly within the context of eudaimonic well-being. As discussed earlier, only four studies (Panahi et al. 2013; Roslan et al., 2017; Yusli et al., (2021); Zainuddin & Kutty (2022)) in the recent decade have examined the psychological well-being of postgraduate students with the use of Ryff's (1989) Psychological Well-being Scale, whereas the remaining two studies (Ahmed et al., 2020; Vasugi & Che Hassan, 2019) focused on their levels of depression, anxiety, and stress.

Thus, there is an urgent need to conduct more research that examines the psychological well-being of Malaysian postgraduate students to gain a more comprehensive understanding of the state of their mental health within the multicultural context of Malaysia. It is worth investigating whether cultural variations might influence how postgraduate students perceive and handle difficulties in their academic and research pursuits, as well as their methods of coping with psychological distress and protecting their psychological well-being. Given that there are multiple perspectives of well-being (Delle Fave, 2014; Tov, 2018), it is also important for future researchers to be explicit with their chosen theoretical framework and methods in measuring psychological well-being to ensure replicability and generalisability of the research findings.

Secondly, previous studies on postgraduate students have been limited in their generalisability due to the recruitment of participants solely from a single higher education institution instead of from a diverse range of institutions and geographical regions throughout Malaysia. Hence, future research should explore the extent in which findings from previous studies can be generalised to a wider student population by increasing the sample size. To achieve this, future

studies should prioritise obtaining a representative sample of the postgraduate student population by utilising various probability sampling methods such as cluster sampling, stratified random sampling, or systematic sampling. Additionally, it is recommended that questionnaires should be administered in multiple languages, including those spoken by major ethnic groups in Malaysia. By providing participants with the option to respond in their preferred language, greater participation from a more diverse population of postgraduate students can be facilitated and the internal validity of the research can be enhanced through the collection of more accurate responses.

Furthermore, the use of cross-sectional research design in previous studies to measure psychological well-being does not allow for causal inference to be made as data were only collected at a single point of time. Thus, future studies should make use of longitudinal research designs, which involve the examination of a group of postgraduate students over an extended period of time. Specifically, researchers should track incoming postgraduate students and examine how changes in their psychological well-being throughout their candidacy are influenced by both personal and contextual factors (such as the COVID-19 pandemic) as well as its effects on academic-related outcomes. In addition, future studies should consider employing qualitative and mixed methods to obtain insights on the lived experiences of postgraduate students' candidature and to identify the ways in which their psychological well-being has contributed to their academic and research progress.

Recommendations for Higher Education Institutions

Postgraduate students are a vital source of skilled human capital for Malaysia's future economic growth to become a developed nation status (Azman et al., 2016; Symaco & Wan, 2017). Therefore, higher education institutions have an important role in this nation-building process by providing evidence-based services that sufficiently promote and support the psychological well-being of postgraduate students even after the COVID-19 pandemic has impacted the lives of every individual across the globe (Kowal et al., 2020; Lieberoth et al., 2021).

Previous studies suggest that postgraduate students' sense of efficacy as a novice researcher and perceived meaningfulness in their work are important for them to be motivated and persistent throughout their research work (Barry et al., 2018; Vekkaila et al., 2013, 2018). Hence, it is the responsibility of faculty members to organise academic skills workshops and offer individual consultation sessions that equip postgraduate students with skills and resources relevant for their work. In order to facilitate postgraduate students' ability to manage their academic and research workloads in a manner that does not compromise their psychological well-being, it is necessary for faculty members to actively engage with postgraduate students through the regular use of focus group sessions. This would allow for a deeper understanding of the academic needs and issues faced by postgraduate students and for the implementation of appropriate services to cater for their needs.

A wide body of research has also established that having a sense of belonging within one's scholarly community is linked to their intentions of withdrawing from their candidature (Castelló et al., 2017; van Rooij et al., 2021; Virtanen et al., 2017). Given that postgraduate studies can be daunting for newly enrolled students, faculty administrators and postgraduate student associations should prioritise in creating a safe and welcoming environment on campus to ease the transition of postgraduate students into their new academic setting. This can be

facilitated by organising weekly on-site or virtual social events to foster a sense of belonging among postgraduate students for them to socialise and seek support in a casual and non-academic setting. This is especially important in the Malaysian context when faculty administrators and supervisors have to work with students from varying cultures who may have different sets of expectations and communication styles when expressing their personal thoughts and engaging in intellectual discussion. Another recommendation involves incentivising academic supervisors to update themselves on the best practices in supervision through attending professional development courses, thus allowing them to provide appropriate psychological support for their students' well-being while effectively managing their respective supervisor-supervisee relationships.

Additionally, universities must consistently assess and improve the quality of their existing mental health services to ensure that the psychological needs of postgraduate students can be sufficiently supported without any barriers, including situations when stricter COVID-19 restrictions are being implemented nation-wide. To better serve the needs of postgraduate students, it is recommended that mental health professionals on campus participate in ongoing professional development and receive training on contemporary approaches for providing effective counselling and intervention strategies for postgraduate students with diverse issues. Additionally, workshops focusing on improving mental health should be regularly organised and promoted on and off-campus as a preventative mental health strategy to empower postgraduate students with the psychological strength and skills to manage the challenges associated with their candidature and personal life.

Conclusion

For Malaysia to confidently compete on the global stage and become on a par with other developed nations in the era of the Fourth Industrial Revolution, the government should not simply rely on allocating scholarships to produce a talent pool of postgraduate degree holders to achieve its goals without considering their psychological needs. However, the lack of studies examining the psychological well-being of postgraduate students in Malaysia remains a concern considering that there has been a rising trend in mental health issues among Malaysian youths. Given that a large proportion of postgraduate students have experienced some degree of psychological distress during their candidacy, it is essential for them to cultivate a healthy sense of psychological well-being that would empower them to persist through challenging moments of academia and successfully complete their candidature. In light of the recent COVID-19 pandemic that has impacted the lives of every individual across the globe, there is a greater need for researchers to conduct further studies to gain a deeper understanding on the factors affecting the psychological well-being of the wider postgraduate student population in Malaysia and its influence on outcomes importance for their candidature. While postgraduate students are responsible for keeping their own candidature progress and psychological well-being on track, it also requires the combined efforts of various stakeholders involved in higher education institutions to provide the necessary support systems that ensure a greater sense of psychological well-being can be cultivated among postgraduate students on campus. With these considerations in mind, acknowledging that there are some gaps in understanding and addressing the psychological needs of postgraduate students in Malaysia would be the first important step towards establishing and developing a flourishing talent pool of human capital for Malaysia's future development.

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