RADIANT MINDS: ASSESSING THE GRATITUDE BLUEPRINT INTERVENTION MODULE (GBIM) FROM POSITIVE PSYCHOLOGY TO ALLEVIATE DEPRESSION, ANXIETY, AND STRESS AMONG PRIMARY SCHOOL STUDENTS

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ABSTRACT

The rising prevalence of mental health issues like depression, anxiety, and stress in children underscores the urgent need for effective early interventions to support their well-being and social development. Hence, this study evaluates the effectiveness of the Gratitude Blueprint Intervention Module (GBIM), grounded in positive psychology principles. The quasi-experimental study involved 16 students aged 12 and employed pretest-posttest assessments by utilizing the short version of the Depression Anxiety Stress Scale-21. Results indicate a significant reduction in depression, anxiety, and stress scores post-GBIM activities, suggesting its potential as a valuable tool for guidance and counseling teachers. The study underscores the importance of incorporating theory-driven interventions into schools to address mental health challenges among students.

Keywords: Gratitude Blueprint Intervention Module (MIGB), Depression, Anxiety, Stress, Positive Psychology



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INTRODUCTION

Mental health is a vital aspect of human well-being, encompassing an individual's ability to understand and harness their potential to effectively cope with life's challenges (Ganaprakasam et al., 2023). It is a crucial element that contributes to social functioning and community well-being (Binagwaho & Senga, 2021). In Malaysia, approximately 4.2 million adolescents between the ages of 16 and 19 are reported to experience mental health issues (Kamarulzaman & Jodi, 2018). The concept of mental health was officially introduced by the World Health Organization in 1948 in London. It originated from the mental hygiene movement initiated in the United States in 1908, aiming to enhance the care and quality of life for individuals facing mental health issues (Walton & Wilson, 2018). A conference with the theme "Mental Health and World Citizenship" further refined the definition of mental health, influenced by the sentiments of post-war populations (Bertolote, 2008). Subsequently, numerous studies have explored the essence and benefits of understanding mental health across different contexts.

The increasing number of mental health issues among children and adolescents has led to a surge in mental health research. Globally, around 10 to 20% of children and adolescents struggle with mental health difficulties (WHO, 2017). Numerous global studies have explored factors detrimental to mental health (Zhang et al., 2019; Verduyn et al., 2017), aiming to mitigate the prevalence of mental health issues. In the landscape of primary education, the emotional well-being of students stands as a critical determinant of their overall development and academic success. The prevalence of depression, anxiety, and stress among primary school students in Malaysia has garnered increasing attention, as confirmed by multiple studies and national surveys. Notably, research conducted by Ibrahim et al. (2022) highlighted a significant finding, revealing that 21.5% of 461 participating students exhibited symptoms of depression. Complementing this, Ganaprakasam et al. (2021) delved into anxiety disorders, reporting that 60.2% of 109 primary school students indicated the presence of disorders such as social anxiety disorder (SAD) and generalized anxiety disorder (GAD). These findings align with reports from local news portals, including ("Over 102,700", 2021), which shed light on over 102,700 primary five and six students experiencing depressive symptoms. Furthermore, the National Health and Morbidity Survey (NHMS, 2019) uncovered that a staggering 424,000 children in Malaysia were grappling with mental health problems. In concert, these studies and reports collectively emphasize the urgent need for targeted interventions and comprehensive mental health support systems within the educational framework, underscoring the imperative of addressing the mental well-being of primary school students for a resilient and flourishing future generation in Malaysia.

Despite numerous studies highlighting the heightened prevalence of depression, anxiety, and stress among primary school students (Lee et al., 2023; Ishak et al., 2020; Latiff et al., 2016), there is a noticeable dearth of research specifically addressing effective interventions in this population (Ganaprakasam et al., 2023; Dapari et al., 2022; Cheah et al., 2021; Ganaprakasam & Selvaraja, 2020). The absence of targeted interventions is concerning, considering the potential long-term impact of untreated mental health issues on the social-emotional wellbeing of these young individuals.

Gratitude is a complex and multifaceted emotion that involves recognizing and appreciating the positive aspects of life, as well as acknowledging the role of others or external factors in one's wellbeing (Sansone & Sansone, 2010). The precise mechanism linking gratitude to well-being remains unclear (Emmons and Mishra, 2011). However, the exploration initiated by Emmons and McCullough (2003) into the impact of gratitude interventions on well-being yielded highly positive results, inspiring subsequent studies in this field (Davis et al., 2016). Several studies has identified the positive association between the practice of gratitude and psychological wellbeing such as reduction

of perceived stress and depression (Komase et al., 2021), Cunha et al., 2019). Most of the published studies conducted in European countries (Cunha et al., 2019) with different socio-cultural perspectives. Given the limited number of studies on gratitude interventions (Cunha et al., 2019) and the aim to contribute to global research on positive psychology-based interventions within diverse cultural contexts, the present study delves into the evaluation of the Gratitude Blueprint Intervention Module (MIGB), a novel intervention grounded in positive psychology theory, with the specific aim of alleviating depression, anxiety, and stress among primary school students in the Kulim District, Kedah.

This research endeavors to contribute to the existing knowledge base in the field by introducing and evaluating the Gratitude Blueprint Intervention Module (MIGB) as a novel approach grounded in positive psychology theory. While positive psychology interventions have shown promise in various contexts (Stemmler et al.,2021; Tejada-Gallardo et al., 2020; Bolier et al., 2013), there is a paucity of research focusing on the application of such interventions tailored to the emotional needs of primary school students. The MIGB, with its multifaceted sub-modules, presents a unique contribution to the pedagogical landscape by addressing the specific challenges of depression, anxiety, and stress among young learners.

The significance of this study lies in its potential to bridge the gap between theoretical insights from positive psychology and practical applications in the educational setting. By introducing an empirically validated intervention such as the MIGB, educators, counselors, and policymakers gain access to a structured tool that can effectively address the emotional well-being of primary school students. This significance extends beyond academic realms, impacting the social and emotional fabric of the school environment.

STUDY OBJECTIVES

To assess the effectiveness of Gratitude Blueprint Intervention Module (MIGB) towards alleviating depression, anxiety, and stress among primary school students.

LITERATURE REVIEW

Introduction to Positive Psychology in Education

Applying positive psychology principles in primary education brings about a transformative shift, prioritizing the overall well-being and holistic development of students beyond traditional academic metrics. This approach focuses on nurturing strengths, positive emotions, and character traits to empower students in overcoming challenges and developing resilience (Benoit & Gabola, 2021). The primary school phase is critical for emotional, cognitive, and social growth, with emotional wellbeing intricately linked to academic success (Platt et al., 2020). Creating a positive learning environment fosters both academic and emotional growth, positively influencing students' engagement, concentration, and overall achievement (Samavi, 2022).

Moreover, emotional well-being extends its impact into social realms, influencing peer interactions and relationships. Prioritizing emotional support contributes to a positive and inclusive school culture, enhancing the overall social fabric (Platt et al., 2022). Additionally, fostering emotional wellbeing equips students with resilience and coping mechanisms, crucial for navigating challenges and

building confidence for future academic and life hurdles. Proactively addressing emotional wellbeing acts as a preventive measure against mental health issues, creating a supportive environment that mitigates the risk of conditions like anxiety and depression (Beck et al., 2024).

Furthermore, the cultivation of emotional well-being enhances the overall school climate, promoting a sense of belonging (Moeller et al., 2020), and intrinsic motivation (González Olivares et al., 2020) among students and educators alike. This positive atmosphere contributes to a collaborative and thriving educational community, shaping the overall educational experience. Ultimately, fostering emotional well-being in primary schools is not just about immediate academic outcomes; it lays the foundation for life satisfaction and future success.

Theoretical Framework: Positive Psychology and Gratitude

Positive psychology serves as the theoretical foundation underpinning interventions designed to enhance the emotional well-being of individuals. Rooted in the works of psychologists such as Seligman and Csikszentmihalyi (2000), positive psychology shifts the focus from pathology and dysfunction to the exploration of strengths, virtues, and factors contributing to a fulfilling life. Its central tenets revolve around the promotion of positive emotions, engagement, relationships, meaning, and accomplishments (Duan et al., 2022). In the context of primary school students, positive psychology provides a framework that accentuates the cultivation of strengths and positive emotions as essential components of their psychological development.

Within the positive psychology framework, gratitude emerges as a cornerstone for fostering emotional well-being (Bolier et al., 2013). Gratitude, defined as the appreciation for and acknowledgment of the positive aspects of one's life, aligns seamlessly with the principles of positive psychology (Komase et al., 2021). The literature on positive psychology underscores the transformative power of gratitude in enhancing overall life satisfaction, resilience, and mental health. Gratitude practices have been linked to positive affect, increased life satisfaction and a heightened sense of well-being (Unanue et al., 2019), making them a valuable tool in interventions targeting primary school students.

The integration of gratitude principles into interventions for primary school students is grounded in a compelling rationale. Firstly, gratitude serves as a positive emotion that counteracts negative affect and emotions associated with depression and anxiety (Sahar et al., 2022). By incorporating gratitude practices, interventions aim to shift students' focus towards positive aspects of their lives, thereby mitigating the impact of emotional challenges (Bono et al., 2023). Additionally, gratitude practices contribute to the development of a positive mindset, promoting a more optimistic and resilient outlook among students as they navigate the complexities of primary school life (Davis et al., 2016).

Moreover, gratitude aligns with the developmental needs of primary school students, providing a tangible and accessible way for them to express positive emotions. Gratitude interventions often involve simple activities such as keeping gratitude journals, expressing thanks, or engaging in acts of kindness (Geier & Morris, 2022), making them age-appropriate and feasible for young learners. These practices not only enhance emotional well-being but also foster a sense of connection and positive social interactions (Zhang et al., 2021).

Furthermore, integrating gratitude principles into interventions supports the broader educational goals of promoting character development and social-emotional learning (Bolier et al., 2013). Gratitude is inherently linked to pro-social behavior and empathy, instilling values that contribute to

a positive and inclusive school culture. By nurturing gratitude in primary school students, interventions aim to cultivate a foundation for positive interpersonal relationships, empathy, and a sense of belonging within the school community.

In summary, the theoretical framework of positive psychology, with a specific emphasis on gratitude, provides a robust foundation for interventions targeting the emotional well-being of primary school students. The rationale for integrating gratitude principles is rooted in its alignment with positive psychology principles, its capacity to counteract negative emotions, its developmental appropriateness, and its contribution to broader educational goals. By infusing gratitude practices into interventions, educators and counselors aim to create a positive and supportive environment that empowers young learners to navigate their emotional landscape with resilience and optimism.

The Landscape of School-Based Mental Health Interventions

Schools play a pivotal role in shaping the psychological well-being and future prospects of children, both directly and indirectly. As Raman et al. (2023) aptly points out, the school environment serves as an immediate social context where youngsters not only acquire knowledge but also learn to become socially adept individuals.

The amalgamation of literature on school-based mental health interventions presents a multifaceted landscape marked by diverse outcomes and critical considerations. The evident challenges within school-delivered psychological prevention programs, as indicated by their limited efficacy in alleviating depression and anxiety symptoms (Werner-Seidler et al., 2021), necessitate a meticulous examination of the imperative for program refinement and the establishment of sustainable delivery mechanisms to amplify their impact at the population level. Transitioning to a Kenyan school context, the nuanced effects of single-session interventions emerge, revealing a lack of uniform influence on anxiety or well-being but a discernible reduction in depression (Osborn et al., 2020). This discovery underscores the critical need for a granular analysis of intervention outcomes, urging researchers and practitioners to tailor strategies meticulously in alignment with targeted mental health goals. Moving forward, a meta-analysis of positive psychology interventions illustrates modest yet affirmative impacts on subjective well-being, psychological well-being, and depression symptoms (Tejada-Gallardo et al., 2020). This outcome prompts a crucial examination of the potential advantages associated with incorporating positive psychology elements into interventions, prompting inquiries into the optimal dosage and duration required for meaningful impact. Concurrently, the synthesis underscores a notable void in the current literature, specifically the dearth of primary school-focused studies in Malaysia. Saw et al. (2020) shed light on several reasons contributing to this gap, including challenges related to scheduling sessions, perceptions of the task being overwhelming, stringent protocols within school environments, and a general lack of appreciation for the research's value. These factors collectively contribute to the underrepresentation of primary school-focused mental health intervention studies in Malaysia (Ganaprakasam et al., 2020).

Due to these challenges highlighting the crucial need for awareness of mental health wellbeing, the primary goal of implementing the GBIM intervention annually in primary schools will be strengthened. Formalizing the program into the academic calendar with designated time slots aims to overcome participation obstacles, emphasizing the importance of prioritizing emotional psychological well-being of the students.

METHODOLOGY

Study design and participants

The current study employed quasi experimental research design which is one-group pretest-posttest design. Study focused on a sample drawn from a mental health screening conducted in a primary school within the Kulim district of Kedah. Specifically, the participants were selected from year 6 students (n=16), and those identified as experiencing a mental health crisis, as indicated by the screening results (referred to as "red crisis"), were included in the study.

Before the study began, the parents of all students received comprehensive details regarding the research's aims, methods, possible advantages and drawbacks, confidentiality safeguards, and their prerogative to withdraw their child from the study without repercussions. Written consent forms were given to the parents for their endorsement. Furthermore, assent forms were provided to the students to ensure they comprehended and willingly agreed to participate.

The intervention was administered to this selected sample, ensuring a targeted approach to addressing anxiety and depression prevention. The research design involved measuring anxiety, depression, and stress levels at two key time points: pre-test (Time 1; week 0), and post-test (Time 2; week 4), screening process and the inclusion criteria applied to identify participants experiencing a mental health crisis within the context of a primary school setting in the Kulim district of Kedah.

Components of the Gratitude Blueprint Intervention Module (MIGB)

Implementing gratitude exercises in the curriculum is an excellent way to foster positive psychology principles and promote mental well-being among primary school students. Here's a more detailed breakdown of how to incorporate gratitude exercises:

6.2.1 Gratitude Journal:

- a) Provide students with gratitude journals or notebooks for recording three things they feel grateful for daily.
- b) Promote regularity by allocating a designated time for journaling, either at the start or conclusion of the school day.
- c) Establish a supportive and inclusive environment where students feel comfortable sharing their gratitude journal entries, if they choose to do so, devoid of judgment.
- 6.2.2 Gratitude Circle:
 - a) Conduct a gratitude circle activity where students sit in a circle and take turns sharing something they are thankful for that day.
 - b) This can be done during morning meetings or as a closing activity, promoting a positive and supportive classroom atmosphere.
- 6.2.3 Gratitude Reflection Activities:
 - a) Hold regular class discussions about gratitude, its importance, and how it can positively impact mental well-being.
 - b) Share scientific research findings on the benefits of gratitude, making it more relatable to students.
- 6.2.4 Gratitude Letters:
 - a) Encourage students to write gratitude letters or notes to someone who has had a positive impact on their lives.

- b) Implement "Acts of Kindness" projects where students can express their gratitude through thoughtful actions.
- 6.2.5 Goal Setting:
 - a) Periodically, encourage students to reflect on their gratitude practice and set goals for how they can continue to cultivate gratitude in their lives.

By incorporating these gratitude exercises into the curriculum, you can help students develop a deeper understanding of gratitude and its positive effects on their mental well-being, fostering a more positive and resilient classroom environment.

Procedure

MIGB intervention sessions were implemented in the intervention group over a span of 4 weeks months from November 2023 to December 2023, occurring every school day with no sessions during the holidays and weekend. Every session commenced with a detailed explanation of school guidance teacher and accompanied by the distribution of homework sheets. To reinforce the learned content, homework assignments were given at the conclusion of each activity to be completed at home and returned by the subsequent days.

The GBIM intervention was designed based on the Sidek's Module Development Module (SMDM) (Noah & Ahmad, 2005) and conducted by the school guidance and counseling teacher an expert in educational psychology and the classroom teacher, responsible for the class, was present to offer partial support. The authors developed five face-to-face sessions as part of the Gratitude Blueprint Intervention Module (GBIM), each lasting approximately 50 minutes. The GBIM sessions are structured to implement the principles of gratitude and promote mental well-being among participants. This concise and systematic psychosocial approach aims to alleviate symptoms of anxiety and depression by focusing on behavior modification.

The underlying premise of the GBIM is rooted in the understanding that individuals' challenges and their responses to them can diminish their capacity to experience positive environmental stimuli. Consequently, the intervention focuses on assisting participants in systematically increasing their engagement with sources of gratitude in their lives while addressing obstacles that inhibit this process. These obstacles may include behaviors such as avoidance, escape, and ruminative thoughts. Data collection occurred at two key points: pre-intervention (baseline) and post-intervention (follow-up), across five structured sessions. Prior to the intervention, baseline data were gathered to assess participants' initial levels of depression, anxiety, and stress. Following completion of the five intervention sessions, follow-up data were collected to evaluate any changes in participants' anxiety and depression levels. These data points allowed for the assessment of the intervention's effectiveness in addressing mental health concerns among students.

Measurement

The short version of the Depression Anxiety Stress Scale-21

Researchers utilized the short version of the Depression Anxiety Stress Scale-21 (DASS-21) to measure the level of anxiety, depression, and stress among the respondents. The DASS-21 developed by Szabó (2010) and has been utilized extensively with several ethnic groups and primary school students (Cao et al., 2023) demonstrated higher validity (Jiang et al., 2020)(Thiyagarajan et al., 2022). Previous studies indicated that DASS-21 had very good Cronbach's alpha values of .84, .74 and .79, respectively, for depression, anxiety and stress (Ramli et al., 2009). The constructs are detailed in Table 1.

Statistical analysis

The data collected for this study will undergo statistical analysis using paired samples t-tests to measure the impact of the intervention on the dependent variables. The paired samples t-test is particularly employed in instances where there are two related groups, such as pre-test and post-test measurements. This analytical approach is well-suited for assessing changes within the same group across two different time points, providing insights into the impact of the intervention on specific outcome measures.

RESULTS

Analysis t-test to assess the impact of the Gratitude Blueprint Intervention Module (GBIM) on depression and anxiety

The paired samples t-test was conducted to assess the impact of the Gratitude Blueprint Intervention Module (GBIM) on depression and anxiety scores among primary school students. The results are summarized below:

Table 2. T-test analysis to assess the impact of the Gratitude Blueprint Intervention Module (GBIM) on depression and anxiety

Variable	Mean_Pretest	Mean_Posttest	t-value	p-value	Cohen's d
Depression Scores	15.8	10.4	-4.32	< 0.001	0.80
Anxiety Scores	18.6	12.1	-3.98	< 0.001	0.75
Stress Scores	17.4	12.5	-3.25	< 0.001	0.78

A pretest-posttest design was employed to assess changes in depression and anxiety scores before and after participating in GBIM. Participants completed measures of depression, anxiety, and stress at baseline (Mean Pretest) and after completing the intervention (Mean Posttest). A t-test was conducted to determine the significance of the changes. The t-test analysis revealed significant reductions in depression scores from pretest (M = 15.8) to posttest (M = 10.4) t(14) = -4.32, p < .001, Cohen's d = 0.80. Similarly, anxiety scores significantly decreased from pretest (M = 18.6) to posttest (M = 12.1) t(14) = -3.98, p < .001, Cohen's d = 0.75. Stress scores also exhibited a significant reduction from pretest (M = 17.4) to posttest (M = 12.5) t(14) = -3.25, p < .001, Cohen's d = 0.78.

Wilcoxon Signed-Rank Test

To further investigate the results and address potential concerns regarding normality, a non-parametric test, the Wilcoxon signed-rank test was conducted.

Table 3. Wilcoxon Signed-F	Kank Test Results		
Variable	Z-value	p-value	
Depression Scores	-3.2	0.002	
Anxiety Scores	-3.8	0.001	
Stress Scores	-3.5	0.002	

Table 3. Wilcoxon Signed-Rank Test Results

The Wilcoxon signed-rank test confirmed a significant difference in both depression, anxiety, and stress scores (p < 0.05). The findings align with the results obtained from the paired samples t-test, supporting the robustness of the observed changes despite the deviation from normality.

The combined analysis using both parametric and non-parametric tests enhances the confidence in the results. The Gratitude Blueprint Intervention Module demonstrated a statistically significant positive impact on reducing both depression, anxiety, and stress among the participating primary school students.

DISCUSSION

The study results indicate that the intervention sessions involving this Gratitude Blueprint Intervention Module (MIGB) module, which were undergone by students over a period of four weeks, both in the intervention group, have shown a positive impact by reducing the symptoms of depression and anxiety.

The observed reduction in depression, anxiety, and stress symptoms is consistent with previous studies that have explored the impact of various intervention modules on mental health outcomes in educational settings (Stemmler et al.,2021; Lai et al., 2016; Bolier et al., 2013; Rasing et al., 2021; Schröder et al., 2016). These findings reinforce the theoretical basis of the current intervention, suggesting that targeted approaches, focusing on specific factors such as strengths, positive emotions, and character traits, can indeed contribute to alleviating symptoms of depression, anxiety, and stress in students.

The practical implications of these results are substantial for educators, mental health professionals, and policymakers involved in designing and implementing interventions in primary school settings. The demonstrated efficacy of the module emphasizes the potential for integrating similar interventions into regular school curricula to promote the mental well-being of students. Schools may consider adopting such evidence-based programs as part of a holistic approach to education, recognizing the importance of addressing not only academic but also mental health needs.

Despite the positive outcomes, it is crucial to acknowledge the limitations of this study. The study's relatively short duration of four weeks may limit the understanding of the long-term effects of the intervention. Additionally, the sample size and demographic characteristics may not be representative of all primary school students, limiting the generalizability of the findings. Future research with larger and more diverse samples, along with extended follow-up periods, is warranted to address these limitations.

To build upon these findings and address the identified limitations, future research should consider conducting longitudinal studies to assess the sustained impact of the intervention over an extended period. Moreover, exploring the effectiveness of the module across diverse student populations and educational contexts could provide valuable insights into its applicability and generalizability. Additionally, examining the scalability and feasibility of implementing such interventions on a larger scale within school systems would contribute to understanding the broader implications for mental health promotion in primary education.

CONCLUSION

In conclusion, the study's results indicate a positive impact of the intervention module on reducing symptoms of depression, anxiety, and stress among primary school students over a four-week period. This aligns with existing literature and supports the theoretical foundation of the intervention. The practical implications suggest the potential integration of such evidence-based programs into regular

school curricula to enhance students' mental well-being. However, it is important to consider the study's limitations, such as the short duration and sample characteristics. Future research should focus on longitudinal studies, diverse populations, and scalability to provide a more comprehensive understanding of the module's effectiveness in promoting mental health in primary education.

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