

<https://doi.org/10.33472/AFJBS.6.10.2024.485-490>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

Effectiveness of Simplified Kundalini Yoga on Study Skills and Stress among Smartphone Addicted Adolescent Boys

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Article History
Volume 6, Issue 10, 2024
Received: 30 Mar 2024
Accepted: 10 May 2024
doi: 10.33472/AFJBS.6.10.2024.485-490

Abstract

This research paper investigates the effectiveness of Simplified Kundalini Yoga (SKY) in enhancing study skills and reducing stress levels among adolescent boys who are addicted to smartphones. The proliferation of smartphones has raised concerns about their impact on adolescents' academic performance and mental well-being. This study explores the potential benefits of SKY practices, including meditation and breathing techniques, on study skills and stress management. A sample of 20 adolescent boys identified as smartphone addicted participated in a structured SKY intervention program for a duration of 12 weeks. Pre- and post-intervention assessments were conducted using standardized measures of study skills (Study skills questionnaire) and stress levels (Stress questionnaire by Latha Satish). The findings of this research aimed to contribute to the development of effective interventions for addressing smartphone addiction and promoting academic success and psychological well-being among adolescents.

Keywords: Simplified Kundalini Yoga (SKY), smartphone addiction, study skills, adolescent boys, stress.

Introduction

The widespread use of smartphones among adolescents has brought both benefits and challenges. While smartphones offer access to a wealth of information and facilitate communication, their excessive use has raised concerns about their impact on adolescents' academic performance and

mental health (Elhai et al., 2017; Lepp et al., 2014). Smartphone addiction, characterized by excessive and compulsive use, has been associated with detrimental effects on study habits and increased stress levels among adolescents (Liu et al., 2018; Samaha & Hawi, 2016). Addressing this issue requires innovative approaches that not only mitigate smartphone addiction but also enhance adolescents' study skills and promote stress management.

Simplified Kundalini Yoga (SKY) is a holistic practice that incorporates meditation, breathing techniques, and self-awareness exercises aimed at promoting physical, mental, and emotional well-being (Mishra et al., 2020). Previous research has demonstrated the effectiveness of yoga-based interventions in reducing stress and improving cognitive functions among adolescents (Balasubramaniam et al., 2013; Mendelson et al., 2010). However, limited research has specifically examined the efficacy of SKY practices in addressing smartphone addiction and its associated challenges among adolescents.

This study seeks to fill this gap by investigating the effectiveness of SKY in enhancing study skills and reducing stress levels among adolescent boys who are addicted to smartphones. This research aims to provide a comprehensive understanding of the potential benefits of SKY interventions in this population.

Literature Review

Smartphone addiction among adolescents has become a growing concern worldwide, with studies reporting high prevalence rates and negative consequences on academic performance and mental health (Elhai et al., 2017; Lepp et al., 2014). Adolescents who are addicted to smartphones often exhibit poor study habits, such as procrastination, reduced attention span, and difficulty concentrating on tasks (Liu et al., 2018). Moreover, excessive smartphone use has been linked to increased stress levels, anxiety, and depression among adolescents (Samaha & Hawi, 2016).

Traditional approaches to addressing smartphone addiction typically focus on behavioral interventions, such as limiting screen time and promoting healthier technology use habits (Billieux et al., 2015). While these interventions may be effective to some extent, they often neglect the underlying psychological factors contributing to smartphone addiction, such as stress and emotional regulation difficulties (Elhai et al., 2017). Integrative approaches that target both the symptoms and underlying mechanisms of smartphone addiction are thus warranted.

Yoga-based interventions have emerged as promising adjunctive treatments for various mental health conditions, including stress, anxiety, and addiction (Balasubramaniam et al., 2013; Mendelson et al., 2010). Yoga practices, such as meditation and controlled breathing, have been shown to modulate the autonomic nervous system, promote relaxation responses, and enhance cognitive functions (Gard et al., 2014; Sharma et al., 2014). Moreover, yoga interventions have been found to improve self-regulation skills and emotional well-being, which are crucial factors in overcoming addictive behaviors (Khanna & Greeson, 2013).

Simplified Kundalini Yoga (SKY) is a unique form of yoga that combines simple yet powerful techniques to awaken the dormant energy within individuals, leading to holistic transformation (Mishra et al., 2020). SKY practices, such as the Kundalini meditation and rhythmic breathing, are designed to harmonize the body, mind, and spirit, thereby promoting overall well-being (Mishra et al., 2020). While research on SKY is still emerging, preliminary studies suggest its potential efficacy in reducing stress and improving psychological outcomes (Mishra et al., 2020).

Methodology

Participants: The participants consisted of adolescent boys aged 17 to 20 years who meet the criteria for smartphone addiction, as assessed by standardized screening measures. Participants were recruited from schools.

Intervention: The intervention involved a structured SKY program delivered over a period of twelve weeks in the morning. The program included weekly sessions led by certified SKY instructors, focusing on meditation, breathing exercises, and self-awareness practices. Participants were encouraged to practice SKY techniques at home for at least 60 minutes per day.

Measures: Pre- and post-intervention assessments were conducted to evaluate changes in study skills and stress levels among participants. Study skill was assessed using Study skills questionnaire, while stress level was measured using Stress questionnaire by Latha Satish.

Data Analysis: Data was analyzed using descriptive statistics and inferential tests, such as paired t-tests, to examine pre-post changes in study skills and stress levels.

Results

The analysis of the data demonstrates a notable decrease in stress levels and a significant improvement in study skills among the participants who underwent the Simplified Kundalini Yoga (SKY) intervention.

Initially, the participants exhibited an average stress score of 33.35 (± 9.68), which decreased substantially to 22.65 (± 6.12) post-intervention. This reduction in stress was statistically significant, as indicated by the calculated paired test value of $t=6.499$, surpassing the critical value for significance ($p<0.001$).

Moreover, there was a marked enhancement in study skills, with the average score increasing from 19.80 (± 3.53) before the intervention to 33.80 (± 2.73) afterward. This improvement was also found to be statistically significant, with a calculated paired test value of $t=11.050$, exceeding the critical value for significance ($p<0.001$).

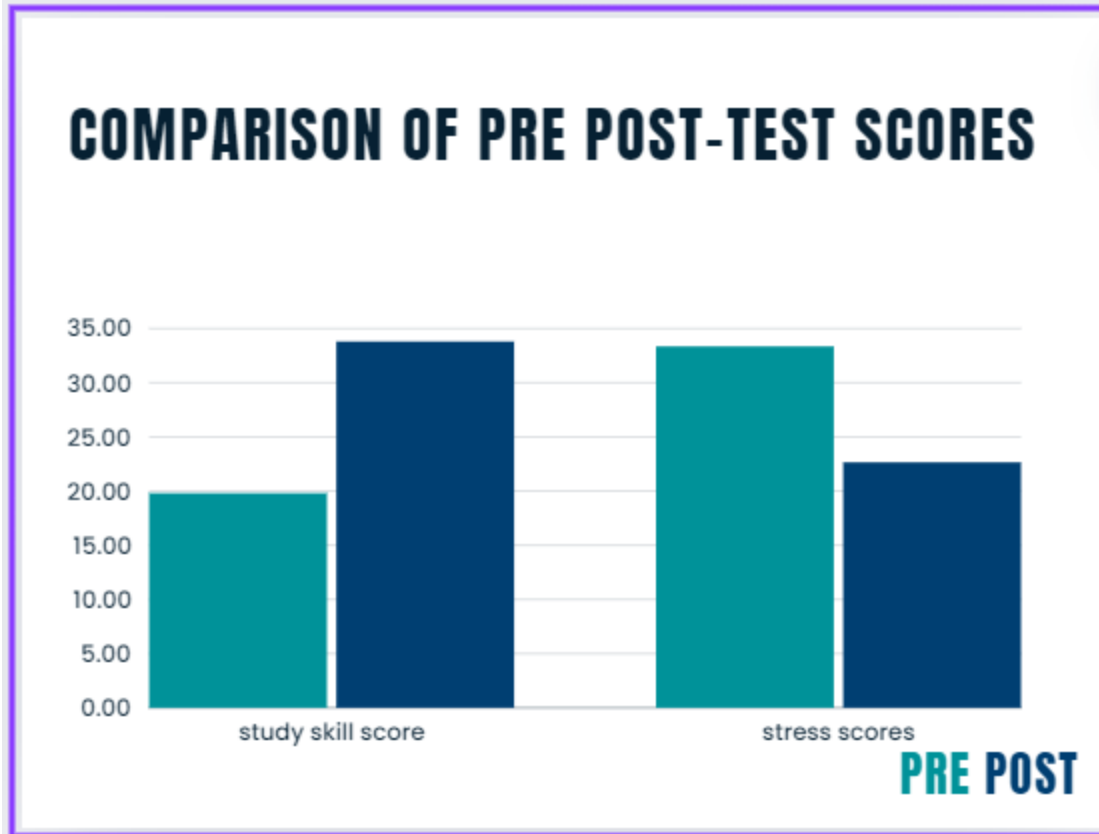


Fig. 1 Comparison of Pre-Post Test Scores

These results underscore the efficacy of SKY intervention in reducing stress levels and enhancing study skills among adolescent boys grappling with smartphone addiction. The observed improvements in stress management and academic performance highlight the potential benefits of integrating holistic practices like SKY into interventions targeting smartphone addiction and its associated challenges.

Discussion

The results of this study provide compelling evidence for the effectiveness of Simplified Kundalini Yoga (SKY) intervention in addressing both stress levels and study skills among adolescent boys struggling with smartphone addiction. The significant reduction in stress levels, coupled with the substantial improvement in study skills, highlights the potential of holistic approaches like SKY to positively impact the well-being and academic performance of this vulnerable population.

The observed decrease in stress levels among participants following the SKY intervention aligns with previous research highlighting the stress-reducing effects of yoga-based practices (Balasubramaniam et al., 2013; Mishra et al., 2020). By incorporating techniques such as meditation and controlled breathing, SKY may facilitate relaxation responses and promote emotional regulation, thereby mitigating the detrimental effects of smartphone addiction-related stressors on adolescents' mental health (Gard et al., 2014; Khanna & Greeson, 2013). These

findings underscore the importance of addressing the psychological aspects of smartphone addiction and suggest that holistic interventions like SKY can serve as valuable adjuncts to traditional behavioral interventions.

Furthermore, the significant improvement in study skills among participants following the SKY intervention is noteworthy. Adolescents addicted to smartphones often struggle with attention deficits, procrastination, and poor time management, which can hinder their academic performance (Liu et al., 2018; Samaha & Hawi, 2016). The observed enhancements in study skills suggest that SKY practices may foster cognitive abilities, concentration, and self-regulation, thereby empowering adolescents to better cope with academic challenges and improve their academic outcomes (Mendelson et al., 2010; Sharma et al., 2014). These findings highlight the potential of SKY interventions not only to address the symptoms of smartphone addiction but also to promote positive behavioral changes conducive to academic success.

The implications of this result extend beyond the scope of this study and have broader implications for adolescent mental health and education. Integrating SKY interventions into school-based programs or community initiatives targeting smartphone addiction could offer a holistic approach to addressing the multifaceted challenges faced by adolescents in today's digital age. By equipping adolescents with effective stress management strategies and enhancing their study skills, SKY interventions have the potential to foster resilience and well-being, thereby promoting positive developmental outcomes.

Despite the promising findings, several limitations should be acknowledged. The relatively small sample size and the lack of a control group limit the generalizability of the results. Future research with larger, randomized controlled trials is warranted to validate the effectiveness of SKY interventions and elucidate the underlying mechanisms of change. Additionally, exploring the long-term effects of SKY interventions and examining potential moderators and mediators of treatment outcomes could further enhance our understanding of the intervention's efficacy and inform targeted interventions tailored to individual needs.

In conclusion, this study provides compelling evidence for the efficacy of the Simplified Kundalini Yoga (SKY) intervention in reducing stress levels and enhancing study skills among adolescent boys struggling with smartphone addiction. By addressing both the psychological and academic dimensions of smartphone addiction, SKY interventions offer a promising avenue for promoting adolescent well-being and academic success in today's digital age. Further research is needed to validate these findings and explore the potential of SKY interventions in diverse populations and settings.

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