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Effectiveness of international yoga protocol-Based Yogic Intervention in enhancing Self-Confidence among Visually Impaired Adolescents and Young Adults: An Experimental Study

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Abstract

Yoga is an ancient Indian practice that promotes harmony between the body, mind, and spirit, enhancing overall health and well-being. It is recognized for improving psychological attributes such as self-confidence, emotional balance, and resilience. This study examined the effect of the International Yoga Protocol (IYP) on the self-confidence of visually impaired adolescents and young adults aged 14 to 21 years. The findings revealed a significant association between self-confidence and practice of IYP. There was a significant improvement in self-confidence in young visuallyu-impaired adults following the intervention demonstrating the effectiveness of IYP. The results suggest that structured yoga practices can serve as an effective and accessible strategy for enhancing psychological well-being and self-confidence among visually impaired individuals. The study highlights the potential of yoga as a valuable complementary approach in rehabilitation, education, and holistic development programs for persons with visual disabilities.

Keywords: International Yoga Protocol (IYP), Psychological Well-being, Visually Impaired Adults, Self-Confidence

Introduction

Adolescence and early adulthood are two important stages in the growth of an individual during which one experiences changes in the physical, intellectual, emotional, and social dimensions. Besides changes in these areas, individuals also acquire knowledge and become self-aware about their personalities, talents, social connections, and future career possibilities. Self-confidence plays an important role in the psychological aspect of development as it affects an individual's confidence about their abilities, decision-making, willingness to meet challenges, and engagement in different situations. With sufficient self-confidence, individuals can cope with challenging situations through utilizing their skills effectively.

Deficiency in vision is likely to influence one's developmental processes and functional abilities in a unique way. Visually deficient adolescents may encounter challenges when it comes to education, communication, mobility, socialization, independence, and career options in the future. Even though deficiency in vision does not influence the intellectual capacity of an individual, the problem with one's vision can have an adverse effect on learning, socializing, and independence that is likely to result in a low self-confidence consequently affecting the career prospects adversely. Despite the fact that visual impairment does not affect the cognitive capacities of a person, problems with vision can negatively impact the process of learning, social interaction, and independence.

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Education among the visually impaired students does not merely include academics. Emotional stability, social adaptability, independence and self-concept are other important aspects which form an integral part of their overall growth. Educational environments may offer ways through which visually impaired students are made aware of their capabilities and increase their decision-making.

Self-confidence is one of the most vital aspects in psychology that relate to an individual's actions and success. Self-confident enables people to be more confident about their capabilities and be ready to confront difficult tasks; besides, they may develop a positive attitude towards challenges. At the same time, lack of self-confidence may cause avoidance of unknown situations, hesitation while making decisions, and improper use of people's abilities. In relation to visually impaired young people, the significance of self-confidence is crucial because such people encounter various difficulties with regard to independence, participation in society, education, and their future life.

Yoga asanas are integral to yogic practice and are performed with conscious awareness, controlled breathing, and mental focus. Unlike conventional physical exercises that primarily target muscular fitness, yoga asanas represent a psycho-physical discipline that simultaneously influences the body and mind. Maharshi Patanjali described an ideal asana as "Sthiram Sukham Asanam" (Yoga Sutra 2.46), implying that a posture should be steady, comfortable, and maintained without strain (Patanjali, circa 200 BCE). Scientific investigations have demonstrated that yoga asanas produce distinct physiological and psychological effects. Karambelkar et al., (1969) reported that maintaining yogic postures in a relaxed manner reduces muscle electrical activity, indicating neuromuscular relaxation. Similarly, Ray et al., (2011) observed a reduction in Basal Metabolic Rate (BMR) following regular yoga practice, suggesting improved physiological efficiency and autonomic regulation.

The cognitive advantages of yoga asanas have been well documented through research. Studies have indicated that the regular practice of yoga enhances perceptual, attentional, concentration, mnemonic, reasoning skills, and efficiency of information processing (Madanmohan et al., 1992). Improved attention and mental clarity help people to cope up with environmental and academic demands more efficiently. Various studies have revealed that the practice of yoga results in enhanced sensory motor abilities through faster reaction times. The work of Madanmohan et al. (1992) has indicated that there is considerable decrease in visual and auditory reaction times among healthy individuals after 12 weeks of yoga practice. These findings are consistent with the findings of previous studies conducted by Malathi & Parulkar (1989). Specific pranayama techniques have also demonstrated beneficial cognitive effects. Bhavanani et al. (2003) reported that Mukh Bhastrika Pranayama produced immediate improvements in reaction times, indicating enhanced alertness and neural efficiency. Besides, Sarang & Telles (2007) also found that yoga practice significantly improved selective attention, concentration, visual scanning abilities, and repetitive motor performance.

Neurocognitive researches have also emphasized the advantages of yoga. According to Sarang & Telles (2006), decreased P300 peak latencies were noticed after a relaxation technique based on yoga, which indicates improved cognitive processes and increased neural efficiency. Yoga helps not only in developing higher-order cognitive functions but also positively influences mental abilities. Moreover, besides its cognitive advantages, yoga is essential for emotional health. Numerous studies prove that practice of yoga

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decreases stress, anxiety, psychological distress, and improves emotional stability, self-awareness, optimism, and resilience (Woodyard, 2011; Telles et al., 2013). Psychological benefits make significant contributions to self-confidence formation.

Contemporary neurophysiological research suggests that yoga positively influences brain function, autonomic balance, and neuro-effector communication, thereby improving emotional regulation and psychological adaptability (Ross & Thomas, 2010). Consequently, practitioners often experience increased tranquillity, mental balance, and a more positive outlook toward life. For visually impaired adolescents and young adults, these benefits are particularly meaningful. Improved concentration, emotional stability, body awareness, and self-regulation can strengthen self-belief and foster greater confidence in personal abilities. Through regular participation in IYP-based practices, individuals may develop enhanced self-confidence, independence, and overall psychological well-being. Therefore, yoga asanas constitute an effective, holistic intervention to promote cognitive development, emotional health, and self-confidence among visually impaired adolescents.

Materials and Methods

The present study employed an experimental research design to investigate the effectiveness of an IYP-based yogic intervention on self-confidence among visually impaired adolescents and young adults. The study compared self-confidence levels following participation in a structured IYP program and examined the relationship between yoga practice and self-confidence outcomes.

The study was conducted at the National Institute for the Empowerment of Persons with Visual Disabilities (NIEPVD), Rajpur Road, Dehradun, India. A total of 90 visually impaired adolescents and young adults (both male and female), aged 14–21 years, were selected through random sampling as participants. The participants met the inclusion criteria for visual impairment and voluntarily participated in the study.

Participants were randomly divided into two groups. One was the experimental group which comprised 45 participants. The other group was the control group consisting of 45 participants as well. But, in the next step, one participant withdrew from each of these groups. Therefore, the experimental group was involved in a yogic intervention for 12 weeks as seen from 87 participants. The intervention sessions took place 5 times per week. Every session lasted for 60 minutes under supervision of a certified yoga teacher. Every session included praying, warm-up, yoga poses, pranayama, meditation and relaxation exercises following the International Yoga Protocol designed by the Ministry of AYUSH. Participants in the control group were engaged in their studies and regular activities without participating in any yoga intervention. Prior to starting the intervention sessions, a pre-test was performed. After 12 weeks of the intervention, a post-test was carried out. Both pre-test and post-test were conducted in order to reveal changes in self-confidence.

The study intended to test the hypothesis that IYP increases self-confidence level of visually impaired adolescents and young adults.

Statistical Analysis

The association between participation in the IYP and self-confidence levels was examined using the Pearson Chi-Square Test. Self-confidence scores were categorized into five levels: Extremely High, High, Moderate, Low, and Extremely Low. Statistical significance was determined at 5% level of significance.

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Results

Table 1 gives the estimates of the percentages of visually impaired participants distributed across the different levels of self-confidence

Table 1: Distribution of Self-Confidence Levels among Visually Impaired Participants

Self-Confidence Level	Percentage (%)
Extremely High	1.15
High	28.74
Moderate	43.68
Low	25.29
Extremely Low	1.15
Total	100.00

A majority of participants demonstrated moderate to high levels of self-confidence following the intervention. Specifically, 43.68% of participants were classified as Moderate, 28.74% as High, and 25.29% as Low. Only a small proportion of participants belonged to the Extremely High and Extremely Low categories, with 1.15% in each.

The Pearson Chi-Square test given in table 2 below reveals a statistically significant association between participation in the IVP and self-confidence levels among visually impaired participants ($\chi^2 = 59.839$, df = 4, $p < .001$).

Table 2: Association between International Yoga Protocol and Self-Confidence

Variable	Test Statistic (χ^2)	Degrees of Freedom (df)	p-value	Result
IYP Participation × Self-Confidence	59.839	4	< .001	Significant association exists between IYP participation and self-confidence levels among visually impaired participants.

A significant chi-square indicates a strong relationship between the independent variable (International Yoga Protocol-based intervention) and the dependent variable (self-confidence). The p-value was less than the predetermined significance level of 0.05, demonstrating that the observed association was unlikely to have occurred by chance.

The results indicate that participation in the IYP-based intervention is significantly associated with improved self-confidence among visually impaired adolescents and young adults. Regular engagement in IYP practices may contribute positively to psychological well-being by enhancing self-belief, emotional

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stability, self-awareness, and confidence in personal abilities. The result is supported by a previous study in which the Ashtanga-based Yoga Therapy (AYT) program was implemented among 10 legally blind adult participants for improving sleep disturbances, balance, and negative psychological states. The findings show improvement in quality of life, including stress, anxiety, depression, respiration, balance, and sleep disturbances (Jeter et al., 2012).

Discussion

This study was carried out to investigate the impact of Yoga Asanas done under the IYP on self-confidence among visually impaired adolescents and young adults within the age range of 14-21 years old. From the results obtained from the statistical analysis, there was a highly significant association between being practicing of the IYP and self-confidence. This result is consistent with the findings of a controlled experiment involving 16 participants and in-home deployment involving 4 individuals with visual impairment, where it was found out that motivational techniques positively impacted user experience and frequency of exercise (Rector et al., 2017).

Thus, the findings of the study suggest that a structured yoga-based intervention can serve as an effective and accessible strategy for enhancing psychological well-being, particularly self-confidence, among visually impaired individuals. The results underscore the potential of the IVP as a valuable complementary approach in rehabilitation, education, and holistic development programs for persons with visual disabilities. Future studies employing larger samples, longitudinal designs, and controlled experimental approaches are recommended to further validate and extend these findings.

Conclusion

It can therefore be inferred that through the use of IYP, holistic yoga-based interventions can greatly improve the physical, emotional, cognitive and psychological well-being of the visually impaired adolescents and young adults. Through the application of yoga-based interventions in the rehabilitation and educational processes of the visually impaired adolescents and young adults, stress reduction, self-regulation and an overall improved self-identity and confidence will be achieved. This proves the fact that yoga is indeed a highly transformative and sustainable intervention in the lives of the visually impaired adolescents and young adults.

References

Bhavanani, A. B., Madanmohan, & Udupa, K. (2003). Acute effect of Mukh Bhastrika (a yogic bellows type breathing) on reaction time. *Indian Journal of Physiology and Pharmacology*, *47*(3), 297–300.

Jeter, P. E., Dagnelie, G., Khalsa, S. B. S., Haaz, S., & Bittner, A. K. (2012). Yoga for persons with severe visual impairment: A feasibility study. *Alternative Medicine Studies*, *2*(1), e5. https://www.researchgate.net/profile/Pamela-Jeter/publication/260145234

Karambelkar, P. V., Bhole, M. V., & Gharote, M. L. (1969). Muscle activity in some asanas: A pilot study. *Yoga Mimamsa*, *12*(1), 1–13.

Madanmohan, Thombre, D. P., Balakumar, B., Nambinarayanan, T. K., Thakur, S., Krishnamurthy, N., & Chandrabose, A. (1992). Effect of yoga training on reaction time, respiratory endurance, and muscle

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strength. *Indian Journal of Physiology and Pharmacology*, *36*(4), 229–233.

Malathi, A., & Parulkar, V. G. (1989). Effect of yogasanas on the visual and auditory reaction time. *Indian Journal of Physiology and Pharmacology*, *33*(2), 110–112.

Ray, U. S., Pathak, A., & Tomer, O. S. (2011). *Hatha yoga practices: Energy expenditure, respiratory changes and intensity of exercise*. *Evidence-Based Complementary and Alternative Medicine*, Article 241294. https://doi.org/10.1093/ecam/neq046

Rector, K., Vilardaga, R., Lansky, L., Lu, K., Bennett, C. L., Ladner, R. E., & Kientz, J. A. (2017). Design and real-world evaluation of eyes-free yoga: An exergame for blind and low-vision exercise. *ACM Transactions on Accessible Computing*, *9*(4), 1–25. https://dl.acm.org/doi/abs/10.1145/3022729

Ross, A., & Thomas, S. (2010). The health benefits of yoga and exercise: A review of comparison studies. *Journal of Alternative and Complementary Medicine*, *16*(1), 3–12.

Sarang, S. P., & Telles, S. (2006). Changes in P300 following two yoga-based relaxation techniques. *International Journal of Neuroscience*, *116*(12), 1419–1430. https://doi.org/10.1080/00207450500514193

Sarang, S. P., & Telles, S. (2007). Immediate effect of two yoga-based relaxation techniques on performance in a letter-cancellation task. *Perceptual and Motor Skills*, *105*(2), 379–385.

Telles, S., Singh, N., & Balkrishna, A. (2012). Managing mental health disorders resulting from trauma through yoga: A review. *Depression Research and Treatment*, *2012*, Article 401513.

Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga*, *4*(2), 49–54.

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