

THE EFFECT OF BHRAMARI PRANAYAMA ON ANXIETY IN PRE-ADOLESCENT CHILDREN

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Abstract

Anxiety is a growing concern among preadolescent children due to various academic, social, and environmental stressors. Bhramari Pranayama, a yogic breathing technique, has been recognised for its potential to enhance relaxation and emotional regulation. This article explores the impact of Bhramari Pranayama on anxiety levels in preadolescent children, emphasising its physiological and psychological benefits. By activating the parasympathetic nervous system, reducing cortisol levels, and improving focus, this technique may serve as an effective non-pharmacological intervention for childhood anxiety. The article reviews existing literature and suggests future research directions to further validate these findings. Additionally, it highlights the accessibility of this technique, requiring no special equipment or extensive training. Potential benefits extend beyond anxiety reduction, contributing to overall emotional resilience and cognitive development. Further empirical studies are necessary to establish standardised protocols for implementation in educational and clinical settings. Research suggests that it can serve as a complementary approach to conventional anxiety treatments, offering a natural and side-effect-free alternative. This paper highlights the significance of Bhramari Pranayama, its psychological benefits, and the need to establish its long-term efficacy.

INTRODUCTION:

UNDERSTANDING ANXIETY AND PREADOLESCENCE

Preadolescence is the developmental stage between childhood and adolescence, typically ranging from **9 to 12 years of age**. It is marked by significant physical, emotional, and cognitive changes as the body prepares for puberty. During this time, the brain grows quickly, but the part that controls emotions (amygdala) develops faster than the part that helps with thinking and decision-making (prefrontal cortex). This can make preteens feel more emotional and anxious. Anxiety is a natural response to stress, often characterized by excessive worry, nervousness, and fear. While occasional anxiety is normal, persistent and

intense anxiety may develop into an anxiety disorder, negatively impacting daily life. Bhramari is an effective breathing technique and a promising tool for managing anxiety. This paper explores the effectiveness of Bhramari Pranayama in managing anxiety in preadolescents and its potential as a complementary intervention alongside conventional treatment.

EARLY ONSET OF ANXIETY

Anxiety disorders in preadolescents can stem from multiple factors, including genetic predisposition, environmental stressors, and neurobiological imbalances. Family history of anxiety or mood disorders increases

susceptibility to developing anxiety at a young age. Additionally, high academic pressure, peer conflicts, bullying, and exposure to traumatic experiences contribute significantly to heightened anxiety levels and overall emotional health.

TECHNIQUE AND POSITIVE IMPACT OF BHARAMARI

Bhramari Pranayama, often referred to as the "humming bee breath," is a simple yet effective breathing exercise rooted in ancient yogic practices. It is classified as a slow, deep breathing technique that involves inhaling deeply and exhaling while producing a humming sound. Psychologically, Bhramari Pranayama helps in reducing stress, promoting relaxation, improving emotional stability. The vibrations created during humming stimulate the vagus nerve, which regulates the autonomic nervous system, leading to decreased heart rate,, lowered cortisol level, improves concentration and cognitive functioning.

SCIENTIFIC FINDINGS ON HUMMING BEE BREATH AND ANXIETY

Empirical research on Bhramari Pranayama has demonstrated its effectiveness in anxiety reduction. Physiological measures such as heart rate variability (HRV) and cortisol levels indicate a significant decrease in stress markers following consistent practice. Additionally, self-reported anxiety assessments in preadolescents have shown improvements in emotional stability, concentration, and overall well-being. However, more standardized methodologies are necessary to further substantiate these findings and confirm its broader applicability.

CONCLUSION

Bhramari Pranayama is a simple and accessible breathing technique with significant potential in managing anxiety in preadolescents. Its psychological benefits, coupled with its ease of practice, make it a valuable addition to anxiety

CONVENTIONAL TREATMENT VS. BHARAMARI

Conventional treatment for anxiety includes psychotherapy, pharmacological interventions, and lifestyle changes. Cognitive Behavioural Therapy (CBT) is one of the most effective therapeutic approaches, helping individuals recognize and restructure negative thought patterns. In more severe cases, medications are prescribed to manage symptoms. However, these treatments may have side effects such as drowsiness, dependency risks, and long-term withdrawal symptoms. Bhramari Pranayama presents a safe, natural, and side-effect-free alternative that can complement conventional treatments. By integrating Bhramari into treatment plans, it can decrease dependence on medication.

FUTURE RESEARCH AND PRACTICAL APPLICATION

Despite the promising evidence supporting Bhramari Pranayama in reducing anxiety, further research is required to determine its precise mechanisms and efficacy. Longitudinal studies focusing on different age groups, comparative analyses with other relaxation techniques, and integration into clinical settings would provide valuable insights into its role as a therapeutic tool. Additionally, more neuroimaging studies can help uncover how Bhramari affects brain function. Research on its long-term effects on adolescents in school settings, including its influence on academic performance and social interactions, could further establish its significance as a holistic mental health intervention.

management strategies. Future research should focus on large-scale clinical trials to validate its effectiveness and explore its integration into holistic mental health interventions for preadolescents.

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