



"IMPACT OF YOGA ON QUALITY OF LIFE, EMOTIONAL INTELLIGENCE, AND MENTAL HEALTH AMONG SECONDARY SCHOOL STUDENTS"

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ABSTRACT

Adolescence is a sensitive developmental period characterized by rapid biological, cognitive, and psychosocial transitions that can increase vulnerability to stress, emotional dysregulation, and mental health problems. Schools are uniquely positioned to deliver scalable, low-cost preventive interventions that strengthen students' psychosocial functioning. Yoga, typically integrating physical postures (asanas), breathing (pranayama), relaxation, and mindfulness/meditation, has gained attention as a school-based approach that may improve students' mental health, quality of life (QoL), and emotional competencies. This review-based research article synthesizes evidence from school-based and youth-focused yoga literature with a specific focus on three outcomes relevant to secondary education: QoL, emotional intelligence (EI), and mental health. A structured narrative review approach was used, prioritizing peer-reviewed systematic reviews, scoping reviews, and meta-analyses, supplemented by representative controlled trials in school settings. Across reviews, yoga interventions show generally favorable effects on stress, anxiety, mood, emotion regulation, and related psychosocial outcomes, although effect sizes vary and methodological heterogeneity is common. Evidence also indicates improvements in emotional and psychosocial QoL in school populations exposed to yoga or yoga-plus-mindfulness programs. Mechanisms likely include downregulation of physiological stress reactivity, improved interoceptive awareness, enhanced self-regulation, and strengthened coping and social-emotional skills.



KEYWORDS: Yoga, Secondary School Students, Quality of Life, Emotional Intelligence, Mental Health, School-Based Intervention.

1. INTRODUCTION

Secondary school years (typically ages 12–18) represent a developmental stage marked by increased academic demands, heightened peer influence, and greater exposure to digital and social stressors. Globally, adolescent mental health concerns have risen in prominence, with stress, anxiety, and depressive symptoms frequently reported in school settings. In this context, preventive, skill-building interventions that can be delivered within schools are of high public health value.

Yoga has transitioned from a primarily adult wellness practice to an increasingly implemented youth intervention in educational environments. Contemporary school-based yoga programs often combine movement sequences, controlled breathing, mindful attention, and relaxation strategies. Reviews of school-based yoga research describe the field as growing, with evidence suggesting

beneficial effects on a range of emotional, behavioral, and mental health outcomes. For example, systematic reviews and research reviews have highlighted improvements in stress reduction, emotional balance, and self-regulation among children and adolescents in educational settings.

Schools and researchers require clearer synthesis focused on outcomes that are directly relevant to educational functioning and adolescent development. This article addresses that need by organizing evidence around three interrelated outcomes:

1. **Quality of Life (QoL):** students' perceived well-being across emotional, social, physical, and functional domains.
2. **Emotional Intelligence (EI):** abilities related to emotional awareness, understanding, regulation, and adaptive interpersonal functioning.
3. **Mental Health:** psychological well-being and symptoms such as stress, anxiety, depression, emotional dysregulation, and related indicators.

The goal is not only to summarize whether yoga "works," but to clarify *how, for whom, and under what conditions* school-based yoga may improve these outcomes.

2. CONCEPTUAL FRAMEWORK

Yoga's potential impacts on QoL, EI, and mental health can be understood through a self-regulation framework:

- **Physiological regulation:** Breathing practices and relaxation are theorized to reduce hyperarousal and stress reactivity, supporting calmer affective states and improved sleep and recovery. Reviews on youth yoga describe consistent links to reductions in stress and anxiety symptoms.
- **Attention and interoception:** Mindful movement may strengthen attention control and awareness of bodily cues (interoceptive awareness), improving early detection of emotional escalation and enabling adaptive coping.
- **Emotion regulation and social-emotional learning:** Yoga-based practices can support emotional regulation skills (a central EI component), potentially improving peer interactions, classroom behavior, and perceived life satisfaction. Randomized and controlled studies in schools have specifically examined emotion regulation and mood outcomes among adolescents exposed to yoga.
- **Psychological resources:** By strengthening coping and self-efficacy, yoga may influence broader QoL domains, including perceived competence, school engagement, and overall well-being. These mechanisms are consistent with research reviews arguing that yoga may help young people cope with stress and contribute positively to balance in life, well-being, and mental health.

3. METHOD: REVIEW DESIGN (STRUCTURED NARRATIVE REVIEW)

This paper uses a structured narrative review approach emphasizing evidence most likely to appear in Google Scholar and academic databases:

Inclusion priorities

- Systematic reviews, scoping reviews, and meta-analyses focused on yoga in children/adolescents and/or school settings.
- Secondary education relevance (adolescents or school-based programs).
- Outcomes aligned with mental health, emotional regulation/EI-related constructs, and QoL/well-being indicators.

Supplementary evidence

- Representative controlled trials and school-based intervention studies were used to contextualize findings and illustrate outcome patterns (e.g., mood/affect and emotion regulation in high school students).

This approach is appropriate when the objective is to synthesize across heterogeneous interventions and outcomes while keeping the focus on applied school settings.

4. REVIEW OF LITERATURE

Below are 10 review articles (systematic reviews, scoping reviews, and meta-analyses) that are widely indexed in Google Scholar and relevant to yoga, mental health, and adolescent/school populations.

4.1 School-Based Yoga: Scope and Outcomes

Serwacki and Cook-Cottone (2012) conducted a systematic review of yoga interventions delivered in school settings, identifying multiple study designs (pilot, quasi-experimental, and randomized trials) and concluding that school yoga shows promise for improving emotional balance, attentional control, and reducing anxiety and negative affect, although study quality varied.

Khalsa (2016) provided a systematic research review of school-based yoga interventions and described the field as expanding, with evidence suggesting beneficial effects across mental, emotional, behavioral, and physical domains, while emphasizing the need for stronger methodology and consistent measurement in future studies.

Ferreira-Vorkapic et al. (2015) (review) examined yoga in school contexts and reported that yoga programs in schools may contribute to stress reduction, emotional well-being, and improved psychosocial functioning; the review also highlighted implementation variability and measurement limitations across studies.

4.2 Youth Yoga and Mental Health

Hagen and Nayar (2014) reviewed yoga for children and young people's mental health and well-being, proposing that yoga supports stress coping, resilience, mood, and self-regulation and may contribute positively to overall well-being in educational settings.

James-Palmer et al. (2020) reviewed yoga interventions for youth anxiety and depression symptoms, concluding that the evidence base suggests reductions in anxiety and marginal reductions in depression, while noting variability in intervention content and methodological quality.

Weaver and Darragh (2015) systematically reviewed yoga interventions targeting anxiety among children and adolescents. They found evidence supporting anxiety reduction, while emphasizing heterogeneity in intervention protocols and calling for more rigorous trials and consistent outcomes reporting.

5. EVIDENCE SYNTHESIS BY OUTCOME

5.1 Mental Health Outcomes

Across reviews, the strongest and most consistent evidence for school-based and youth yoga is seen in mental health-related outcomes particularly reductions in stress and anxiety, and improvements in mood and emotion regulation. Systematic reviews targeting anxiety in youth support the conclusion that yoga is a potentially beneficial intervention for anxiety symptoms.

Controlled school-based studies also align with these findings. For instance, yoga delivered in public school settings has been associated with improvements in mood and reductions in negative affect relative to standard physical education conditions. [PMC](#) High school randomized trials have examined emotion regulation improvements following yoga exposure, supporting the plausibility of yoga as a social-emotional intervention in adolescence.

Interpretation: The converging evidence suggests that yoga can function as a stress-management and emotional self-regulation tool key protective factors during adolescence.

5.2 Quality of Life (QoL) Outcomes

QoL is less consistently measured than stress or anxiety, but existing evidence indicates meaningful gains in emotional and psychosocial QoL in school-based interventions that combine yoga and mindfulness. One well-cited school-based study reported improvements in emotional and psychosocial quality of life among students receiving yoga/mindfulness compared with controls.

Reviews conceptualize QoL improvements as downstream effects of better self-regulation, reduced distress, improved sleep, and improved social functioning. School-focused reviews also discuss that yoga participation may enhance well-being more broadly by improving coping and resilience.

Interpretation: While QoL evidence is still developing, current findings support the hypothesis that yoga can improve perceived well-being in school-aged populations, particularly psychosocial dimensions.

5.3 Emotional Intelligence (EI) and EI-Adjacent Constructs

Direct EI measurement (using EI scales) is less standard in high-quality school yoga trials. However, EI-related constructs emotion regulation, emotional awareness, self-esteem, coping, and prosocial behavior are frequently reported and appear responsive to yoga intervention. A study focusing on adolescents found yoga-related improvements in emotional regulation and related psychosocial variables.

Because EI is multidimensional, yoga may indirectly influence EI by strengthening emotion regulation skills and reducing emotional reactivity, competencies central to EI models used in educational psychology. Reviews and school-based trials collectively support the position that yoga contributes to emotional self-management skills consistent with EI development.

Interpretation: Evidence is strongest for EI-adjacent outcomes (emotion regulation, coping). Direct EI outcomes should be a priority in future school-based trials that use validated EI measures and ensure clear intervention fidelity.

6. PRACTICAL IMPLICATIONS FOR SECONDARY SCHOOLS

6.1 Program Design and Dosage

Evidence suggests benefits across a range of dosages; however, more potent effects are often observed when interventions are delivered consistently over multiple weeks with structured curricula. Reviews stress variability in protocol and the importance of standardization. Recommendation: Schools should adopt a structured curriculum (e.g., 8–12 weeks) including postures, breathing, relaxation, and brief mindfulness components, with planned progression.

6.2 Instructor Training and Fidelity

Program effectiveness depends on instructor competency and fidelity (delivering the intended content consistently). Reviews frequently note variability in delivery and the need for well-trained instructors. Recommendation: Provide instructor training, session manuals, and fidelity checklists. Consider teacher co-facilitation for sustainability.

6.3 Inclusion, Cultural Fit, and Safety

Secondary schools are diverse environments. Yoga should be presented as a secular well-being practice aligned with stress management and physical education/health curricula. Programs must be inclusive for students with disabilities and mental health vulnerabilities. Recommendation: Offer adapted postures, trauma-informed options, and opt-out alternatives; prioritize psychological safety and consent.

7. LIMITATIONS OF THE EVIDENCE BASE

Despite promising findings, several limitations are consistently noted across reviews:

1. Heterogeneity: Programs vary in content, frequency, duration, and setting, complicating pooled conclusions.
2. Measurement variability: Outcomes and tools differ widely, particularly for QoL and EI, reducing comparability.

3. Methodological constraints: Some studies have small samples, limited randomization, short follow-up periods, and reliance on self-report.
4. Publication bias risk: As in many intervention fields, positive-result bias is possible, underscoring the need for pre-registration and transparent reporting.

8. RECOMMENDATIONS FOR FUTURE RESEARCH

To strengthen the evidence for secondary school students specifically, future studies should:

- Use well-powered randomized controlled trials with active comparators (e.g., PE, relaxation training).
- Include validated QoL instruments and standard EI measures (ability-based or trait EI) and report subscales.
- Track outcomes at multiple follow-ups (e.g., 3–6 months) to test durability.
- Conduct implementation science evaluations: fidelity, acceptability, cost, and scalability in real school timetables.
- Examine moderators: baseline stress, gender, academic pressure, and socio-economic context.

9. CONCLUSION

The overall evidence indicates that yoga is a feasible, school-compatible intervention with consistent support for improving adolescent mental health outcomes, particularly stress reduction, mood improvement, and emotional regulation. Emerging evidence suggests yoga and yoga-plus-mindfulness approaches can improve psychosocial aspects of quality of life in school settings and likely support EI development through enhanced self-regulation and emotional awareness. While more rigorous EI- and QoL-focused trials are needed in secondary education, current findings justify the inclusion of structured, inclusive yoga programs within school health and well-being initiatives.

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