

More than a Game: Investigating the Effects of High School Sports Team Bonding on Mental Health



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BACKGROUND

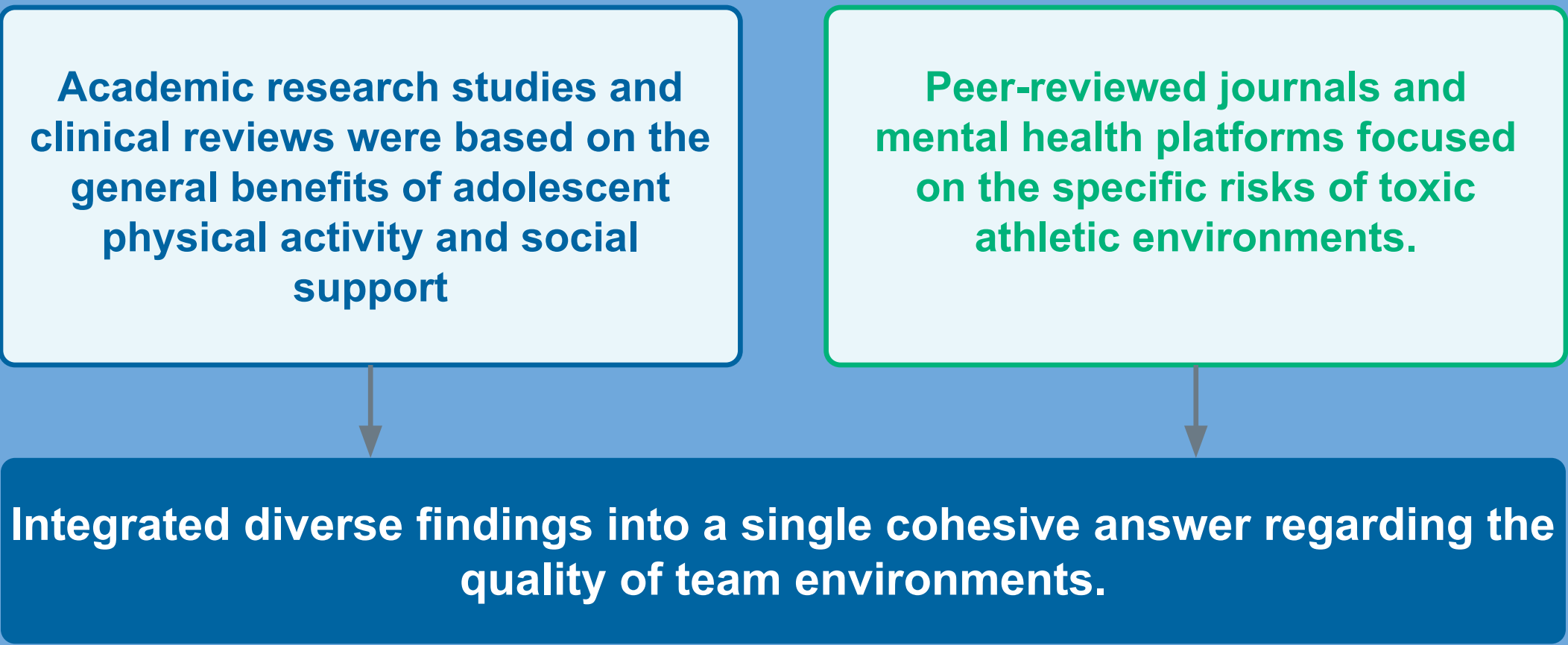
- High school athletes face immense pressures from academics and athletics, making mental health support critical during high school development
- While it is apparent that physical activity boosts mood, supportive team environments foster social connection and reduces stress. However, competitive athletics can also foster toxic, high-pressure environments.
- Much of existing sources view sports participation as a uniform benefit without evaluating how variations in team culture directly alter mental health outcomes.

This study fills the gap by examining how the quality of team bonding and social culture specifically determines whether high school sports protect against stress or increase risks for anxiety and burnout.

RESEARCH QUESTIONS

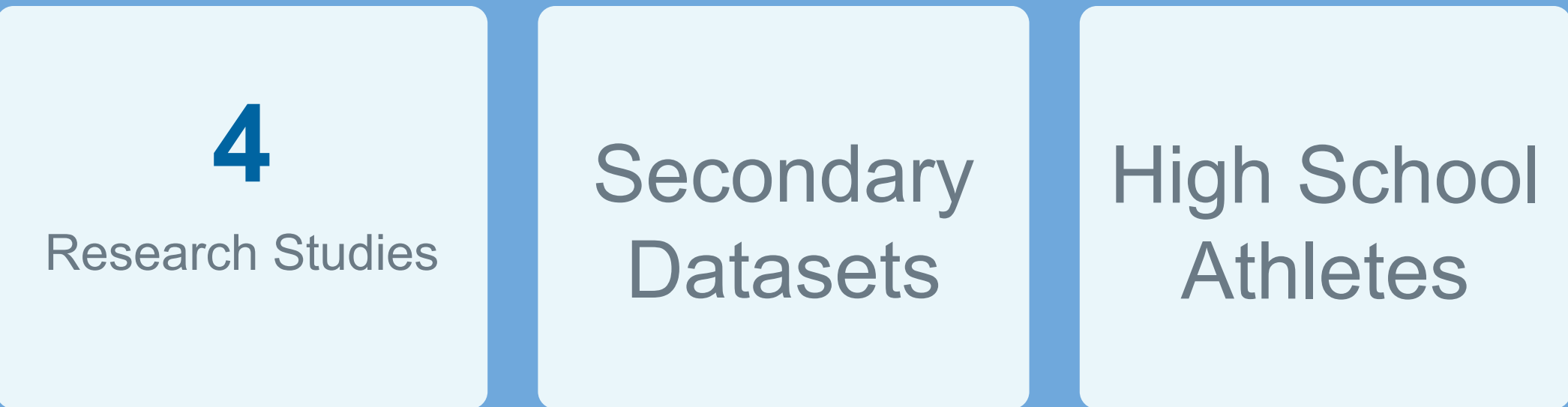
- RQ1.
How does team bonding in high school sports affect teen mental health?
- RQ2.
How do positive vs toxic team environments differ in their impact on high school athlete anxiety, resilience, and sense of belonging?

STUDY DESIGN



Qualitative secondary research synthesizing patterns present in this topic to evaluate data from multiple existing academic and clinical datasets.

PARTICIPANTS & SETTING



- Secondary research from existing academic studies, clinical reviews, and observational data focusing on high school and youth student-athletes across general and elite competitive settings
- Targeted approach towards professional platforms focused on adolescent mental health, team bonding, social support, and athletic environments.

DATA SOURCES & MEASURES

- Ward et al.
 - Measures social support mechanisms, teammate dynamics, and stress reduction
- Gwyther et al.
 - Evaluates emotional resilience alongside the risks of toxic team environments, anxiety, and athletic burnouts
- Saybrook University & UWill
 - Assesses the general psychological benefits, self-esteem, mood elevation, and social belonging in student-athletes.

ANALYSIS

- Thematic Analysis
- There were recurring patterns that were identified across multiple sources to determine collective evidence in terms of the distinction between positive and negative athletic environments.
- Categorical Arrangement
- Sorted findings into “Positive” vs. “Negative/Toxic” environment categories to compare mental health outcomes.
- Research Gap
- Reviewing studies for missing demographics and unanswered questions to identify the limitations of the current research

RESULTS — PRIMARY FINDING

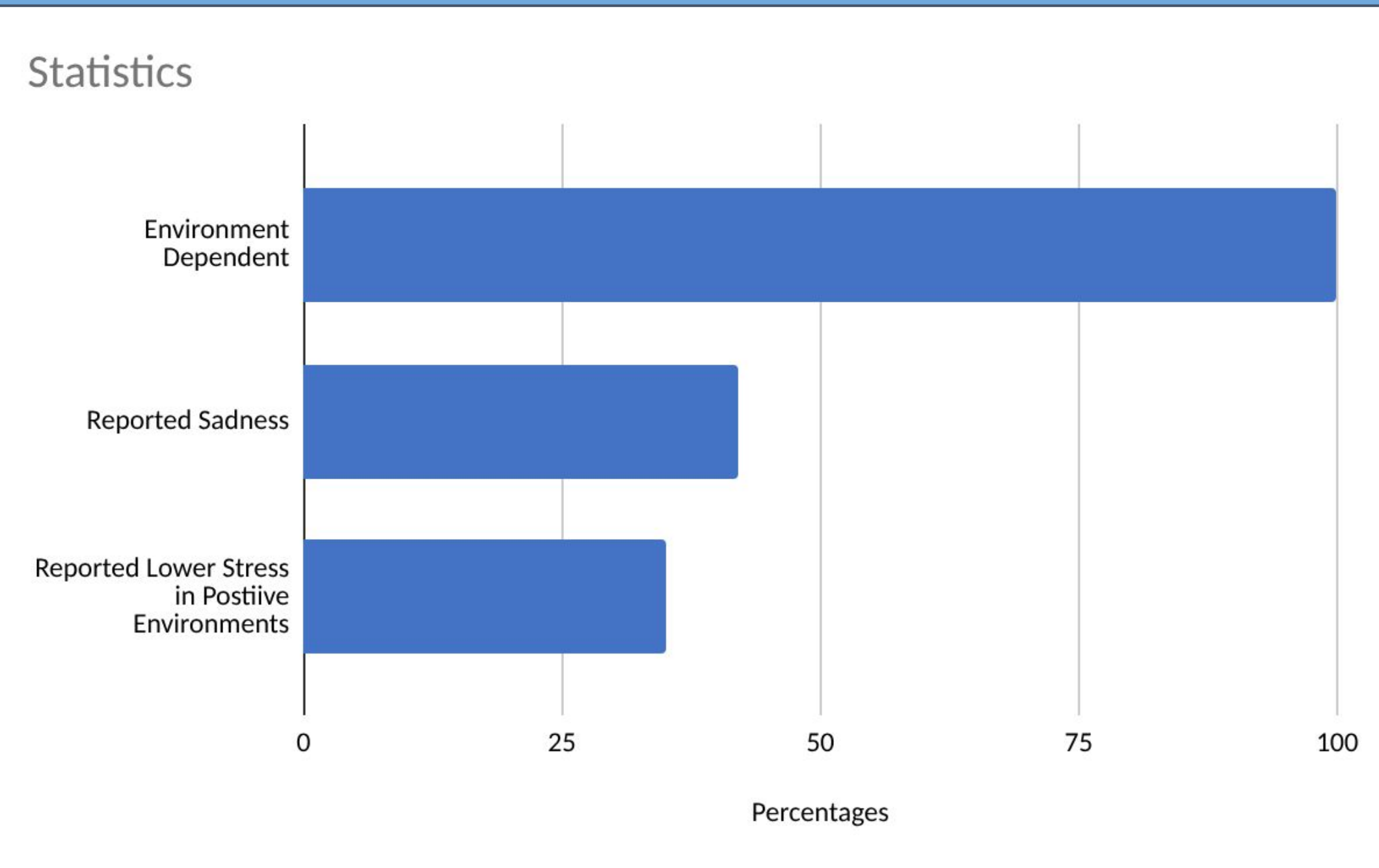


Figure 1. Majority of adolescents report persistent sadness due to various stressors, while a large amount of student athletes report having lower stress levels of positive team environments, demonstrating the efficacy of team bonding on the mental health of adolescents.

RESULTS — [SECONDARY FINDINGS]

[Col]	[Indicator]	[Estimate (95% CI)]	[Effect size]
[1]	Team vs. Individual Sports	7.0% (Team) vs. 13% (Individual)	d = 0.46
[2]	Social Support & Burnout	r = -0.67 (negative correlation)	r = -0.67
[3]	Non-Athlete Mental Health Risk	10%-20% higher risk	d = 0.25

The data reveals a significant protective social buffer in team sports, where athletes report nearly half the rates of anxiety and depression (7%) compared to those in individual sports (13%). Furthermore, there is a moderate negative correlation ($r = -0.67$) between perceived social support and athletic burnout, indicating that support networks are the primary mechanism for mental health preservation.

Participation in organized team activities is associated with higher levels of efficacy and mental toughness compared to non-participants or those in negative or unsupportive athletic environments.

RESULTS — [QUALITATIVE / OTHER]

- Theme 1. Social Support in Stress Reduction
- Active social support from coaches and teammates significantly decreases stress levels and improves overall well-being.
- Theme 2. Emotional Resilience
- Strong relationships built within sports teams improve confidence, boost self-esteem, elevate mood, and protect mental wellness.
- Theme 3. Overcoming Isolation

Team sports foster built-in communities, establishing a welcoming environment through shared teamwork and mutual goals

DISCUSSION & IMPLICATIONS

- Playing team sports is not an automatic solution for adolescent mental health as the outcome almost entirely depends on team culture.
- These findings support prior research on the benefits of participation in physical activity and social connection, while expanding the framework to demonstrate that environmental quality acts as the consistent variable
- Athletic departments must actively generate supportive team environments and remove toxic dynamics from either coaches or peers rather than solely focusing on winning.
 - In regards to mental health, high school sports programs should incorporate preventative mental health spaces to improve the mental health of student-athletes.

LIMITATIONS

- Difficulty finding specific demographics or exact percentages, making numerical conclusions less precise in our research.
- The focus of our project was strictly team-based sports, which potentially excludes the stressors found in individual sports while decreasing the level of nuance in our findings.
- Future research can explore gender dynamics and specific team-bonding activities to determine which are the most effective at alleviating stress.

TAKE-HOME MESSAGE

When it comes to high school sports, the environment matters more than the activity itself. While a positive team culture serves as a crucial component for social connection that prevents isolation and buffers stress, a toxic environment poses a significant threat for adolescent anxiety.

Acknowledgments & References

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