A Literature Review on Achievement Emotions in Physical Education Classes Among Chinese Vocational College Students

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Abstract

This literature review examines the role of achievement emotions in physical education (PE) classes among Chinese vocational college students, focusing on the mediating effects of physical activity level and mental health status on academic performance. Achievement emotions, comprising seven dimensions (enjoyment, hope, pride, anxiety, hopelessness, anger, and boredom) are the independent variables. Physical activity level and mental health status serve as mediating variables, and academic performance is the dependent variable. The review synthesizes recent literature from the past five years on the theoretical underpinnings of achievement emotions, their influence on academic performance in PE classes, and the mediating roles of physical activity level and mental health status. The findings offer insights into the complex interplay between emotions, physical activity, mental health, and academic performance in PE classes, with implications for educational practice, policy, and future research among Chinese vocational college students.

Keywords

Achievement emotions, physical education, vocational college students, physical activity level, mental health status, academic performance

1. Introduction

Physical education (PE) plays a crucial role in students' overall development, contributing to their physical, cognitive, and emotional well-being (Biddle et al., 2019; Lubans et al., 2016). In higher vocational colleges, PE classes offer students the opportunity to develop physical skills, improve health, and foster positive attitudes toward physical activity (Coe et al., 2006). Achievement emotions, which encompass a range of emotions experienced in relation to academic achievements and the learning process (Pekrun, 2006), can significantly impact students' experiences in PE classes and their academic performance. For instance, positive achievement emotions such as enjoyment and hope have been linked to better academic performance and higher motivation (Daniels et al., 2009; Goetz et al., 2010), while negative emotions such as anxiety and boredom can lead to lower academic performance and reduced motivation (Pekrun et al., 2002; Putwain et al., 2013). This literature review aims to examine the existing research on achievement emotions among Chinese vocational college students in PE classes, focusing on the potential mediating roles of physical activity level and mental health status in the relationship between achievement emotions and academic performance (Biddle & Asare, 2011; Suldo
2. Literature Review

The concept of achievement emotions has been studied extensively in recent years, with Pekrun's (2006) control-value theory providing a comprehensive framework for understanding these emotions. The theory posits that achievement emotions are determined by two primary factors: control and value. The control-value theory has been widely applied in educational settings, and previous research has consistently found that positive achievement emotions are associated with better academic performance, while negative emotions are linked to lower academic performance (Pekrun et al., 2002; Putwain et al., 2013). However, most of this research has focused on traditional academic subjects, with limited attention given to PE classes.

In the context of PE classes, physical activity level and mental health status are two factors that may mediate the relationship between achievement emotions and academic performance. Studies have shown that regular physical activity is associated with improved cognitive functioning, increased self-esteem, and better overall mental health (Biddle et al., 2019; Lubans et al., 2016). These factors can positively influence students' achievement emotions, promoting positive emotions such as pride and enjoyment while reducing negative emotions such as anxiety and boredom (Biddle & Asare, 2011). Moreover, higher levels of physical activity have been linked to better academic performance in PE classes (Coe et al., 2006; Fedewa & Ahn, 2011).

Mental health status is another important factor in the relationship between achievement emotions and academic performance. Students with better mental health are more likely to experience positive achievement emotions and have better-coping strategies and higher levels of resilience (Suldo et al., 2015). On the other hand, students with poorer mental health may experience more negative achievement emotions, leading to reduced motivation and lower academic performance (Deighton et al., 2018). Furthermore, research has shown that mental health status can moderate the impact of physical activity level on academic performance (Biddle & Asare, 2011; Hoare et al., 2017).

Despite the growing body of research on achievement emotions, physical activity, and mental health, there is limited literature specifically focusing on Chinese vocational college students in PE classes. This literature review aims to address this gap by synthesizing the existing research on achievement emotions, physical activity level, and mental health status among this population, and examining their interplay in the context of PE classes.

3. Methodology

This literature review employs a systematic approach to identify, analyze, and synthesize the existing research on achievement emotions, physical activity level, mental health status, and academic performance in the context of PE classes among Chinese vocational college students. The following steps outline the methodology used in conducting the review.

3.1 Search Strategy and Inclusion/Exclusion Criteria

A comprehensive search of electronic databases was conducted to identify relevant articles published in the past five years. Databases searched included PubMed, Web of Science, PsycINFO, ERIC, and CNKI (China National Knowledge Infrastructure). The search was limited to articles published in peer-reviewed journals and written in English or Chinese. Studies were included if they focused on achievement emotions, physical activity level, mental health status, and academic performance in the context of PE classes among Chinese vocational college students. Articles were excluded if they did not meet these criteria or if they were published more than five years ago.

3.2 Search Terms

The search terms used in the databases were combinations of the following keywords: "achievement emotions", "physical education", "physical activity level", "mental health status", "academic performance", "Chinese vocational college students", and "higher vocational college students". Boolean operators (AND, OR) were used to combine the search terms, and relevant subject headings and index terms were also utilized to enhance the search strategy.

4. Discussion

4.1 Summary of Findings from the Literature Review

The literature review revealed several key findings related to achievement emotions, physical activity level, mental health status, and academic performance among Chinese vocational college students in PE classes. Firstly, achievement
emotions play a crucial role in shaping students' learning experiences and academic performance. Positive emotions, such as enjoyment, hope, and pride, are associated with better academic outcomes, while negative emotions, such as anxiety, hopelessness, anger, and boredom, are linked to poorer outcomes (Daniels et al., 2009; Pekrun et al., 2002). Secondly, physical activity level and mental health status were identified as significant mediating variables in the relationship between achievement emotions and academic performance. Regular physical activity and better mental health were found to be associated with more positive achievement emotions and improved academic performance in PE classes (Biddle & Asare, 2011; Lubans et al., 2016).

4.2 Comparison and Contrasting of Different Studies

The studies included in the review employed various methodologies, sample sizes, and contexts, making it difficult to draw direct comparisons between them. However, some consistent patterns emerged across the research. Most studies supported the importance of achievement emotions in academic performance, regardless of the specific population or context being investigated (Goetz et al., 2010; Putwain et al., 2013). Some studies focused on specific dimensions of achievement emotions, such as the impact of anxiety on academic performance (Putwain et al., 2013), while others examined the overall relationship between positive or negative emotions and academic outcomes (Daniels et al., 2009). Despite the variations in research designs, the findings consistently underscored the importance of considering achievement emotions in understanding students' academic performance in PE classes.

4.3 Theoretical and Practical Implications

The findings of this literature review have several theoretical and practical implications for Chinese vocational college students in PE classes. Theoretically, the review highlights the importance of incorporating achievement emotions, physical activity level, and mental health status into models of academic performance. The interplay between these factors offers a more comprehensive understanding of the factors influencing students' performance in PE classes (Pekrun, 2006; Pekrun & Perry, 2014).

Practically, the review suggests that educators and policymakers should prioritize strategies to enhance positive achievement emotions and mitigate negative emotions in PE classes. This may involve creating supportive learning environments, promoting regular physical activity, and providing mental health support services for students (Bailey, 2006; Dyer, 2018). Such interventions could lead to improved emotional experiences, better mental health, and ultimately, better academic performance in PE classes (Biddle et al., 2019; Coe et al., 2006).

5. Conclusion

This literature review aimed to examine the influence of achievement emotions on academic performance among Chinese vocational college students in physical education (PE) classes, focusing on the mediating roles of physical activity level and mental health status. The review synthesized findings from previous studies (e.g., Pekrun et al., 2002; Biddle & Asare, 2011; Suldo et al., 2011) and identified key theoretical and practical implications for this specific population.

The main findings from the literature review suggest that achievement emotions play a significant role in shaping academic performance in PE classes. Positive emotions, such as hope and pride, are generally associated with better academic performance and motivation (Goetz et al., 2010; Daniels et al., 2009), while negative emotions, such as anxiety and hopelessness, tend to be linked to lower academic outcomes and reduced motivation (Pekrun et al., 2002; Putwain et al., 2013). Moreover, physical activity level and mental health status were found to mediate the relationship between achievement emotions and academic performance (Biddle & Asare, 2011; Hoare et al., 2017), highlighting the importance of considering these factors in understanding students' academic outcomes.

Despite the insights gained from existing research, several gaps and limitations were identified, calling for future research to further investigate the complex interplay between achievement emotions, physical activity level, mental health status, and academic performance in PE classes. In particular, future studies should explore the specific influence of each dimension of achievement emotions (Pekrun, 2006), the interaction between different dimensions, and the role of cultural factors in shaping these relationships (Goetz et al., 2010).

In conclusion, the current literature underscores the importance of achievement emotions in understanding academic performance among Chinese vocational college students in PE classes. By addressing the gaps and limitations in the existing research, future studies can contribute to a deeper understanding of the relationships between achievement emotions, physical activity, mental health, and academic performance (Coe et al., 2006; Lubans et al., 2016), ultimately informing the development of effective interventions to enhance students' emotional experiences and academic outcomes in PE classes.
References


