

Doctoral Thesis Abstract

Development of Positive Behavior and Mental Toughness Skills in Young Athletes

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BACKGROUND AND OBJECTIVES

In recent years, the growing issue of aggression and mutual disrespect among both athletic and non-athletic adolescents and young individuals – regardless of whether they become professional athletes – has increasingly been emphasized not only in public discourse but also in scientific research. This has become an undeniably relevant scientific problem (Cristello, Trucco, & Zucker, 2020; Jewett, Kerr, MacPherson, & Stirling, 2020; Mays & Thompson, 2009; Whitley et al., 2019). As a preventive measure against the manifestation of negative adolescent behavior, an integrated skill development program through sports, based on a comprehensive model of positive behavior and mental toughness skills, may play a crucial role (Chauke & Malatji, 2022; Gould, Griffes, & Carson, 2011; Gucciardi & Jones, 2012; Slack et al., 2015). This enables the formulation of a key research question: How would an educational program based on a comprehensive model of positive behavior and mental toughness skills contribute to the development of young athletes' positive behavior and mental toughness skills? The aim of this dissertation is to reveal the characteristics of young athletes' positive behavior and mental toughness skill development.

METHODS

The dissertation employed a mixed methods convergent design (one-phase design) research strategy (Creswell & Creswell, 2023). The logical sequence of the research consisted of five phases. First, a scientific literature analysis was conducted on the dissertation topic. Second, research instruments for the dissertation study were identified. Third, a diagnostic study was carried out, during

which a written survey was used to assess the level of positive behavior and mental toughness skills among young athletes (aged 15–18). Fourth, an educational experiment was organized, starting with an initial assessment of both the experimental group ($n = 30$) and the control group ($n = 32$) using a written survey. The experimental group underwent an intervention involving participation in activities based on an integrated skill development program designed to enhance positive behavior and mental toughness skills among young athletes. Afterwards, a final assessment was conducted for both the experimental and control groups, along with a qualitative study involving the parents of young athletes from both groups. Finally, quantitative and qualitative data were analyzed, and data integration was performed.

RESULTS

The applied multivariate analysis of variance (MANOVA) revealed that the skill levels of the experimental group were statistically significantly higher ($p < 0.05$) compared to the control group in most skill scales, except for the determination and visualization skills, which are part of the athletic mental toughness skills construct. The integration of quantitative and qualitative data demonstrated a trend: the higher the Cohen's d effect size identified in the quantitative analysis, the higher the frequency of analysis units in the qualitative data, except for the empathy, self-control, and self-esteem skill scales. The results of quantitative and qualitative data integration not only confirmed this trend but also revealed that the acquired skills were transferred to other life contexts.

CONCLUSIONS

After the application of the integrated positive behavior and mental toughness skill development program based on the positive behavior and mental toughness skill development model, the skill levels of the experimental group were statistically significantly higher ($p < 0.05$) compared to the control group. Moreover, the acquired skills were successfully transferred to other life contexts.

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