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The Mediating Role of Resilience in the Relationship between Physical Activity and Students' Phone Addiction

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Abstract

Improving students' health is one of the most important goals of the education system. In recent years, increasing attention to students' health has significantly enhanced the importance of school physical education programs. Accordingly, the main objective of this research was to investigate the mediating role of resilience in the relationship between physical activity and students' phone addiction. This research was applied, and a correlational research method was used. All female secondary school students in Ramian City during the 2023 academic year constituted the statistical population of the study (291 students). The entire population was considered as the sample, and finally, 259 completed questionnaires were collected. The data collection instruments included three questionnaires measuring physical activity (Hagger et al., 2003), psychological resilience (Van Der Meer et al., 2018), and mobile phone addiction (Kwon et al., 2013). Descriptive and inferential statistics were used to analyze the collected data. The results showed a positive and significant relationship between physical activity and psychological resilience among female secondary school students. The results also indicated a negative and significant relationship between physical activity and mobile phone addiction among female high school students. Finally, the findings showed that the relationship between physical activity and mobile phone addiction among female students was significant with the mediating role of psychological resilience. Increasing female students' motivation to engage in regular physical activity can lead to outcomes such as increased psychological resilience and reduced mobile phone use. Based on the results, encouraging female students to engage in regular physical activity in schools and incorporating attractive sports programs for these students into extracurricular activities are recommended.

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Extended Abstract

Introduction

Using a mobile phone is considered a necessity in today's modern life, and this smart device has a special place in the technological revolution. Beyond their primary function, smartphones provide entertainment opportunities such as online games, web surfing, and social media browsing, and have made life easier through a variety of applications. Despite the many advantages of smartphones, their potential threats have become a new and growing area of research. Smartphone addiction is considered one of the potential threats associated with the use of these electronic devices. Smartphone addiction is a growing phenomenon, particularly among young people, due to factors such as the increasing number of social networks, the expanding capabilities of smartphones, users' growing skills in using this modern technology, and the COVID-19 pandemic. With the increasing problems associated with smartphone addiction, efforts have been made to develop interventions aimed at reducing the use of these smart devices. Many studies have identified physical activity as an effective factor in reducing mental and behavioral disorders such as smartphone addiction. Physical activity also has functions similar to those provided by smartphones. The recreational, social, entertainment and educational functions of physical activity can satisfy people's psychological needs in different ways, potentially replacing mobile phone use and thereby reducing the frequency of smartphone use. Furthermore, the recreational, competitive, and open-air features of physical activities provide a suitable environment for developing psychological resilience in individuals such as students, and students with greater psychological resilience achieve greater academic success. Alongside the increasing access of different age groups to mobile phones in Iran, their use has also increased substantially. Despite the growing number of mobile phone users, relatively little scientific research has been conducted in the country on the negative consequences of mobile phone use, such as addiction. Encouraging students to engage in physical activity can be used as an important strategy in this regard; however, limited research has been conducted on this issue, highlighting the necessity of the present study. Based on the aforementioned considerations, the main aim of the research was to investigate the mediating role of resilience in the relationship between physical activity and students' phone addiction. Accordingly, the main objective of this research was to investigate the mediating role of resilience in the relationship between physical activity and students' phone addiction.

Method

This applied research used a descriptive correlational method. The statistical population consisted of all female high school students in Ramian City during the 2023 academic year (291 students). The census method was used to select the research sample, and finally, 259 questionnaires were collected. Data collection instruments included three questionnaires: Physical Activity (Hagger et al., 2003), Psychological Resilience (Van Der Meer et al., 2018), and Mobile Phone Addiction (Kwon et al., 2013). Descriptive statistics and structural equation modeling were used to analyze the data using SPSS version 25 and SmartPLS version 3 software.

Results

The results showed a positive and significant relationship between physical activity and

psychological resilience among female students. Additionally, the results indicated a negative and significant relationship between physical activity and mobile phone addiction among students. Finally, the findings showed that the relationship between physical activity and mobile phone addiction among female students was significantly mediated by psychological resilience.

Discussion

Increasing female students' motivation to engage in regular physical activity can lead to outcomes such as increased psychological resilience and reduced mobile phone use. Based on the results, it is recommended that female students be encouraged to engage in regular physical activity in schools and those attractive sports programs for these students be incorporated into extracurricular activities. One of the limitations of this study is the small size of the statistical population, which limits the generalizability of its results to female high school students in other provinces.

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