

ORIGINAL ARTICLE

An analysis of the mediating role of academic procrastination in the relationship between cyberspace usage and aggression among sixth grade elementary school students

Maryam Darvishi^{1*}, Rahim Rahimi²

1. assistant Professor of Educational Sciences and psychology, Payame Noor University, Tehran, Iran.
2. M.sc. Educational Psychology, Department of Educational Psychology, Islamic Azad University, Hamedan, Iran.

Correspondence:

Maryam Darvishi

Email: m.darvishi61@pnu.ac.ir

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ABSTRACT

Introduction and Objective: The emergence of social networks has provided new challenges and opportunities for understanding learners' motivation. Therefore, the main objective of this study was An analysis of the mediating role of academic procrastination in the relationship between cyberspace usage and aggression among sixth grade elementary school students. **Method:** The study was applied in terms of purpose and descriptive in terms of method, correlational. The statistical population was all sixth grade elementary school male students in Dargazin County (260 people) in the academic year 1403-1404, 260 people. 152 people were selected using the Krejci and Morgan table and were reduced to 120 people due to attrition. The sampling method used was a multi-stage cluster. The measurement tools in this study included three standard cyberspace questionnaires: Lee et al. (2005), Nielsen's aggression questionnaire (2000), and the Savari academic procrastination questionnaire (2011). data were analyzed using descriptive statistics such as frequency distribution table, graphs, mean and standard deviation and to test statistical hypotheses of correlation coefficient and structural equation using smart pls and smart pls (3, 3, 3). **Findings:** the results showed that: there is a meaningful relation between the use of cyberspace and aggression with the mediating role of academic procrastination among students. there is a meaningful relation between the use of cyberspace and academic procrastination; there is a meaningful relation between the use of virtual space and academic procrastination ($p < 0.005$). **Conclusion:** The findings indicate the negative impact of using cyberspace on students' academic performance and social relationships. Therefore, given the importance of the relationship between cyberspace and aggression and procrastination, identifying the factors affecting students' excessive use of cyberspace and their excessive involvement with cyberspace, which has many negative effects on their mental and physical health, should be a priority for governments, parents, schools and other relevant organizations.

KEYWORDS

Cyberspace Use, Aggression, Academic Procrastination.



Introduction

the emergence of social networks has provided new challenges and opportunities for understanding learners' motivation. Although digital and mobile technologies offer many benefits, excessive and irregular use can lead to dependence and addictive behaviors, with consequences affecting both physical and mental health (Choksi & Patel, 2021). Research indicate that the risk of harm from online games increases with decreasing age and peaks during adolescence (Andersen et al., 2016); because adolescents, due to their exploratory nature and tendency toward exciting experiences, may engage in behaviors that threaten their health (Wu et al., 2019). Aggression during adolescence, whether verbal or nonverbal, if left unaddressed, can severely impair an individual's social functioning (Ojanen et al., 2015). Academic procrastination is also considered as one of the key challenges in educational systems (Melgaard et al., 2022). This phenomenon refers to postponing or avoiding tasks and responsibilities (Nurlila & Rahmawati, 2019), such that despite having the ability and awareness of negative consequences, the individual refrains from completing tasks and defers them to the future (Ferrari et al., 2018). Procrastination manifests in various forms, the most common being academic procrastination. According to available evidence, academic procrastination is recognized as a prevalent problem among student populations (Al-Moromode et al., 2024). In today's technology-driven world, the boundary between necessary internet use and internet addiction has become very blurred; although digital technologies facilitate human activities, excessive use can lead individuals toward internet addiction. Given the above, attention to variables such as aggression and procrastination in relation to social media usage among students is of particular importance. Therefore, the main research question is whether there is a relationship between the use of cyberspace and the variables of aggression and academic procrastination in sixth-grade elementary school students.

Method

The present study was applied in terms of purpose and descriptive-correlational in terms of method. The statistical population consisted of all 260 male sixth-grade elementary school students in the city of Dargazin during the 2024–2025 academic year. A sample of 152 students was selected using the Krejcie and Morgan table, subsequently reduced to 120 due to attrition. The sampling method was multi-stage cluster sampling. Measurement instruments included three standard questionnaires: the Cyberspace Questionnaire by Lee et al. (2005) with 21 items on a five-point Likert scale; the Aggression Questionnaire by Nilsson (2000) with 39 items on a four-point Likert scale; and the Academic Procrastination Questionnaire by Savari (2011) with 12 items on a five-point Likert scale. Data analysis was performed using descriptive statistics such as frequency distribution tables, graphs, means and standard deviations. To test the statistical hypotheses, correlation coefficients and structural equation modeling were used via SPSS26 and SmartPLS (3,3,3).

Findings

The results showed that the research model had a good fit. There was a significant relationship between the use of cyberspace and aggression mediated by academic procrastination in students. There was a significant relationship between the use of cyberspace and aggression. There was a significant relationship between the use of cyberspace and academic procrastination, and between procrastination and aggression ($p < 0.005$).

Conclusion

The aim of this study was to investigate the relationship between cyberspace use and aggression with the mediating role of academic procrastination in sixth-grade elementary school students. The findings indicated the effect of cyberspace use on students' aggression and procrastination. Therefore, given the relationship between cyberspace use and aggression and procrastination, the following recommendations are made:

1. Identifying and controlling the factors influencing students' excessive use of this space should be prioritized by governments, parents, schools and other relevant organizations.
2. Governments should adopt measures to reduce children's unrestricted use of cyberspace, or limit access to websites and platforms by establishing regulatory frameworks.
3. Teachers and administrators should, through various courses or even short lectures, inform students and their parents about the proper use of mass media, especially cyberspace and highlight both the benefits and risks of using cyberspace.

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Authors' Contribution

The corresponding author was responsible for the study's conceptualization and methodology and the second author was responsible for data collection, analysis, writing, and final approval of the manuscript.

Conflict of Interest

The authors declare no conflict of interest regarding the publication of this article.

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