

The Threshold Effect of Instagram Usage Duration and the Role of Instagram Addiction on the Happiness of Students at University of Gonabad

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Extended Abstract

Purpose

With the rapid expansion of social media and its determining role in individuals' daily lives, examining the psychological consequences of social media consumption patterns has gained increasing importance. In recent years, Instagram—due to its visual nature, aesthetic appeal, and capacity for extensive social interaction—has become one of the most frequently used platforms among young users. However, previous studies show that the type and intensity of Instagram use can produce divergent psychological outcomes, such as enhanced social connectedness and strengthened support networks, or conversely, reduced happiness, increased anxiety, and behavioral addiction. The main purpose of this study is to investigate the relationship between daily Instagram use, Instagram addiction, and the happiness of students at the Gonabad Institute of Higher Education. In addition, the study explores whether a threshold effect exists in the relationship between Instagram use duration and happiness—meaning that moderate use may be beneficial, while exceeding a certain limit may be associated with negative consequences. From this perspective, the study addresses an important gap in domestic literature regarding the nonlinear psychological effects of social media consumption among university students.

Design / Methodology / Approach

This research adopts a quantitative approach and is descriptive–analytical in nature, employing a correlational design. The statistical population consisted of all students of the Gonabad Institute of Higher Education during the academic year 2023–2024, from which 150 individuals were selected through convenience sampling. Data were collected using the Oxford Happiness Inventory (OHI) and the 15-item Persian version of the Instagram Addiction Scale. Daily Instagram usage time was obtained through a researcher-designed questionnaire. Given the potential nonlinear relationship, the data were analyzed us-

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ing a Threshold Regression Model, and the statistical significance of slope change was assessed through the Davies Test. Gender and marital status were included as control variables. The theoretical framework draws on media psychology, behavioral addiction theory, and emotion-regulation models, all emphasizing the role of media consumption habits in shaping mental well-being.

Findings

The results revealed a nonlinear relationship between daily Instagram use and happiness, confirming the presence of a threshold effect. According to the model, using Instagram for up to approximately 1.84 hours per day was associated with higher happiness, whereas usage beyond this threshold was significantly associated with lower happiness levels. This indicates that the psychological relationship with Instagram use varies according to consumption level: moderate use was associated with higher well-being, whereas excessive use was associated with poorer psychological outcomes. The findings also showed that Instagram addiction was significantly and negatively associated with happiness, meaning that individuals with more compulsive or addictive usage patterns reported lower levels of happiness. Among the control variables, marital status had a positive and significant relationship with happiness, while gender did not produce a meaningful difference. Overall, the results suggest that controlled and mindful social media use may foster positive emotions and social interaction opportunities, whereas excessive engagement was associated with lower levels of psychological well-being.

Research limitations/implications

This study has certain limitations. Data were collected via self-report questionnaires; therefore, accuracy depended on the honesty and psychological state of participants at the time of response. Additionally, the focus on a single student population limits the generalizability of the findings.

Future research is encouraged to examine whether variables such as family support, quality of real-life social interactions, and participation in group activities can moderate the negative consequences of social media addiction. Comparative studies between dormitory and non-dormitory students may also provide deeper insights into cultural and environmental factors influencing the development and severity of social media addiction.

Practical Implications

The findings offer important practical implications for universities, counseling centers, psychologists, and media policymakers. Since moderate Instagram use was associated with higher happiness, universities should avoid restrictive or prohibitive approaches and instead focus on empowering students through self-regulation skills, time-management training, and mindful media use education.

Developing workshops on healthy digital behavior, producing educational content on the risks of excessive use, and offering counseling services for managing behavioral media addiction are practical steps inspired by the study's results. Additionally, because social support has protective effects, strengthening student group activities and peer-support networks can contribute to improved psychological well-being.

Social Implications

Given the central role of social media in shaping students' personal and social interaction patterns, this study can guide policymakers in designing more effective social strategies.

The finding that moderate use was associated with higher happiness may influence public attitudes toward balanced social media engagement, while warnings about the harms of excessive use can inform media literacy programs and behavioral addiction prevention strategies. It is recommended that higher education policymakers prioritize enhancing behavioral media literacy, strengthening social support systems, and promoting healthy digital skill development rather than imposing restrictive measures.

Originality / Value

The key novelty of this study lies in examining the threshold effect of Instagram use on happiness, a topic rarely addressed in domestic research. While most previous studies assume a linear relationship between media consumption and mental health, the findings indicate that the relationship appears to be nonlinear, with the direction and magnitude of the association varying according to usage intensity. The application of threshold regression and the Davies Test adds methodological value. The findings provide meaningful insights for researchers, mental health policymakers, university counselors, and media specialists.

Keywords: Instagram, Happiness, Threshold Regression, Social Media Addiction, Mental Health, Media Behavior.