# Investigating the Structural Relationships of the Tendency to Addiction to Mobile Phone-Based Social Networks in Students, Based on Early Maladaptive Schemas Mediated by Alexithymia in Students

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## Extended Abstract

### Aim

In recent years, smartphone adoption has surged worldwide, with penetration rates projected to reach 90% among adults in developed countries by the end of 2023 (Arpaci, 2021). Among the most widely used smartphone services are social networking sites, which provide users with convenient communication channels. However, excessive use of these platforms has been associated with social network addiction, which, in turn, is linked to various psychological issues, including anxiety, stress, insomnia (Hussain & Griffiths, 2021), loneliness, and depression (Gong et al., 2021). Early maladaptive schemas (EMSs)—patterns of thought and behavior that can trigger uncontrollable and harmful emotions (Young et al., 2003)—are recognized as contributing factors to addiction. Although recent studies have established a relationship between social network addiction and EMSs (Kahouei et al., 2020; Cudo et al., 2020), limited research has investigated the nature of these associations. Moreover, no prior studies have examined the role of alexithymia—the inability to identify or describe one's emotions—as a potential mediator in these relationships. This study seeks to explore the indirect effects of early maladaptive schemas on the tendency toward social network addiction, with alexithymia acting as a mediating factor.

### Methodology

This study adopted a descriptive-correlational design, targeting university students aged 18 to 30 who actively used social networking sites (SNSs) in Isfahan and Tehran during the 2021–2022 academic year. The sample comprised 524 participants (143 males and 381 females, with a mean age of 26.48), selected through a convenience sampling method. Several instruments were employed for data collection: the Mobile Social Network Addiction Scale (SNA) (Khajeahmadi et al., 2017), the Toronto Alexithymia Scale (TAS-20) (Bagby et al., 1994), and the Young Schema Questionnaire-Short Form 3 (YSQ-S3) (Young, 2005). Participants also provided sociodemographic data, including age, gender, and daily SNS usage time. Data analysis included descriptive statistics, correlation analyses, and path modeling to estimate regression coefficients. SPSS software version 26 and R software version 4.2 were used to perform these analyses.

### Findings

Analysis of the 524 questionnaires revealed that the average participant age was 26.48 years. Women constituted the majority of the sample, representing 72.7% (381 participants), while most participants reported being unmarried (82.3%, 436 individuals). Additionally, 46% (241 participants) had an undergraduate level of education. The most frequently used social networking platforms were WhatsApp (81.9%, 429 users), Instagram (80.9%, 424 users), and Telegram (57.8%, 303 users), with participants spending an average of 5.8 hours daily on these platforms.

The model's fitness indices demonstrated an acceptable fit (GFI = 0.89, AGFI = 0.85, SRMR = 0.06, CFI = 0.91, NFI = 0.89, NNFI = 0.89, RMSEA = 0.08, PGFI = 0.64). The results indicated that early maladaptive schemas significantly predicted both the tendency toward social network addiction and alexithymia. However, alexithymia did not significantly predict the tendency toward social network addiction, nor did it mediate the relationship between early maladaptive schemas and social network addiction.

## Conclusion

First, the findings are consistent with previous research emphasizing the significant role of early maladaptive schemas in substance and behavioral addictions (Bakhshi Bojed & Nikmanesh, 2013). Specifically, the results align with studies by Cudo et al. (2020) and Kahouei et al. (2020), which established a connection between early maladaptive schemas and social network addiction. This relationship may be explained by the tendency of social network users to engage with these platforms to alleviate negative emotions and dysfunctional thoughts associated with early maladaptive schemas, often seeking validation from other users.

Second, the findings showed that alexithymia did not function as a mediating factor. Given the characteristics of alexithymia—such as difficulty identifying and describing emotions, an externally oriented thinking style, and its association with early maladaptive schemas as self-damaging cognitive and emotional patterns—it is plausible that alexithymia serves as a component or consequence of certain schema elements, rather than as an independent mediator.

Based on these results, it can be concluded that when investigating schemas as a primary influence on social network addiction, alexithymia may not need to be considered a secondary construct. These findings suggest that psychologists and counselors should prioritize addressing early maladaptive schemas in the prevention, management, and treatment of social network addiction. Additionally, future longitudinal studies are recommended to explore the causal relationship between early maladaptive schemas and social network addiction.

## Ethical Considerations

This study complied with all ethical standards, including obtaining informed consent from participants, safeguarding the confidentiality of personal information, and ensuring voluntary participation. Ethical principles were rigorously upheld throughout the research process.

## Acknowledgments

## Conflict of Interest

The authors declare no conflict of interest related to this article.

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