COVER PAGE

Offical Title: *The Effect of Digital Parenting Education Provided to Mothers on Social Media Addiction and Their Knowledge and Attitudes Regarding Their Children's Technology Use*

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NCT Number: Not yet assigned

STUDY PROTOCOL

This study aims to examine the effectiveness of digital parenting education provided to mothers in reducing their levels of social media addiction and improving their knowledge and attitudes regarding their children's use of technology. The widespread presence of digital media in everyday life has increased children’s exposure to technology, which in turn has raised concerns about screen time, digital safety, and parental guidance. Research suggests that parents' own digital habits, particularly mothers', may significantly influence their children's digital behaviors. Despite the importance of this issue, there is a limited number of intervention studies focusing on evidence-based digital parenting education. Therefore, this randomized controlled trial has been designed to fill this gap and contribute to the growing field of digital health education.

The primary objective of the study is to evaluate the impact of a structured digital parenting education program on mothers’ social media addiction levels and their knowledge and attitudes related to the digital media usage of their children. The study will utilize a randomized controlled, pretest-posttest design with two parallel groups: an intervention group and a control group.

A total of 152 mothers will be recruited to participate in the study. Participants will be randomly assigned into either the intervention group (n = 76) or the control group (n = 76) using a simple randomization method generated via randomizer.org. Eligibility criteria include being over the age of 18, having at least one child, and being an active social media user. Mothers with severe psychiatric diagnoses or those unable to participate in the training program will be excluded from the study.

The intervention group will receive a digital parenting education program delivered online over a four-week period. The content will focus on responsible social media use, digital communication, media literacy, setting boundaries, and digital role modeling. The control group will not receive any intervention during this period but will complete the same pretest and posttest assessments as the intervention group.

Data collection will occur at two time points: prior to the intervention (pretest) and after the completion of the intervention (posttest). The following validated instruments will be used: the Social Media Addiction Scale (SMAS), the Digital Parenting Attitude Scale (DPAS), and a Technology Knowledge Questionnaire developed by the researchers.

Descriptive statistics will be calculated to summarize the demographic characteristics of participants. The normality of data distribution will be evaluated using the Shapiro-Wilk test. Between-group comparisons will be conducted using the independent samples t-test or the

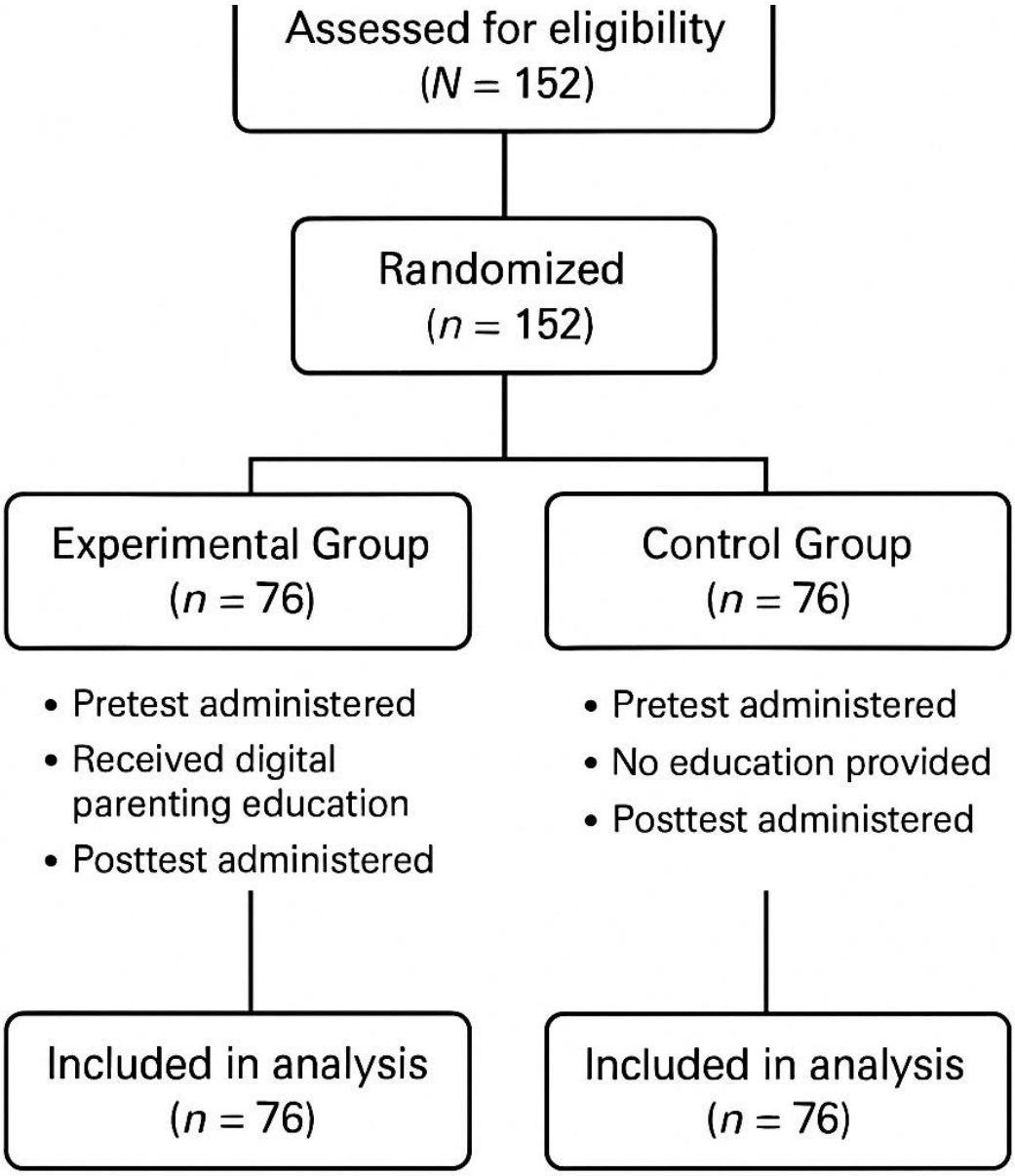
Mann-Whitney U test, depending on the distribution of data. Within-group changes will be analyzed using the paired samples t-test or Wilcoxon signed-rank test. A two-way repeated measures ANOVA will be conducted to test the time × group interaction effects. If assumptions are violated, non-parametric alternatives such as the Friedman test will be employed. Effect sizes will be calculated using Cohen's d to determine the magnitude of intervention effects.

If missing data occurs, cases with less than 5% missingness will be excluded from analysis. If missing data exceeds this threshold, imputation methods such as multiple imputation or last observation carried forward (LOCF) will be applied. Both intention-to-treat and per-protocol analyses will be performed to ensure robustness. A p-value of less than 0.05 will be considered statistically significant. All statistical analyses will be performed using IBM SPSS Statistics version 26. Power analysis and sample size estimation were conducted using G*Power software.

This study will be conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval will be obtained from the relevant institutional review board prior to data collection. Informed consent will be collected from all participants before enrollment in the study.

The CONSORT flow diagram summarizes the participant process. Of the 152 participants who applied, all were randomized into either the intervention or control group. The intervention group received the training and completed the posttest. The control group only completed pretest and posttest assessments. No participant attrition occurred, and all 152 participants were included in the final analyses.

This study will be conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was obtained from the Atatürk University Non-Interventional Clinical Research Ethics Committee (Date: 29.03.2024, Approval Number: B.30.2.ATA.0.01.00/194). Written informed consent will be obtained from all participants prior to their enrollment in the study.


Assessed for eligibility
(N = 152)
Randomized
(n = 152)
Experimental Group
(n = 76)
Control Group
(n = 76)
• Pretest administered
• Received digital parenting education
• Posttest administered
• Pretest administered
• No education provided
• Posttest administered
Included in analysis
(n = 76)
Included in analysis
(n = 76)