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College with Potential Excellence (Status Awarded by the UGC)

Star College Status Awarded by DBT -MST An ISO 9001:2015 Certified Institution Coimbatore - 641014

#### DEPARTMENT OF COMPUTER SCIENCE (SF)

Organised by

INTERNATIONAL CONFERENCE ON RECENT TRENDS IN COMPUTATIONAL TECHNOLOGIES AND SUSTAINABLE DEVELOPMENT GOALS (ICRTCTS - 2025) 25th MARCH 2025



Editors
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### INTERNATIONAL CONFERENCE ON RECENT TRENDS IN COMPUTATIONAL TECHNOLOGIES AND SUSTAINABLE DEVELOPMENT GOALS

## EFFECTS OF EXCESSIVE MOBILE USE ON CHILD DEVELOPMENT: TECHNOLOGICAL SOLUTIONS FOR MITIGATION

#### Dr. R. Nandhakumar

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#### **Abstract**

The growing reliance on mobile devices among children has sparked concerns about its effects on their cognitive, social, and physical wellbeing. Excessive screen time is associated with diminished attention spans, weakened social interactions, and sedentary behaviours, potentially leading to long-term developmental issues. Cognitively, overuse of mobile devices may impair critical thinking and problem-solving skills, while socially, it can reduce opportunities for face-to-face communication, impacting emotional intelligence. Physically, prolonged use often results in poor posture, eye strain, and insufficient physical activity, increasing risks of obesity and related health problems. To counteract these challenges, technological solutions such as screen time management apps, content filters, and gamified fitness programs are being developed. These interventions aim to promote balanced device usage, encourage healthier habits, and support overall development. This abstract explores the negative consequences of excessive mobile device use on children and investigates how technology can be harnessed to mitigate these effects, fostering a more balanced and healthy developmental environment.

**Keywords-**Mobile Device Usage, Child Development, Cognitive Impact, Social Skills, Physical Health, Technological Interventions.

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