



# Mobile Dependency and Hostile Behaviour Among Children With Developmental Disabilities

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## ABSTRACT

Smartphone addiction has been on the rise and especially with children. It has become a pacifier to calm a child down to such an extent that it is leading to developmental delay in some children. This paper explores the mobile dependency leading to aggressive behaviour and the intervention used in decreasing it among children with developmental disabilities. Aim: To find out to what extent the intervention would decrease the dependency on mobiles. Objectives: a) To determine the factors contributing to addiction in relation to internalized and externalized aggression among children; b) To effectively symptom management of self injurious behaviour and intervention among children with Developmental Disabilities. Sample: Seventeen children with Mild and Moderate Developmental Disabilities are considered for the study. Tools: A researcher developed a checklist and BASIC MR-Part B are used. Results: Mean of 35.83 and SD of 12.8 from 113.16 and 58.43 shows that through appropriate intervention, phone addiction can be reduced. No matter how strong the smartphone addiction is through behaviour modification, aggressive behaviours can be reduced. Early identification followed by appropriate measures taken can help a blooming child.

*Keywords:* Mobile Addiction, Aggression, Self Injurious Behaviour, Children with Developmental Disability

## INTRODUCTION

Mobile dependency can be defined as repeated use of mobile phones to an extent which can cause significant social and emotional impairment. It's become difficult to handle children these days by not giving them a phone. If once it is in their hands, it's difficult to take it from them. In a way it has become a pacifier to calm them down. According to a study conducted in 2019, shows that 23% of the children have problematic smartphone use. According to the National Commission for Protection of Child Rights, 23.80% of children use phones in bed while 37.15% of children use it before going to sleep. No adequate sleep can result in irritable behaviour. Billieux, Maurage, et al. (2015) proposed a theoretical framework to understand problematic mobile phone use. This model posits three distinct pathways associated with specific psychological and psychopathological factors: (1) the excessive reassurance pathway, (2) the impulsive pathways, and (3) the extraversion pathway. The excessive reassurance pathway is linked to factors such as emotional instability, anxiety symptoms, dysfunctional attachment, or low self-esteem, which promote addictive-like mobile phone use (e.g., using the phone to get reassured in the context of unsecure romantic or affective relationship). The impulsive pathway is related to personal characteristics such as impulsivity, low self-control, or antisocial personality that may lead to various types of problematic mobile phone use (e.g., addictive, risky, and antisocial use, see Canale et al., 2021). The extraversion pathway addresses risk factors such as sensation-seeking, extraversion, and reward sensitivity, which may result in addictive and risky usage patterns (Billieux, Maurage, et al., 2015; Canale et al., 2021).

Aggression is any behaviour directed toward another individual that is carried out with the proximate (immediate) intent to cause harm. In addition, the perpetrator must believe that the behaviour will harm the target, and that the target is motivated to avoid the behaviour (Bushman & Anderson 2001, Baron & Richardson 1994, Berkowitz 1993, Geen 2001). Delay in development is generally determined if a child does not attain developmental milestones as compared to peers from the same population (ICD 10). According to Lee et.al, (2022), smartphones by children between 1 to 6 years of age affects their sociability and also increases their emotional sensitivity. According to Domoff et.al (2019), smartphones interfere with family time disrupting familial relations.

## II. NEED OF THE STUDY

According to Limone (2021) children addicted to mobiles suffer from neurodevelopmental issues. According to Tuitou (2016), children exposed to blue light develop aggressive tendencies. The aim of the study is to find out to what extent the intervention would decrease the dependency on mobiles. The objectives of the study: a) To determine the factors contributing to addiction in

relation to internalized and externalized aggression among children; b) To effectively symptom management of self injurious behaviour and intervention among children with Developmental Disabilities.

### III. RESEARCH METHODOLOGY

#### 3.1 Participants

Children between the age 3-6 yrs, diagnosis of Moderate & Mild DD with autism/ down syndrome are considered for the study. Children having an associated condition and more than two disabilities like visual impairment, person with cerebral palsy, hearing impaired, suffering with any Psychiatric Disorder are excluded.

#### 3.2 Tools Used

Attachment, Addiction and Aggression (AAA) Case Taking Checklist by the Researcher: The Researcher prepared a semi structured case taking checklist which has 14 questions related to items on Attachment, Addiction and Aggression. Information is gathered from the informant.

Behavioural Assessment Scale for Indian Children with Mental Retardation - Part B (BASIC MR-Part B): The BASIC MR-Part B is developed by Reeta Peshawaria and S. Venkatesan in the year 2000. It consists of 75 items grouped under ten domains namely violent and disruptive behaviour, temper tantrums, misbehaves with others, self injurious behaviours, repetitive behaviours, odd behaviours, hyperactive behaviours, rebellious behaviours, antisocial behaviours and fears. It is scored from 0,1 and 2. The test-retest reliability was found to be 0.68

#### 3.3 Procedure

Consent from the parent was taken for the intervention. It was done in three phases. Phase one included a Pre-Intervention Assessment where the child was assessed for IQ, Researcher checklist and BASIC MR-Part B was administered. The second phase consisted of Intervention where the child was given behaviour modification. Phase three included a Post-Intervention Assessment with follow up and feedback from the parent.

#### 3.4 Data Analysis

The researcher employed statistical measures like mean, standard deviation and t-test to compare the level of difference between the pre and post test measures of the intervention.

### IV. RESULTS AND DISCUSSION

Table 4.1: Sample Details

Sample Size	Age	Diagnosis
17	3-6 yrs	Mild & Moderate DD

Table 4.2: Level of addiction leading to aggression among children with Developmental Delays

	Mean	SD
In a day how many hours does your child engage in using mobile/tab (Pre Test)	133.16	58.43
In a day how many hours does your child engage in using mobile/tab (Post Test)	35.83	12.8

Table 4.3: Various domains on the BASIC MR - Part B among 3-6 yrs children with Developmental Delay

	Mean	SD	t
Violent & Destructive Behaviours (Pre)	5.64	1.61	12.04
Violent & Destructive Behaviours (Post)	1.52	1.12	

Temper Tantrums (Pre)	2.82	1.50	9.5
Temper Tantrums (Post)	0.58	0.71	
Misbehaves With Others (Pre)	0.94	0.42	10.95
Misbehaves With Others (Post)	0.05	0.24	
Self Injurious Behaviours (Pre)	2.47	1.23	7.48
Self Injurious Behaviours (Post)	0.35	0.49	
Odd Behaviours (Pre)	1.29	1.21	2.58
Odd Behaviours (Post)	1.0	1.17	
Hyperactivity (Pre)	3.94	0.65	16.31
Hyperactivity (Post)	1.47	0.51	

Table 4.1 shows the demographic details. The sample size consisted of 17 children within the age 3-6 years diagnosed with Mild and Moderate Developmental Delay. As there have been many cases of children having delayed milestones giving rise to neurodevelopmental disorders at a later stage, this sample is considered. Intervention given at an early age can reduce giving rise to more problematic behaviours at a later stage. Table 4.2 shows the means and standard deviations for pre and post hours a child engaged in using mobile/tab. The pre mean was 133.16 and post 35.83. This indicates that there was a significant reduction in the number of hours after the intervention. Parents as part of the Behaviour Modification program, were recommended not to give the phones to the child but instead to use alternatives for the phone. For example: use of toys, having family time etc.. Table 4.3 shows the mean, standard deviation and t test for the various internalized and externalized aggression domains on BASIC MR-Part B. Temper Tantrums, Self Injurious Behaviours and Odd Behaviours were considered under the Internalized aggression domains. The pre mean for temper tantrums was 2.82 and post 0.58, the t value was 9.5 and was significant at 0.01 level. The pre mean for self injurious behaviour was 2.47 and post 0.35, the t value was 7.48 and was significant at 0.01 level. The pre mean for odd behaviours was 1.29 and post 1.00, the t value was 2.58 and was significant at 0.01 level. A significant reduction in the internalizing aggressive behaviours after the intervention was observed. A number of 5 to 8 sessions were used for each child. Different activities were given to children as part of therapy. Highly reinforcing activities were given to the children along with positive reinforcement. The Externalizing Aggressive behaviours were Violent & Destructive Behaviours, Misbehaves With Others and Hyperactivity. The pre mean for violent & destructive behaviours was 5.64 and post 1.52, the t value was 12.04 and was significant at 0.01 level. The pre mean for misbehaves with others was 0.94 and post 0.05, the t value was 10.95 and was significant at 0.01 level. The pre mean for hyperactivity was 3.94 and post 1.47, the t value was 16.31 and was significant at 0.01 level. There was a significant reduction in the externalizing aggressive behaviours after the intervention. Approximately a number of 400 minutes for 5 to 8 sessions went into each child.

No matter how strong the smartphone addiction is through behaviour modification, aggressive behaviours can be reduced. Early identification followed by appropriate measures taken can help a blooming child.

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