

A STUDY TO PREDICT THE PRESENCE OF EMOTIONAL AND COGNITIVE NEGLECT IN CHILDREN DUE TO PARENTAL PHONE ADDICTION USING LINEAR REGRESSION

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ABSTRACT

There has been substantial increase in emotional and cognitive deficits of adolescents. As a consequence, this deficit is attributed to neglect by parents due to their phone addiction. A decline in adolescents' emotional and cognitive quotient has also been of concern to schools too. On the basis of the present research, a parent-engagement program can be devised to empower parents to engage more meaningfully with their children and schools could maximize their academic efficiency. In the present study, efforts were made to understand if parental phone obsession would predict emotional and cognitive neglect among early adolescents. A total of 113 adolescents aged 12-13 years were surveyed using questionnaires on Parental Phubbing and Multidimensional Neglectful Behaviour Scale. On analysis of the collected data, regression constants of 0.054 and 0.005 indicated that phone obsession in parents predicted emotional and cognitive neglect respectively in children. The results support the application of parent-engagement program.

KEYWORDS: Academic Improvement, Cognitive Neglect, Early Adolescents, Emotional Neglect, Parent Engagement, Parent Phone Addiction.

I. INTRODUCTION

In the last few years, especially after the pandemic, there has been a significant increase in regular usage and addiction related to smart phones. In 2023, the penetration rate of smart phones reached more than 71% of the population and is also estimated to reach 96% by the end of 2040 (Sun, 2023). Moreover, India ranks second in terms of smart phone penetration rate in the world. This increase in the usage of smart phones is associated with its advantages and disadvantages. For

instance, it has significantly increased the convenience in the everyday life of users where a wide range of functions can be performed easily requiring minimal effort and minimum time. It has been beneficial in connecting people all over the world (Kwon et al., 2013). However, this increased usage of smart phones is also associated with several negative effects. These effects can also be observed in family dynamics. The inappropriate consumption of smart phones is associated with growing concerns related to family dynamics. For instance, it has been reported that younger individuals who have internet addictions report lower levels of family satisfaction, adoption, cohesion and organization (Li et al., 2017).

Moreover, it has also been associated with reduced responsiveness and sensitivity from parents towards their children during interactions (Kildare & Middlemiss, 2017). Along the same lines, it has also been observed that regular consumption of smart phones during normal working hours is also associated with reduced work-life balance and increased risk of family conflicts (Kwon et al., 2013). Increased phone obsession among parents is associated with negative consequences for children. It has been observed that increased usage by parents can influence their marital relationship as well as their presence and involvement in family activities. Moreover, the physical interactions between the parents and the children can be reduced significantly with increased usage of smart phones by the parents (Mullan & Chatzitheochari, 2019).

Mi et al. (2023) mentioned in their study that increased phone usage by parents is associated with a negative impact on the behaviour and emotions of the child. These are usually associated with the feelings of alienation that are faced by the child. Moreover, the parent-child relationship is influenced negatively and the attachment style of the child is also influenced. This can be observed in terms of the negative cohesion between the parent and the child. The family environment becomes aggressive and conflicting where the individuals may find it difficult to express their emotions and feelings with each other. As a result, teenagers may resort to external sources for attention.

This can include social media and the Internet as a way of emotional regulation. As a result, it can also result in developing emotional dependence on mobile phones among children as well (Sarour, & El Keshky, 2023). Therefore, the goal of this study is to evaluate the influence of parental phone addiction on emotional and cognitive neglect faced by children. This study is particularly significant in current times where there has been a significant increase in the usage and obsession of smart phones among both the children and the parents. With the help of this study, questions related to the quality and type of interactions taking place between parent and

child were well evaluated and understood.

II. REVIEW OF LITERATURE

- **Qingqing He et al. (2022)** showed that Parental phubbing was significantly correlated with parent-child attachment, ego depletion and learning burnout and Parental phubbing has an indirect impact on learning burnout in elementary and secondary school students through three pathways: a separate mediating effect on ego depletion and a chain mediating effect on both. Parental phubbing is a risk factor for Learning Burnout in elementary and secondary school students. The findings of the study contribute to revealing the influence mechanism of parental phubbing on learning burnout in elementary and secondary school students.
- **Xingchao Wang, YuranQiao, Shiyin Wang (2022)** Parental phubbing was associated with problematic smart phone use, and there were bidirectional associations between problematic smart phone use and learning burnout as well as between parental phubbing and learning burnout. Problematic smart phone use significantly mediated the relationship between parental phubbing and learning burnout. There were no gender differences among parental phubbing, problematic smart phone use, and learning burnout.
- **Han Zhang et al. (2022)** showed that parental marital bond not only had a direct effect on academic burnout but also affected academic burnout through three indirect ways: conflict-negative emotions-academic burnout, parental marital conflict –negative emotions-academic burnout-phubbing. The parental marital conflict increased the risk of negative emotions and phubbing in college students and had a subsequent impact on academic burnout.
- **XinyuanShen, XiaochunXie and Siqi Wu (2022)** examined how parental phubbing is related to adolescent Internet gaming disorder (IGD), and the role of self-esteem and maladaptive cognition. The findings contributed to the understanding of the underlying mechanisms of adolescent IGD and its possible association with parental phubbing.
- **Jinzhe Zhao et al. (2023)** revealed a positive correlation between parental phubbing and aggression, which was mediated by rejection sensitivity. That is, adolescents who experienced parental phubbing were more likely to exhibit rejection sensitivity which further triggered aggression. However, school climate moderated the relationship between rejection sensitivity and aggression.

- **Qing Ding et al. (2023)** found parental phubbing and negative emotions were significantly and positively correlated to sleep quality problems, but self-control was not correlated to sleep quality problems through the mediating effect of negative emotions. Moreover, self-control played a moderating role in the path of parental phubbing affecting negative emotions. That is, the effect was more significant for adolescents low in self-control relative to those in high self-control.
- **Marius Marici et al. (2023)** indicated that the child's environment was significantly associated with feelings of shame. Abuse is associated with both guilt and shame, while paternal rejection is associated with guilt. The environment in which children and teenagers develop is associated with how they perceive themselves in relation to others. This study underlines the importance of considering child development conditions and the paramount importance of social work assistance for abandoned children and teenagers.
- **Vu AnhTrong Dam et al. (2023)** conducted a study to examine social media addiction among Vietnamese adolescents, its relationship with FOMO score, stresses associated with rejection and neglect, and the overall quality of life. The results highlighted there is a relationship between FOMO score and impaired overall quality of life, increased depressive symptoms, and an association between stresses relating to negative rejection and FOMO score.
- **Jelena Komanchuk et al. (2023)** studied the effect of parental technofence on parent-child relationship and findings demonstrated that parents recognized, and researchers observed, changes in parents' and children's behaviors. Adolescent self-reported mental health concerns and maladaptive technological behaviors (e.g., cyber bullying) were associated with more parental technofence, and findings highlighted safety concerns for children.
- **Xiaohui Yang, Ping Jiang and Liqi Zhu (2023)** explored whether parental problematic smart phone use and technofence were associated with children's Executive Functioning (EF). Results indicated that parental problematic smart phone use was significantly correlated with children's EF difficulties. Furthermore, the positive relationship between parental problematic smart phone use and children's EF problems was partly due to the interference of technology with parent-child activities. Furthermore, the relationships between parental problematic smart phone use, technofence, and children's working memory problems were moderated by the children's age group. These findings emphasize the important influence of parental media use on children's EF.

- **ZhenhongMi et al. (2023)** examine the relation between parental phubbing and mobile phone addiction among Chinese junior high school students, as well as the mediating role of friendship quality in this relationship. The findings suggest that parental phubbing was not only associated with mobile phone addiction but also indirectly through the mediating role of parent-child cohesion and the moderating role of friendship quality.
- **Pengcheng Wang, Yin and Biao Li (2023)** showed that mother phubbing was positively associated with adolescent Problematic Social Networking Site Use(PSNSU) and perceived burdensomeness mediated this association. Furthermore, need to belong moderated the relationship between perceived burdensomeness and PSNSU, the relationship between mother phubbing and perceived burdensomeness, and the relationship between mother phubbing and PSNSU.
- **Yibo Hu et al. (2023)** indicated that parental phubbing was a significant predictor of the academic engagement of elementary students; the sense of exclusion moderated the relationship between parental phubbing and sense of exclusion. These findings enrich the theory of parental phubbing and reveal the mechanisms by which parental phubbing hurts academic engagement of elementary students, filling a gap in previous literature. In practical terms there are important implications for teachers in the education of elementary students with popularity of smart phone.
- **YuqianJian, Lu Lin and Rongta Hu (2023)** examined the relationship between parental phubbing and adolescents' academic burnout and whether social anxiety and self-control play a mediating effect. These findings indicated that: (1) parental phubbing, social anxiety and self-control all significantly predict adolescents' academic burnout directly and (2) parental phubbing could indirectly influence adolescents' academic burnout through three pathways: the separate mediating effect of social anxiety and self-control and the chain mediating effect of both. The results of this study helped parents understand how their phubbing actions affect adolescents' academic burnout and the mechanism of action.
- **Jayne McMullan, Julia robinson and NickeyVarley (2023)** wrote a comment paper to highlight the prevalence of adolescent neglect. As a society, we underestimate that adolescence is a time of vulnerability for some young people that can be significantly impacted by neglect and abuse.

III. OBJECTIVES OF THE STUDY

This study aims to evaluate the influence of parental phone addiction on emotional and cognitive neglect faced by children. It will be achieved with the following objectives:

- A. To evaluate the influence of parental phone addiction on emotional neglect faced by children.
- B. To evaluate the influence of parental phone addiction on cognitive neglect faced by children.

IV. RESEARCH METHODOLOGY

A. Problem Statements:

- a. Predict if parental phone obsession will lead to emotional neglect in early adolescents.
- b. Predict if parental phone obsession will lead to cognitive neglect in early adolescents.

B. Hypotheses:

- a. H_0 = Phone obsession in parents will not predict emotional neglect in early adolescents.
- b. H_0 = Phone obsession in parents will not predict cognitive neglect in early adolescents.

C. Sample:

The survey was conducted in Vatican High School, Bangalore on early adolescents between 12 years to 13 years; mainly students studying in Grades 6 and 7. A total of 113 samples were collected after which 7 samples were removed based on incompleteness of questionnaires. Participants included 52 boys and 54 girls in elementary school. Participants included 52 students from grade 6 and 63 students from grade 7. Data was collected through multistage cluster sampling technique.

D. Tools for Data Collection:

a. Parental Phubbing Scale:

It is given by Luca Pancani, Tiziano Gerosa, Marco Gui, Paolo Riva. It is having 9 items questionnaire; Items 1,2,3,4,5,6,7 – phone obsession and 8, 9 – communication disturbance. It interprets that a higher total score means more severe parental phubbing.

- **Reliability:** 0.9 Cronbach's alpha
- **Validity:** 0.88 Concurrent validity

b. Multidimensional Neglectful Behaviour Scale:

It is given by Murray A Strauss, Miling Kinrad, Linda Meyer Williams. It is having 20 item questionnaire showing number of neglectful behaviours experienced

- Agree/Strongly Agree=1
- Others=0
- Sub-scales score=0-5
- Total score=0-20

E. Research Tool:

Regression Analysis is used with phone obsession in parents as dependent variable and emotional neglect and cognitive neglect as predictor variables.

V. DATA ANALYSIS AND INTERPRETATION

At the end of data collection 106 respondents participated in the survey. A simple linear regression was used to test the hypothesis with emotional neglect and cognitive neglect as predictor variables. On subjecting the data collected by 106 participants for data analysis, regression is employed and the following results were observed.

Table 1: Regression Statistics for Phone Obsession and Emotional Neglect

Variable	R	R Square
Emotional Neglect	0.054	0.003

a. Dependent Variable: Phone Obsession

Source: Compiled by Author Using SPSS

Table 1 represents emotional neglect present in early adolescents due to phone obsession in parents. The R value i.e. regression co-efficient of 0.054 indicates a linear relationship between phone obsession in parents and emotional neglect in early adolescents. It shows the prevalence of emotional neglect in early adolescents. We therefore reject the null hypothesis.

Table 2: Regression Statistics for Phone Obsession and Cognitive Neglect

Variable	R	R Square
Cognitive Neglect	0.007	0.000

a. Dependent Variable: Phone Obsession

Source: Compiled by Author Using SPSS

Table 2 represents cognitive neglect present in early adolescents due to phone obsession in parents. An R value i.e. regression co-efficient of 0.007 indicates a linear relationship between phone obsession in parents and cognitive neglect in early adolescents. It shows the prevalence of

cognitive neglect in early adolescents. We therefore reject the null hypothesis.

VI. CONCLUSION

The goal of this study was to evaluate the influence of parental phone addiction on emotional and cognitive neglect faced by the child. Based on the findings of this study, it can be concluded that increased levels of parental phone addiction are associated with increased levels of emotional and cognitive neglect towards the child. These findings can be confirmed by the findings of previously conducted literature. For example, Mi et al. (2023) mentioned in their study that this neglect faced by the children is caused because of the enthusiasm that the parents have towards their mobile phones instead of their children. This behaviour exhibited by the parents establishes a bad example for the child and also that increases levels of emotional neglect.

Moreover, it has been associated with a reduced quality of the emotional bonding and relationship between the parent and the child. Kwak et al. (2018) mentioned that this behaviour exhibited by the parents is associated with the development of negative emotions in the child. Kwak et al. (2018) also mention that this is associated with increased levels of depression and anxiety among children. Moreover, it has been identified to be associated with an increased risk of mobile phone addiction among children as well (Zhang et al., 2021). Therefore, it can be concluded that the overall findings of this study can be confirmed based on the findings of the previous literature. Hence, it is recommended that the parents be encouraged to establish clear boundaries between the time that they assign to their work, phone usage and spending quality time with their children. Moreover, appropriate resources can help them develop healthy digital habits as well as set appropriate examples for the children regarding the screen and behaviour. Educational and training programmes can also be developed that focus on the promotion of awareness regarding the negative consequences associated with regular phone consumption and its impact on the health and well-being of the child.

The findings of this study can be used significantly in the development of Parent-Engagement Programs that are focused on promoting healthy relationships and interactions between parent and child. It can be used in developing interventions for reducing the usage and consumption of phones by parents and developing healthy relationships with their children. Moreover, with the help of this study, increased awareness about the negative consequences associated with parental phone obsession can also be established. This information can be used by school educators, healthcare professionals, counsellors and social workers in advocating

appropriate resources and support services.

However, it is important to note that this study has certain limitations. Firstly, the study was conducted with the participants belonging to a specific area which results in reducing the generalizability of the findings of the study. Moreover, the study has a cold metal design that is not beneficial in establishing the cause-and-effect relationship between parental phone obsession and emotional and cognitive neglect. This means that it cannot be clearly established if parental phone obsession causes emotional and cognitive neglect among children. Lastly, the influence of confounding variables like peer groups, study pressure, marital relationships, family dynamics and other such aspects has not been evaluated in the study. It is important to value of these variables as they may have a significant influence on the results and interpretation of the findings.

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