

The Role of Marital Conflict, Mobile Phone Addiction, and Parental Loneliness in Predicting Behavioral Problems in Elementary School Students

DOI: 10.22098/JPC.2025.16398.1281

Elahe Azmoudeh^{1*}; Reza Golpour²

1. Department of Psychology, Payame Noor University, Tehran, Iran.

* Correspondence Author: goddess_e1983@yahoo.com

2. Assistant Professor, Department of Psychology, Payame Noor University, tehran, Iran.

Abstract

Aim: The objective of this study was to explore how marital conflict, mobile phone addiction, and parental loneliness can impact behavioral issues in elementary school students.

Method: The research method was a descriptive-correlational approach. The study included 190 couples who visited the Qom Counseling Center in 2022, with 123 individuals selected as the research sample through convenience sampling. These participants completed questionnaires on Children's Behavioral Problems Scale (Yousefi and Shahim, 1999), Couple Conflict Scale (Sanei & Barati, 1996), The Smartphone Addiction Scale (Koo, 2009), and loneliness. Data analysis was carried out using Pearson correlation and multiple regression analysis with the help of SPSS version 24 software.

Results: findings showed that the regression slope for marital conflict ($B=0.501$), mobile phone addiction ($B=0.46$), and loneliness ($B=0.314$) are statistically significant at the 0.01 level. This indicates that all three variables have a significant predictive power on behavioral problems.

Conclusion: The examination of the data uncovered a significant link between the mean levels of conflict in marriages, addiction to mobile phones, feelings of loneliness in parents, and the behavioral challenges faced by students. Additionally, the findings from the step-by-step regression analysis suggested that the factors of marital conflict, mobile phone addiction, and parental loneliness were able to explain the variation in behavioral difficulties.

Keywords: Behavioral problems, Marital conflict, Mobile phone addiction, Loneliness.

Introduction

Child behavioral issues are widespread challenges that have a significant impact on teachers, families, and the affected individuals, leading to poor academic, social, and professional performance, as well as an increased risk of mental health issues in adulthood (Schlack, Peerenboom, Neuperdt, Junker, & Beyer, 2021). Recognizing and addressing behavioral problems in children, particularly students is crucial as early experiences greatly influence a person's physical and mental well-being in the future. Efforts to diagnose, prevent, and treat these issues during childhood can have a positive impact on society's mental health. Unfortunately, there has been a rise in the prevalence of behavioral problems among students, increasing from 8.6 to 14.3 percent over the last 25 years (Izett, Rooney, Prescott, De Palma, & McDevitt, 2021). The family plays a crucial role in shaping the social and emotional behaviors of children, influencing their attitudes and behaviors as they grow up (Elsayed, 2024). Marital conflict is a common issue experienced by children worldwide, leading to stress and impacting various aspects of a child's development, including social, cognitive, academic, and psychological functioning, as well as peer relationships (Craft, Perry-Jenkins, & Newkirk, 2021). The results suggest a significant connection between parental marital disputes and the behavior of adolescents, regardless of their ethnic background. Put simply, there is a correlation between the internalized and externalized behaviors of adolescents and the overt and covert disagreements among parents. Furthermore, overt marital disputes are more likely to forecast internalized behaviors in adolescents compared to covert marital disputes (Manuele, Yap, Lin, Pozzi, & Whittle, 2023).

A study conducted on the model of marital conflict and pathological parenting, exploring the connection between marital conflict and parental behaviors. The study found that marital conflict can impact both the internalizing and externalizing behaviors of parents and that the internalizing behaviors of parents may influence the relationship between marital conflict and the behaviors of their children. Children exposed to marital conflicts may experience fear, stress, and anger (Dijk, de Moor, Oosterman, Huizink, & Matvienko-Sikar, 2022). The conflicts between parents can also lead to elevated levels of cortisol in children, which can increase their vulnerability and result in behavioral issues by affecting their emotional, cognitive, neurological, and biological systems. High cortisol levels caused by exposure to hostility and conflicts in the family can disrupt the child's neurobiological systems and contribute to behavioral and psychological problems, as per developmental models. The conflicts between parents can have a detrimental impact on their behavior (Frosch, Schoppe-Sullivan, & O'Banion, 2021).

Feelings of loneliness can be seen as a perceived lack and vulnerability in relationships, resulting in dissatisfaction with social interactions (Mund, Yang, & Qualter, 2023). Loneliness is prevalent among married individuals as well, with the strength of the marriage playing a role in whether it serves as a source of protection or as a contributor to loneliness (Stokes, 2017). Prolonged exposure to parental conflict leads to feelings of loneliness in parents. To cope with loneliness stemming from conflicts, parents may turn to behaviors such as excessive use of mobile phones, ultimately leading to a potential addiction to these devices (Manuele et al., 2023). Decreased parental engagement and

attention to children can hinder their ability to learn crucial life lessons through interaction with diverse social groups, leading to behavioral issues. These issues may involve inappropriate behavior and emotional responses in children and adolescents that do not align with their age, cultural norms, or societal expectations. Such imbalances in behavior and emotions can impact various aspects of an individual's life, including education, social interactions, personal relationships, and professional environments (Wildmon, Anthony, & Kamau, 2024).

Since childhood is a period of developing talents, moral values, and societal changes, it is important to recognize that students are the future assets of a nation, and their education plays a crucial role in shaping their development. Behavioral issues in children can have long-term consequences, impacting various aspects of their lives. Despite previous research on the impact of mobile phone use, marital conflicts, and loneliness on behavioral problems, there has been no study examining the combined effects of mobile phone addiction, marital conflict, and parental loneliness on students' behavior. This study aims to explore how marital conflicts, mobile phone addiction, and parental loneliness contribute to behavioral problems among elementary school students.

Methodology

The current research was carried out as a correlational and predictive study. All clients of Qom counseling centers in 2022 were the statistical population for this study, with 190 clients selected through convenience sampling. Despite aiming for a sample size of at least 110 individuals according to the Tabapnik and Fidel formula, questionnaires were distributed virtually to participants via Telegram and WhatsApp due to the COVID-19 pandemic. Tabachenik and Fidel's formula ($m \geq 50$, with m representing the number of independent variables in the research) was used to select a sample of participants who fulfilled the necessary criteria (Tabapnik and Fidel, 2012). Ultimately, 123 individuals took part in the study through convenience sampling, completing assessments related to children's behavioral problems (particularly those of their parents), couple conflicts, mobile phone addiction, and loneliness.

Children's Behavioral Problems Scale: Yousefi and Shahim (1999) created the Children's Behavioral Problems Questionnaire, which consists of 24 items and four subscales measuring attention deficit, fear, social behavior, and aggression on a three-point Likert scale (never = 0, sometimes = 1, most of the time = 2). The questionnaire demonstrated a validity of 0.80 with Cronbach's alpha for the total score and 0.77 using the test-retest method. Construct validity was confirmed through factor analysis with Varimax rotation, as cited in Pour, Azizi, & Mohamadi (2016), with the preschool children's behavior problems questionnaire. In the current study, the reliability of the same questionnaire was assessed with a Cronbach's alpha value of 0.75.

Couple Conflict Scale: Sanei & Barati (1996) designed this questionnaire to measure seven key dimensions of conflicts within couples. The questionnaire consists of 42 questions and was developed based on the practical experiences of the research supervisor. This instrument evaluates seven aspects of marital conflicts: 1- Reduced cooperation 2- Decreased sexual intimacy 3- Increased emotional responses 4- Increased requests for child support 5- Disrupted personal relationships with one's family members 6- Strained family relationships with the spouse's family and friends 7- Separation of

financial matters, all measured using a five-point Likert scale. The resulting Cronbach's alpha coefficient was found to be 0.79. In the current study, the Cronbach's alpha value was calculated to be 0.70.

The Smartphone Addiction Scale (SAS): In the smartphone addiction (dependency) questionnaire was created by Koo (2009), and consists of 20 questions, the first part is demographic characteristics and proper cell phone usage methods. The second part includes questions about cell phone, resistance to the three domains of deprivation, functional disorder, and compulsion and each component has specific questions as follows: deprivation (questions 1 to 7), life disorder (questions 8 to 13) and compulsion (questions 14 to 20). Likert scale was the base of the scoring. The scale was divided to four groups, including very low, low, high and very high and varied from 1 to 4. The scores below 63 represent the moderate usage of cell phones. Heavy cell phone users get the scores between 63 and 69. The students who have score equal to or greater than 70 are considered addicted. Savari and Manshedavi localized the Persian version of this tool in which the reliability of the questionnaire has been reported about 92% using the Cronbach's alpha coefficient, and the validity of the questionnaire was confirmed after translating and using factor analysis by academic professors (Savari and Manshedavi, 2016).

Loneliness Scale (UCLA): Developed by Russell et al, (1996), this scale includes 20 items. The descriptive phrases are scored in a way that items 1-4-5-6-9-10-15-16-19-20 are scored inversely after participants select a response from four options, namely never, rarely, sometimes, and often. Other items are scored directly. At UCLA scores range from 20 to 80 with higher scores indicating a stronger perception of loneliness. Zarei et al, (2016) reported the reliability of this scale based on Cronbach's alpha of 0.91. The validity of UCLA was confirmed with a CVI of 0.95 and a CVR of 0.93 (Zarei et al,2016). In the current research, the reliability of UCLA was 0.89 using Cronbach's alpha coefficient. The Cronbach's alpha for this scale in the current study was 0.82.

Results

The participants comprised 123 boys and girls, with 87 (70.73%) boys and 36 (29.26%) girls. Most were 11 years old 57(46.34%), and the youngest was nine years old 15 (12.19%). The demographic variables of the participants are shown in Table 1.

Table 1: Demographic variables of the participants

Demographic variables	Group	N	%
Gender	Boy	87	70.73
	Girl	36	29.26
Age	9	15	12.19
	10	37	30.08
	11	57	46.34
	12	14	27

Table 2: Mean and standard deviation of the research variables

Variables	M	SD
Mobile phone addiction	111.81	13.86
Marital conflict	47.71	11.41
Loneliness	51.74	4.41
Behavioral Problems	54.82	8.68

In Table (2), the mean and variation in behavioral issues serve as the main focus, with marital conflict, mobile phone addiction, and loneliness being identified as potential factors contributing to these problems.

Table (3). Correlation between research variables and behavioral problems

Variables	r	p
Mobile phone addiction	0.501	0.000
Marital conflict	0.461	0.000
Loneliness	0.314	0.000

Table (3) clearly shows a strong and positive relationship between marital conflict, mobile phone addiction, parental loneliness, and the behavioral problems of students. A stepwise regression analysis was conducted to test the research hypotheses and assess the impact of marital conflict, mobile phone addiction, and loneliness in predicting and explaining behavioral problems. Before the regression analysis, the assumptions related to the study were carefully checked. One of these checks included the Kolmogorov-Smirnov test, which confirmed the normal distribution of variables at a significance level of $P < 0.01$.

Table (4). Results of regression analysis of marital conflict, mobile phone addiction, and loneliness with behavioral problems in subjects using the step-by-step method

Criterion variable	Predictor variables	Regression	SS	Df	Ms	F	R2	p
Mobile phone addiction	Index		2313.99	1	99.2313	4.59	0.25	0.01
	Total		6898.07	121	009.57			
	Residual		9212.06	122				
Behavioral Problems	Marital conflict	Regression	3308.04	2	02.1654	33.66	0.36	0.01
		Total	5904.02	120	2.49			
		Residual	9212.06	122				

Loneliness	Regression	3358.53	3	1119.51	22.76	0.365	0.01
	Total	5853.53	119	48.19			
	Regression	9212.06	122				

The study in Table 4 examined how marital conflict, mobile phone addiction, and parental loneliness impact students' behavioral problems in a regression model. The results indicated that the observed f value was statistically significant ($P < 0.05$). In the first step of the regression analysis, marital conflict accounted for 25% of the variance in behavioral problems. Adding the mobile phone addiction variable in the second step increased the predictive power by 11%, with mobile phone addiction itself predicting 11% of the variance in behavioral problems. The inclusion of the loneliness variable in the third step increased the prediction power by 0.05%. Overall, the combined variables of marital conflict, mobile phone addiction, and parental loneliness could predict approximately 36% of the variability in behavioral problems.

Table (5). Summary of the model and regression results predicting behavioral problems based on marital conflict, mobile phone addiction, and loneliness.

Criterion variable	Model	B	SE	Beta	T	p
Behavioral Problems	Mobile phone addiction	0.314	0.049	0.501	6.37	0.001
	Marital conflict	0.351	0.061	0.46	12.64	0.001
	Feeling lonely	0.618	0.17	0.314	3.63	0.001

Based on the findings in Table 5, the T-test results show that the regression slope (b) for marital conflict ($B=0.501$), mobile phone addiction ($B=0.46$), and loneliness ($B=0.314$) are statistically significant at the 0.01 level. This indicates that all three variables have a significant predictive power on behavioral problems. The research hypothesis that marital conflict, mobile phone addiction, and parental loneliness can predict children's behavioral problems is supported by the results obtained.

Discussion

The main aim of the present study was to investigate the role of marital conflict, mobile phone addiction, and parental loneliness in predicting behavioral problems in elementary school students. The analysis of data revealed a strong connection between the mean levels of marital conflict, mobile phone addiction, loneliness, and the behavioral issues of students. Furthermore, the results from the stepwise regression analysis indicated that the variables of marital conflict, mobile phone addiction, and parental loneliness could account for approximately 36% of the variance in behavioral problems. Based on these findings, it can be concluded that the key hypothesis of the study is supported, that marital

conflict and parental mobile phone addiction play a role in predicting children's behavioral problems. This finding aligns with previous research conducted by Niu, Yao, Wu, Tian, Xu, et al (2020); McDaniel, & Radesky, (2018); Xie, Chen, Zhu, & He, (2019); Chen, Zhu, Ye, Huang, Yang, et al (2021).

Children, being a vulnerable age group, are prone to experiencing various psychological issues, according to research findings. The vulnerability during these ages is impacted by their active growth process, the specific demands of each stage, and the supervision of adults over their environmental and situational conditions (Niu et al., 2020). The most common form of psychopathology in children is behavioral and emotional problems, which can manifest during the growth and development stages, leading to emotional and behavioral responses that deviate from cultural, age, and ethnic norms. These differences can negatively impact academic performance, self-care, social relationships, personal adjustment, classroom behavior, and adaptation to their surroundings (Chen et al., 2021).

Resource theory posits that scarce and valuable resources within social institutions like families are unequally distributed, leading to potential conflicts among individuals. These resources include both material assets, like power and income, and non-material assets, such as affection. From this perspective, external factors such as social status and job position influence family members' power dynamics. Individuals from lower social classes may resort to conflict and domestic violence to assert power within the family (Schmalz, Ludwig, & Webster, 2018). Classical conflict theorists argue that resource scarcity underpins this viewpoint; when resources are ample enough to meet individuals' needs, conflict is unnecessary. However, since such surpluses are rarely found in reality, conflicts among individuals and groups are inevitable across all social institutions, including families. Some family theorists leverage this assumption to analyze family disputes, asserting that resources and power are central to understanding the essence of family conflicts (Bilinovic, 2015).

Children with behavioral disorders typically struggle with short attention spans and have low self-esteem. They often face challenges in communicating with family members, peers, and others, leading to frequent failures (McDaniel & Radesky, 2018). Within the realm of developmental pathology, marital discord is identified as a potential risk factor for behavioral issues in both children and teenagers. Conflicts between parents can trigger fear, stress, and anger in children. Studies have indicated that marital conflicts can adversely impact children's overall health and behavior (Xie et al., 2019). Chen et al. (2021) also point out that marital conflicts among parents can contribute to anxiety, depression, and behavioral challenges in children and teenagers. Prolonged exposure to parental conflicts can result in feelings of isolation among parents. This sense of isolation

may drive parents to rely heavily on mobile phones, potentially leading to a dependence on them. The excessive use of mobile phones and engagement in cyberspace by parents, along with unhealthy emotional dynamics between parents, are strongly linked to behavioral problems and disruptive conduct in children (Craft et al., 2021).

The family is the primary and most crucial environment for a child's upbringing. Parents have a considerable influence on their children, impacting genetic traits like intelligence, temperament, and other characteristics that shape the child's life. Children learn essential skills such as walking, talking, and being productive by observing and interacting with their parents, who must dedicate time and attention (McDaniel, & Radesky, 2018). Parents who are constantly on their phones or surfing the internet not only neglect their child's development but also model an unhealthy lifestyle for their offspring. The rise of communication through mobile phones has resulted in a decline in in-person interactions and live conversations. Flawed relationships reinforced through cold and impersonal messages can make it difficult to distinguish between playful banter and serious conversations, leading to a misguided and unhealthy approach that cannot replace the importance of verbal and emotional connections between family members. The virtual and inaccurate information gained from these interactions cannot serve as a reliable indicator for understanding the dynamics of relationships (Brown & Greenfield, 2021).

A significant limitation of the current study was the challenge of controlling all potential variables and distinguishing their impact from the study's predictive variables due to the correlational study design. Therefore, it is recommended that future studies be conducted on a larger scale and utilize alternative data collection methods like interviews and observations to enhance the generalizability of the findings. Based on the results, specialists, therapists, and educators are encouraged to implement strategies aimed at enhancing life skills and conflict resolution to prevent and address marital conflicts. It is anticipated that fostering these skills will decrease the overreliance on mobile phones and improve communication within families, ultimately benefiting children .

The authors of this article are Elaheh Azmoudeh and Dr. Reza Golpour, and it is derived from the author's master's thesis. The study focuses on ethical research principles, such as obtaining consent and ensuring the freedom of participants to take part in the research, as well as maintaining the confidentiality of their information.

This project was carried out with the financial support of the Honorable Vice Chancellor for Research of Payam Noor Nowshahr University.

Author Contributions

The first author (principal researcher) is responsible for collecting data, implementing, and writing the article extracted from the master's thesis (70 percent); the corresponding author (research associate) is responsible for correspondence and project design and monitoring implementation (30 percent).

Conflict of interest

This study did not have any conflict of interest for the authors.

ORCID

0009-0004-1562-7647



References

- Bilinovic, A. (2015). The Contribution of the Classical Theory of Social Conflict to the Study of Family and Marital Conflicts. *Kultura Polisa*, 12, 345.
- Brown, G., & Greenfield, P. M. (2021). Staying connected during stay-at-home: Communication with family and friends and its association with well-being. *Human Behavior and Emerging Technologies*, 3(1), 147-156.
- Chen, Y., Zhu, J., Ye, Y., Huang, L., Yang, J., Chen, L., & Zhang, W. (2021). Parental rejection and adolescent problematic mobile phone use: Mediating and moderating roles of school engagement and impulsivity. *Current Psychology*, 40, 5166-5174.
- Craft, A. L., Perry-Jenkins, M., & Newkirk, K. (2021). The implications of early marital conflict for Children's development. *Journal of child and family studies*, 30, 292-310.
- Dijk, W. V., de Moor, M. H., Oosterman, M., Huizink, A. C., & Matvienko-Sikar, K. (2022). Longitudinal relations between parenting stress and child internalizing and externalizing behaviors: Testing within-person changes, bidirectionality and mediating mechanisms. *Frontiers in Behavioral Neuroscience*, 16, 942363.
- Elsayed, W. (2024). Building a better society: The Vital role of Family's social values in creating a culture of giving in young Children's minds. *Heliyon*, 10(7).
- Frosch, C. A., Schoppe-Sullivan, S. J., & O'Banion, D. D. (2021). Parenting and child development: A relational health perspective. *American Journal of Lifestyle Medicine*, 15(1), 45-59.
- Izett, E., Rooney, R., Prescott, S. L., De Palma, M., & McDevitt, M. (2021). Prevention of mental health difficulties for children aged 0–3 years: A review. *Frontiers in psychology*, 11, 500361.
- Koo, H. Y. (2009). Development of a cell phone addiction scale for Korean adolescents. *Journal of Korean Academy of Nursing*, 39(6), 818-828.
- Manuele, S. J., Yap, M. B. H., Lin, S. C., Pozzi, E., & Whittle, S. (2023). Associations between paternal versus maternal parenting behaviors and child and adolescent internalizing problems: A systematic review and meta-analysis. *Clinical Psychology Review*, 102339.
- McDaniel, B. T., & Radesky, J. S. (2018). Technoference: Longitudinal associations between parent technology use, parenting stress, and child behavior problems. *Pediatric research*, 84(2), 210-218.
- Mund, M., Yang, J., & Qualter, P. (2023). Loneliness in (inter) action: Behavioral correlates of loneliness in friendship interactions. *Current Research in Behavioral Sciences*, 5, 100135.
- Niu, G., Yao, L., Wu, L., Tian, Y., Xu, L., & Sun, X. (2020). Parental phubbing and adolescent problematic mobile phone use: The role of parent-child relationship and self-control. *Children and Youth Services Review*, 116, 105247.
- Pour, E. G., Azizi, A., & Mohamadi, J. (2016). The Efficacy of Detached Mindfulness in Meta-Cognitive Therapy on Postpartum Depression. *Journal of Nursing Education*, 5(5), 17-22.

- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of personality assessment*, 66(1), 20-40.
- Sanei, B., & Barati, T. (1996). *Inventory Marital Conflict. Measures of Family Structure and Marriage*. Tehran: Besat Publications. 53-48.
- Schmalz, S., Ludwig, C., & Webster, E. (2018). The power resources approach: Developments and challenges. *Global labour journal*, 9(2).
- Schlack, R., Peerenboom, N., Neuperdt, L., Junker, S., & Beyer, A. K. (2021). The effects of mental health problems in childhood and adolescence in young adults: Results of the KiGGS cohort. *Journal of Health Monitoring*, 6(4), 3.
- Sevari, K., & Manshedavi, S. (2016). The efficacy of self-awareness training on reduction of internet addiction and loneliness and increase of self-efficacy. *Clinical psychology studies*, 6(22), 1-17.
- Stokes, J. E. (2017). Marital quality and loneliness in later life: A dyadic analysis of older married couples in Ireland. *Journal of Social and Personal Relationships*, 34(1), 114-135.
- Tabachnik, D., & Fidel, J. (2012). Structural equation modeling: Guidelines for determining model fit. *J Bus Res Methods*, 6, 1-55.
- Venkatesh, V., Sykes, T., Chan, F. K., Thong, J. Y., & Hu, P. J. (2019). Children's Internet addiction, family-to-work conflict, and job outcomes: a study of parent-child dyads. *MIS quarterly*, 43(3), 903-927.
- Wildmon, M., Anthony, K., & Kamau, Z. (2024). Identifying and navigating the barriers of parental involvement in early childhood education. *Current Issues in Education*, 25(1).
- Xie, X., Chen, W., Zhu, X., & He, D. (2019). Parents' phubbing increases Adolescents' Mobile phone addiction: Roles of parent-child attachment, deviant peers, and gender. *Children and youth services review*, 105, 104426.
- Yousefi, F., Shahim, S., Razavieh, A., Mehryar, A. H., Hosseini, A. A., & Alborzi, S. (1992). Some normative data on the Bender Gestalt Test performance of Iranian children. *British Journal of Educational Psychology*, 62(3), 410-416.
- Zarei, S., Memari, A. H., Moshayedi, P., & Shayestehfar, M. (2016). Validity and reliability of the UCLA loneliness scale version 3 in Farsi. *Educational Gerontology*, 42(1), 49-57.