

Child-Parent Relationships and Parents' Preventive Behaviors Affecting the Onset of Substance Use in Children: My Family Study

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Abstract

Background: Considering the fundamental role that parents play in a family dynamic, it is important to explore the parent-child relationship and examine what protective behaviors or risk factors may contribute to the onset of substance use in children.

Objectives: The present study aims to investigate the correlation between child-parent relationships and parents' preventive behaviors and their effect on the onset of substance use in children.

Materials and Methods: This cross-sectional study was carried out in 2014 among 234 randomly selected volunteer participants. These participants, who were all Tehran-based Iranian mothers, filled out a self-administered questionnaire in which they recorded: I-demographic information, II of family-based behaviors aimed at preventing the onset of substance use in children, and III of the child-parent relationship. Data were analyzed via SPSS software (ver. 21.0) using Pearson correlations, independent t-tests, and ANOVA at a 95% significant level.

Results: Results reported a negative significant correlation between conflict and closeness ($r = -0.465, P \geq 0.001$), a positive significant correlation between closeness and preventive behaviors ($r = 0.852, P \geq 0.001$), and a negative significant correlation between conflict and preventive behaviors ($r = -0.605, P \geq 0.001$).

Conclusions: The findings suggest that the development of preventive programs will contribute to increases in the child-mother closeness relationship and will help to prevent the onset of substance use in children.

Keywords: Family, Cognitive Factors, Conflict, Closeness

1. Background

Recent epidemiological studies indicate that substance use has become a significant problem in Iranian society. Not only has the prevalence ratio of substance abuse increased (1), the average age of substance use onset has dropped to young adulthood (2-7). Therefore, it is crucial to investigate relevant factors to determine which are effective in preventing the onset of substance use in children. Several factors have been known to effectively treat and prevent substance abuse. Previous studies in this field have suggested that parental functions and family dynamics are critical influencers (8-14). Researchers have categorized the factors contributing to substance abuse at the family level into two groups: protective factors and risky factors (15). Protective factors contributing to substance abuse prevention at the family level include: the presence of proper parental supervision, the encouragement of a secure and healthy parent/child attachment, the monitoring of behav-

ior and the application of effective discipline, the healthy communication of pro-social family values, the existence of parental involvement in the child's life, the establishment of supportive parenting practices (emotional, cognitive, social and financial) (16), the fostering of an effective parent-child relationship (17), the promotion of parental friendliness (18), and the formation of healthy communication patterns (19, 20). Among the concepts mentioned above, competent parenting has long been considered a powerful protective factor (21-23). Moreover, important family-level risk factors contributing to substance use in children include: a lack of bonding or insecure relationships with parents, the lack of a significant relationship with a caring adult, the existence of ineffective parenting, a chaotic home environment, the influence of parents or siblings with substance abuse issues, and the presence of mental illness, criminal behavior, or social isolation (24). Behavioral interactions between family members can also affect the quality of a child's behavior (25). To this end, sev-

eral studies have investigated the role of parent-child relationships in influencing a child's mental health (26), the outbreak of anti-social behaviors (27), and the formation of complicated problems in a child's future life (28). Results indicate that an emotionally negative child-parent relationship, particularly with the mother, can affect a child's other relationships (29) and can contribute to substance use (30). Additionally, when a young adult experiences low relationship quality in a child-parent relationship, he or she is more likely to exhibit weak social skills in their relationships with peers or the opposite sex (31). Further research has reported a negative significant correlation between child-parent relationships and addiction, potentiality in both genders (32). Furthermore, young adult addicts showed significantly lower quality child-parent relationships in comparison to normal young adults (33). Some researchers believe that prior to use, a person's vulnerability to substance abuse is formed during development, where the formation of ideas, attitudes, personality, and lifestyle takes place (34). Therefore, it seems that family-oriented preventive behaviors must focus on strengthening the child-parent relationship in order to prevent the onset of substance use in children.

2. Objectives

Considering the fundamental role that parents play in a family dynamic, it is important to explore the parent-child relationship and examine what protective behaviors or risk factors may contribute to the onset of substance use in children. Therefore, the present study aims to investigate the correlation between child-parent relationships and parents' preventive behaviors and their effect on the onset of substance use in children.

3. Materials and Methods

3.1. Participants and Procedure

A cross-sectional study was conducted among 234 randomly selected mothers in Tehran, Iran. Results from the pilot study phase were considered and dependent variables $SD = 5.35$ relating to mothers' behaviors aimed at preventing the onset of substance use in children were examined at a 95% significant level and $d = 0.5$. The number of samples was defined as 229, providing for a 10% attrition rate, and a sample of 252 was estimated.

3.2. Measures

Three valid self-reporting questionnaires were used to collect the required data.

3.2.1. Part One, I-Demographic Information

The first questionnaire gathered demographic data including: age (year), education level (under diploma (12 grades <), diploma (12 grades), and academic), family and friends history of substance abuse (yes/no), occupation (housewife, working), and family economic status (very good, good, average, poor, very poor).

3.2.2. Part Two, II-Family-Based Behaviors to Prevent the Onset of Substance Use in Children

The second questionnaire was titled "Family-based behaviors to prevent the onset of substance use in children" and was developed by committee during the my family study program (35). This questionnaire was created using relative evidence from previous theory-based studies (36-40) and intervention mapping steps (41). To craft these particular questionnaire items, the first and second steps of the intervention mapping protocol were utilized. The questionnaire was used to investigate parental behaviors related to the prevention of substance use among children. The questionnaire included 10 items ($\alpha = 0.81$) with potential scores ranging from 10 to 50 (e.g. "I spend more time with my family and I am responsible for preventing the onset of substance use in my children"). Participants were asked to choose their answers from a 5-Likert scale ranging from "completely agree" to "completely disagree". To confirm the results of this study, the content validity index (CVI) and content validity ratio (CVR) of the questionnaire were taken to experts for consultation. Experts in health education, addiction, family and psychology, and face validity were approached for approval based on their qualitatively collected viewpoints of target groups similar to the population under study. Experts were consulted regarding the difficulty, appropriateness, and ambiguity of questionnaire items. Additionally, a confirmatory study of 30 representative group samples was conducted to confirm the reliability of the questionnaire.

3.2.3. Part Three, III - Child-Parent Relationships

The final questionnaire was a short form version of the children-parent relationship scale (CPRS) developed by Pianta et al. and adapted from the students-teacher relationship scale (STRS) (42). The questionnaire investigated two factors using 15 items; eight items dealt with conflict (e.g. "My child and I always seem to be struggling with each other"), with scores ranging from 8 to 40, and seven items examined closeness (e.g. "I share an affectionate, warm relationship with my child"), with scores ranging from 5 to 35. Participants were asked to choose their answers from a 5-Likert scale, with the options: "definitely does not apply," "not really," "neutral/not sure," "applies somewhat," or "definitely applies." Wamboldt et al. (43) recorded the

internal reliability and structural reliability of the questionnaire as 0.72 and 0.35, respectively. The present study also verified internal reliability by presenting the questionnaire and recorded results to a representative group of 30 (Cronbach $\alpha = 0.7$).

3.3. Procedure

The inclusion criteria for this study required that participants: possess a healthy family framework, be a Tehran resident, range in age from 30 to 50, have a child at the pre-school level, and have no family history of substance use. Self-reports provided the means to confirm a lack of substance use. Moreover, all participants were briefed on study procedures and ensured of the confidentiality of results. Participants were given explanations regarding the research aims and were directed to conduct self-study in order to comply with research ethics. The collected data were analyzed using SPSS version 21, making use of descriptive and analytical statistics including the Pearson correlation, independent t-tests, and ANOVA at a 95% significance level.

4. Results

Results from the Pearson correlation reported a negative significant correlation between conflict and closeness ($r = -0.465$, $P \geq 0.001$). There was a positive significant correlation between closeness and preventive behaviors ($r = 0.852$, $P \geq 0.001$) and a negative significant correlation between conflict and preventive behaviors ($r = -0.605$, $P \geq 0.001$).

ANOVA and independent T-tests were used to indicate the association between closeness and conflict. According to results, the only major associations were recorded between education level, closeness, and conflict (Tables 1 and 2).

5. Discussion

Our findings indicated a significant correlation between the child-parent relationship (conflict, closeness) and preventive behaviors affecting the onset of substance use in children.

In short, mothers who enjoyed a significantly closer relationship with their children exhibited more behaviors aimed at preventing the onset of substance use in their children; conversely, mothers who had a significantly more conflicted relationship with their children exhibited fewer preventive behaviors. Thus, our research findings confirm the impact of the child-parent relationship on the

Table 1. Association Between Background Variables and the Child-Parent Relationship (Conflict)

Variable	Conflict ^a	P
Education level		
Under Diploma (12 grades <)	11.10 ± 2.82	0.027
Diploma (12 grades)	10.70 ± 3.27	
Economic status		
Very Poor	10.48 ± 3.26	0.065
Weak	12.04 ± 3.81	
Average	10.34 ± 3.14	
Good	10.60 ± 3.13	
Very Poor	8.91 ± 2.15	
Positive family history of substance abuse		
Yes	10.25 ± 3.86	0.869
No	10.51 ± 3.20	
Positive friends history of substance abuse		
Yes	11.20 ± 3.42	0.629
No	10.49 ± 3.21	
Occupation		
Housewife	10.60 ± 3.22	0.157
Working	9.59 ± 2.95	

^aValues are expressed as mean ± SD.

display of behaviors aimed at preventing the onset of substance use in children. It is therefore recommended that family-centered programs focusing on the prevention of substance use in children be provided and that efforts to strengthen the child-parent relationship (closeness) be initiated.

Various studies have indicated that the child-parent relationship plays an important role in the occurrence or prevention of problem behaviors, such as: the onset of substance use (24, 30), the diminished quality of a child's behavior (25), decreases in a child's mental health (26), the incidence of anti-social behaviors (27), complex problems in the children's future (28), other negative contextual child relations (29), a lack of social skills or communication with peers and the opposite sex (31), and vulnerability to substance use (32).

Research conducted by Seiffge-Krenke et al. (29) has shown that if a child-parent relationship, particularly between mother and child, is emotionally negative, a child's other relationships and contexts will suffer. These indications seem to place significant emphasis on the mother-child relationship.

To this end, many family-oriented programs focus on

Table 2. Association Between Background Variables and the Child-Parent Relationship (Closeness)

Variable	Closeness ^a	P
Education level		0.029
Under Diploma (12 grades <)	27.21 ± 1.87	
Diploma (12 grades)	27.35 ± 2.61	
Academic	28.63 ± 3.31	
Economic status		0.421
Very Poor	27.15 ± 1.51	
Weak	27.21 ± 2.69	
Average	27.75 ± 2.64	
Good	26.97 ± 2.75	
Very Poor	28.03 ± 4.16	
Positive family history of substance abuse		0.340
Yes	26.25 ± 3.86	
No	27.56 ± 2.69	
Positive friends history of substance abuse		0.629
Yes	26.80 ± 3.70	
No	27.55 ± 2.70	
Occupation		0.157
Housewife	27.50 ± 2.68	
Working	27.86 ± 3.09	

^aValues are expressed as mean ± SD.

preventing problem behaviors in children and address the importance of strengthening the relationship between parent and child (44-49).

An association between a mother's education level and the strength of the child-parent relationship (closeness, and conflict) was also indicated. Previous study results have revealed a similar relationship between parents' education level and appropriate child-parent relationships (50); therefore, it can be argued that higher parental education levels have a positive effect on the child-parent relationship.

The findings suggest that the development of preventive programs will contribute to increased child-mother (closeness) relationships and will aid in the prevention of substance use in children.

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Footnotes

Authors' Contribution: Mehdi Mirzaei-Alavijeh, Alireza Hidarnia, and Gerjo Kok developed the original idea and protocols for this study. Shamsaddin Niknami, Mohammad Ismail Motlagh, and Mahnaz Pishdar participated in the study execution. All authors provided comments and approved the final manuscript.

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