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The relationship between Family Communication Patterns and High-Risk Behaviors in Adolescents: The Mediating Role of Big Five Personality Traits

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Extended Abstract

Aim

Adolescence is marked by significant biological and social changes that strongly influence adolescent development and can lead to engagement in high-risk behaviors (de Oliveira Pinheiro et al., 2021). High-risk behaviors are defined as actions that pose a threat to the physical and mental health of adolescents and young adults, potentially leading to serious and irreversible consequences for both the individual and those around them (Friedman et al., 2011). Common examples of such behaviors include aggression and violence, substance abuse, smoking, alcohol consumption, addiction, illicit sexual activities, reckless driving, dangerous physical activities, unhealthy eating habits, physical altercations, and unlawful actions (Sun et al., 2021). One of the most prominent models that explores the interactions and communicative exchanges between family members is the Family Communication Patterns model (Koerner & Fitzpatrick, 2002). This model represents a scientific framework of how families communicate, focusing on the content and meaning behind their interactions. Family communication patterns are defined by what family members discuss, how they communicate, and the intended meaning behind their exchanges (Mohamadizadeh & Mirhashemi, 2021). The model consists of two primary dimensions: conversation orientation (which involves open participation, discussion, and collaborative decision-making) and conformity orientation (which reflects the alignment of values, beliefs, and attitudes, typically passed from parents to children) (Syah Putri, Kusumaningrum & Tristiana, 2021).

Personality traits are another critical factor in predicting various behaviors, including high-risk behaviors. Alport, one of the pioneering theorists in this area, defined personality as a dynamic organization of psychological systems within an individual that determines their characteristic patterns of behavior and thought (Alport, 1960). One of the most comprehensive and widely accepted theories of personality is the Five-Factor Model, proposed by McCrae and Costa (2004). This model outlines five core dimensions of personality: neuroticism (emotional instability), extraversion, agreeableness, openness to experience, and conscientiousness.

This study aims to investigate the relationship between family communication patterns and high-risk behaviors in adolescents, with a specific focus on the mediating role of the five major personality traits. The study's objectives include:

1. Exploring the relationship between conversation orientation and high-risk behaviors in adolescents, considering the mediating role of the five major personality traits.
2. Examining the relationship between conformity orientation and high-risk behaviors in adolescents, with attention to the mediating role of the five major personality traits, as outlined in Figure 1.

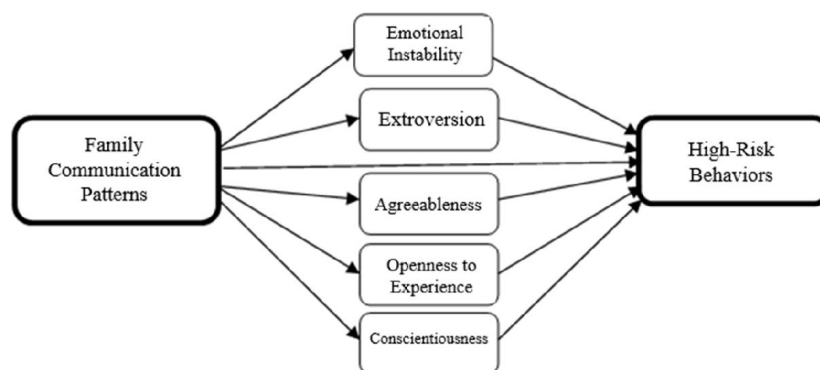


Figure 1. Conceptual model of research

Methodology

The study population consisted of all upper secondary school students in Bushehr during the 2021-2022 academic year. A total of 259 students were selected through convenience sampling. According to Kline (2023), a minimum sample size of 200 is sufficient for structural equation modeling. The instruments used for data collection included Koerner and Fitzpatrick's Family Communication Patterns Questionnaire-Revised Form (RFCP), the Iranian Adolescents' Risk-Taking Scale (IARS), and the Big Five Personality Factors Questionnaire (BFQ-C) by Barbaranelli. Prior to the study, necessary approvals were obtained from the Bushehr Department of Education, and the study objectives were explained to the relevant authorities. Due to the COVID-19 pandemic, in-person access to students was not feasible, so the questionnaire was created using Google Forms. The link to the questionnaire was distributed via the students' educational platform (Shad app). Data analysis was conducted using structural equation modeling with SPSS-25 and AMOS-24 software.

Findings

Of the participants, 78 were male (30.1%) and 181 were female (69.9%). The average age of male participants was 15.63 ± 1.05 years, and for female participants, it was 15.77 ± 1.07 years. In terms of grade level, 13 students (5.0%) were in the tenth grade, 58 students (22.4%) in the eleventh grade, and 188 students (72.6%) in the twelfth grade.

The study found significant relationships between various factors. Conversation ($r = -0.318$, $p < 0.01$), extroversion ($r = -0.549$, $p < 0.01$), agreeableness ($r = -0.344$, $p < 0.01$), conscientiousness ($r = -0.577$, $p < 0.01$), and openness to experience ($r = -0.373$, $p < 0.01$) were negatively correlated with high-risk behaviors, while conformity ($r = 0.288$, $p < 0.01$) and emotional instability ($r = 0.564$, $p < 0.01$) were positively correlated with high-risk behaviors. Additionally, extroversion ($r = 0.448$, $p < 0.01$), agreeableness ($r = 0.528$, $p < 0.01$), conscientiousness ($r = 0.524$, $p < 0.01$), and openness to experience ($r = 0.560$, $p < 0.01$) were positively correlated with conversation. There was also a negative correlation between emotional instability and conversation ($r = -0.424$, $p < 0.01$).

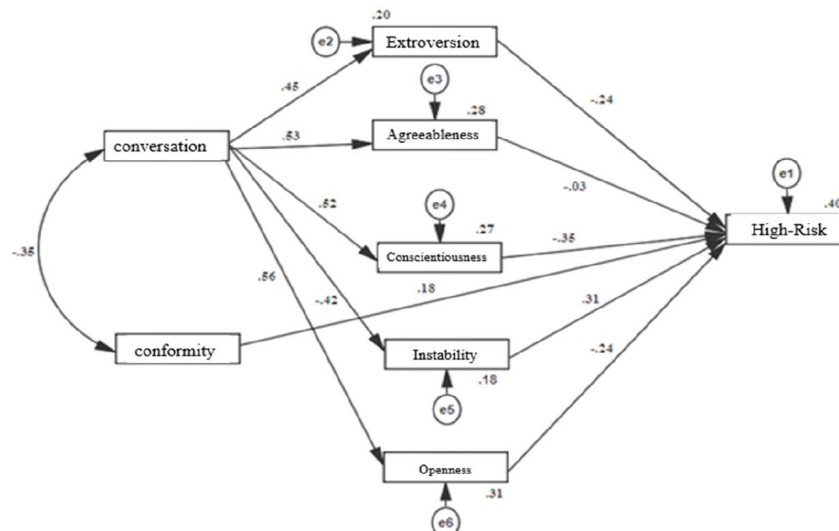


Figure 2. Standardized path model values

Conclusion

The findings suggest that promoting open conversation within families can reduce high-risk behaviors in adolescents. Conversely, higher levels of conformity within the family were associated with increased high-risk behaviors. These results align with previous research on the role of family communication patterns in reducing industrial psychotropic substance abuse (Rashidi, Mohseni, & Gol Mohammadian, 2017), addiction susceptibility (Sadri Damirchi, Raeis Gharedarvishloo, & Rahimi Zarajabad, 2018), and the protective influence of positive parenting on reducing high-risk behaviors (Singh, 2022).

This study revealed that emotional instability and conformity act as risk factors, while conversation, agreeableness, openness to experience, extroversion, and conscientiousness serve as protective factors against high-risk behaviors in adolescents. Family communication patterns, the quality of family relationships, and personality traits all play significant roles in influencing adolescents' engagement in high-risk behaviors. According to Problem-Behavior Theory, both problem and non-problem behaviors result from various risk and protective factors. Donovan, Jessor, and Costa (1991) proposed the concept of a "risk behavior syndrome," which encompasses personality, situational, and behavioral factors. They suggested that a unique combination of these factors can predispose adolescents to engage in either problematic or non-problematic behaviors.

The results also indicated that extraversion, emotional instability, and conscientiousness act as mediating variables in the relationship between conversation and high-risk behaviors. Figure 2 presents the final model proposed in this study, showing that personality traits—such as extroversion, conscientiousness, and emotional instability—mediate the relationship between family communication patterns and high-risk behaviors in adolescents. Previous research has supported the role of emotional instability, conscientiousness, and extroversion in predicting high-risk behaviors (Singh, 2022; Weston & Jackson, 2015; Turano et al., 2015).

From a theoretical perspective, emotional instability (neuroticism) is linked to high-risk behaviors through emotional processes. Emotional instability is a strong predictor of negative affect, such as anxiety and depression, as well as perceived stress (Mroczek & Almeida, 2004). The inability to regulate negative emotions and stress may lead individuals to engage in high-risk behaviors as a coping mechanism to alleviate perceived stress and negative feelings.

The findings of this study underscore the significance of family communication patterns and personality traits in influencing high-risk behaviors among adolescents. The results suggest that the quality of relationships between family members and individual personality traits can play a pivotal role in the emergence of high-risk behaviors. As such, therapists should consider these variables when

designing intervention programs aimed at reducing high-risk behaviors. Additionally, assessing and addressing family communication issues and personality traits in adolescents could facilitate meaningful changes, as adolescence is a critical period for development in these areas. A primary limitation of this study was the use of self-report instruments, which may have influenced the research findings.

Keywords: Adolescents, Big Five Personality Traits, Family Communication Patterns, High-Risk Behaviors.

Ethical Considerations

To adhere to ethical standards, participants were provided with clear instructions about the study's objectives and procedures. Informed consent was obtained, and participants were assured that their information would remain anonymous and confidential. They were also free to withdraw from the study at any time. Participants were informed that they could access the study's findings if desired, and reassured that the research was strictly academic, with no implications for their educational records or disciplinary actions in schools. The results of the study were reported with proper citation and without any reporting bias.

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Conflict of Interest

The authors declare no conflict of interest related to this study.

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