

## The Mediating Role of Emotion Regulation in the Relationship Between Parent-Child Relationship Quality and Risky Behaviors in Adolescents

Ali. Jamali<sup>1</sup>, Amin. Rafiepoor<sup>2\*</sup>

<sup>1</sup> M.A Clinical Psychology, Rodehen Branch, Islamic Azad University, Tehran, Iran

<sup>2</sup> Assistant Professor, Department of Psychology, Faculty of Psychology, Payame Noor University, Tehran, Iran

\* Corresponding author email address: rafiepoor2000@yahoo.com

### Article Info

#### Article type:

Original Research

#### How to cite this article:

Jamali, A., & Rafiepoor, A. (2024). The Mediating Role of Emotion Regulation in the Relationship Between Parent-Child Relationship Quality and Risky Behaviors in Adolescents. *Journal of Adolescent and Youth Psychological Studies*, 5(1), 35-44.

<http://doi.org/10.61838/kman.jayps.5.1.5>



© 2024 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

### ABSTRACT

**Objective:** Adolescence is a critical period in life. During adolescence, individuals experience new situations and, as a result, face various risks. The present study aims to determine the mediating role of emotion regulation in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents.

**Methods and Materials:** This study is descriptive-correlational in terms of data collection and structural equation modeling in nature. The study population includes all adolescents in Tehran city. Based on Morgan's table, 222 individuals were selected as the sample size through a convenient sampling method and participated in the current study. Data were collected using the Parent-Child Relationship Assessment questionnaire, the Cognitive Emotion Regulation questionnaire, and the Adolescent Risk-Taking Scale. Data analysis was conducted using Pearson correlation analysis and path analysis in the AMOS and SPSS version 22 software.

**Findings:** The results of the research showed that maladaptive emotion regulation is significantly positively correlated with risky behaviors in adolescents ( $P < 0.01$ ). The quality of the parent-child relationship had a significant negative correlation with components of risky behaviors in adolescents ( $P < 0.01$ ).

**Conclusion:** Other findings of this research indicated that emotion regulation strategies play a mediating role in the relationship between the quality of the parent-child relationship and risky behaviors. Therefore, in adolescents, the quality of the parent-child relationship determines risky behaviors through emotion regulation strategies.

**Keywords:** Risky behaviors, Parent-child relationship, Adolescents, Emotion regulation.

### 1. Introduction

A

Adolescent puberty in numerous studies has been considered as one of the most significant stressors and turning points in

the developmental stages of the family (Parsakia, Rostami, Darbani, et al., 2023). Researchers believe that hormonal changes and sexual arousal resulting from puberty lead to significant pressure towards individuation from parents and increased engagement in peer relationships (Branje, 2018). Adolescence is a period of significant changes; rapid emotional and physical changes, a time of exploration, self-reliance, self-control, independent decision-making, and a period of choice. Adolescence is when acquiring autonomy, responsibility, and decision-making regarding health, family, career, and peers occur (Sadeghzadeh & Samani, 2010). This period is when adolescents assume new roles and responsibilities and learn social skills to take on these roles, but as a precise, clear, and comprehensive model or pattern of appropriate behavior is not defined for them, they engage in weighing behaviors, experimenting with roles, distinguishing themselves from adults, and in some cases, disregarding rules, eventually leading to risky behaviors (De Los Reyes et al., 2019). Therefore, adolescence and youth are often synonymous with risk-taking, and the individual is defined as a risk-taker. Risk-taking refers to a group of behaviors that increase the likelihood of negative and destructive physical, psychological, and social outcomes for the individual (Wiguna et al., 2018).

Understanding adolescent risk-taking and emphasizing it as an expected requirement of this age group, rather than as deviant criminal behavior, makes the recognition and prevention of the criminalization process in adolescents more realistic. In other words, before legal centers directly focus on criminal adolescents and signs of crime and legal punishments, they should consider their emotional and physical changes and social and family conditions in the inclination towards risk-taking (Zablotska et al., 2019). The occurrence and spread of crime in the youth and adolescence periods often start with risky behaviors during middle and high school. Risky behaviors are the most important factor endangering the health of the community. Risky behaviors are those that jeopardize the health and well-being of adolescents, youth, and other community members. Smoking, tobacco use, alcohol consumption, risky sexual behaviors, substance abuse, etc., are considered risky behaviors (Achterbergh et al., 2017). When the biological and psychological pressures of puberty and the emergence of communication and social problems with family and peers, academic competitions and failures, lack of healthy relationships and resilience, create a breeding ground for substance and alcohol abuse, sexual risk-taking, running away from home, theft, and violence. Today, the prevalence

of risky behaviors, especially in adolescents and youth, has become one of the most significant and widespread concerns of human societies, and despite three decades of activities, risky behaviors have shown an exponential growth worldwide. According to statistics from the Centers for Disease Control and Prevention, the prevalence of behaviors that endanger health is increasing in the community of youth and the elderly. Alcohol consumption among youth, for example, is a high-risk behavior that not only causes trouble for the perpetrator but also imposes significant costs on society and results in the deaths of millions of young people and billions of dollars in costs to human societies. In European and American countries, weekly alcohol consumption is higher among 15-year-old boys than girls (Esmailzadeh et al., 2014).

Psychoanalytic theories believe that hormonal changes resulting from puberty drive Oedipal desires to the surface. These surfaced desires, involved in issues related to impulse control and anxiety, lead to rebelliousness in adolescents, consequently creating a distance between them and their parents. Most researchers distinguish parent-adolescent interaction due to the essential difference of the adolescent period from the childhood period from parent-child interaction (Sadeghzadeh & Samani, 2010). Consequently, studying this interaction is of special importance in shaping individual identity and the developmental changes of adolescents and parents, and hence many studies have focused on this bilateral interaction. Despite the importance of the parent-adolescent relationship, depending on which theoretical approach we examine the interaction between adolescents and their parents, the concept of "parent-adolescent relationship" will take a different form (Satoorian et al., 2016). The theory of individuation highlights that a skeptical parent-adolescent relationship during puberty serves to facilitate relationships outside the family group and tends toward risky behaviors, consequently driving the adolescent towards less intimacy with parents and independence from them. Therefore, the parent-child interaction, influenced by the child's puberty, transforms into parent-adolescent interaction and thus becomes significantly important. The first theory in this area is the theory of individuation (or the endogenous change approach) (Achterbergh et al., 2017). Thinkers in this theory believe that intimacy in the parent-adolescent relationship decreases under the influence of the adolescent's efforts to achieve social, cognitive, and emotional independence. In other words, concurrent with the transition of children to adolescence, they also begin the process of individuation. In

this approach, individuation is a process in which the individual, while maintaining a relationship with their parents, also begins to separate from them as an independent individual, and therefore, the likelihood of inclination towards risky behaviors increases during such a process (Zablotska et al., 2019). It appears that the process of emotion regulation could play a mediating role in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents.

Everyday life experiences have a fundamental impact on psychological health, motivational processes, and appropriate responsiveness to stress-inducing incidents and social development, affecting various individual actions. Although emotions (such as fear, anger, and disgust) have biological bases, individuals can influence the intensity, duration, and type of their emotional experiences (Morris et al., 2017). This process, in psychological texts, is called emotion regulation. Emotion regulation can be defined as processes through which individuals can impact which emotions they have, when they experience and express them. Emotion regulation encompasses all external and internal processes responsible for monitoring, evaluating, and modifying emotional reactions, especially intense and transient states, to achieve individual goals, which can be done automatically or controlled, consciously or unconsciously. Difficulty in emotional regulation should be the result of a lack of emotional regulation abilities and skills (Wante et al., 2018). Researchers, based on previous studies, state that emotional regulation refers to a stage where individuals influence their emotions and how they express and experience them. According to the emotion regulation model, emotional regulation is a unique and singular process for moderating emotional experience aimed at achieving social desirability and being in a physical and psychological state ready for appropriate responses to internal and external psychological demands (Van Lissa et al., 2019).

The Gross model consists of five stages (onset, situation, attention, appraisal, and response). Gross believes each stage of the emotion production process has a potential regulatory goal, and emotional regulation skills can be applied at different points in this process (Van Lissa et al., 2019). At the onset of an emotion or choosing a situation, there are factors that either put an individual in a situation of emotional arousal or keep them away from it (avoidance stage). In the second stage (situation), changes can be made in the emotion production process by modifying the situation. In the third stage (attention), one of the ways to create change and regulate emotion is to shift or expand

attention. Three methods of expanding attention include distraction, focusing, and rumination (Kazemi Rezaei et al., 2019). In the fourth stage of the emotion production process (appraisal), creating cognitive changes is the regulatory part's task in this stage, and one of the strategies is cognitive reappraisal. The last stage of the emotional sequence is the response stage, and adjusting the response constitutes the last part of the emotion regulatory process. Therefore, the Gross emotion regulation process model includes five stages, each containing a set of adaptive and maladaptive strategies, where individuals with emotional problems use more maladaptive strategies such as rumination, avoidance, etc. (Wante et al., 2018). Based on this, considering the sensitivity of adolescence and the likelihood of risky behaviors in this period and the importance of examining variables related to these behaviors, the present study is designed to respond to this question: whether emotion regulation strategies have a mediating role in the relationship between parent-child relationship quality and risky behaviors in adolescents.

## 2. Methods and Materials

### 2.1. Study Design and Participants

This study is a descriptive-correlational research and a structural equation modeling type. The study population includes all adolescents in Tehran city. Based on Morgan's table, 222 individuals were selected as the sample size through a convenient sampling method and participated in the current study. Sample selection criteria for the research included being an adolescent, not having a serious medical illness, not having a major psychiatric disorder, and consenting to participate in the study. Exclusion criteria included lack of consent to continue the research and having any serious physical or mental illness. According to Morgan's table, 222 adolescents in Tehran city were selected as the sample size through a convenient sampling method.

### 2.2. Measures

#### 2.2.1. Emotion Regulation

Emotion Regulation Scale was developed by Garnefski and Kraaij to assess cognitive emotion regulation (Garnefski & Kraaij, 2007). This is an 18-item instrument assessing cognitive emotion regulation strategies in response to threatening and stressful life events on a five-point scale ranging from never (1) to always (5), based on 9 subscales: self-blaming; other-blaming; focusing on

thought/rumination; catastrophizing; minimizing; positive refocusing; positive reappraisal; acceptance; and refocusing on planning. The minimum and maximum scores for each subscale range from 6 to 10, with higher scores indicating more frequent use of that cognitive strategy. Cognitive emotion regulation strategies in the questionnaire are divided into two general categories: adaptive (conforming) strategies and maladaptive (non-conforming) strategies. Adaptive strategies consist of the subscales of minimizing (questions 13 and 14); positive refocusing (questions 7 and 8); positive reappraisal (questions 11 and 12); acceptance (questions 3 and 4); refocusing on planning (questions 9 and 10). Maladaptive strategies consist of the subscales of self-blaming (questions 1 and 2); other-blaming (questions 17 and 18); focusing on thought/rumination (questions 5 and 6); catastrophizing (questions 15 and 16). Scores range from one to five for each question. Then, scores of each of the nine subscales are calculated by summing the scores of related questions. The score of adaptive strategy subscales is obtained by dividing the total scores by ten (number of questions), and the score of maladaptive strategy subscales is obtained by dividing the total scores by eight (number of questions) ((Garnefski & Kraaij, 2007). It is validated and the reliability is confirmed in Iran by many researchers.

### 2.2.2. Parent-Child Relationship

Parent-Child Relationship Scale (PCRS), developed by Mark et al. (1983), consists of 24 items used to measure the quality of parent-child communication. This questionnaire includes four components: positive feelings, role confusion/disgust, identity setting, and communication. The scoring of the questionnaire is based on a 7-point Likert scale. Items 9, 13, and 14 are scored inversely, and then the scores of the options are summed and divided by the number

of options of each factor (average of each subscale). The total score is the sum of the averages of the subscales (Foran et al., 2020). In Iran, the construct validity, face validity, and content validity of this scale were confirmed, and the Cronbach's alpha coefficient for the subscales of positive relationship aspects and conflict were satisfactory (Seydi et al., 2019; Seyed Mousavi et al., 2013; Teimouri et al., 2010).

### 2.2.3. Risky Behaviors

Iranian Adolescent Risk-Taking Scale is used to assess adolescents' vulnerability to a range of risky behaviors. The questionnaire consists of 38 questions to assess risky driving behaviors (6 questions), violence (5 questions), smoking (5 questions), drug use (8 questions), alcohol consumption (6 questions), sexual relationships and attraction to the opposite sex (8 questions). The scale consists of 38 items, and respondents express their agreement or disagreement with these items on a 5-point scale from strongly disagree (1) to strongly agree (5). The construct validity, face validity, content validity, and reliability of the Iranian Adolescent Risk-Taking Scale were confirmed by several researchers (Dastjerdi et al., 2010; Esmailzadeh et al., 2014; Ghoreishi Rad & Pour JabbarAkhouni, 2019).

### 2.3. Data analysis

For data analysis, correlation coefficients and path analysis were used under the AMOS and SPSS version 22 software.

## 3. Findings and Results

The demographic results of the study revealed that out of 222 participants, 121 were female and 91 were male.

**Table 1**

### Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum	Skewness	Kurtosis
Driving	15.49	3.95	7	30	0.29	0.82
Violence	17.39	3.61	5	25	-0.49	-0.71
Smoking	17.11	4.78	6	25	0.30	0.94
Substance Use	22.82	6.08	10	38	-0.51	-0.88
Alcohol Consumption	18.91	5.61	7	28	0.63	0.83
Sexual Behavior	23.90	6.29	8	40	-0.93	-0.77
Adaptive Emotion Regulation	25.60	6.74	10	48	0.79	0.62
Maladaptive Emotion Regulation	28.31	7.39	8	40	-0.80	-0.59
Parent-Child Relationship	8.58	3.14	3	17	-0.44	-0.48

**Table 2**

*Correlation Matrix*

Variables	Driving	Violence	Smoking	Substance Use	Alcohol Consumption	Sexual Behavior	Adaptive Emotion Regulation	Maladaptive Emotion Regulation
Driving	1							
Violence	0.41**	1						
Smoking	0.38**	0.27**	1					
Substance Use	0.40**	0.33**	0.64**	1				
Alcohol Consumption	0.52**	0.43**	0.67**	0.28**	1			
Sexual Behavior	0.57**	0.58**	0.41**	0.48**	0.36**	1		
Adaptive Emotion Regulation	-0.42**	-0.31**	-0.29**	-0.37**	-0.40**	-0.25**	1	
Maladaptive Emotion Regulation	0.38**	0.53**	0.33**	0.28**	0.24**	0.38**	-0.28**	1
Parent-Child Relationship Quality	-0.56**	-0.51**	-0.45**	-0.39**	-0.47**	-0.52**	0.37**	-0.62**

As the results in Table 2 show, the quality of the parent-child relationship had a significant negative correlation with the components of risky behaviors in adolescents, including driving ( $P < 0.01$ ,  $R = 0.56$ ), violence ( $P < 0.01$ ,  $R = 0.51$ ), smoking ( $P < 0.01$ ,  $R = 0.45$ ), substance use ( $P < 0.01$ ,  $R = 0.39$ ), alcohol consumption ( $P < 0.01$ ,  $R = 0.47$ ), and sexual behavior ( $P < 0.01$ ,  $R = 0.52$ ). The quality of the parent-child relationship had a significant positive correlation with adaptive emotion regulation strategies ( $P < 0.01$ ,  $R = 0.37$ ) and a significant negative correlation with maladaptive emotion regulation strategies ( $P < 0.01$ ,  $R = 0.62$ ). Moreover, adaptive emotion regulation was significantly negatively correlated with risky behaviors in adolescents, including driving ( $P < 0.01$ ,  $R = 0.42$ ), violence ( $P < 0.01$ ,  $R = 0.31$ ), smoking ( $P < 0.01$ ,  $R = 0.29$ ), substance use ( $P < 0.01$ ,  $R = 0.37$ ), alcohol consumption ( $P < 0.01$ ,  $R = 0.40$ ), and sexual behavior ( $P < 0.01$ ,  $R = 0.25$ ). Maladaptive emotion regulation had a significant positive correlation

with risky behaviors in adolescents, including driving ( $P < 0.01$ ,  $R = 0.38$ ), violence ( $P < 0.01$ ,  $R = 0.53$ ), smoking ( $P < 0.01$ ,  $R = 0.33$ ), substance use ( $P < 0.01$ ,  $R = 0.28$ ), alcohol consumption ( $P < 0.01$ ,  $R = 0.24$ ), and sexual behavior ( $P < 0.01$ ,  $R = 0.38$ ).

In this study, the chi-square value was 74.95, which is significant at the  $P < 0.01$  level. Given the large sample size of the study, the ratio of chi-square to degrees of freedom was used, which was 1.44. Based on this index, the resulting number from this ratio should not exceed 3 for the model to be accepted. Since the ratio of chi-square to degrees of freedom is less than 3, it can be said that the data obtained are consistent with the hypothetical model. Considering the model fit indices, especially the chi-square to degrees of freedom ratio of 1.61, the GFI index of 0.94, the AGFI index of 0.91, the CFI index of 0.93, the TLI index of 0.86, the IFI index of 0.90, the NFI index of 0.93, and the RMSEA index of 0.05, it can be stated that the model has a good fit.

**Table 3**

*Direct Effects*

Path Description	Non-Standard Coefficient (B)	Standard Coefficient (β)	SE	Critical Ratio	p
Parent-Child Relationship Quality on Adaptive Emotion Regulation	0.64	0.44	0.033	10.41	<0.001
Parent-Child Relationship Quality on Maladaptive Emotion Regulation	0.50	0.31	0.051	8.21	<0.001
Adaptive Emotion Regulation on Driving	0.64	0.32	0.031	8.26	<0.001
Adaptive Emotion Regulation on Substance Use	0.70	0.38	0.012	10.01	<0.001
Adaptive Emotion Regulation on Sexual Behavior	0.63	0.32	0.046	8.25	<0.001
Maladaptive Emotion Regulation on Violence	0.50	0.37	0.061	9.98	<0.001
Maladaptive Emotion Regulation on Smoking	0.38	0.29	0.042	6.78	0.001
Maladaptive Emotion Regulation on Substance Use	0.34	0.21	0.012	5.85	0.001
Maladaptive Emotion Regulation on Sexual Behavior	0.55	0.30	0.050	8.46	0.001

In the conceptual model, it is assumed that the quality of the parent-child relationship is related to risky behaviors in adolescents through emotion regulation. In the initial model, i.e., the hypothetical model of the mediating role of emotion regulation in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents, some path coefficients were not significant, and these paths were removed to better fit the model with the data. Figure 1 shows the paths of the hypothetical model of the mediating role of emotion regulation in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents after modification. According to the results of

Table 3 and based on the path analysis results, the coefficients of all paths in this model were significant.

After reviewing and confirming the model for hypothesis significance testing, two indices, the Critical Ratio (CR) and P, were used. Based on the significance level of 0.05, the critical value must be greater than 1.96 or less than -1.96, and a parameter value other than this in the model is not considered significant. Also, values less than 0.05 for the P value indicate a significant difference of the calculated value for the regression weights from zero at the 95 percent level. Based on the mentioned indices, as the results in Table 3 show, the regression weights related to the results of this table are all significant at a level less than 0.05.

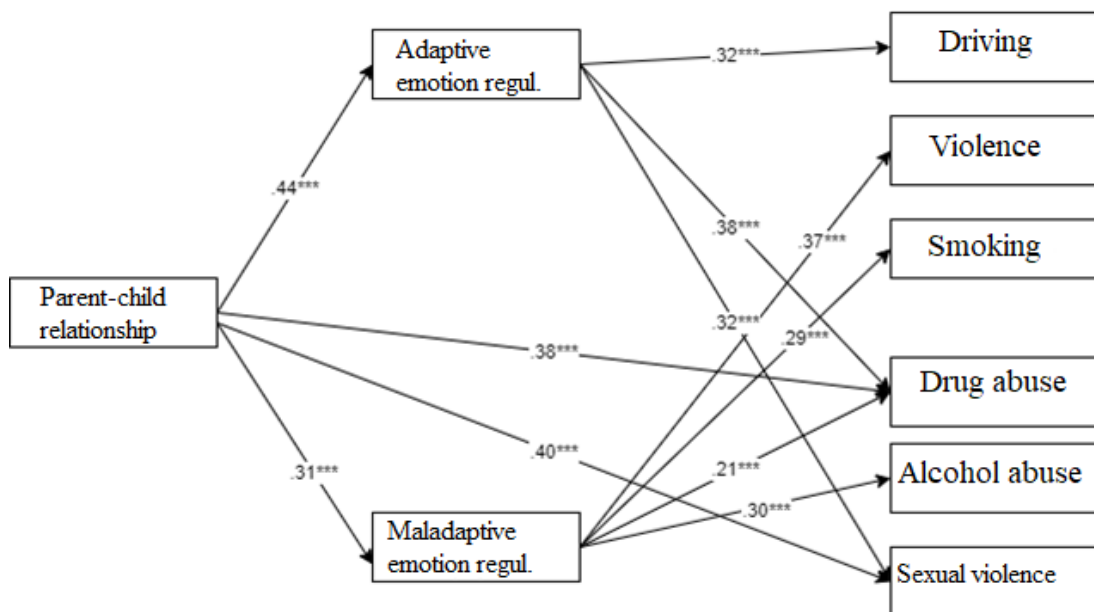
**Table 4**

*Indirect Effects*

Path Description	Standard Coefficient (B)	Non-Standard Coefficient (β)
Parent-Child Relationship Quality on Driving	0.22	0.12
Parent-Child Relationship Quality on Violence	0.24	0.10
Parent-Child Relationship Quality on Smoking	0.18	0.11
Parent-Child Relationship Quality on Substance Use	0.20	0.13
Parent-Child Relationship Quality on Alcohol Consumption	0.17	0.10
Parent-Child Relationship Quality on Sexual Behavior	0.23	0.12

**Figure 1**

*Final Model with Direct Effects*



Since one of the objectives of path analysis is to present the indirect effect of independent variables on dependent variables, in addition to the direct effect, the indirect effect of the independent variable on the dependent is shown in Table 4. As can be seen, the indirect effect of the quality of

the parent-child relationship on the components of risky behaviors in adolescents was significant at the 0.001 level.

#### 4. Discussion and Conclusion

The present study aimed to explore the mediating role of emotion regulation in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents. According to the results of this study, higher levels of parent-child relationship quality were associated with a decrease in risky behaviors among adolescents, such as reckless driving, smoking, and sexual behaviors. In other words, there was a significant negative relationship between the quality of the parent-child relationship and the reduction of risky behaviors in adolescents. These findings are consistent with the results of previous studies (Álvarez-García et al., 2019; Ghoreishi Rad & Pour JabbarAkhouni, 2019; Liu et al., 2017; Satoorian et al., 2016). Furthermore, the study found a significant negative relationship between adaptive emotion regulation strategies and risky behaviors in adolescents, indicating that higher levels of adaptive emotion regulation strategies were associated with a decrease in risky behaviors such as reckless driving, smoking, and sexual behaviors. There was also a significant positive relationship between maladaptive emotion regulation strategies and risky behaviors in adolescents, indicating that higher levels of maladaptive emotion regulation strategies were associated with an increase in risky behaviors such as reckless driving, smoking, and sexual behaviors. These findings align with some previous studies (Dadfarnia et al., 2020; Ghoreishi Rad & Pour JabbarAkhouni, 2019; Wante et al., 2018). Lastly, the study found that emotion regulation plays a mediating role in the relationship between the quality of the parent-child relationship and risky behaviors in adolescents, in such a way that the quality of the parent-child relationship, with an increase in the level of adaptive strategies, can lead to a reduction in risky behaviors in adolescents. This finding is consistent with some previous studies (Sadeghi & Mazaheri, 2007; Van Lissa et al., 2019).

Adolescence is a transition period from childhood to adulthood, where individuals experience significant physical and emotional changes that can bring stress and tension, leading adolescents to seek relief from these pressures through peer groups and consequently engaging in risky behaviors (Pirzadeh & Parsakia, 2023). Involvement in risky behaviors during adolescence, associated with reduced academic and social performance, can lead to a decline in the quality of life even in later ages, including adulthood and old age. Risky behaviors not only affect adolescents but also have numerous negative consequences for their families and

society, entailing various individual and social harms (Liu et al., 2017). Adolescents who have a warm and intimate family environment and relationships with their parents can use these emotional relationships as a protective factor against their inclination towards risky behaviors. Having a warm and intimate relationship with family members, especially parents, is associated with functions such as increasing self-esteem, impacting personal and social well-being, enhancing problem-solving abilities, social cohesion, strengthening ethical commitments, and social stability, which are factors in combating the pressures and tensions of adolescence and deterring the occurrence of risky behaviors among adolescents (Álvarez-García et al., 2019). Psychologists and researchers have supported the hypothesis that individual experiences during childhood and adolescence play a significant role in personality development. Research on childhood experiences has highlighted the impact of childhood experiences and their failures on physical and psychological health throughout life (Perryman et al., 2017). Often, behavioral maladjustments and disorders after childhood in the family result from a lack of attention to this sensitive period and lack of proper guidance in the process of growth and development. This negligence leads to maladjustment and non-conformity with the environment and various deviations in different dimensions for the child and the family (Khanjani et al., 2016; Morris et al., 2017).

Adolescence, as a transitional stage between childhood and adulthood, is a period of significant biological, social, emotional, and cognitive changes. If adolescents do not satisfactorily navigate this stage, it can lead to emotional and behavioral problems in adulthood (Dastjerdi et al., 2010). Adolescence is a period of transition from childhood to adulthood, marked by numerous biological, social, emotional, and cognitive changes that can bring stress and tension for adolescents. They might turn to peer groups and consequently risky behaviors as a means of coping with the stress and pressures arising from the developmental stages of adolescence. In fact, if adolescents cannot satisfy their emotional needs and reduce their stress and tension within their family and interpersonal relationships with their parents, they might seek to relieve the stress and pressures of adolescence by gaining independence from their parents, seeking emotional support outside the home, and seeking approval from peer groups. Having a loving relationship with family members and parents is associated with increased self-esteem, impacting personal and social well-being, enhancing problem-solving abilities, social cohesion,

strengthening ethical commitments, and social stability, which are considered factors in combating the pressures and tensions of adolescence and deterring the occurrence of risky behaviors among adolescents (Álvarez-García et al., 2019; Parsakia, Rostami, Darbani, et al., 2023; Parsakia, Rostami, Saadati, & Navabinejad, 2023).

Furthermore, emotion regulation is a central process for all aspects of human functioning and plays a vital role in how individuals cope with stressful experiences. Emotion regulation helps adolescents increase their emotional understanding and adjust their emotional experience and expression of emotions. Emotion regulation, as a set of processes through which individuals seek to monitor, evaluate, and redirect the automatic flow of emotions in accordance with their needs and goals, is essential for initiating, increasing, maintaining, or decreasing positive and negative emotions in response to environmental events, as it influences physiological, behavioral, and experiential processes (Debeuf et al., 2020). Difficulty in emotion regulation, such as lack of understanding and awareness of emotions, difficulty in accepting negative emotional experiences, inability to control impulses, difficulty in achieving desired goals, and inability to use appropriate emotion regulation strategies when faced with negative emotions, can be associated with many psychological and behavioral harms (Ashori & Najafi, 2020; Izadpanah et al., 2016). A warm and affectionate parent-child relationship can ensure adolescents' success in managing their emotions, especially in critical situations, by increasing and expanding internal psychological resources and capabilities, including emotion regulation skills. Therefore, cognitive emotion regulation strategies, as actions indicative of ways people cope with stressful situations and adverse events, are important factors in determining health and successful performance in social interactions, and the quality of the parent-child relationship can help reduce the inclination of the child towards risky behaviors by helping them better manage emotions in crisis situations (Mikulincer & Shaver, 2019). Emotion regulation is an inherent aspect of emotional response tendencies and involves changing or modulating an emotional state, a specific form of self-regulation in external and internal processes involved in emotional reactions. When parents are in a healthy and loving relationship with their children, in a warm and intimate interaction, the child is in touch with their emotions without any anxiety and avoidance and can easily express themselves and their emotions and receive positive responses from their parents. Such a two-way parent-child relationship can acquaint the

child with their emotions and enable them to show the best response in stressful situations by increasing their awareness of emotions and how to deal with them.

Research results indicate that individuals' capacity for effective emotion regulation impacts psychological, physical, and interpersonal well-being; for example, signs of emotion regulation failure occur in over half of axis one disorders and in all personality disorders (Mosadegh et al., 2023; Parsakia, Rostami, & Saadati, 2023). Additionally, examining psychological texts and studies shows that emotion regulation is an important factor in determining health and successful performance in social interactions (Abutalebi et al., 2018). Emotion plays a significant role in affective disorders. Psychoticism involves emotional changes. Neuroticism is related to anxiety. Antisocial personality is rooted in the apparent lack of emotion. Common mental disorders and various types of abnormal behaviors are rooted in emotional problems, and even intellectual disabilities are often considered as emotional developmental delays. Based on previous studies, it has been hypothesized that individuals with emotion regulation skills demonstrate greater success in various areas of their personal lives (Cludius et al., 2020; Vuillier et al., 2021).

## 5. Limitations & Suggestions

In this research, the researcher faced certain limitations. The study was correlational, which limits causal conclusions. Various factors such as age, gender, parents' educational level, economic status, etc., that could potentially act as intervening variables affecting the results, were not examined and controlled. Another limitation of the present study was the small number of subjects, hence caution should be exercised in generalizing the results. It is recommended that future research be conducted with larger samples and with different groups of individuals, taking into account variables such as age, gender, parents' educational level, and economic status. Different dimensions of risky behaviors in different individuals and groups and identifying factors involved in them should be investigated. Programs and interventions based on identified factors in risky behaviors in adolescents should be implemented.

## Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.



## Declaration of Interest

The authors of this article declared no conflict of interest.

## Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

## Funding

None.

## Authors' Contributions

Ali Jamali contributed to the research design, data collection, and the assessment of the quality of the parent-child relationship and risky behaviors in adolescents. Amin Rafiepoor provided expertise in research methodology, data analysis, and the investigation of the mediating role of emotion regulation in the relationship between parent-child relationship quality and risky behaviors.

## References

- Abutalebi, F., Khamsan, A., & Rastgomoghadam, M. (2018). The Relationship between Perceived Social Support with Subjective Well-Being and Academic Achievement of Female Pre-University Students. *Educational Psychology, 14*(48), 147-168. <https://doi.org/10.22054/jep.2018.17094.1599>
- Achterbergh, R. C. A., van der Helm, J. J., van den Brink, W., & de Vries, H. J. C. (2017). Design of a syndemic based intervention to facilitate care for men who have sex with men with high risk behaviour: the syn.bas.in randomized controlled trial. *BMC Infectious Diseases, 17*(1), 398. <https://doi.org/10.1186/s12879-017-2474-x>
- Álvarez-García, D., Núñez, J. C., González-Castro, P., Rodríguez, C., & Cerezo, R. (2019). The Effect of Parental Control on Cyber-Victimization in Adolescence: The Mediating Role of Impulsivity and High-Risk Behaviors [Original Research]. *Frontiers in psychology, 10*. <https://doi.org/10.3389/fpsyg.2019.01159>
- Ashori, M., & Najafi, F. (2020). Cognitive Emotion Regulation Training on Cognitive Flexibility and Alexithymia in Hearing-Impaired Students [Original Research Article]. *Middle Eastern Journal of Disability Studies--*, *10*(0), 50-50. <http://jdisabilstud.org/article-1-1310-en.html>
- Branje, S. (2018). Development of Parent-Adolescent Relationships: Conflict Interactions as a Mechanism of Change. *Child Development Perspectives, 12*(3), 171-176. <https://doi.org/10.1111/cdep.12278>
- Cludius, B., Mennin, D., & Ehring, T. (2020). Emotion regulation as a transdiagnostic process. *Emotion, 20*(1), 37-42. <https://doi.org/10.1037/emo0000646>
- Dadfarnia, S., Hadianfard, H., Rahimi, C., & Aflakseir, A. (2020). Predicting Depression Based on Cognitive Emotion Regulation Strategies [Research]. *Tolooebehdasht, 19*(1), 32-47. <https://doi.org/10.18502/tbj.v19i1.2815>
- Dastjerdi, G., Ebrahimi Dehshiri, V., Kholasezade, G., & Ehsani, F. (2010). Effectiveness of Methadone in Reduction of High Risk Behaviors in Clients of MMT Center [Original article]. *The Journal of Shahid Sadoughi University of Medical Sciences, 18*(3), 215-219. <http://jssu.ssu.ac.ir/article-1-1094-en.html>
- De Los Reyes, A., Ohannessian, C. M., & Racz, S. J. (2019). Discrepancies Between Adolescent and Parent Reports About Family Relationships. *Child Development Perspectives, 13*(1), 53-58. <https://doi.org/10.1111/cdep.12306>
- Debeuf, T., Verbeken, S., Boelens, E., Volkaert, B., Van Malderen, E., Michels, N., & Braet, C. (2020). Emotion regulation training in the treatment of obesity in young adolescents: protocol for a randomized controlled trial. *Trials, 21*(1), 153. <https://doi.org/10.1186/s13063-019-4020-1>
- Esmailzadeh, H., Asadi, M., Miri, N., & Keramatkar, M. (2014). Prevalence of High Risk Behaviors Among High School Students of Qazvin in 2012 [Research]. *Iranian Journal of Epidemiology, 10*(3), 75-82. <http://irje.tums.ac.ir/article-1-5282-en.html>
- Foran, H. M., Fraude, I., Kubb, C., & Wamboldt, M. Z. (2020). Assessment of the Parent-Child Relationship. In *The Handbook of Systemic Family Therapy* (pp. 35-54). <https://doi.org/10.1002/9781119438519.ch35>
- Garnefski, N., & Kraaij, V. (2007). The Cognitive Emotion Regulation Questionnaire. *European Journal of Psychological Assessment, 23*(3), 141-149. <https://doi.org/10.1027/1015-5759.23.3.141>
- Ghoreishi Rad, F. S., & Pour JabbarAkhouni, F. (2019). Investigating the Relationship of Social Health and Personality Traits with High-Risk Behaviors of Tabriz University of Medical Sciences Students in 2017: A Descriptive Study [Research]. *Journal of Rafsanjan University of Medical Sciences, 18*(2), 107-120. <http://journal.rums.ac.ir/article-1-4112-en.html>
- Izadpanah, S., Schumacher, M., Arens, E. A., Stopsack, M., Ulrich, I., Hansenne, M., Grabe, H. J., & Barnow, S. (2016). Adolescent harm avoidance as a longitudinal predictor of maladaptive cognitive emotion regulation in adulthood: The mediating role of inhibitory control. *Journal of adolescence, 52*(1), 49-59. <https://doi.org/10.1016/j.adolescence.2016.07.006>
- Kazemi Rezaei, S. V., Kakabraee, K., & Hosseini, S. S. (2019). The Effectiveness of Emotion Regulation Skill Training Based on Dialectical Behavioral Therapy on Cognitive Emotion Regulation and Quality of Life of Patients With Cardiovascular Diseases [Original Article]. *Journal of Arak University of Medical Sciences, 22*(4), 98-111. <https://doi.org/10.32598/jams.22.4.90>
- Khanjani, Z., Peyamannia, B., & Hashemi, T. (2016). Prediction of quality of interaction mother - child with anxiety disorders in children According to cultural characteristics of Iranian mothers. *The Journal of New Thoughts on Education, 12*(2), 239-260. <https://doi.org/10.22051/jontoe.2016.2398>
- Liu, C., Cox, R. B., Jr., Washburn, I. J., Croff, J. M., & Crethar, H. C. (2017). The Effects of Requiring Parental Consent for Research on Adolescents' Risk Behaviors: A Meta-analysis. *Journal of Adolescent Health, 61*(1), 45-52. <https://doi.org/10.1016/j.jadohealth.2017.01.015>

- Mikulincer, M., & Shaver, P. R. (2019). Attachment orientations and emotion regulation. *Current opinion in psychology*, 25, 6-10. <https://doi.org/10.1016/j.copsyc.2018.02.006>
- Morris, A. S., Criss, M. M., Silk, J. S., & Houlberg, B. J. (2017). The Impact of Parenting on Emotion Regulation During Childhood and Adolescence. *Child Development Perspectives*, 11(4), 233-238. <https://doi.org/10.1111/cdep.12238>
- Mosadegh, H., Darbani, S. A., & Parsakia, K. (2023). The mediating role of sexual satisfaction in the relationship between personality traits and emotional divorce in men. *Journal of Applied Family Therapy*, 4(4), 191-202. [https://www.aftj.ir/article\\_184086.html?lang=en](https://www.aftj.ir/article_184086.html?lang=en)
- Parsakia, K., Rostami, M., Darbani, S. A., Saadati, N., & Navabinejad, S. (2023). Explanation of the concept of generation disjunction in studying generation z. *Journal of Adolescent and Youth Psychological Studies*, 4(2), 136-142. <http://dx.doi.org/10.52547/jspnay.4.2.174>
- Parsakia, K., Rostami, M., Saadati, N., & Navabinejad, S. (2023). Analyzing the causes and factors of the difference between the girls of the generation Z and the previous generations in Iran from the perspective of social psychology. *Psychology of Woman Journal*, 4(1), 1-13. <https://doi.org/10.61838/kman.pwj.4.1.1>
- Parsakia, K., Rostami, M., & Saadati, S. M. (2023). The Relationship between Emotional Intelligence and Marital Conflicts Using Actor-Partner Interdependence Model. *Journal of Psychosociological Research in Family and Culture*, 1(1), 23-28. <https://journals.kmanpub.com/index.php/jprfc/article/view/521>
- Perryman, K. L., Christian, D. D., & Massengale, B. D. (2017). The impact of a two-day child parent relationship therapy training on attitude, knowledge, and skills. *International Journal of Play Therapy*, 26(4), 218-229. <https://doi.org/10.1037/pla0000053>
- Pirzadeh, S., & Parsakia, K. (2023). A Comparative Study of Family Structure (Cohesion and Flexibility) and Functioning in People with and without Drug Abuse. *International Journal of Body, Mind & Culture*, 10(1), 82-89. <https://doi.org/10.22122/ijbmc.v10i1.278>
- Sadeghi, M., & Mazaheri, M. A. (2007). Quality of parent-child relationship: Precondition of the children s religious education. *Journal of Family Research*, 3(9), 471-. <https://www.magiran.com/paper/463169>
- Sadeghzadeh, M., & Samani, F. (2010). Prediction of Adolescent's Anxiety, Stress and Depression Based on two Dimensions of Family Process and Content Model. *Psychological Methods and Models*, 1(2), 45-60. [https://jpmm.marvdasht.iau.ir/article\\_1145\\_e80501175f70e50554b7e0ccdbd12561.pdf](https://jpmm.marvdasht.iau.ir/article_1145_e80501175f70e50554b7e0ccdbd12561.pdf)
- Satoorian, A., Tahmassian, K., & Ahmadi, M. R. (2016). The Role of Parenting Dimensions and Child-Parent Relationship in Children's Internalized and Externalized Behavioral Problems. *Journal of Family Research*, 12(4), 683-705. [https://jfr.sbu.ac.ir/article\\_97463\\_79ae7c4e5d9ef827f214d19b6cdb2f3d.pdf](https://jfr.sbu.ac.ir/article_97463_79ae7c4e5d9ef827f214d19b6cdb2f3d.pdf)
- Seydi, M. S., Rezaee, K., & Hoseini Shurabeh, S. (2019). Investigating the Mediating role of quality of family life in relationship between parenting stress and children's behavioral problems. *Journal of Educational Psychology Studies*, 16(34), 131-154. <https://doi.org/10.22111/jeps.2019.4729>
- Seyed Mousavi, P., Mazaheri, A., Pakdaman, S., & Heidari, M. (2013). Effectiveness of attachment based therapy using video feedback on decreasing parental stress and externalizing problems of children. *Contemporary psychology*, 8(1), 33-46. <https://bjcp.ir/article-1-174-en.html>
- Teimouri, Saeed, Far, A., & Rashin. (2010). Relationship between Parental Stress and Children's Affective and Behavioral Disorders. *Thought and Behavior in Clinical Psychology*, 4(16), 17-. <https://www.magiran.com/paper/863738>
- Van Lissa, C. J., Keizer, R., Van Lier, P. A. C., Meeus, W. H. J., & Branje, S. (2019). The role of fathers' versus mothers' parenting in emotion-regulation development from mid-late adolescence: Disentangling between-family differences from within-family effects. *Developmental Psychology*, 55(2), 377-389. <https://doi.org/10.1037/dev0000612>
- Vuillier, L., May, L., Greville-Harris, M., Surman, R., & Moseley, R. L. (2021). The impact of the COVID-19 pandemic on individuals with eating disorders: the role of emotion regulation and exploration of online treatment experiences. *Journal of eating disorders*, 9, 1-18. <https://doi.org/10.1186/s40337-020-00362-9>
- Wante, L., Van Beveren, M.-L., Theuwis, L., & Braet, C. (2018). The effects of emotion regulation strategies on positive and negative affect in early adolescents. *Cognition and Emotion*, 32(5), 988-1002. <https://doi.org/10.1080/02699931.2017.1374242>
- Wiguna, T., Irawati Ismail, R., Sekartini, R., Setyawati Winarsih Rahardjo, N., Kaligis, F., Prabowo, A. L., & Hendarmo, R. (2018). The gender discrepancy in high-risk behaviour outcomes in adolescents who have experienced cyberbullying in Indonesia. *Asian Journal of Psychiatry*, 37, 130-135. <https://doi.org/10.1016/j.ajp.2018.08.021>
- Zablotska, I. B., Vaccher, S. J., Bloch, M., Carr, A., Foster, R., Grulich, A. E., Guy, R., McNulty, A., Ooi, C., Pell, C., Poynten, I. M., Prestage, G., Ryder, N., Templeton, D., Bloch, M., Carr, A., Cheung, C., Foster, R., Gianacas, C., . . . the Pr, E. S. G. (2019). High Adherence to HIV Pre-exposure Prophylaxis and No HIV Seroconversions Despite High Levels of Risk Behaviour and STIs: The Australian Demonstration Study PrELUDE. *AIDS and Behavior*, 23(7), 1780-1789. <https://doi.org/10.1007/s10461-018-2290-3>