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# The Impact of Parental Psychological Control on Adolescent Risky Behaviors with an Emphasis on the Mediating Role of Gratitude

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## ABSTRACT

**Objective:** This study aimed to investigate the impact of parental psychological control on adolescent risky behaviors, with an emphasis on the mediating role of gratitude.

**Methods and Materials:** The research utilized a descriptive-survey design, with a sample of 361 first-year high school students in Tonekabon, selected through simple random sampling. Data were collected using the Iranian Adolescent Risk-Taking Scale, the Parental Psychological Control Scale (Soenens et al., 2010), and the Gratitude Scale (Morgan et al., 2017). Structural equation modeling (SEM) was employed to analyze the relationships between variables, using the Smart PLS software.

**Findings:** The results showed that parental psychological control has a significant negative impact on gratitude and a direct positive effect on adolescent risky behaviors. Gratitude was found to mediate the relationship between parental psychological control and adolescent risky behaviors, with partial mediation. Additionally, gratitude was negatively associated with risky behaviors, acting as a protective factor.

**Conclusion:** Parental psychological control increases the likelihood of risky behaviors in adolescents, while gratitude plays a significant mediating role in reducing this effect. Interventions focused on enhancing gratitude may help mitigate the negative influence of psychological control on adolescent behavior. **Keywords:** Parental psychological control, adolescent risky behaviors, gratitude.

## 1. Introduction

A dolescence is a dynamic and challenging period in every individual's life, characterized by significant physical, psychological, and social changes. This stage, typically spanning from ages 10 to 19, is considered a pivotal point in human development (Mansouri & Khodabakhshi-

Koolaee, 2024; Turani & Akhoundzadeh, 2024). During this period, adolescents experience hormonal changes that lead to sexual maturation and notable physical alterations. Simultaneously, the brain undergoes structural and functional changes, influencing thought processes, emotions, and behaviors (Blakemore & Mills, 2014). Psychologically, adolescents are in search of their identity



and strive to gain a deeper understanding of themselves and their place in the world. This process is often accompanied by emotional challenges, mood swings, and sometimes risky behaviors (Turani & Akhoundzadeh, 2024). Socially, peer relationships become increasingly important, and adolescents seek greater independence from their families. These changes can lead to tensions in family relationships but also provide opportunities for growth and learning social skills (Mansouri & Khodabakhshi-Koolaee, 2024).

Risky behaviors during adolescence are a complex and multifaceted phenomenon that has garnered the attention of many researchers and health professionals. These behaviors, which may include drug use, risky sexual behaviors, dangerous driving, and antisocial behaviors, are often the result of a combination of biological, psychological, and social factors (Steinberg, 2017). From a neurological perspective, the uneven development of different brain regions during adolescence plays a key role in the emergence of these behaviors. The brain's reward system, responsible for feelings of pleasure and excitement, matures earlier than the prefrontal cortex, which is responsible for impulse control and logical decision-making. This imbalance can lead to increased risk-taking and sensation-seeking in adolescents (Casey et al., 2019). Psychological factors such as identity exploration, the desire for independence, and peer pressure also contribute to risky behavior formation. Adolescents may engage in risky behaviors to gain social acceptance and feel a sense of belonging to peer groups (Yousefynezhad et al., 2022). Environmental and social factors also influence this dynamic. Unstable family environments, poverty, and easy access to drugs or alcohol can increase the likelihood of risky behaviors. Additionally, media and social networks, by portraying and sometimes promoting risky behaviors, can impact adolescents' decisionmaking (Mistretta et al., 2018).

Parental psychological control and its relationship with adolescent risky behaviors is a complex, multidimensional topic that has attracted the interest of many researchers. Psychological control refers to behaviors that parents use to manipulate their children's thoughts, feelings, and behaviors through manipulative techniques such as inducing guilt, shame, or anxiety (Cui et al., 2014; Mahdian & Sheikholeslami, 2021). Studies have shown that parental psychological control can have significant negative effects on adolescents' emotional and behavioral development. This parenting style often leads to reduced self-esteem, increased anxiety and depression, and a higher likelihood of engaging in risky behaviors (Wang et al., 2018). One reason for this

connection is the negative impact of psychological control on adolescents' ability to develop autonomy and an independent identity. Adolescents under severe psychological control may turn to risky behaviors as a way to express their independence and identity (Koster et al., 2016). Furthermore, parental psychological control can lead to unhealthy communication patterns within the family. This can result in reduced trust between parents and adolescents, increasing the likelihood of secrecy and risky behaviors (Larrañaga et al., 2016). Research has also shown that psychological control negatively adolescents' ability to regulate their emotions, which can lead to the use of maladaptive coping strategies, such as risky behaviors, to manage stress and negative emotions (Zimmer-Gembeck et al., 2017).

Gratitude, as a personality trait and emotional skill, plays an important role in reducing adolescent risky behaviors. Recent research has shown that adolescents who experience higher levels of gratitude are less likely to engage in risky behaviors such as drug use, unsafe sexual behaviors, or antisocial actions (Froh et al., 2010; Froh et al., 2011; Saeed, 2024). One reason for this connection is the positive impact of gratitude on mental health and emotional well-being. Adolescents who experience more gratitude typically have higher self-esteem and lower levels of depression and anxiety, which in turn can reduce the risk of engaging in risky behaviors (Shafiei et al., 2022). Additionally, gratitude can strengthen adolescents' social relationships. Grateful adolescents generally have better relationships with parents, teachers, and peers, and these positive relationships can act as a protective factor against risky behaviors (Mahdian & Sheikholeslami, 2021). Research has also demonstrated that gratitude can enhance healthy coping mechanisms in adolescents. Instead of turning to risky behaviors to cope with stress or negative emotions, grateful adolescents are more likely to use adaptive strategies such as problemsolving or seeking social support (Wang et al., 2015). Gratitude can also positively influence adolescents' outlook on life and the future, increasing motivation for success and progress, thereby reducing the likelihood of engaging in risky behaviors (Ma et al., 2013; Reckart et al., 2017; Wood et al., 2010).

This research, by examining the impact of parental psychological control on adolescent risky behaviors and the mediating role of gratitude, can fill important gaps in our current knowledge and lead to a deeper understanding of family dynamics and adolescent behavior. One of the most significant gaps this study can address is a better



understanding of the psychological mechanisms linking parental control to adolescent risky behaviors. While previous studies have demonstrated the relationship between these two variables, a detailed understanding of how this influence operates remains incomplete. By exploring the mediating role of gratitude, this study can demonstrate how parental psychological control may affect adolescents' ability to experience and express gratitude, and how this, in turn, influences risky behaviors. Moreover, this research can help clarify the role of protective factors against risky behaviors. While many studies focus on risk factors, examining gratitude as a protective factor can offer new insights into how adolescent resilience against the negative effects of parental control can be strengthened. This study can also contribute to a better understanding of the interaction between individual factors (such as gratitude) and family factors (such as parental control) in shaping adolescent behaviors. This more comprehensive perspective can aid in the development of more effective interventions to reduce risky behaviors. Practically, the findings of this research could assist in developing educational programs for parents, emphasizing the importance of reducing psychological control and encouraging gratitude in adolescents. Furthermore, these findings could be used in designing gratitude-based interventions for adolescents at risk of engaging in risky behaviors. Finally, this study can expand the existing literature on the role of positive emotions in adolescent development. By focusing on gratitude, this research can show how fostering positive emotions can serve as an effective strategy for reducing risky behaviors. Given the above, the present study aimed to examine the impact of parental psychological control on adolescent risky behaviors with an emphasis on the mediating role of gratitude.

## 2. Methods and Materials

## 2.1. Study Design and Participants

The present study is descriptive in nature and uses a survey method. The statistical population of this study includes all first-year high school students in the city of Tonekabon during the 2023-2024 academic year. Based on the number of variables and paths required for structural equation modeling, a total of 361 participants were estimated to be necessary. There are 20 parameters, and for each parameter, 18 participants are required (Teknori & Markoullides, trans. Eiznalu, 2016). In this study, due to the nature of the research topic and the studied population, a

simple random sampling method was used, and the samples were selected by lottery from a list of first-year high school students in Tonekabon.

#### 2.2. Measures

## 2.2.1. Risky Behaviors

The Iranian Adolescent Risk-Taking Scale, developed by Zadeh Mohammad et al. (2011), consists of 28 items and aims to assess the degree of risk-taking in adolescents across various dimensions (tendency toward drug use [items 1–8], tendency toward alcohol [items 9-14], tendency toward smoking [items 15-19], tendency toward violence [items 20-24], and tendency toward sexual relationships and behavior [items 25-28]). Measurement is based on a fivepoint Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). In Zadeh Mohammad et al.'s (2011) study, the construct validity of this scale was evaluated. Exploratory factor analysis with principal components indicated that this questionnaire is a seven-dimensional scale, explaining 64.84% of the variance in risk-taking. The Cronbach's alpha coefficient for the overall scale was 0.94, and for its subscales, it ranged from 0.74 to 0.93, indicating good reliability (Turani & Akhoundzadeh, 2024).

#### 2.2.2. Parental Psychological Control

The Parental Psychological Control Scale was developed by Soenens et al. (2010) and consists of 16 items with two subscales: dependency orientation (items 1-8) and achievement orientation (items 9-16). Measurement is based on a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Soenens et al. (2010) reported the questionnaire's reliability using Cronbach's alpha, with 0.87 for maternal psychological control in the dependency orientation and 0.93 in the achievement orientation, and 0.84 and 0.91, respectively, for paternal psychological control. Ashraf and Sheikh-Islami (2017) used confirmatory factor analysis to determine the scale's construct validity. According to the findings, the model had a good fit. The factor loadings for the items on dependency orientation ranged from 0.44 to 0.68, and for achievement orientation, from 0.52 to 0.75. Test-retest reliability of the questionnaire, assessed after two weeks on a sample of 40 participants, showed reliability coefficients for dependency orientation, achievement orientation, and the overall psychological control scale of 0.85, 0.88, and 0.90, respectively (Heidari et



al., 2022; Mahdian & Sheikholeslami, 2021; Manindjo et al., 2023).

#### 2.2.3. Gratitude

The Gratitude Scale was developed by Morgan et al. (2017) to assess gratitude, consisting of 29 items and three subscales: emotional (6 items), attitudinal (10 items), and behavioral (13 items). Measurement is based on a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Morgan et al. (2017) reported the reliability of the emotional, attitudinal, and behavioral subscales using Cronbach's alpha, which were 0.87, 0.80, and 0.84, respectively. Morgan et al. (2017) found that the emotional, attitudinal. behavioral and components of the multidimensional Gratitude Scale positively and significantly correlated with the Gratitude Questionnaire (McCullough et al., 2002) and well-being scales. In the present study, confirmatory factor analysis was used to assess validity. The results showed that the items related to emotional gratitude from individuals were loaded appropriately on three items (with factor loadings ranging from 0.53 to 0.78), emotional gratitude for possessions on four items (with factor loadings ranging from 0.47 to 0.63), reflective gratitude on four items (with factor loadings ranging from 0.46 to 0.65), and gratitude toward others on

eight items (with factor loadings ranging from 0.38 to 0.72). Model fit indices indicated that the model had a good fit. Additionally, to assess the reliability of the Gratitude Scale scores, Cronbach's alpha coefficients for the factors of emotional gratitude toward individuals, emotional gratitude for possessions, reflective gratitude, gratitude toward others, and overall gratitude were 0.70, 0.64, 0.69, 0.78, and 0.84, respectively (Mahdian & Sheikholeslami, 2021; Shafiei et al., 2022).

## 2.3. Data Analysis

For statistical analysis, the Kolmogorov-Smirnov test was initially used to assess the normality of the data distribution, and structural equation modeling was employed to examine the effects of independent and mediating variables on the dependent variable using Smart PLS statistical software.

## 3. Findings and Results

Out of the total 361 respondents, 201 participants, equivalent to 55.7% of the sample, were female, and 160 participants, equivalent to 44.3%, were male. Table 1 presents the descriptive statistics for the variables of parental psychological control, adolescent risky behaviors, and gratitude.

 Table 1

 Descriptive Statistics for Parental Psychological Control, Adolescent Risky Behaviors, and Gratitude

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Parental Psychological Control	361	1	5	3.59	0.721
Adolescent Risky Behaviors	361	1	5	2.46	0.718
Gratitude	361	1	5	3.52	0.819

The Pearson correlation coefficients between all research variables are presented in Table 2.

 Table 2

 Correlation Between Research Variables

Variables	Parental Psychological Control	Adolescent Risky Behaviors	Gratitude
Parental Psychological Control	1		
Adolescent Risky Behaviors	-0.466**	1	
Gratitude	0.376**	-0.359**	1

\*\*p<0.01

Table 3 presents the path coefficients along with t-statistics.





**Table 3**Path Coefficients and t-Values

Direct Path Hypotheses	Standardized Path	Standard	t-	Significance	Result
	Coefficient	Error	Value	Level	
Gratitude -> Adolescent Risky Behaviors	-0.756	0.046	16.479	0.000	Significant
Parental Psychological Control -> Gratitude	0.827	0.017	49.193	0.000	Significant
Parental Psychological Control -> Adolescent Risky	-0.194	0.049	3.966	0.000	Significant
Behaviors					
Parental Psychological Control -> Gratitude -> Adolescent	-0.625	0.040	15.487	0.000	Significant
Risky Behaviors					

The significance of the coefficients is based on the reported t-value. If the t-value exceeds 1.96, it can be concluded with 95% confidence that the independent

variable affects the dependent variable. The Sobel and Baron and Kenny tests were used to assess the role of the mediating variables.

 Table 4

 Results of the Baron and Kenny and Sobel Test for the Main Hypothesis

Model	Independent Variable	Dependent	Baron and	Standardized Path	t-	Sobel	Sobel Test
Condition		Variable	Kenny Steps	Coefficient	Value	Statistic	Significance
Without	Parental	Adolescent Risky	Step 1 (c)	-0.826	48.885	9.361	0.000
Mediator	Psychological Control	Behaviors					
With	Parental	Adolescent Risky	Step 4 (c)	-0.194	3.966		
Mediator	Psychological Control	Behaviors					
	Parental	Gratitude	Step 2 (a)	0.827	49.193		
	Psychological Control						
	Gratitude	Adolescent Risky	Step 3 (b)	-0.756	16.479		
		Behaviors					

As shown in Table 4, the relationship between the independent variable and the mediator, the mediator and the dependent variable, and the independent and dependent variables are statistically significant. This significance confirms the first three steps of the Baron and Kenny method. When gratitude as a mediating variable is introduced into the model of the relationship between parental psychological control and adolescent risky behaviors, the beta coefficient between these two variables changes from -0.826 to -0.194, while maintaining statistical

significance with a t-value of 3.966. Thus, it can be inferred that the type of mediation by gratitude in this study is partial. Additionally, the Sobel test was used to complete the research process. In the Sobel method, if the test statistic exceeds 1.96 and the significance level is below 0.05, the mediating role is confirmed. As the results in Table 4 indicate, the significance level of the Sobel test, with a test statistic of 9.361, is less than 0.05, confirming the mediation relationship.



Figure 1

T-Value Significance for Hypotheses

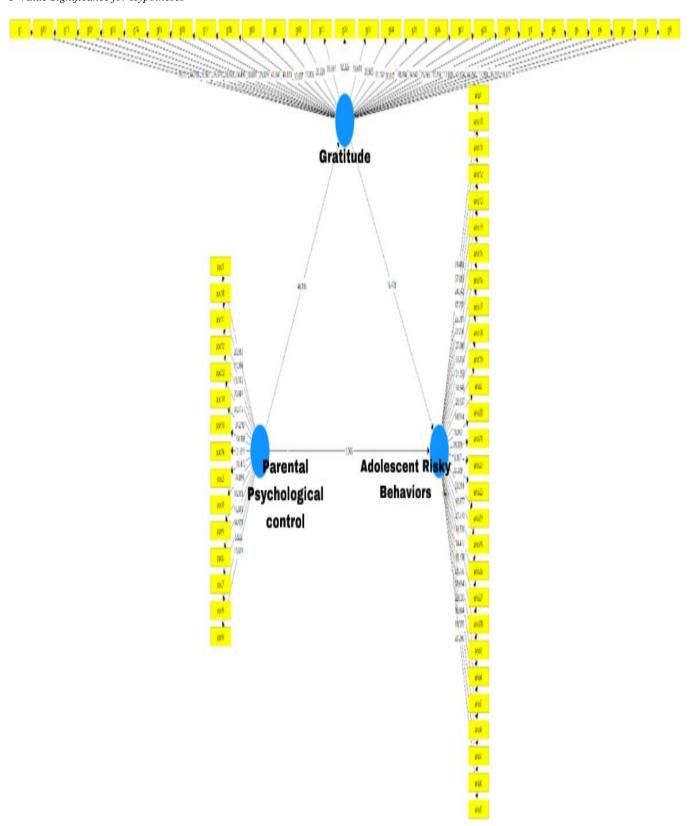
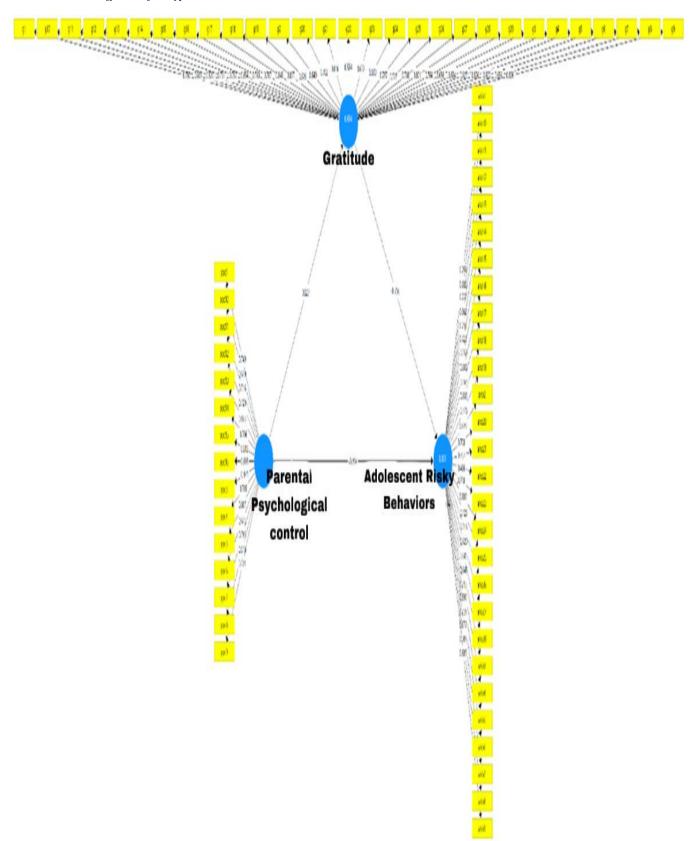




Figure 2
Standardized Path Coefficients for Hypotheses





#### 4. Discussion and Conclusion

The present study aimed to investigate the impact of parental psychological control on adolescent risky behaviors, emphasizing the mediating role of gratitude. The results showed that gratitude mediates the relationship between parental psychological control and adolescent risky behaviors. These findings are consistent with the prior research (Mansouri & Khodabakhshi-Koolaee, 2024; Yousefynezhad et al., 2022). Parental psychological control refers to behaviors used by parents to control their children's thoughts, emotions, and behaviors. This type of control can involve emotional manipulation, inducing guilt, or limiting children's independence (Soenens & Vansteenkiste, 2010; Soenens et al., 2017). On the other hand, adolescent risky behaviors include a wide range of actions, such as substance use, unsafe sexual behaviors, and antisocial behaviors, which can jeopardize the adolescent's health and future (Steinberg, 2017). Gratitude, as a positive personality trait and emotion, refers to an individual's ability to recognize and appreciate the positive aspects of life and their experiences (Froh et al., 2010; Froh et al., 2011). This study demonstrates that gratitude can mediate the relationship between parental psychological control and adolescent risky behaviors. Parental psychological control can reduce adolescents' sense of independence and autonomy, which in turn may diminish their ability to perceive and appreciate the positive aspects of life (Wang et al., 2018). When adolescents feel that their freedom and independence are restricted, they may be less capable of recognizing and valuing the positive aspects of their lives. Gratitude can act as a protective factor against risky behaviors. Adolescents who experience higher levels of gratitude tend to have greater life satisfaction and are less likely to engage in risky behaviors (Ma et al., 2013). Gratitude can enhance selfesteem and self-efficacy, which in turn can reduce the likelihood of engaging in risky behaviors. Adolescents under strict parental psychological control may seek ways to compensate for the feeling of restriction and lack of independence. Risky behaviors can be one of these ways. However, if these adolescents can cultivate gratitude, the need for compensation through risky behaviors may decrease (Padilla-Walker et al., 2016). Gratitude can improve the quality of family relationships. Adolescents who experience more gratitude may have better relationships with their parents, even in the context of psychological control. This improvement in relationships can, in turn,

reduce the likelihood of engaging in risky behaviors (Yousefynezhad et al., 2022). Gratitude can help improve emotional regulation skills. Adolescents who are able to experience and express gratitude typically have better skills in managing stress and negative emotions. These skills can reduce the likelihood of turning to risky behaviors as a mechanism for coping with stress (Froh et al., 2010; Froh et al., 2011). In conclusion, this study shows that gratitude can serve as an important protective factor against the negative effects of parental psychological control. This finding can be used in the design of preventive and therapeutic interventions for adolescents and their families. Promoting gratitude in adolescents can be an effective strategy for reducing risky behaviors, even in situations where parental psychological control is present.

Another finding of this study showed that parental psychological control affects adolescent risky behaviors. This finding is consistent with the prior research (Koster et al., 2016; Wang et al., 2018). Parental psychological control refers to behaviors used by parents to control their children's thoughts, emotions, and behaviors. This type of control can involve emotional manipulation, inducing guilt, or limiting children's independence (Soenens & Vansteenkiste, 2010). On the other hand, adolescent risky behaviors include a wide range of actions, such as substance use, unsafe sexual behaviors, and antisocial behaviors, which can jeopardize the adolescent's health and future (Steinberg, 2017). Parental psychological control can reduce adolescents' sense of independence and autonomy. This may lead to oppositional reactions and a tendency to engage in risky behaviors as a way to assert independence (Cui et al., 2014). Parents who use psychological control may reduce adolescents' self-esteem. Low self-esteem can make adolescents more susceptible to risky behaviors in order to gain peer attention or acceptance (Heidari et al., 2022). Psychological control can impair adolescents' ability to regulate their emotions. This may lead to the use of risky behaviors as a mechanism to cope with stress and negative emotions (Cui et al., 2014). Studies have shown that parental psychological control can lead to increased anxiety and depression in adolescents. These psychological problems can increase the risk of engaging in risky behaviors (Scharf et al., 2016). Adolescents under strict parental psychological control may have difficulty forming healthy relationships with their peers. This can lead to associating with delinquent peer groups, increasing the likelihood of engaging in risky behaviors (Van der Giessen et al., 2014). Psychological control can disrupt effective communication between



parents and adolescents. This can cause adolescents to be less willing to talk to their parents about their problems and challenges, which can increase the risk of engaging in risky behaviors (Soenens et al., 2017). Ultimately, this study shows that parental psychological control can have significant negative effects on adolescent behavior. This finding can be used in designing preventive interventions and parent education programs. Encouraging parents to adopt positive and supportive parenting methods, rather than psychological control, can help reduce the likelihood of adolescents engaging in risky behaviors.

Another finding indicated that parental psychological control affects gratitude. This result is consistent with the prior research (Koster et al., 2016; Shafiei et al., 2022). Gratitude refers to an individual's ability to recognize and appreciate the positive aspects of life and their experiences (Froh et al., 2010; Froh et al., 2011). On the other hand, adolescent risky behaviors include a wide range of actions, such as substance use, unsafe sexual behaviors, and antisocial behaviors, which can jeopardize the adolescent's health and future (Steinberg, 2017). Gratitude is associated with increased psychological well-being and life satisfaction. Adolescents who experience higher levels of well-being are less likely to engage in risky behaviors (Froh et al., 2010; Froh et al., 2011). Gratitude can help improve relationships with family and peers. Positive and supportive relationships can serve as protective factors against risky behaviors (Reckart et al., 2017). Adolescents who experience higher levels of gratitude usually also have greater self-control. Higher self-control can reduce the likelihood of engaging in risky behaviors (Ma et al., 2013). Gratitude is associated with reduced materialistic tendencies. This can reduce the likelihood of engaging in risky behaviors to achieve material goals (Froh et al., 2011). Gratitude can improve stress-coping skills. This can reduce the need to use risky behaviors as a coping mechanism (Wood et al., 2010). In conclusion, this finding indicates that fostering gratitude in adolescents can serve as a protective factor against risky behaviors. This information can be used in designing preventive interventions and educational programs for adolescents to help them develop gratitude skills, thereby reducing the likelihood of engaging in risky behaviors.

## 5. Limitations & Suggestions

This study has several limitations that should be acknowledged. First, the use of self-reported questionnaires

may introduce response bias, as participants could underreport or overreport their risky behaviors or levels of gratitude due to social desirability or recall issues. Second, the cross-sectional design of the study limits the ability to draw causal inferences between parental psychological control, gratitude, and adolescent risky behaviors. Third, the sample was restricted to first-year high school students from one city, which may limit the generalizability of the findings to other age groups or regions. Lastly, unmeasured confounding variables, such as socioeconomic status or peer influence, might have influenced the results.

Future research could benefit from using a longitudinal design to better examine the causal relationships between parental psychological control, gratitude, and adolescent risky behaviors over time. Additionally, expanding the sample to include adolescents from different age groups, cultural backgrounds, and geographic regions would improve the generalizability of the findings. Future studies should also explore the potential moderating roles of variables such as family structure, peer relationships, and socioeconomic factors. Furthermore, incorporating qualitative approaches, such as interviews or focus groups, may provide deeper insights into adolescents' experiences and perceptions of parental control and gratitude.

The findings of this study have important implications for both parents and educators. Parent education programs should emphasize the importance of reducing psychological control and promoting supportive parenting practices that encourage autonomy while fostering gratitude in adolescents. Schools and mental health professionals could implement gratitude-based interventions to enhance emotional well-being and reduce risky behaviors among adolescents. These interventions could focus on building emotional regulation skills and fostering positive peer and family relationships, which can act as protective factors against engagement in risky behaviors.

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## **Declaration of Interest**

The authors of this article declared no conflict of interest.

#### **Ethical 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.

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#### **Authors' Contributions**

This article is derived from the first author's doctoral dissertation. All authors equally contributed to this article.

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