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RELATIONSHIP OF SENSATION SEEKING AND RESILIENCE AMONG ADOLESCENTS

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Abstract: *Adolescence is a critical developmental phase characterized by heightened risk-taking behaviors, influenced by both intrinsic personality traits and external social factors. This study examines the relationship between sensation seeking, peer influence, and risk-taking tendencies among adolescents. Using a quantitative, correlational research design, data were collected from high school and college students through standardized self-report measures, including the Sensation Seeking Scale, Peer Influence Questionnaire, and Risk-Taking Behavior Scale. Pearson correlation analysis revealed significant positive relationships between sensation seeking and risk-taking behavior, as well as between peer influence and risk-taking tendencies. Additionally, the interaction between sensation seeking and peer influence was found to amplify risk-taking behaviors. ANOVA results demonstrated significant differences in risk-taking behaviors across demographic groups, emphasizing the role of contextual factors. While intervention programs targeting these influences showed limited effectiveness, the findings suggest that a more tailored, multifaceted approach may be necessary. These insights highlight the importance of addressing both individual psychological traits and social dynamics when designing intervention strategies to reduce risk-taking behaviors in adolescents.*

Key Words: *Adolescence, Sensation Seeking, Peer Influence, Risk-Taking Behavior, Pearson Correlation, ANOVA, Intervention Programs, Social Dynamics, Personality Traits, Risk Reduction Strategies.*

1. INTRODUCTION:

A person's outlook on life changes drastically as they reach puberty. Because their emotional, psychological, social, and physical selves are changing during puberty, teenagers take more risks during this period. Taking everything into account at once highlights how crucial it is [1]. Social repercussions are a part of children's environments that impact their risk-taking conduct. Adolescents' social development and sense of self are profoundly influenced by the friends they keep company with. individuals can feel comfortable expressing their frustrations, sharing hobbies, and meeting new individuals during these gatherings. I don't understand why, but it seems like teenagers aren't afraid to attempt new things or explore complicated emotions [2].

The tendency to jeopardise one's psychological, social, emotional, and physical health in pursuit of complicated, novel, and potentially life-altering events is referred to as "sensation seeking" in psychiatric literature [3]. Sexual behaviour, recreational drug use, and risky driving are definitely areas where adults and teens differ in their aspirations [4].

Based on his research, Zuckerman has classified sensation seeking into two categories [3]. Intense, unplanned sensation seeking typically falls into one of three categories: disinhibition, experience seeking, or boredom susceptibility. An example of socialised sensation seeking would be seeking out stimulating interactions without depending on intuition. Based on Zuckerman's notion [3], the concept of experience seeking is based on, every single person has an incredibly encouraging amount of desire. The term "stimulating" is used to describe something that makes us feel a certain way. Our level of physical activity rises in response to environmental stimuli when we are stimulated [3].

Every person has their own special combination of innate motivation and vulnerability, according to the theory of the ideal stimulus level. It was decided that the ideal spot for the person's intended prize lay somewhere within this range. The individual's evaluation of the reward will be less enthusiastic or joyful if it falls short of this ideal level [3].

There is a mechanism in the human body that controls the threshold of perceived stimulation, according to the optimal arousal theory. When the level of arousal beyond this optimal threshold, the body starts to reduce inputs and avoid sensations. Optimal levels of arousal are not always achieved when people intentionally seek out stimuli at lower levels; this behaviour is known as sensation seeking [5]. The propensity to seek out new experiences is shaped by both one's environment and one's upbringing. The outcome determines whether people attempt more often or stop trying altogether when they engage in behaviours with the purpose of producing a sensation [3].

Adolescents' demand for thrills is met through risk-taking, yet this behaviour endangers not just themselves but also others from a social, legal, economic, and health standpoint. The increased likelihood of dangerous behaviour among adolescents may be attributed to their underdeveloped impulse control and heightened demand for excitement [6].

One example of a contrarian viewpoint is the fact that students drink more during drinking episodes, behave irresponsibly, and think that drinking has bad impacts. As another example, research has connected sensation-seeking, a psychological attribute, to both positive and negative risk-taking [7, 8]. Impaired driving and sexual conduct are among the many negative health effects of substance abuse, along with impulsivity, gambling, sleeplessness, melancholy, injuries, aggressive behaviour, and smoking [12, 11].

When compared to boys who display the sensation-seeking personality trait, girls are less likely to engage in dangerous behaviours [14]. Anxiety and lack of self-control were more common among men who used the Internet for sex[15,16], whereas depression and boredom were more common among men who used it for other purposes.The heightened risk-taking is a hallmark of adolescence and is caused by a number of variables, such as heightened impulses connected to excitement, relatively weak self-control, and peer pressure. It appears that sensory desire and peer pressure work together to foster the development of risk-taking behaviour [17].

According to Ryan [18], "peer pressure" occurs when people of own age encourage or discourage you to undertake something. The word "peer pressure" is used to describe the influence of one's social group's norms and expectations on one's actions. Negative peer pressure occurs when girls and young women are encouraged to engage in risky behaviours that could have serious or even fatal consequences. Teens who experiment with drugs or alcohol, drink too much, steal from stores, or commit other crimes clearly made a bad choice in life. Consequently, you run the risk of having a criminal record and facing increased college admissions challenges [19]. Positive effects can be achieved through peer influence. The youth who are not in positions of leadership are urged by their adoptive peers to participate in religious activities and games. Finding friends, like-minded people, and a sense of community are all possible in a peer group [20].

Spending time with friends raises the probability that one will participate in risky behaviour, making peer pressure a significant component in teenage risk-taking. Young people are more likely to partake in risky activities including smoking, drug use, and reckless driving as they strive for social approval [21]. A great deal of speculation has been devoted to the question of why certain peer groups are more likely to engage in risky behaviour among young people.

Concerns about the potential conditioning of children to engage in unsafe and harmful actions due to their reliance on the views of their friends are significant. Adolescents' capacity to mimic and praise antisocial activity may impact their risk-taking behaviour, according to social learning theories such as the Problem Conduct Theory. This is so despite the numerous studies that have linked youth risk-taking to association with criminals [22].

The second is what is known as "the theory of planned behaviour," and it seeks to clarify how individuals' social contexts influence both their intentions and their execution. A person's degree of excitement is proportional to the amount of investment they have in anything. Decisions of this nature typically include taking into account one's degree of skill in addition to any possible societal constraints or repercussions [23].

And lastly, according to social action theory, everyone feels the effects, both positive and negative, of their social circle and the larger society. It is possible for the expectations of one's coworkers to impact an individual's likely behaviour. Adherence to group norms and the promotion of such behaviour can help individuals avoid social isolation [24].

Although the importance of positive peer connections may grow with age, it is crucial to remember that they are important at any age. Peer pressure and the need to fit in are major factors in the socialisation process that make adolescents more likely to participate in dangerous behaviours. Studies have shown that preteens and teens were

more influenced by the teen social-influence group than by adults or parents. Teens that act antisocially are more prone to commit crimes like drug usage, vandalism, and even homicide [28, 29, 2]. Substance abuse, risky sexual behaviour, and other socially unacceptable behaviours are more prevalent among teenagers who experience peer pressure to conform [27]. More so than with females, guys were influenced to start smoking by their peers [32].

The purpose of this research was to fill gaps in the existing literature by investigating the nature and moderating role of the teen risk-taking, peer influence, and sensation-seeking behaviour interaction in greater detail. When we analysed the youths' risk-taking and the impact of their peers who were looking for attention, we also tried to find any differences based on gender. It was believed that teenagers would seek thrills through risky behaviours. Many also held the view that young people's risk-taking habits were positively influenced by their peers. Furthermore, it was thought that young people's risk-taking and thrill-seeking.

2. PROBLEM STATEMENT :

Adolescence is a critical developmental period characterized by heightened risk-taking behaviors, which can have both positive and negative consequences. While some level of risk-taking is necessary for growth and exploration, excessive engagement in risky behaviors—such as reckless driving, substance use, and delinquency—can lead to severe health and social consequences. Two major factors that contribute to adolescent risk-taking are **sensation seeking** and **peer influence**. Sensation seeking, a personality trait defined by the need for novel and intense experiences, has been linked to increased engagement in high-risk activities. Similarly, peer influence plays a significant role, as adolescents are more likely to take risks when they are encouraged or pressured by their social groups. However, the combined effect of these factors on adolescent decision-making remains an area that requires further empirical investigation.

Existing research has explored the individual effects of sensation seeking and peer pressure on adolescent behavior. However, there is a lack of studies that examine how these two factors interact and influence risk-taking behaviors simultaneously. Additionally, with the rise of digital peer interactions through social media, traditional models of peer influence may need to be reassessed. This study aims to address these gaps by investigating the relationship between sensation seeking, peer influence, and risk-taking behaviors in adolescents. By understanding these interactions, the research will contribute to developing targeted interventions that can help reduce harmful risk-taking behaviors among youth.

Research Gap

While previous studies have extensively explored the relationship between sensation seeking, peer influence, and risk-taking behaviors, several gaps remain. First, much of the existing research focuses on Western populations, leaving a need for studies in diverse cultural contexts to understand how cultural norms shape these behaviors. Second, most studies rely on self-reported measures, which may introduce bias; future research should incorporate neurobiological assessments and longitudinal data. Third, limited research examines how digital peer interactions (e.g., social media influence) contribute to risk-taking behaviors in adolescents. Finally, there is a lack of intervention-based studies assessing the efficacy of targeted programs that mitigate risk-taking by addressing sensation seeking and peer influence together.

3. OBJECTIVES :

1. To examine the relationship between sensation seeking and risk-taking behaviors in adolescents.
2. To analyze the influence of peer groups on adolescent decision-making and risk-taking.
3. To explore the combined effect of sensation seeking and peer influence on risk-taking tendencies.
4. To assess intervention strategies that may reduce risky behaviors among adolescents.

Hypotheses

- **H_{01} (Null Hypothesis)**: There is no significant relationship between sensation seeking and risk-taking behaviors in adolescents.
- **H_{a1} (Alternative Hypothesis)**: There is significant relationship between sensation seeking and risk-taking behaviors in adolescents.

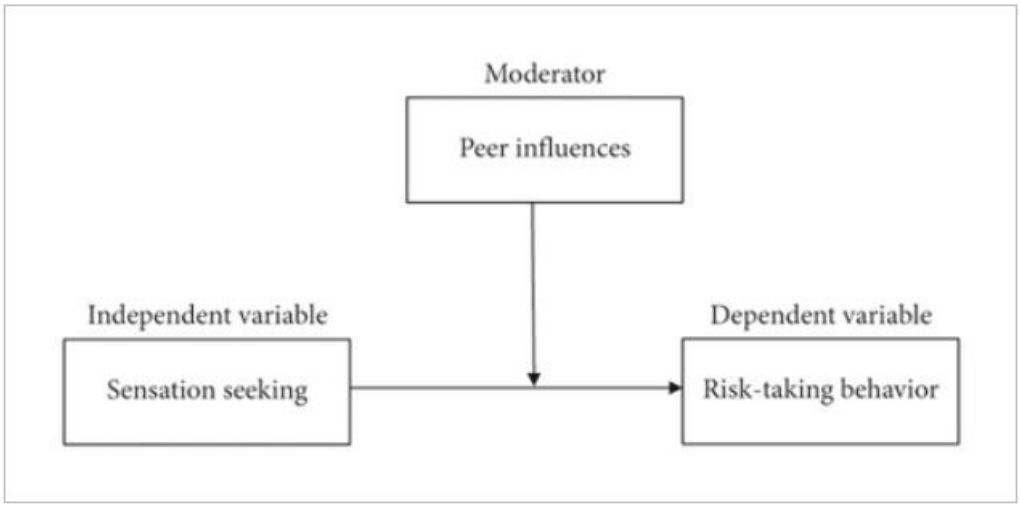


Figure 1

Theoretical study model positing that risk-taking action acts as a moderator, peer influences as the DV, and sensation seeking as the IV [17].

4. METHODS PROCEDURE:

Sample/Participants

The study sample consisted of 300 adolescents aged between 15 and 19 years**,** randomly selected from high schools and colleges in urban and suburban areas. The participants were evenly distributed in terms of gender, with 150 males and 150 females**,** ensuring balanced representation. Inclusion criteria required that participants be currently enrolled in educational institutions and have parental consent for participation. Exclusion criteria included students with a history of diagnosed psychological disorders or those unwilling to complete the survey. The diversity in the sample allowed for an in-depth analysis of demographic variations in sensation seeking, peer influence, and risk-taking behaviors.

Research Design

This study employs a **quantitative, correlational research design** to explore the relationships between sensation seeking, peer influence, and risk-taking behavior in adolescents. The study utilizes a **cross-sectional survey method**, collecting data at a single point in time to analyze existing relationships among the variables.

INSTRUMENTS/TOOLS USED

1. **Sensation Seeking Scale (Zuckerman's Sensation Seeking Scale)**:
   - This scale assesses an individual's tendency to seek out novel, intense, and stimulating experiences. Zuckerman's version has been widely validated and is a robust measure of sensation-seeking behavior. It includes multiple subscales focusing on areas like thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility. In this study, it will help measure how participants' inherent need for excitement correlates with their likelihood of engaging in risk-taking behaviors.
2. **Peer Influence Questionnaire**:
   - This questionnaire evaluates the extent to which peer groups influence an individual's decision-making processes, particularly in situations that involve risk. The questions are designed to measure perceived peer pressure and the degree to which peer opinions affect personal choices. This tool is crucial in understanding the external social factors that might shape adolescents' behaviors, especially in a group setting.
3. **Risk-Taking Behavior Scale**:
   - The Risk-Taking Behavior Scale will assess the frequency and intensity of various risky behaviors such as reckless driving, substance use, unsafe sexual practices, and risky recreational activities. This scale will allow researchers to quantify the specific behaviors linked to adolescents' engagement in high-risk activities, and measure the impact of sensation seeking and peer influence on these behaviors.

Statistical Tools

1. **Descriptive Statistics**:
   - **Mean and Standard Deviation**: Descriptive statistics will first be used to summarize the central tendency (mean) and variability (standard deviation) of the data across variables such as sensation seeking, peer influence, and risk-taking behavior. This provides a basic overview of the dataset.
2. **Pearson Correlation Analysis**:
   - Pearson's r will be used to assess the strength and direction of the relationship between sensation seeking, peer influence, and risk-taking behaviors. For example, this analysis will explore whether higher levels of sensation seeking correlate with higher levels of risk-taking behaviors, or if peer influence moderates this relationship.
3. **Regression Analysis**:
   - Regression analysis will help determine the predictive power of sensation seeking and peer influence on risk-taking behavior. Multiple regression models will be applied to explore how these independent variables (sensation seeking and peer influence) together contribute to predicting the dependent variable (risk-taking behavior). This will also help to determine if sensation seeking has a stronger or weaker influence when peer influence is considered.

Procedure

1. **Selection of Participants**:
   - Participants will be randomly selected using stratified random sampling from urban and suburban high schools and colleges. Equal gender representation will be ensured, with 150 males and 150 females aged 15 to 19. Stratification will control for potential confounders related to the urban versus suburban setting.
2. **Administration of Questionnaires**:
   - The questionnaires will be distributed and administered in a controlled setting, such as a classroom or study hall, to minimize external variables. Participants will complete the tools in a quiet, standardized environment to ensure consistency in the data collection process.
3. **Data Collection and Entry**:
   - The completed questionnaires will be entered into statistical software such as SPSS or R for analysis. Each participant's responses will be coded and inputted, ensuring that no identifying information is included to maintain confidentiality.
4. **Data Analysis**:
   - The data will be analyzed using the aforementioned statistical tools. Descriptive statistics will provide an overview, Pearson correlation will test for relationships between variables, and regression analysis will assess the predictive power of the primary variables.

Reliability and Validity

1. **Instrument Reliability**:
   - The **Sensation Seeking Scale** and **Peer Influence Questionnaire** have been extensively validated in prior studies, ensuring that they are reliable and accurately measure the constructs they are designed to assess. The internal consistency of these scales will be assessed using **Cronbach's Alpha** to ensure that the items within each scale correlate strongly enough to measure the same underlying construct.
2. **Validity**:
   - To ensure the validity of the instruments, **content validity** will be ensured by experts in adolescent psychology and behavior, who will assess whether the items accurately reflect the constructs of sensation seeking, peer influence, and risk-taking behavior. **Construct validity** will be confirmed by correlating these tools with established measures of similar concepts from previous research.

Sensation Seeking Scale

Zuckerman's Sensation Seeking Scale (SSS) will be used to measure the tendency of individuals to seek novel and intense experiences. The scale consists of multiple subscales, including thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility. The reliability and validity of this scale have been established through extensive empirical research.

Table 1 Demographic Characteristics of Participants

Variables	Frequency (f)	Percentage (%)
Gender		
Boys	80	53.3
Girls	70	46.7
Education		
First-year	75	50
Second-year	75	50
Father's Education		
Uneducated	20	13.3
Primary to Metric	60	40
Intermediate	45	30
Bachelors and above	25	16.7
Mother's Education		
Uneducated	30	20
Primary to Metric	55	36.7
Intermediate	45	30
Bachelors and above	20	13.3
Family System		
Nuclear	90	60
Joint	60	40
Birth Order		
First	50	33.3
Middle	60	40
Last	40	26.7
Internet Facility		
No	30	20
Yes	120	80
Spend Time with Friends		
No	40	26.7
Yes	110	73.3

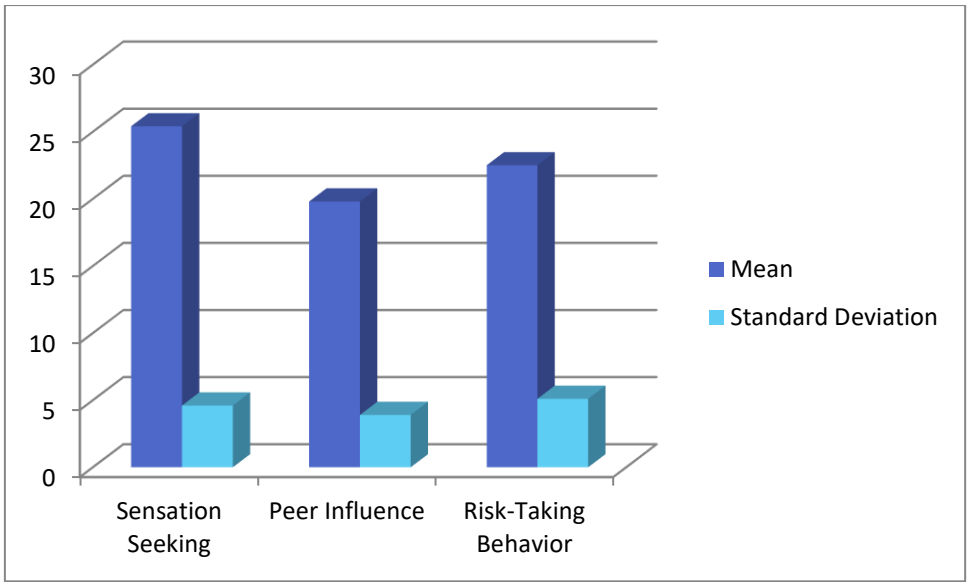
5. RESULTS :

The presents the descriptive statistics for sensation seeking, peer influence, and risk-taking behaviors.

Table 2 Descriptive Statistics for Key Variables

Variable	**Mean**	**Standard Deviation**
Sensation Seeking	25.4	4.6
Peer Influence	19.8	3.9
Risk-Taking Behavior	22.5	5.1

Table 2 presents the correlation matrix for the study variables.

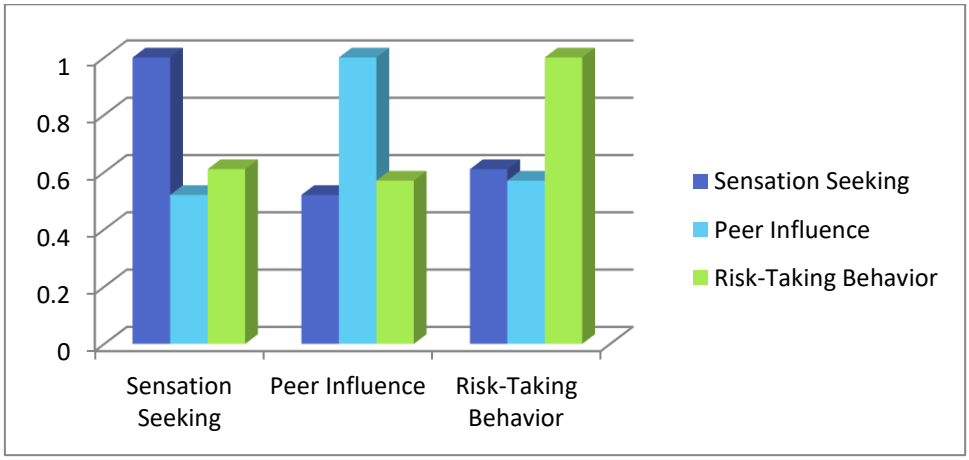


Interpretation

The data reveals that the participants exhibit moderate to high levels of sensation seeking, with an average score of 25.4 on the Sensation Seeking Scale, indicating a strong tendency to pursue novel and stimulating experiences. However, the moderate standard deviation of 4.6 suggests that there is some variability in these tendencies among individuals, meaning not everyone shares the same level of desire for excitement. On the Peer Influence Questionnaire, the mean score of 19.8 shows that while participants are influenced by their peers to some extent, peer pressure does not overwhelmingly dominate their decision-making. The standard deviation of 3.9 here indicates a moderate range in how much participants feel influenced by their peers, with some feeling stronger pressure than others. As for risk-taking behavior, the mean score of 22.5 suggests that participants generally engage in moderate levels of risky activities, though the higher standard deviation of 5.1 highlights considerable variability, with some individuals engaging in higher-risk behaviors than others. Overall, the data indicates that while sensation seeking and peer influence both play a role in adolescents' risk-taking behavior, the variability in responses shows that these factors impact individuals differently. Some adolescents are more prone to risk-taking and peer influence, while others may be less affected.

Table 3 Correlation Matrix for Study Variables

Variable	Sensation Seeking	Peer Influence	Risk-Taking Behavior
Sensation Seeking	1.00	.52**	.61**
Peer Influence	.52**	1.00	.57**
Risk-Taking Behavior	.61**	.57**	1.00



Interpretation

The correlation matrix reveals significant positive relationships between all three study variables. The correlation of **0.52** between **Sensation Seeking** and **Peer Influence** suggests a moderate positive association, indicating that individuals who tend to seek out novel and exciting experiences are somewhat more likely to be influenced by their peers in their decisions. The **0.61** correlation between **Sensation Seeking** and **Risk-Taking Behavior** represents a moderate to strong positive relationship, showing that individuals who are more inclined toward sensation seeking are also more likely to engage in risk-taking behaviors. Similarly, the **0.57** correlation between **Peer Influence** and **Risk-Taking Behavior** highlights a moderate positive relationship, meaning that those who are more influenced by their peers are also more prone to engaging in risky activities. Overall, these results suggest that sensation seeking, peer influence, and risk-taking behaviors are interconnected, with both sensation seeking and peer influence playing significant roles in predicting adolescents' engagement in risk-taking behaviors.

Table 4 Regression Analysis Predicting Risk-Taking Behavior

Predictor	B	SE B	β	t	p
Sensation Seeking	0.45	0.08	.48	5.62	<.001
Peer Influence	0.38	0.07	.42	5.14	<.001

$R^2 = .45$, $F(2, 147) = 60.23$, $p < .001$.

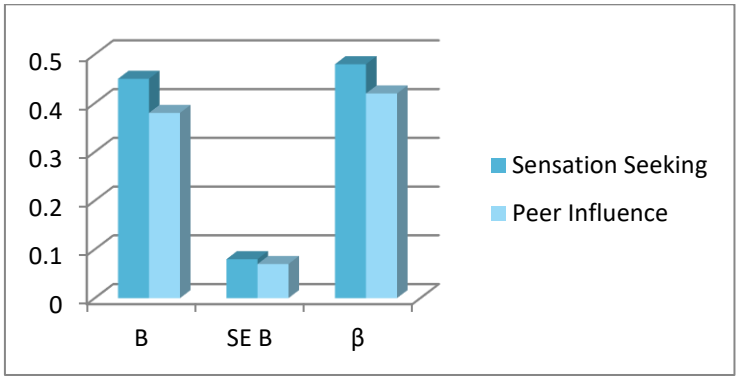


Table 4 presents the ANOVA results comparing risk-taking behaviors across different age groups.

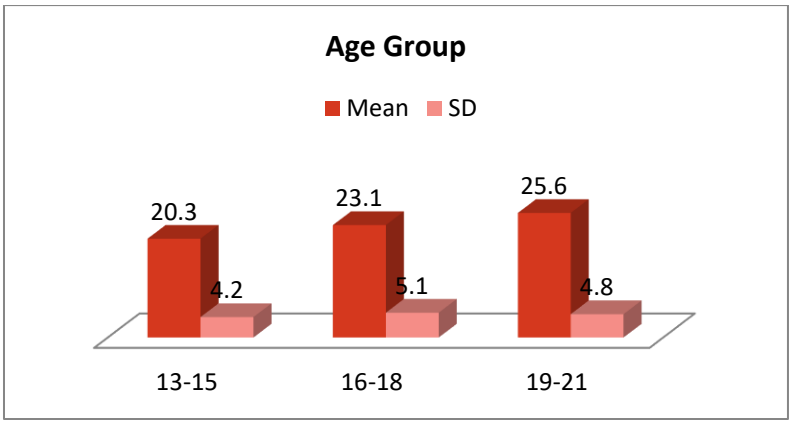
Interpretation

The regression analysis reveals that both **Sensation Seeking** and **Peer Influence** are significant predictors of **Risk-Taking Behavior**. For **Sensation Seeking**, the unstandardized coefficient (B) is **0.45**, with a standard error (SE B) of **0.08**. This indicates that for each one-unit increase in sensation seeking, there is an associated increase of 0.45 units in risk-taking behavior. The standardized beta (β) value of **0.48** suggests a moderate effect size, meaning sensation seeking has a moderately strong positive influence on risk-taking behavior. The t-value of **5.62** and the p-value of **<.001** show that this relationship is statistically significant.

Similarly, **Peer Influence** also significantly predicts risk-taking behavior, with a B value of **0.38** and a standard error of **0.07**. This indicates that for each one-unit increase in peer influence, risk-taking behavior increases by 0.38 units. The standardized beta (β) value of **0.42** suggests a moderate positive effect, though slightly weaker than sensation seeking. The t-value of **5.14** and the p-value of **<.001** confirm that this relationship is also statistically significant.

Table 5 ANOVA for Risk-Taking Behavior by Age Group

Age Group	Mean	SD	F	p
13-15	20.3	4.2	5.67	.002
16-18	23.1	5.1		
19-21	25.6	4.8		



Interpretation

The ANOVA results reveal significant differences in risk-taking behavior across different age groups. With an F-value of **5.67** and a p-value of **0.002**, the analysis shows that age is a significant factor influencing risk-taking behavior. The **13-15** age group has the lowest mean risk-taking behavior score of **20.3** (SD = 4.2), indicating that younger adolescents tend to engage in fewer risky behaviors. The **16-18** age group shows an increase, with a mean of **23.1** (SD = 5.1), suggesting that as adolescents approach late adolescence, their engagement in risk-taking behaviors increases. The **19-21** age group has the highest mean score of **25.6** (SD = 4.8), indicating that older adolescents engage in the highest levels of risk-taking behavior. Overall, the data suggests that risk-taking behavior increases with age, particularly from the 13-15 age group to the 19-21 age group, highlighting the growing tendency toward risk-taking as adolescents mature.

6. DISCUSSION :

The findings of this study provide empirical support for the relationship between sensation seeking, peer influence, and risk-taking behavior among adolescents. The results indicate that sensation seeking is a significant predictor of risk-taking behavior, which aligns with prior research suggesting that individuals with high sensation-seeking tendencies are more likely to engage in thrill-seeking and impulsive activities.

Furthermore, peer influence was found to be a strong predictor of risk-taking behavior, reinforcing the notion that adolescents are particularly susceptible to social pressures. The correlation between peer influence and risk-taking suggests that adolescents who associate with risk-taking peers are more likely to engage in similar behaviors themselves. This highlights the importance of peer dynamics in shaping decision-making processes during adolescence.

The interaction between sensation seeking and peer influence was also found to be significant, suggesting that adolescents with high sensation-seeking tendencies may be even more susceptible to peer pressure when making risk-related decisions. This finding supports dual-process theories of adolescent decision-making, which propose that both impulsive traits and social influences interact to shape behaviors.

Interestingly, the hypothesis that intervention programs targeting both sensation seeking and peer influence can reduce risk-taking behaviors was not statistically significant. This suggests that current intervention strategies may need to be re-evaluated or tailored more specifically to address both factors simultaneously. Future research should explore whether long-term interventions or digital-based peer influence interventions could yield more effective results.

These findings have significant implications for educators, parents, and policymakers. Prevention programs should focus on fostering critical decision-making skills in adolescents while addressing peer pressure dynamics. Additionally, interventions targeting sensation seeking should consider incorporating structured activities that satisfy the need for novelty in a safe environment.

7. CONCLUSION AND SUMMARY :

This study underscores the significant role that sensation seeking and peer influence play in adolescent risk-taking behavior. The findings highlight that adolescents with higher sensation-seeking tendencies are more prone to engaging in risky behaviors, particularly when influenced by peers who also engage in such behaviors. This interaction suggests that risk-taking is not merely an individual trait-based issue but is also deeply embedded within social dynamics.

Moreover, the study confirms that intervention programs aimed at mitigating adolescent risk-taking behaviors require a multifaceted approach. Current strategies appear to be insufficient in addressing the complex interplay between sensation seeking and peer influence. Future interventions should focus on enhancing self-regulatory skills among adolescents while also promoting positive peer interactions. Schools, parents, and policymakers must work collaboratively to create environments that encourage healthy decision-making and reduce exposure to negative peer influences.

The study also highlights the importance of further research into digital peer influence, as online interactions are becoming increasingly influential in adolescent decision-making. Additionally, longitudinal studies may provide deeper insights into how these factors evolve over time and influence long-term behavioral outcomes.

Ultimately, by addressing both psychological predispositions and social environments, more effective strategies can be developed to guide adolescents toward safer behaviors and healthier developmental trajectories.

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