



## Relationship among Anger, Impulsivity and Risk-Taking Behaviour among Young Adults

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### Abstract :

The research set out to examine how anger, impulsivity, and risk-taking behaviour are interconnected in young adults. A total of 451 participants, aged between 18 and 30, were recruited using a convenience sampling approach. Data were gathered through well-established psychological instruments: the State-Trait Anger Expression Inventory-2 (STAXI-2), the Barratt Impulsiveness Scale (BIS-11), and the Domain-Specific Risk-Taking Scale (DOSPERT). The responses were analysed using SPSS software, applying descriptive statistics, reliability checks, and Pearson's correlation to identify behavioural patterns.

The analysis revealed clear positive associations among anger, impulsivity, and risk-taking. In other words, individuals who scored higher on anger and impulsivity were more likely to engage in risky behaviours. These findings underscore the crucial role of emotional regulation and self-control in shaping behavioural outcomes. Furthermore, the study offers valuable insights for designing psychological interventions that can help young adults reduce maladaptive behaviours and make healthier decisions.

**Keywords:** Anger, Impulsivity, Risk-Taking Behaviour, Young Adults, Emotional Regulation

**Word Count : 2,598**

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### Ethical Compliance:

All research activities involving human participants were conducted following the ethical standards laid down by the University Grants Commission (UGC), India, the regulations of Savitribai Phule Pune University, Pune, and the protocols approved by the institutional research committee.

### Conflict of Interest Declaration

The author declares that there is no conflict of interest regarding the publication of this research work.

### Author Contributions:

MVB and SBW both contributed to the study's design and implementation. MVB prepared the manuscript, while SBW conducted the data analysis. SBW also supervised the project and conceptualized the original idea.

### Introduction

Anger is a powerful emotional response that often arises from frustration, unfair treatment, or a sense of threat. It can strongly influence how individuals behave and the



decisions they make (Meyer et al., 2021). Impulsivity refers to the tendency to act rapidly without carefully considering potential consequences (Patton et al., 1995; Elliott et al., 2022). Risk-taking behaviour involves engaging in activities that carry uncertainty or possible harm, usually in pursuit of rewards or benefits (Weber et al., 2002; Soni et al., 2023).

Young adulthood represents a critical stage of development, characterised by heightened emotions, growing independence, and the process of identity formation. During this period, individuals are often more impulsive and more inclined to take risks (Beisswingert et al., 2015). Research has shown that impulsivity can lead to poor decision-making and risky actions, while anger tends to intensify impulsive behaviour (Habib et al., 2015; Shi et al., 2017). Understanding how anger, impulsivity, and risk-taking interact is therefore essential for promoting healthier behavioural patterns among young adults.

### Relevance of the Study

A central aim of this study is to better understand the emotional and behavioural tendencies of young adults. The insights gained can help educators, psychologists, and counsellors design practical strategies to manage anger, reduce impulsivity, and discourage risky behaviours. Beyond its practical applications, the research also contributes to existing scholarship by demonstrating the close connection between emotional states and behavioural outcomes.

### Objectives of the Research:

1. To examine the significant positive relationship between anger and impulsivity among young adults.
2. To investigate whether anger shows a significant positive relationship with risk-taking behaviour among young adults.
3. To determine the significant positive relationship between impulsivity and risk-taking behaviour among young adults.

### Hypotheses:

1. There will be a significant positive relationship between anger and impulsivity among young adults.
2. There will be a significant positive relationship between anger and risk-taking Behavior among young adults.
3. There will be a significant positive relationship between impulsivity and risk-Taking behavior among young adults

### Method

#### Participants:

The study involved 451 young adults between the ages of 18 and 30. Both men and women participated, and the group was chosen using a convenience sampling approach.

#### Measure:

**State-Trait Anger Expression Inventory-2 (STAXI-2)** The State-Trait Anger Expression Inventory-2 (STAXI-2), created by Charles D. Spielberger in 1999, is designed to evaluate how individuals experience and express anger. It has become one of the most widely used tools in both research and clinical practice for examining different aspects of anger. The inventory includes a series of items rated on a Likert scale, which capture the intensity and frequency of anger-related feelings and behaviours.

STAXI-2 measures several dimensions of anger, such as state anger, trait anger, angry temperament, angry reaction, outward expression of anger, inward suppression of anger, and both external and internal anger control. These subscales provide a detailed picture of how



people respond to anger in various situations. Previous studies have consistently shown that the scale is reliable and valid, making it a trusted instrument for assessing anger among adolescents and adults across diverse contexts.

**Barratt Impulsiveness Scale (BIS-11)** The Barratt Impulsiveness Scale (BIS-11), developed by Ernest S. Barratt in 1995, is one of the most widely used tools for assessing impulsivity as a personality trait. It is a self-report questionnaire consisting of 30 items, where participants indicate how often they engage in certain behaviours on a four-point Likert scale ranging from “rarely/never” to “almost always/always.”

The BIS-11 captures three main aspects of impulsivity: attentional impulsivity, which reflects difficulties in maintaining focus or concentration; motor impulsivity, which involves acting without forethought; and non-planning impulsivity, which indicates a lack of consideration for future outcomes. By measuring these dimensions, the scale provides a comprehensive picture of impulsive tendencies.

Research across diverse populations has consistently shown that the BIS-11 is both reliable and valid. Because of this, it has become a standard instrument in behavioural and psychological studies for examining impulsivity among adolescents and adults.

**Domain-Specific Risk-Taking Scale (DOSPERT)** In this study, risk-taking behaviour was assessed using the Domain-Specific Risk-Taking Scale (DOSPERT), developed by Elke U. Weber, Ann-Renée Blais, and Nancy E. Betz (2002). The DOSPERT is designed to evaluate how willing individuals are to engage in potentially risky activities across different areas of life. It includes a set of items where participants indicate, on a Likert-type scale, the extent to which they would consider taking part in each activity.

The scale covers five domains of risk-taking: ethical, financial, health and safety, recreational, and social. These categories provide a broad understanding of how people perceive and approach risk in varied contexts. Previous research has shown that the DOSPERT demonstrates strong reliability and validity, and it has become a widely used instrument in psychological and behavioural studies for examining risk-taking tendencies among different populations.

### **.Procedure**

Participants were recruited through a non-probability convenience sampling method. The questionnaires were distributed online using Google Forms, and responses were collected digitally. Before taking part, each individual provided informed consent and was clearly briefed about the purpose of the study.

The sample consisted of young adults aged 18 to 30 years. They were asked to answer all items honestly, and strict confidentiality was maintained throughout the process. Once collected, the responses were systematically recorded, coded, and prepared for statistical analysis.

### **Results and Discussion**

This study explored the links between anger, impulsivity, and risk-taking behaviour in young adults. Pearson’s correlation analysis revealed significant positive associations among all three variables. Anger was strongly related to impulsivity ( $r = .555, p < .01$ ) and to risk-taking behaviour ( $r = .395, p < .01$ ), suggesting that individuals with higher anger levels are more likely to act impulsively and engage in risky activities. Impulsivity itself showed a robust positive correlation with risk-taking behaviour ( $r = .559, p < .01$ ), indicating that those who are more impulsive tend to take greater risks.



These findings suggest that emotional factors such as anger can weaken self-control, heighten impulsive tendencies, and ultimately increase involvement in risky behaviours. The results align with earlier research showing that poor emotional regulation and impulsivity contribute to maladaptive decision-making (Stanford et al., 1996; Upton et al., 2011). Other studies have also demonstrated that impulsivity is closely linked to risky choices and behavioural outcomes (Elliott et al., 2022), while emotional states like anger can further amplify the likelihood of risk-taking (Habib et al., 2015; Shi et al., 2017).

Overall, the study underscores the importance of emotional regulation and self-control in understanding risk-taking among young adults. Evidence from recent research also supports the idea that strengthening emotional regulation skills can help reduce impulsivity and risky behaviour (Zhang et al., 2025).

### Table 1

**Descriptive Statistics of Anger, Impulsivity and Risk-Taking Behaviour (N = 451)**

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Anger	99.13	22.27	0.27	1.34
Impulsivity	82.40	21.80	-0.13	0.92
Risk-Taking Behaviour	95.44	34.63	0.27	-0.03

The descriptive statistics of the variables, namely anger, impulsivity, and risk-taking behaviour, are presented in the above table. The mean score of anger was 99.13 (SD = 22.27), indicating a moderate level of anger among the participants. The skewness value (0.27) suggests a slight positive skew, while the kurtosis value (1.34) indicates a somewhat peaked distribution.

For impulsivity, the mean score was 82.40 (SD = 21.80), indicating a moderate level of impulsivity. The skewness value (-0.13) shows a slight negative skew, and the kurtosis value (0.92) suggests a slightly peaked distribution.

The mean score of risk-taking behaviour was 95.44 (SD = 34.63), indicating a moderate level of risk-taking among the participants. The skewness value (0.27) indicates a slight positive skew, and the kurtosis value (-0.03) suggests a near-normal distribution.

Overall, the values of skewness and kurtosis for all variables fall within the acceptable range, indicating that the data is approximately normally distributed and suitable for further statistical analysis.



### Table 2

Correlation among Anger, Impulsivity and Risk-Taking Behaviour (N = 451)

Variables	Anger	Impulsivity	Risk-Taking Behaviour
Anger	1		
Impulsivity	.555**	1	
Risk-Taking Behaviour	.395**	.559**	1

Note. \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix presented above shows the relationship among anger, impulsivity, and risk-taking behaviour. The results indicate a significant positive correlation between anger and impulsivity ( $r = .555, p < .01$ ), suggesting that individuals with higher levels of anger tend to exhibit greater impulsivity.

A significant positive relationship was also found between anger and risk-taking behaviour ( $r = .395, p < .01$ ), indicating that individuals with higher anger are more likely to engage in risk-taking activities.

Furthermore, impulsivity was found to be significantly positively correlated with risk-taking behaviour ( $r = .559, p < .01$ ), suggesting that individuals with higher impulsivity are more prone to risk-taking behaviour.

Overall, the findings indicate that all three variables are significantly and positively related to each other.

#### Results & Discussion:

The study found clear positive relationships among anger, impulsivity, and risk-taking behaviour. Anger was strongly associated with impulsivity ( $r = .555, p < .01$ ), showing that individuals with higher anger levels tend to act more impulsively. Anger also correlated positively with risk-taking behaviour ( $r = .395, p < .01$ ), suggesting that those who experience greater anger are more likely to engage in risky activities.

Impulsivity itself demonstrated a significant positive link with risk-taking behaviour ( $r = .559, p < .01$ ), indicating that highly impulsive individuals are more prone to risky choices. These results support the study's hypotheses and highlight how emotional dysregulation and impulsive tendencies contribute to poor decision-making.

The findings are consistent with earlier research showing that anger can undermine self-control and increase impulsive actions, while impulsivity often leads to inadequate risk evaluation. Taken together, the results emphasise the importance of emotional regulation and self-control in reducing maladaptive behaviours among young adults.

#### Conclusions:



The findings of this study demonstrate that anger, impulsivity, and risk-taking behaviour are closely and positively linked among young adults. Higher levels of anger were associated with greater impulsivity and increased participation in risky activities. Likewise, impulsivity showed a strong positive connection with risk-taking, indicating that individuals who act without sufficient forethought are more likely to engage in behaviours with potential risks.

These results carry both theoretical and practical significance. From a theoretical perspective, they reinforce existing research that highlights the interplay between emotional and behavioural factors such as anger, impulsivity, and risk-taking. Previous studies have consistently shown that poor emotional regulation and heightened impulsivity contribute to risk-seeking tendencies (Stanford et al., 1996; Elliott et al., 2022). Similarly, emotional states like anger have been found to influence decision-making and increase the likelihood of engaging in risky behaviour (Habib et al., 2015; Shi et al., 2017).

On a practical level, the findings suggest that interventions aimed at strengthening emotional regulation and self-control can help reduce impulsive and risky behaviours among young adults. Programs that focus on anger management and behavioural regulation may encourage healthier decision-making and promote overall well-being. Such initiatives can be effectively implemented in educational and counselling settings to support young people in developing more adaptive behavioural patterns.

### Recommendations

1. Provide emotional regulation training to young adults so they can manage anger more effectively and strengthen self-control.
2. Offer counselling programs that focus on reducing anger and impulsivity, helping individuals develop healthier coping strategies.
3. Conduct awareness initiatives aimed at discouraging risk-taking behaviours and promoting safer choices.
4. Introduce life skills training to enhance decision-making abilities and reduce impulsive actions.

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