

## BELIEF IN GOOD LUCK PREDICTS PROCRASTINATION THROUGH PERSONALITY TRAITS AMONG UNIVERSITY STUDENTS

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### Abstract

*Purpose: The purpose of this study was to examine the relationship between belief in good luck and procrastination among university students, with a particular focus on the mediating role of personality traits. Method: A cross-sectional research design was employed. The sample consisted of 200 university students (100 males and 100 females) from universities in Islamabad and Rawalpindi, Pakistan. Data were collected using standardized self-report measures, including the Belief in Good Luck Scale, the General Procrastination Scale, and the Ten-Item Personality Inventory (TIPI). Correlation and mediation analyses were conducted to assess both direct and indirect relationships among belief in luck, personality traits, and procrastination. Findings: The results indicated that both rejection of luck and general belief in luck were indirectly associated with procrastination through several personality traits, including extraversion, agreeableness, openness to experience, and emotional stability. However, conscientiousness did not emerge as a significant mediator in the relationship between belief in luck and procrastination. These findings suggest that personality traits play a crucial role in explaining how belief systems influence procrastination behavior. Conclusion: The study highlights the complex interplay between belief in luck, personality traits, and behavioral regulation among university students. The findings suggest that educational interventions aimed at promoting adaptive personality characteristics and enhancing self-regulatory skills may help reduce procrastination tendencies associated with irrational beliefs in luck.*

## Introduction

Procrastination is most accurately characterized as the deliberate delaying or avoiding the completion of a particular task, despite being fully aware of the possible adverse outcomes and the discomfort it may cause. This behavioral pattern is particularly common in academic environments, where students often defer tasks like homework assignments and exam preparations, its accumulation over time can result in not only poor academic performance but also negative emotions that hinder personal development. Among college students, academic procrastination is a prevalent issue. For instance, research indicates that the academic procrastination rate among medical undergraduates on various academic tasks ranges between 13.8% and 49.9% (Madhan et al., 2012; Mortazavi et al., 2015). Luck involves the notion that various elements such as objects, actions, thoughts, experiences, and individuals can influence future outcomes, whether positive or negative (Thompson & Prendergast, 2013; Vyse, 2014). Expressions like "good luck," "sending positive feelings," and "fingers crossed" signify a shared sense of wishing well-being or success to others, often perceived as a transfer of luck or positive energy between individuals. These expressions are commonplace in Western culture, as well as in Asian culture serving as verbal gestures of encouragement. The sentiment of good luck can also be conveyed through tangible means, such as the tradition of gifting money in red envelopes in China, symbolizing prosperity and happiness. In Spanish-speaking countries, individuals may modify their behavior to avoid perceived bad luck, such as refraining from traveling on Tuesday the 13th, known as "mala suerte" or bad luck day. Similarly, in Japan, both public and private events are scheduled based on a calendar system designating certain days as "butsumetsu" (the unluckiest) or "taian" (the luckiest). This cultural convention is so ingrained that weddings are seldom held on "butsumetsu" (De Mente, 2011). In Pakistani culture, traditional and informal explanations abound for matters of fortune or misfortune, luck or misfortune, and health or illness. These explanations encompass beliefs in phenomena like dreams, premonitions, fairies, and

spirits, which are perceived as having both positive and negative influences. Additionally, cultural practices may involve the use of specific items such as "taweez" for protection or to attract good luck, as well as superstitions regarding signs of bad luck, such as the color black. Folk beliefs and rituals surrounding aspects like death, burial, and funerals further contribute to this rich tapestry of cultural beliefs (Farooqi, 2006).

Personality traits cover individuals' distinctive patterns of thoughts, emotions, and actions. These traits suggest consistency and stability; for instance, someone exhibiting high levels of Extraversion is typically anticipated to demonstrate sociability across various contexts and over time. Therefore, trait psychology is grounded in the notion that individuals vary from one another based on a set of fundamental trait dimensions that endure across different situations and remain relatively stable over time (Diener & Lucas, 2019).

Procrastination has been associated with the prominent Big Five model of personality introduced by Costa Jr and McCrae (2000). Within this framework, two primary personality traits—neuroticism and conscientiousness—have been consistently linked to procrastination (Watson, 2001). Research in the procrastination literature indicates a positive correlation between neuroticism and procrastination (Rebetz et al., 2015; Watson, 2001; Watson, 2001). In their study focusing on young adults, Johnson and Bloom (1995) discovered that neuroticism, particularly its underlying facets of impulsiveness and vulnerability, significantly predicted procrastination among university students. Similarly, conscientiousness exhibits a robust inverse relationship with trait procrastination (Klassen et al., 2009).

## Method

### Research Design

Cross-Sectional research design was used

### Sample

The participants of study included 200 university students pursuing graduate and post graduate studies from Islamabad, Pakistan, comprising 100 male and 100 female students, aged 20 to 45 years (Mean=24.6, SD=2.7). The survey scales were distributed during class sessions and were filled out

individually by the students. Following completion, the students were provided with an explanation of the research study, and were given the option to reach out to the authors for information regarding the study's outcomes. .

### Materials

#### The Belief in Good Luck Scale (BIGL 22)

The authors constructed twenty-two items derived from the original items of the Belief in Good Luck scale, aiming to reflect four dimensions of beliefs regarding luck: a general belief in luck (e.g., item 22), a rejection of belief in luck (e.g., item 13), a general belief in good luck (e.g., item 19), a general belief in bad luck (e.g., item 20). Similar to the Belief in Good Luck scale, responses to these items are rated on a scale from Strongly Disagree (1) to Strongly Agree (6) (Maltby et al., 2008). The authors propose naming these twenty-two items the Around Luck Scale and recommend that users of the scale cite this designation accordingly (Darke & Freedman, 1997)).

#### The General Procrastination Scale (GPS)

Lodha et al. (2019) developed the General Procrastination Scale, comprising a total of 23 items, to assess procrastination across four domains: academic, workplace, medical, and civic

responsibilities. For this study, I focused specifically on the academic domain. Participants were instructed to rate each item using a 5-point Likert scale, ranging from 1 to 5, with responses indicating: Never (1), Rarely (2), Sometimes (3), Often (4), and Always (5). To assess internal consistency, reliability coefficients were calculated using both the Split-Half method and Cronbach's Alpha, resulting in a reliability coefficient of 0.7.

#### Ten-item Personality Inventory (TIPI)

The Ten Item Personality Inventory (TIPI) was a brief and reliable personality assessment tool. This inventory consists of five subscales: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (or Emotional Stability). The total personality score ranges from 10 to 70. Respondents rate each item on a 7-point Likert scale, with options including "Strongly Disagree" (1), "Moderately Disagree" (2), "Slightly Disagree" (3), "Neither Disagree nor Agree" (4), "Slightly Agree" (5), "Moderately Agree" (6), and "Strongly Agree" (7). In terms of reliability, Cronbach's alpha coefficient for the TIPI was found to be 0.51, with individual subscales demonstrating alpha coefficients falling within the range of 0.40 to 0.60 (Gosling et al., 2003).

**Table 1:** *Frequencies and Percentage of Demographic Variables of the Study (N=200)*

| Variables   | Category   | f   | %     |
|-------------|------------|-----|-------|
| Age         | 18-22      | 128 | 64.00 |
|             | 23-25      | 72  | 36.00 |
| Gender      | Male       | 100 | 50.00 |
|             | Female     | 100 | 50.00 |
| Education   | BS         | 186 | 93.00 |
|             | MS         | 14  | 7.00  |
| Semester    | 1-4        | 73  | 36.5  |
|             | 5-8        | 127 | 63.5  |
| GPA         | 2.50-3.00  | 89  | 44.5  |
|             | 3.1-3.5    | 83  | 41.5  |
|             | 3.6-4.00   | 28  | 14.0  |
| Birth Order | First Born | 48  | 24.0  |
|             | Middle     | 119 | 59.5  |

|                      |                |     |      |
|----------------------|----------------|-----|------|
| Number of Siblings   | Last Born      | 29  | 14.5 |
|                      | Only Child     | 4   | 2.0  |
| Family Structure     | No Siblings    | 4   |      |
|                      | 1-3            | 77  |      |
|                      | More than 4    | 119 |      |
| University           | Joint Family   | 98  | 49.0 |
|                      | Nuclear Family | 102 | 51.0 |
| Socioeconomic Status | Public         | 51  | 25.5 |
|                      | Private        | 149 | 74.5 |
|                      | Lower Class    | 18  | 9.0  |
|                      | Middle Class   | 158 | 79.0 |
|                      | Upper Class    | 24  | 12.0 |

**Table 2:** *Correlation of the study variables (N=200)*

| Variables                 | 1 | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    |
|---------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.Luck                    | - | .46** | .46** | .77** | .79** | .22** | .16** | .12   | .14   | .18*  | .20** |
| 2.Belief being Unlucky    | - | -     | .34** | .04   | .10   | .08   | .07   | .01   | .09   | .07   | .05   |
| 3.Belief being Lucky      | - | -     | -     | .52** | .32** | .14*  | .19** | .12   | .03   | .12   | .14*  |
| 4.Rejection in Luck       | - | -     | -     | -     | .55** | .13   | .09   | .10   | .07   | .18*  | .15*  |
| 5.General belief in Luck  | - | -     | -     | -     | -     | -.03  | .18*  | .06   | .11   | .12   | .20** |
| 6.Personality Traits      | - | -     | -     | -     | -     | -     | .71** | .63*  | .55** | .58** | .65** |
| 7.Extraversion            | - | -     | -     | -     | -     | -     | -     | .41** | .22** | .29** | .32** |
| 8.Agreeableness           | - | -     | -     | -     | -     | -     | -     | -     | .41** | .22** | .29*  |
| 9.Conscientiousness       | - | -     | -     | -     | -     | -     | -     | -     | -     | .17*  | .37** |
| 10.Emotional Stability    | - | -     | -     | -     | -     | -     | -     | -     | -     | -     | .23** |
| 11.Openness to Experience | - | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     |

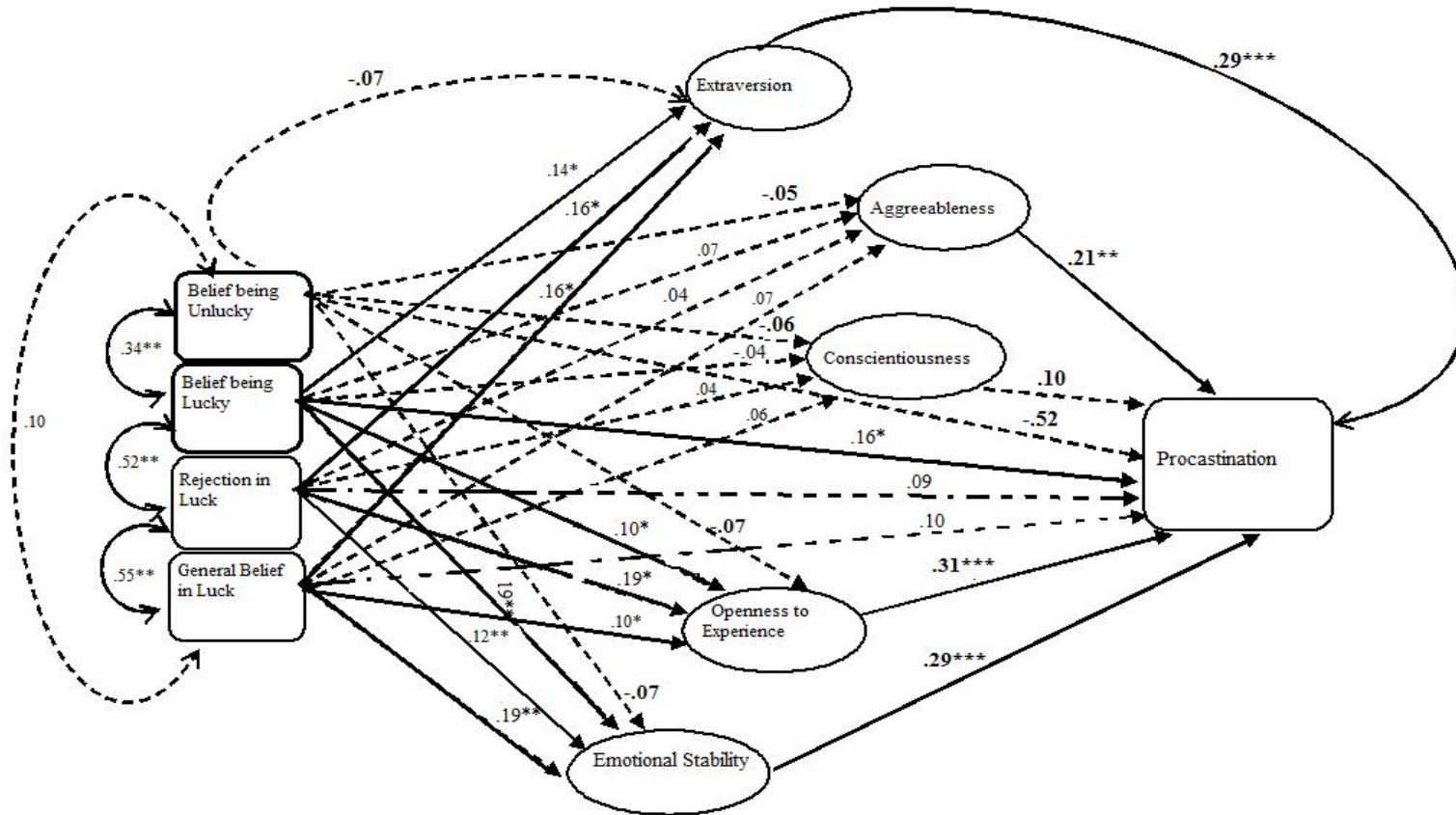
Note. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$

**Table 3:** *Indirect effect of Belief in good Luck on Procrastination through personality Traits (N=200)*

| Path   | Estimate $\beta$ | SE  | p     | 95% CI |      |
|--|------------------|-----|-------|--------|------|
|  |                  |     |       | LL     | UL   |
| Belief being Unlucky to Procrastination                            | -.05             | .15 | .47   | -.42   | 0.19 |
| Belief being Unlucky to Extraversion to Procrastination            | .29              | .24 | <.001 | .55    | 1.49 |
| Belief being Unlucky to Agreeableness to Procrastination           | .21              | .29 | .003  | .31    | 1.46 |
| Belief being Unlucky to Conscientiousness to Procrastination       | .11              | .28 | .13   | -.13   | 0.98 |
| Belief being Unlucky to Openness to Experiences to Procrastination | .31              | .29 | <.001 | .73    | 1.86 |
| Belief being Unlucky to Emotional Stability to Procrastination     | .29              | .26 | <.001 | .61    | 1.64 |
| Belief being lucky to Procrastination                              | .16              | .18 | .02   | .06    | 0.76 |
| Belief being lucky to Extraversion to Procrastination              | .27              | .24 | <.001 | .46    | 1.41 |
| Belief being lucky to Agreeableness to Procrastination             | .19              | .94 | .06   | .24    | 1.39 |
| Belief being lucky to Conscientiousness to Procrastination         | .10              | .28 | .17   | -.16   | 0.93 |
| Belief being lucky to Openness to Experiences to Procrastination   | .29              | .29 | <.001 | .64    | 1.77 |
| Belief being lucky to Emotional Stability to Procrastination       | .27              | .26 | <.001 | .53    | 1.60 |
| Rejection in Luck to Procrastination                               | .16              | .18 | .02   | .07    | .78  |
| Rejection in Luck to Extraversion to Procrastination               | .28              | .24 | <.001 | .50    | 1.44 |

|  |     |     |       |      |      |
|--|-----|-----|-------|------|------|
| Rejection in Luck to Agreeableness to Procrastination                | .19 | .29 | .006  | .24  | 1.39 |
| Rejection in Luck to Conscientiousness to Procrastination            | .09 | .28 | .19   | -.19 | 0.91 |
| Rejection in Luck to Openness to Experiences to Procrastination      | .29 | .29 | <.001 | .64  | 1.77 |
| Rejection in Luck to Emotional Stability to Procrastination          | .27 | .26 | <.001 | .51  | 1.55 |
| General Belief in Luck to Procrastination                            | .16 | .15 | .02   | .06  | 0.66 |
| General Belief in Luck to Extraversion to Procrastination            | .28 | .24 | <.001 | .51  | 1.45 |
| General Belief in Luck to Agreeableness to Procrastination           | .19 | .29 | .06   | .24  | 1.40 |
| General Belief in Luck to Conscientiousness to Procrastination       | .08 | .28 | .23   | -.22 | 0.88 |
| General Belief in Luck to Openness to Experiences to Procrastination | .28 | .29 | <.001 | .61  | 1.76 |
| General Belief in Luck to Emotional Stability to Procrastination     | .72 | .26 | <.001 | .53  | 1.56 |

Note: SE=Standard Error, LL=Lower Limit, UL= Upper Limit, CI= Confidence Interval



## Results

Table 1 show the demographic characteristics of the study variables. Table 2 shows significant positive relationships of luck with beliefs about luck and general belief in luck, as well as moderate correlations with various personality traits. Belief in being unlucky and belief in being lucky shows weaker and often non-significant correlations with personality traits. Belief in being lucky is strongly linked to rejection in luck and general belief in luck, and moderately with personality traits like extraversion. Rejection in luck also correlates with general belief in luck and various personality traits. Overall, personality traits are highly interrelated, indicating a complex interplay between beliefs about luck and personality dimensions in the sample. Table 3 examines the indirect effects of beliefs in good luck on procrastination through various personality traits. Direct paths from belief in being unlucky to procrastination are non-significant, but indirect paths through extraversion, agreeableness, openness to experience, and emotional stability are significant, suggesting these traits mediate the relationship. Belief in being lucky also shows significant indirect effects on procrastination via the same personality traits, except for conscientiousness. Rejection in luck and general belief in luck similarly influence procrastination indirectly through extraversion, agreeableness, openness to experience, and emotional stability, indicating a positive mediation effect of these personality traits on the relationship between luck beliefs and procrastination.

## Discussion

The study aimed to explore the association between procrastination and belief in good luck among university students. Additionally, it examined how personality traits mediate the relationship between these variables. The direct relationship between the belief in being unlucky and procrastination is non-significant. However, significant indirect effects are observed through the personality traits of extraversion, agreeableness, openness to experience, and emotional stability, indicating that these traits mediate the relationship. Similarly, the belief in being lucky exhibits significant indirect effects on procrastination through these same personality traits, with the

exception of conscientiousness. This suggests that while conscientiousness does not mediate the relationship, the other personality traits play a crucial role in how beliefs about luck influence procrastination. Research on procrastination and belief in good luck reveals captivating insights. Procrastination is often associated with negative outcomes such as reduced savings and poorer health, stemming from present bias or overly optimistic beliefs about future demands (Sauerberger, 2019). Studies also reveal a positive relationship between procrastination and belief in good luck. For example, findings suggest that procrastination can impact motivational beliefs and self-regulated learning, indicating that individuals who procrastinate may rely on their belief in good luck to justify their behavior (Breig et al., 2020). Moreover, optimism, which is closely linked to procrastination, influences future stress levels. Optimism helps predict both procrastination and stress over time (Jackson et al., 2000). The results suggest that perceiving luck as a personal and internal trait can influence gambling behavior, contributing to cognitive errors associated with gambling addiction. Since upward counterfactual thinking plays a crucial role in mitigating cognitive errors, it could serve as a protective factor against gambling addiction (Kim et al., 2015).

In addition the current study showed that Rejection in luck and general belief in luck also indirectly influence procrastination through extraversion, agreeableness, openness to experience, and emotional stability. This indicates that these personality traits positively mediate the relationship between beliefs about luck and procrastination. Various studies have examined how beliefs about luck, rejection in luck, and general belief in luck indirectly impact procrastination through personality traits. Extraversion, agreeableness, openness to experience, and emotional stability have emerged as significant positive mediators in this relationship (Bahari et al., 2016; Dacka & Filipiak, 2023; Gregory et al., 2023). In particular, extraversion and agreeableness have demonstrated notable negative associations with procrastination, whereas emotional stability has been underscored as a

significant predictor of procrastination during early adolescence (Kanten & Kanten, 2016). Moreover, conscientiousness, a trait associated with organization and responsibility, has consistently been found to reduce procrastination tendencies across various populations, including undergraduates and employees (Boysan et al., 2017).

#### Limitation

The study has several limitations. Firstly, the use of convenient sampling may not provide a representative sample of the broader population, limiting the generalizability of the findings. Secondly, the study was conducted only among university students from Rawalpindi and Islamabad, which may not reflect the experiences of students in other regions of the country. Thirdly, self-reported data may introduce bias, as participants might not accurately report their beliefs, behaviors, or personality traits. Lastly, the study focused on personality traits as mediators but did not consider other potential mediating factors such as stress, motivation, or external circumstances.

#### Author Contributions

Author Contribution: Aqsa Bibi and Sabir Zaman ,Conceived idea and data collection. Sabir zaman has analyzed the data. Alamzeb Khattak write the original Manuscript, Mudassar Abdullah review the manuscript and Rashid Mustafa final approval of the manuscript.

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#### Disclosure Statement

The authors declare that there is no conflict of interest regarding the publication of this paper. No financial, professional, or personal relationships have influenced the outcomes or reporting of this research.

#### Ethics Statement

This study was conducted in accordance with the ethical standards of the institutional and national research committee. Informed consent was obtained from all participants prior to data collection. Participants were assured of the confidentiality and anonymity of their responses, and their participation was entirely voluntary. Ethical approval for this research was obtained from the Departmental Research Committee of the respective institution.

#### Conflict of Interest

The authors have no conflict of interest

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