

## IMPACT OF INTELLECTUAL HUMILITY ON DARK TRIAD TRAITS AND NARCISSISM AMONG UNIVERSITY STUDENTS

Humera Tufail<sup>\*1</sup>, Wajiha Ghazal<sup>2</sup>, Maryam Nisar<sup>3</sup>, Muqaddas Khursheed<sup>4</sup>

<sup>\*1</sup>Lecturer, Department of Applied Psychology, National University of Modern Languages, Pakistan. Email:

<sup>2</sup>Lecturer, Department of Applied Psychology, National University of Modern Languages, Pakistan. Email:

<sup>3</sup>Student at the Department of Applied Psychology, National University of Modern Languages, Pakistan.

<sup>4</sup>Graduated Student at the Department of Applied Psychology, National University of Modern Languages, Pakistan.

<sup>1</sup>humera.tufail@numl.edu.pk, <sup>2</sup>wajiha.ghazal@numl.edu.pk

DOI: <https://doi.org/10.5281/zenodo.16886071>

### Keywords

Intellectual Humility, dark triad trait, Narcissism, Gender differences, educational

### Article History

Received: 15 May, 2025

Accepted: 20 July, 2025

Published: 16 August, 2025

Copyright @Author

Corresponding Author: \*

Humera Tufail

### Abstract

The current study aimed to examine the impact of intellectual humility on dark triad traits and narcissism among university students from any institute in Rawalpindi and Islamabad. The sample consisted of 505 participants, comprising 265 males and 240 females, collected through convenience sampling. The targeted age range for data collection was 18-29 years. The research used a quantitative approach. The scales employed to measure the study variables were the Comprehensive Intellectual Humility Scale (CIHS), the Short Dark Triad Trait Scale (SD3), and the Narcissistic Personality Inventory (NPI-16). Data analysis involved correlation analysis and linear regression. It was hypothesized that IH would significantly impact dark triad traits and narcissism in educational settings and that there would be notable gender differences in the scores of the study variables. The results indicated that IH is a strong predictor of dark triad traits and narcissism, being negatively associated with narcissism and positively correlated with dark triad traits. Conversely, narcissism and dark triad traits were negatively correlated. An important aspect explored in this study was the impact of adopting positive traits (IH) and avoiding negative ones (narcissism) within educational environments.

### INTRODUCTION

Recognizing the limitations of one's knowledge and appreciating the intelligence of others is what is meant by intellectual humility. The term Intellectual Humility (IH) has been defined in various ways; the majority of definitions agree that IH entails recognizing that Personal convictions and opinions may be incorrect (DeWall, 2023). IH is essentially a cognitive phenomenon, which means that it involves how a person thinks and processes knowledge about themselves and the world around them. Intellectual Humility is described as "doxastic," which is defined as "pertaining of beliefs," by other academics stated

that Intellectual Humility is "meta-cognitive," or "involving individual thoughts about their thoughts." (Worthington & Garrett, 2023). It is essential to understand the distinctions between intellectual servitude, general humility, and intellectual humility before exploring the studies on the aspects of Intellectual Humility. Generally speaking, humility entails being sincere, truthful, and selfless. Intellectual humility is distinct from general humility in that it advocates an inquisitive attitude toward everything. (Cohen et al., 2023).

Intellectually humble people will confront any belief with evidence, even if it means doubting their convictions and accepting imperfections in the name of improvement. Intellectual humility is sometimes mistaken for a lack of confidence in one's ideas and viewpoints that are essentially a servitude of the intellect. Believing that what you know is never true does not fall under the purview of IH. (Moufakkir, 2023) Intellectual arrogance is completely opposed to IH because it ignores the facts that do not work in that person's favor. A leader needs a diverse range of ideas, which includes opposing beliefs and points of view, to foster innovation and creativity in the team's performance. Such individuals would never be welcomed in the circle of a narcissistic and conceited leader, which would have ultimately led to the organization's demise. (Velji et al., 2023).

IH is essentially cognitive as some theorists include motivational, emotional, or behavioral elements. For example, some definitions of IH state that it entails enjoying learning, recognizing potential threats, and appreciating the strengths of others (Buhay, 2023). Some theorists have directly linked IH to traits predictive of future success and leadership abilities. Since it has more advantages than disadvantages, it has been referred to as a positive rather than a negative aspect. This position has also been validated by numerous longitudinal studies that evaluate the leaders' personalities in addition to the organization's success (Kate, 2022).

"Dark Triad" describes a group of three personality traits, narcissism, psychopathy, and Machiavellianism that are linked to self-centeredness, lack of empathy, and interpersonal manipulation. Because of their implications for social interactions and relationships, including potential links to conflicts and narcissistic behaviors, the Dark Triad traits collectively represent a darker aspect of human nature and have been a focus of psychological research. In addition to having a few traits in common, such as self-centeredness, coldness, and manipulation to "get ahead" while ignoring "getting along," the subclinical forms of narcissism, psychopathy, and Machiavellianism are somewhat related (Jones & Paulhus, 2013).

The Greek term "narcissism" means "extraordinary interest in oneself." There are two types of narcissism: normal and aberrant. When narcissism is of a normal form, it leads to various behaviors like

creativity, but when it is of an abnormal kind, it leads to behaviors like rudeness, lack of empathy, self-obsession, power hunger, and manipulative behavior (Miller et al., 2021). Research has compiled personality narcissism into six behavioral and psychological backgrounds. The gap between the ideal and actual egos leads to the development of denial in narcissistic personalities. People who engage in narcissistic denial are trying to reject taking ownership of their mistakes (De-Page & Merckelbach, 2020). When someone attempts to rationalize their narcissistic behavior, they try to find a reason for it and try to offer it acceptable. One of the main causes of unhealthy relationships is this manipulation. When someone engages in self-aggrandizement, they exaggerate their abilities and skills beyond what they truly possess. (Roisiah et al., 2021).

Characteristics of healthy narcissism include competency, self-control over regular emotions, and the capacity to tolerate loneliness. Research has indicated that a healthy level of narcissism is associated with high achievement and a prosperous future. A strong response to resentment, criticism, low self-esteem, jealousy, and the capacity to put in endless hours to succeed are all signs of unhealthy narcissism (Juwono et al., 2022). The maladaptive and adaptive aspects of narcissism in personality, power, cheating, self-esteem, behaviors, and a wide range of other characteristics have been studied in narcissistic research. Narcissism manifests itself not only in actions but also in emotions and ideas (Zeigler-Hill & Besser, 2013).

The narcissistic personality type is positively correlated with deception and fraud; narcissists justify unethical behavior, fail to recognize the wrong in their actions, and attempt to protect their identity. Narcissistic people report guilt towards cheating and doing willingly for self-enhancement (Bodecka-Zych et al., 2022). Individuals who exhibit extreme narcissistic traits typically have a strong sense of self-importance and believe they are deserving of greater respect, benefits, and recognition than other people. They believe that they are the center of the universe and denigrate others for not living up to their inflated expectations (Brown et al., 2009). These researchers claim that people who fall into these categories think highly of themselves, perceive

themselves as superior to others, and seek out critical criticism from others. If they don't receive this feedback, they react by expressing extremely negative feelings (McManus et al., 2022).

The purpose of this research was to examine the influence of IH on dark triad traits and narcissism, with a focus on the relationships between these three variables in students. According to the study, individuals with high IH are courteous and humble when facing disagreement because they feel connected to their group members rather than alienated. Relationships and interpersonal conflicts should be avoided primarily because they demonstrate IH and openness, which help people feel accepted by their social group during conflicts (Porter et al., 2022). An investigation into the relationship between maladaptive personality traits and IH was conducted. The findings showed a significant negative correlation between IH and all maladaptive personality traits (Penner et al., 2022). Day et al. (2022) examined pathological narcissism in individuals with higher levels of narcissistic traits who were in relationships. There were 436 participants in the sample. The pathological narcissism inventory was used to measure narcissistic traits, and the qualitative analysis of interpersonal themes was used to evaluate conflict. Their mental health was assessed in addition to a thematic analysis of the data. Narcissistic partners and their relatives seemed to be heavily involved in intense conflicts. The narcissistic individuals reported higher levels of conflict, and their thematic analysis revealed themes of abuse.

Prior studies have demonstrated that there are notable variations in Dark Triad scores amongst academic majors, with students majoring in business and economics scoring higher than those in psychology. Since these differences were noticed before students started their coursework, socialization was not a factor in their pre-existing nature (Vedel & Thomsen, 2017). Although the evidence regarding the evolution of personality traits is conflicting, earlier studies indicate that mean-level traits do change systematically and gradually throughout a person's life. Undergraduate psychology students were found to score higher on empathy than psychopathy in the context of academic disciplines, and psychopathy decreased

over time during the degree program. Business students, on the other hand, scored higher on psychopathy than empathy, and neither characteristic evolved (Litten et al., 2018).

### Rationale

This quantitative study examines intellectual humility (IH), Dark Triad Symptoms (Machiavellianism, Psychopathy, and Narcissism), and the narrowness between the students of the university in Islamabad and Rawalpindi, with possible penance difference. Based on the belief that IH, once mainly discovered by philosophers, has recently emerged as an important construct in psychology, research addresses a cultural difference in existing literature, as previous studies have reduced the Asian population. Keeping in mind the educational context of Pakistan, where Route Learning often overtakes the development of important thinking, this study emphasizes IH's role in promoting positive personality development and reducing negative symptoms. By examining the students of the university during a formal life phase within a variety of educational settings, the research tries to understand how IH interacts with darkness symptoms and narrowness, offers insight to improve well, promote creative social behavior, and reduce the trend of harmful personality.

### Objectives

The following are the major objectives of the current study:

1. To examine the relationship between intellectual humility and dark triad traits.
2. To explore the impact of intellectual humility on narcissism among students in educational settings.
3. To investigate the relationship between narcissism and dark triad traits

### Hypotheses

**H1:** There will be a significant impact of Intellectual Humility on dark triad traits in the educational setting among students.

**H2:** There will be a negative relationship between Intellectual Humility and narcissism.

**H3:** There will be a negative impact of dark triad traits on narcissism.

**Research Methodology**

**Sample**

The present research targeted the population of students studying at the university level in Rawalpindi and Islamabad. The random sampling technique was used to collect data from the students. A sample of 505 students was approached for data collection. The age range specified for the targeted sample was (18-31) years, which comes under the category of early adulthood (Medley, 1980).

**Instruments**

**1. Comprehensive Intellectual Humility Scale (CIHS)**

It was developed in 2016 by Elizabeth J. Krumrei-Mancuso and Steven V Rouse. It has 22 items with a Likert-type response format ranging from 1 to 5 (1 means strongly disagree and 5 means strongly agree). It has 11 reverse-coded items, and it has a composition as well as subscale scoring depending on the researcher. It has four subscales, i.e., independence of intellect and ego (5 items), openness to revising one’s viewpoints (5 items), respect for others’ viewpoints (6 items), and lack of intellectual overconfidence (6 items). The score range for the whole scale is 22-110. The psychometric properties of CIHS were ensured by conducting several studies. The reliability of this scale reported by the author was 0.82 (Krumrei & Rouse, 2016).

**2. Narcissistic Personality Inventory 16 (NPI-16)**

It was developed by Daniel Ames, Paul Rose, and Cameron Anderson in 2006. The NPI-16 is a short measure of narcissism. It has 16 pairs of items with a reliability of 0.72. The participants will either score 0 or 1 on each item, or the total score range of this scale is 0-16. The scale is single-dimensional (no subscales) and has no reverse-scored items. A higher score indicates higher narcissism

**3. The Short Dark Triad (SD3)**

The Short Dark Triad (SD3) scale will be utilized to measure each participant's Dark Triad trait. In 2014, Jones and Paulhus created the SD3. The researchers have translated it into Urdu for this investigation. The three traits of narcissism, psychopathy, and Machiavellianism are thought to have similar traits and outcomes, which is why the scale was developed. Participants in this study must be at least 18 years old. Three subscales, each with nine items for a trait, make up the 27-item SD3 scale.

**Procedure**

Initially, permission to conduct the research was obtained from the authorities of the National University of Modern Languages. After that, the authors were approached to get permission. After getting permission from the authors, the process of data collection was started. A random sampling technique was used for data collection, and students affiliated with any educational institute that came under the premises of Rawalpindi and Islamabad were approached. Target participants were those who agreed to participate in the study and met the qualifying requirements. The participants gave their written informed consent after being made aware of their rights to privacy, confidentiality, safety, and the ability to withdraw at any moment. Following participant data collection, the Statistical Package for Social Sciences SPSS-21 was used for data analysis to test the hypothesis. The results are shown in the results section.

**Result**

The present research aimed to demonstrate the relationship between IH, the dark triad traits, and narcissism in students. Appropriate statistical procedures were used to analyze the data. All analyses were conducted through SPSS-22 software.

**Table 1: Descriptive and Reliability of Intellectual Humility on Dark Triad Traits and Narcissism (N= 505).**

Variables	N	M	SD	Range		α
				Min	Max	
CIHS	505	22.06	0.32	8	73	.92
SDTT	505	28.57	1.05	5	69	.91
Narcissism	505	26.78	2.57	7	75	.83

**Note:** CIHS = Comprehensive Intellectual Humility Scale; SDTT = Short Dark Triad Trait Scale; NPI = Narcissistic Personality Inventory, N = Total Number of Participants; M = Mean; SD = Standard Deviation;  $\alpha$  = Cronbach alpha.

Table 1 highlights the descriptive statistics of the scales used in the study. It includes the number of items of the study variables, and their alpha reliabilities. The alpha reliabilities of all of the scales were acceptable i.e. above .70 (Cook & Beckman, 2006).

**Table 2: Correlation Analysis between the study Variables (N = 505)**

Sr. No.	Variables	1	2
1	CIHS		
2	SDTT	.88**	
3	Narcissism	-.77**	-.58**

**Note.** CIHS = Comprehensive Intellectual Humility Scale; SDTT = Short dark triad trait Scale; NPI= Narcissistic Personality Inventory. (\*p < .05. \*\*p < .01.)

Table 2 narrates the correlation between IH, dark triad trait, and narcissism among students. IH was significantly positively correlated with the dark triad trait (r = .88, p < .01) and negatively correlated with narcissism (r = -.77, p < .01), however, there was a negative association between the dark triad trait and narcissism (r = -.58, p < .01) among students at the education.

**Table 3: Linear Regression Analysis to check the impact of IH on Dark triad trait (N = 505)**

Variables	B	S.E	$\beta$	p
Constant	13.27	1.45		.00
CIHS	.93	.02	.88	.00
R	.88			
R2	.77			

**Note.** B = Unstandardized Coefficient;  $\beta$  = Standardized coefficient; S.E = Standard Error; p =Significant value; R = Correlation, R2 = Correlation square.

To express the impact of IH on the dark triad trait, linear regression was used, as outlined in Table 3 above. This table highlights that 77% of the variation in the dark triad trait at the educational place is caused by IH. The p-value as shown in the table is .00 (p < .05).

**Table 4: Linear Regression Analysis to Check the Impact of IH on Narcissism (N = 505)**

Variables	B	S.E	B	p
Constant	40.23	.52		.00
CIHS	-.22	.008	-.77	.00
R	.77			
R2	.60			

**Note.** B = Unstandardized Coefficient;  $\beta$  = Standardized coefficient; S.E = Standard Error; p =Significant value; R = Correlation, R2 = Correlation Square.

In Table 4, the statistics represent the influence caused by IH on narcissism in students depicted at their educational place. The findings portray that 60% of the changes in narcissism are caused by IH and hence prove that IH is a strong predictor of narcissism. As the value of p is less than .05, it can be said that the results are statistically significant.

**Discussion**

The present study investigated the interrelationships among Intellectual Humility (IH), Dark Triad Traits (DTT), and Narcissism (NPI) in a sample of 505 university students from Rawalpindi and Islamabad. We utilized validated psychometric instruments, the Cognitive Intellectual Humility Scale (CIHS), the Short Dark Triad scales (SDTT), and the Narcissistic Personality Inventory (NPI), ensuring robust measurement of constructs.

The findings revealed a strong negative correlation between DTT and IH, indicating that higher levels of intellectual humility are associated with lower endorsement of dark triad traits. Within the Dark Triad, narcissism also demonstrated a negative relationship with intellectual humility, albeit with nuances in effect size. These results are consistent with prior literature reporting that intellectual humility is inversely related to narcissism (Alfano et al., 2017; Krumrei-Mancuso & Rouse, 2016) and that all three dark triad traits are conceptually aligned with the opposite pole of Honesty-Humility (the trait most analogous to IH in the HEXACO model). Moreover, the predictive future orientation of IH about both DTT and narcissism suggests that intellectual humility may serve as a protective factor or a moderating variable, supporting healthier interpersonal and educational climates. Prior meta-analytic evidence shows that IH contributes to improved decision-making, reduced conflict, and less susceptibility to misinformation, all of which fortify its prospective value in social and educational domains. Interestingly, while IH had the expected inverse association with narcissism, its impact on overall DTT was less definitive than hypothesized. This divergence underscores the complex interplay among these traits; although IH may broadly counteract antisocial features, its influence differentially varies across distinct dark traits, reflecting the conceptual and empirical reparability of narcissism, Machiavellianism, and psychopathy. Collectively, these findings corroborate previous research suggesting that elevated intellectual humility can attenuate destructive personality tendencies such as grandiosity and manipulative behaviors, thereby promoting more constructive and cooperative environments in educational and social settings. However, the partial non-support regarding

DTT emphasizes that personality dynamics are multifaceted, and interventions aimed at enhancing IH may need to be tailored to address different dark traits uniquely.

**Conclusion**

Research underlines the importance of intellectual humility in shaping students' psychological and social behavior, especially in reducing narrowness. The strength of the study involves its large sample size and the use of standardized devices, increasing reliability and validity. However, its correlated design, dependence on self-reported data, and boundaries as focusing on a specific cultural group, limit the generality of results. Future longitudinal and experimental research is required to establish the links and expand findings to a more diverse population.

**Strengths and limitations**

The study displays strong functioning rigidity by employing drugs (NPIs), dark triad symptoms (DTT), and valid measurements for intellectual humility (IH), showing strong functioning rigidity, ensuring validity and reliability of data. The size of the large sample (n = 505) increases statistical power, which enables the identification of important relations and improves generality for university students. Its comprehensive analysis provides fine insight into the complex differences of personality symptoms in educational settings, adding meaningful contributions to existing literature. However, due to the cause of correlation design, the need for future experimental or longitudinal research is suggested, which clarifies the temporary and dynamic nature of the cause. Cross-cultural studies are also recommended to investigate how cultural factor shapes personality symptoms and behaviors in educational contexts. Additionally, conclusions have a practical value to intervene and develop educational programs aimed at promoting intellectual humility and reducing intoxicants, leading to students' good and positive social interaction.

## References

- Alfano, M. P., et al. (2017); Krumrei-Mancuso, E., & Rouse, S. V. (2016). Intellectual humility and its inverse relationship with narcissism. *Journal of Personality Research*
- Lee, K., Ashton, M. C., et al. (2018). Near-perfect overlap between latent Dark Triad and low Honesty-Humility. *Journal of Research in Personality*
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*
- Leary, M. R. (2022); Bowes, S. M., & Tasimi, A. (2022); Bowes, S. M., & Fazio, L. (2024). Intellectual humility benefits: better decisions, less misinformation, reduced conflict. *American Journal of Health Promotion; Journal of Positive Psychology; Advances in Psychology*
- Krumrei-Mancuso, E., Haggard, M., LaBouff, J., & Rowatt, W. (2019). Intellectual humility and academic performance, mixed findings in different academic outcomes. *Journal of Educational Psychology*
- Kohut, H. (1972). Thoughts on Narcissism and Narcissistic Rage. *The Psychoanalytic Study of the Child*, 27(1), 360-400.
- Krumrei-Mancuso, E. J., Haggard, M. C., LaBouff, J. P., & Rowatt, W. C. (2020). Links between Intellectual Humility and Acquiring Knowledge. *The Journal of Positive Psychology*, 15, 155-170.
- Worthington, E. L., & Garrett, K. (2023). Intellectual humility as a target for psychological, educational, and political intervention. *The Journal of Positive Psychology*, 1-5.
- DeWall, C. N. (2023). Getting humble about intellectual humility. *The Journal of Positive Psychology*, 1-3.
- Cannon, M., Vedel, A., & Jonason, P. K. (2020). Schooltype effects on the Dark Triad traits and intellectual humility. *Personality and Individual Differences*, 163, 110068.
- Yildiz, B., Yildiz, H., & Ayaz Arda, O. (2021). Relationship between work-family conflict and turnover intention in nurses: A meta-analytic review. *Journal of Advanced Nursing*.
- Young, S. M., Du, F., Dworkis, K. K., & Olsen, K. J. (2015). It's All about All of Us: The Rise of Narcissism and Its Implications for Management Control System. *Research. Journal of Management Accounting Research*, 28(1), 39-55.