

Political ideology, dark tetrad, and types of intuition among adults

Swapnil Hyanky* and Pooja DG

Department of Psychology, Kristu Jayanti College, Bengaluru, India.

World Journal of Advanced Research and Reviews, 2025, 26(01), 2468-2477

Publication history: Received on 07 March 2025; revised on 17 April 2025; accepted on 19 April 2025

Article DOI: <https://doi.org/10.30574/wjarr.2025.26.1.1263>

Abstract

Political Ideology has been termed as an individual perspective, idea or belief about political or social information. Factors like personality traits, brain structure, thinking style, environment may influence political ideology. Various western research has shed light on association of political ideology, dark tetrad traits and intuition among adults. But few have looked at relationship from Indian perspective. This correlational study aims to understand the relationships between political ideology, dark tetrad traits, and types of intuition among adults in India. The sample of 220 adults were employed through convenient sampling. This study utilized three instruments - Political Ideology Scale by Puthillam and others (2021), Short Dark Tetrad (SD4) by Paulhus and others (2020), Types of Intuition Scale (TIntS) by Pretz and other (2014). Key findings include purity-based cultural norms having significant correlations with psychopathy, machiavellianism, and sadism traits, while obedience to hierarchical authority was linked to narcissism and machiavellianism. In terms of intuition, obedience to authority was positively correlated with inferential intuition and negatively with affective intuition. Economic ideology was negatively associated with holistic-abstract and positively with affective intuition. Machiavellianism was associated with inferential and holistic-big picture intuition, while psychopathy and sadism were linked to holistic-abstract intuition. Narcissism was positively associated with inferential intuition.

Keywords: Political Ideology; Dark Tetrad; Intuition; Adults; India

1. Introduction

India is the country with diverse population and complex political culture which are influenced by different historical, social and cultural factors. Unlike Western society, which often focus on Individualistic culture, Indian society focused on collectivistic culture which in turn influence political scenario in India. The research findings about political ideology from western and other eastern countries cannot be applied in India due to difference in how government functions, and political views or ideologies, voting behavior.

Political Ideology is the concept that “political opinions and attitudes are linked together in a coherent interconnected system” [1]. According to Erikson and Tedin (2019) [2], it is belief about structure of society and how to achieve it. The purity-based cultural norms (norms) refer to normative beliefs such as religion, dowry, and different culture-related issues which include items like “I don’t think people should be allowed to marry outside their religious communities.” The obedience to hierarchical authority (Hierarchies) refers degree to which one believes that hierarchical institutions and leaders should be respected, and followed. The economic ideology refers to people belief in economic activity relating to government [3, 4].

Paulhus and Williams (2002) [5] introduced the term Dark Triad in psychology which study machiavellianism, psychopathy and narcissism in unity. It was due to high usage of term Sadism and trying to correlate it with Dark Triad traits and study as a “Dark Personality” Dark Tetrad (DT) got introduced. Paulhus, Buckels, Trapnell and Jones gave 28 item scale to measure DT where machiavellianism, psychopathy, narcissism and sadism were also called as crafty, wild,

* Corresponding author: Swapnil Hyanky

special and mean [6]. Each DT traits play some role in political ideology. Narcissism traits make an individual seek authoritative role [7, 8], while Machiavellianism, traits help in strategizing to achieve personal goal [9, 10]. Psychopathy traits often characterized by lack of concern for others that can cause negative consequences in politics [11]. Sadism traits often involve getting enjoyment out of others suffering which can make an individual take wrong decision towards minorities [12].

Intuition has been termed as acquiring insight without the conscious reasoning or thinking [13]. Pretz and Totz in 2007 gave three classifications of Intuition – holistic, inferential and affective. It was based on two majorly used scales Rational-Experiential Inventory (REI) and Myers–Briggs Type Indicator (MBTI). Affective intuition refers judgement based on hunch or strong sense of emotional feelings [14]. Inferential intuition refers to quick judgments which become instinctual due to repeated practice [15]. Holistic intuition refers to decision based on bottom-up, data-driven process, which includes broad perspective, diverse information (holistic-big picture), and focus on abstract information (holistic-abstract) [14].

The various researches have suggested complex relationship between political ideology and DT traits mostly in western countries. Studies by Jonason (2014) [16], Lilienfeld et al. (2014) [17] suggests that Dark Tetrad traits like narcissism and Machiavellianism were positively associated with right wing ideology. But these relationships are not strong enough, as other researches stated negligible or negative association between DT traits and right lean ideology [18]. Social Dominance Orientation (SDO) theory was usually linked with DT traits, especially narcissism and psychopathy traits which play role in authoritarian nature [19, 20], while Right-Wing Authoritarianism (RWA) theory had mixed results [18, 19]. Other factors such as cultural norms and how an individual perceive also play important role [21].

Researches have explored the relationship between political ideology and types of intuition. Jones (2011) [22] gave the intuitionist model that states moral intuitions may shape and limit our cognitive processes. Lytwyn (2012) [23] states no significant relationship between Sensing-Intuition (SN), Thinking-Feeling and political ideology. De Neve (2015) [24] showed how big five personality traits like openness to experience and conscientiousness play important role. In research Cognitive Reflection Test (CRT) has been used to show how right lean view was related with intuitive thinking, while left lean with reflective thinking [25].

There have been studies stating relationship between Dark Tetrad traits and different measures of intuition and personality [26, 27, 28, 29]. MBTI was weakly related with Sensation-Intuition (SN) and several dark personality traits [26], while no direct relationship between NEO traits and ACT intuition was present. Furnham and Crump (2005, 2014) [28, 29] associated HDS (dark side traits), NEO-PI, MBTI, and they were poorly related with SN dimension, but strongly with Thinking-Feeling. Openness to experience and extraversion was positively associated with intuitive decision-making style [30]. This study helps provide insight how norms and hierarchies, and economic ideology factors identified to be part of political ideology in Indian context link to dark personality traits and intuition.

2. Material and methods

2.1. Aim

The primary aim of this research is to understand the relationships between Political ideology dimensions, Dark Tetrad traits, and types of intuition among adults.

2.2. Research Design

The research design is a correlational with quantitative approach. This type of design helps in assessing whether the relationship exist between Political ideology dimensions, Dark Tetrad traits and Types of Intuition.

2.3. Objective

There were 3 objectives for this study:

- To find whether significant relationship exist between Political Ideology dimensions and Dark Tetrad traits among adults.
- To find whether significant relationship exist between Political Ideology dimensions and Types of Intuition among adults.
- To find whether significant relationship exist between Dark Tetrad traits and Types of Intuition among adults.

2.4. Hypothesis

Ho1 - There will be no significant relationship between Political Ideology dimensions and Dark tetrad traits among adults.

- Ho1a: There will be no significant relationship between Norms and Narcissism traits among adults.
- Ho1b: There will be no significant relationship between Norms and Machiavellianism traits among adults.
- Ho1c: There will be no significant relationship between Norms and Psychopathy traits among adults.
- Ho1d: There will be no significant relationship between Norms and Sadism traits among adults.
- Ho1e: There will be no significant relationship between Hierarchies and Narcissism traits among adults.
- Ho1f: There will be no significant relationship between Hierarchies and Machiavellianism traits among adults.
- Ho1g: There will be no significant relationship between Hierarchies and Psychopathy traits among adults.
- Ho1h: There will be no significant relationship between Hierarchies and Sadism traits among adults.
- Ho1i: There will be no significant relationship between Economic Ideology and Narcissism traits among adults.
- Ho1j: There will be no significant relationship between Economic Ideology and Machiavellianism traits among adults.
- Ho1k: There will be no significant relationship between Economic Ideology and Psychopathy traits among adults.
- Ho1l: There will be no significant relationship between Economic Ideology and Sadism traits among adults.

Ho2 - There will be no significant relationship between Political Ideology dimensions and Types of Intuition among adults.

- Ho2a: There will be no significant relationship between Norms and Holistic - Big Picture among adults.
- Ho2b: There will be no significant relationship between Norms and Holistic-Abstract among adults.
- Ho2c: There will be no significant relationship between Norms and Inferential Intuition among adults.
- Ho2d: There will be no significant relationship between Norms and Affective Intuition among adults.
- Ho2e: There will be no significant relationship between Hierarchies and Holistic - Big Picture among adults.
- Ho2f: There will be no significant relationship between Hierarchies and Holistic-Abstract among adults.
- Ho2g: There will be no significant relationship between Hierarchies and Inferential Intuition among adults.
- Ho2h: There will be no significant relationship between Hierarchies and Affective Intuition among adults.
- Ho2i: There will be no significant relationship between Economic Ideology and Holistic - Big Picture among adults.
- Ho2j: There will be no significant relationship between Economic Ideology and Holistic-Abstract among adults.
- Ho2k: There will be no significant relationship between Economic Ideology and Inferential Intuition among adults.
- Ho2l: There will be no significant relationship between Economic Ideology and Affective Intuition among adults.

Ho3 - There will be no significant relationship between Dark Tetrad traits and Types of Intuition among adults.

- Ho3a: There will be no significant relationship between Narcissism traits and Holistic - Big Picture among adults.
- Ho3b: There will be no significant relationship between Narcissism traits and Holistic-Abstract among adults.
- Ho3c: There will be no significant relationship between Narcissism traits and Inferential Intuition among adults.
- Ho3d: There will be no significant relationship between Narcissism traits and Affective Intuition among adults.
- Ho3e: There will be no significant relationship between Machiavellianism traits and Holistic - Big Picture among adults.
- Ho3f: There will be no significant relationship between Machiavellianism traits and Holistic-Abstract among adults.
- Ho3g: There will be no significant relationship between Machiavellianism traits and Inferential Intuition among adults.
- Ho3h: There will be no significant relationship between Machiavellianism traits and Affective Intuition among adults.
- Ho3i: There will be no significant relationship between Psychopathy traits and Holistic - Big Picture among adults.
- Ho3j: There will be no significant relationship between Psychopathy traits and Holistic-Abstract among adults.
- Ho3k: There will be no significant relationship between Psychopathy traits and Inferential Intuition among adults.
- Ho3l: There will be no significant relationship between Psychopathy traits and Affective Intuition among adults.
- Ho3m: There will be no significant relationship between Sadism traits and Holistic - Big Picture among adults.

- Ho3n: There will be no significant relationship between Sadism traits and Holistic-Abstract among adults.
- Ho3o: There will be no significant relationship between Sadism traits and Inferential Intuition among adults.
- Ho3p: There will be no significant relationship between Sadism traits and Affective Intuition among adults.

2.5 Sample

The sample size was 220 where females were 111 and males were 109. Most of the participants that is 109 belonged to the age group of 18 – 25 years, while 59 to 25 – 45 years, 40 to 45 – 59 years and 12 to 60 years. The sample collected from India through convenient sampling technique.

2.5.1 Inclusion criteria

- Adults aged 18-60 years old
- Male, female and third gender
- Resident of India (Indian Citizen)

2.5.2 Exclusion criteria

- Participants with physical disabilities
- Participants diagnosed with psychological illnesses.

2.6 Measures

2.6.1 Political Ideology Scale

A 34-item test was created by Puthillam, Kapoor, and Karandikar (2021) [4] for measuring political ideology in India, which has three dimensions - purity-based cultural norms (norms), obedience to hierarchical authority (Hierarchies), and economic ideology. It is rated using a seven-point Likert-type scale (1 - Strongly Disagree to 7 -Strongly Agree). The reliability of whole scale was .89, while norms had .90, hierarchies had .87, and economic ideology had .45. The scale had content and face validity and was for people aged range 18-64 [3, 4]. A higher score can be interpreted as more “conservative” or right leaning [21].

2.6.2 Short Dark Tetrad (SD4)

The scale by Paulhus, Buckels, Trapnell and Jones (2020) [6] contained 28 items that measure the four traits: psychopathy, machiavellianism, narcissism, and sadism, that together forms DT. It is a five-point Likert scale (1—Strongly Disagree to 5—Strongly Agree). A high score indicates a higher level of individual traits. The reliability for narcissism was of .83, .78 for Machiavellianism, .82 for psychopathy, and .82 for sadism and has satisfactory construct validity. Gangwar et al. (2023) [31] stated SD4 has reliability of .81 validated on 1011 Indian aged 15-39 years.

2.6.3 Types of Intuition Scale (TIntS)

This scale [15] consisting of 23-item measures three types of intuition given by Pretz and Tetz (2007) [14]: holistic, inferential, and affective. It is five-point Likert scale (1 –Definitely false to 5 - Definitely true.). Reliability of was acceptable (Holistic–Big Picture [HB] $\alpha = .73$, Holistic–Abstract [HA] $\alpha = .74$, Inferential $\alpha = .72$, Affective $\alpha = .76$) and it has satisfactory convergent and discriminant validity. Swaminathan and Rathnasabapathy (2024) [32] stated it has good reliability score .66 validated on 755 university students in India.

2.7 Procedure

Prior to initiating data collection, approval was gained through research proposal from college Department of Psychology. After obtaining approval, data was collected via google forms.

2.8 Statistical Analysis

IBM SPSS Statistics Version 25 was used to analyze the data. Non-parametric test spearman’s rank-order correlation was used to find the correlation.

2.9 Research Ethics

This study followed all the APA ethical guidelines, including confidentiality, data protection, consent, voluntary participation. The participants were also informed that they could withdraw their participation whenever they wanted.

3. Results

The Kolmogorov-Smirnov normality test indicates that norms, economic ideology, DT traits, types of Intuition departed significantly from normality. Based on this, non-parametric test like spearman's rank-order correlation test was used to check the correlation.

Norms had very weak positive relationship with Narcissism traits ($r_s = 0.053, p = 0.437$), which was not significant. So, Ho1a was accepted. While it has weak, positive and significant relationship with psychopathy ($r_s = 0.368, p < 0.001$), and machiavellianism traits ($r_s = 0.201, p = 0.003$). But there was moderate, positive and significant relationship between sadism traits ($r_s = 0.416, p < 0.001$) and norms in adults. Hence Ho1b, Ho1c. Ho1d were rejected.

Hierarchies had weak positive and significant correlation with narcissism ($r_s = 0.275, p < 0.001$), machiavellianism traits ($r_s = 0.265, p < 0.001$). Hypothesis Ho1e, Ho1f were rejected. But it had very weak positive relationship with psychopathy ($r_s = 0.091, p = 0.179$) and sadism traits ($r_s = 0.054, p = 0.424$), which was not significant. So, Ho1g, Ho1h were accepted.

Economic ideology had weak negative relationship with machiavellianism ($r_s = -0.048, p = 0.483$), psychopathy ($r_s = -0.041, p = 0.545$), sadism traits ($r_s = -0.115, p = 0.087$). While it had weak positive correlation with narcissism traits ($r_s = 0.051, p = 0.455$), which were not significant. Hence, Ho1i, Ho1j, Ho1k. Ho1l were accepted (see Table 1).

Table 1 Spearman's Rank-Order Correlation between Political Ideology dimensions and Dark Tetrad traits among adults

| SN. | Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|--------------------|----------|---------|--------|---------|---------|---------|---------|---------|
| 1 | Norms | - | | | | | | | |
| 2 | Hierarchies | 0.433** | - | | | | | | |
| 3 | Economic Ideology | -0.284** | -0.082 | - | | | | | |
| 4 | Political Ideology | 0.832** | 0.835** | -0.111 | - | | | | |
| 5 | Narcissism | 0.053 | 0.275** | 0.051 | 0.204** | - | | | |
| 6 | Machiavellianism | 0.201** | 0.265** | -0.048 | 0.283** | 0.245** | - | | |
| 7 | Psychopathy | 0.368** | 0.091 | -0.041 | 0.278** | 0.095 | 0.412** | - | |
| 8 | Sadism | 0.416** | 0.054 | -0.115 | 0.279** | 0.299** | 0.264** | 0.535** | - |
| 9 | Dark Tetrad | 0.385** | 0.225** | -0.065 | 0.372** | 0.525** | 0.658** | 0.733** | 0.785** |

Note. ** Correlation is significant at the 0.01 level.

Norms have very weak positive relationship with HB ($r_s = 0.011, p = 0.865$) and HA ($r_s = 0.129, p = 0.057$) which was not significant. But norms have very weak negative relationship with inferential intuition ($r_s = -0.019, p = 0.782$) and affective intuition ($r_s = -0.038, p = 0.571$), which was not significant. Hypothesis Ho2a, Ho2b, Ho2c, Ho2d were accepted.

Hierarchies had very weak positive relationship with HB ($r_s = 0.070, p = 0.300$), and very weak negative correlation with HA ($r_s = -0.064, p = 0.347$), which were not significant. Hypothesis Ho2e, Ho2f were accepted. Hierarchies had very weak negative correlation with affective intuition ($r_s = -0.141, p = 0.037$), and weak positive correlation between inferential intuition ($r_s = 0.309, p < 0.001$), which was significant. Hypothesis Ho2g, Ho2h were rejected.

Economic Ideology had very weak negative correlation with HB ($r_s = -0.025, p = 0.714$) and very weak positive correlation Inferential Intuition ($r_s = 0.031, p = 0.642$), which were not significant. So, Ho2i, Ho2k were accepted. Economic Ideology had very weak negative correlation with HA ($r_s = -0.133, p = 0.049$), and very weak positive correlation with affective Intuition ($r_s = 0.163, p = 0.016$), which were significant. Hence, Ho2j, Ho2l were rejected (see Table 2).

Table 2 Spearman's Rank-Order Correlation between Political Ideology dimensions and Types of Intuition among adults

| SN. | Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---------------------------|----------|----------|---------|--------|---------|---------|--------|
| 1 | Norms | - | | | | | | |
| 2 | Hierarchies | 0.433** | - | | | | | |
| 3 | Economic Ideology | -0.284** | -0.082 | - | | | | |
| 4 | Political Ideology | 0.832 ** | 0.835 ** | -0.111 | - | | | |
| 5 | Holistic-Big Picture (HB) | 0.011 | 0.070 | -0.025 | 0.033 | - | | |
| 6 | Holistic-Abstract (HA) | 0.129 | -0.064 | -0.133* | 0.014 | 0.142* | - | |
| 7 | Inferential Intuition | -0.019 | 0.309** | 0.031 | 0.170* | 0.280** | -0.073 | - |
| 8 | Affective Intuition | -0.038 | -0.141* | 0.163* | -0.086 | -0.016 | 0.193** | -0.045 |

Note. ** Correlation is significant at the 0.01 level. * Correlation is significant at the 0.05 level

The narcissism traits were very weakly and positively correlated with HB ($r_s = 0.104$, $p = 0.123$), which was not significant. It has very weak negative relationship with HA ($r_s = -0.010$, $p = 0.880$), and affective Intuition ($r_s = -0.087$, $p = 0.199$), which were not significant. Hypothesis Ho3a, Ho3b, Ho3d were accepted. But narcissism traits had significant and very weak positive correlation with inferential intuition ($r_s = 0.180$, $p = 0.008$). So, Ho3c was rejected.

Machiavellianism traits had weak positive correlation with inferential intuition ($r_s = 0.322$, $p < 0.001$) and very weak positive correlation with HB ($r_s = 0.169$, $p = 0.012$), which were statistically significant. Hypothesis Ho3e, Ho3g were rejected. But machiavellianism traits had very weak positive correlation with HA ($r_s = 0.098$, $p = 0.148$), and very weak negative correlation with affective intuition ($r_s = -0.079$, $p = 0.243$), that was not significant. Hypothesis Ho3f, Ho3h were accepted.

Psychopathy traits had very weak and negative relationship with HB ($r_s = -0.048$, $p = 0.477$), and inferential intuition ($r_s = -0.012$, $p = 0.865$), which was not significant. It was positively correlated with Affective Intuition ($r_s = 0.028$, $p = 0.681$), but relationship was negligible and not significant. Hence, Ho3i, Ho3k, Ho3l were accepted. But psychopathy traits had significant and very weak positive correlation with HA ($r_s = 0.139$, $p = 0.039$). So, Ho3j there was rejected.

Sadism traits had weak positive correlation with HB ($r_s = 0.068$, $p = 0.315$) which was not significant. But it had very weak and negative relationship with Inferential Intuition ($r_s = -0.009$, $p = 0.900$) and Affective Intuition ($r_s = -0.115$, $p = 0.088$), which was not significant. Hypothesis Ho3m, Ho3o, Ho3p were accepted. Sadism traits had significant and weak positive correlation with HA ($r_s = 0.242$, $p < 0.001$). Hence, Ho3n was rejected (see Table 3).

Table 3 Spearman's Rank-Order Correlation between Dark Tetrad traits and Types of Intuition among adults

| SN. | Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|-----------------------|----------|----------|----------|----------|---------|---------|---------|--------|
| 1 | Narcissism | | | | | | | | |
| 2 | Machiavellianism | 0.245** | - | | | | | | |
| 3 | Psychopathy | 0.095 | 0.412** | - | | | | | |
| 4 | Sadism | 0.299** | 0.264** | 0.535** | - | | | | |
| 5 | Dark Tetrad | 0.525 ** | 0.658 ** | 0.733 ** | 0.785 ** | - | | | |
| 6 | Holistic-Big Picture | 0.104 | 0.169* | -0.048 | 0.068 | 0.095 | - | | |
| 7 | Holistic-Abstract | -0.010 | 0.098 | 0.139* | 0.242** | 0.181** | 0.142* | - | |
| 8 | Inferential Intuition | 0.180** | 0.322** | -0.012 | -0.009 | 0.153* | 0.280** | -0.073 | - |
| 9 | Affective Intuition | -0.087 | -0.079 | 0.028 | -0.115 | -0.072 | -0.016 | 0.193** | -0.045 |

Note. ** Correlation is significant at the 0.01 level. * Correlation is significant at the 0.05 level

4. Discussion

The results of the present study provide insight into relationship between political ideology dimensions, Dark Tetrad (DT) traits, and types of intuition among adults in India. People with high DT will have high political ideology (right wing) was consistent with findings of [33, 34]. Our findings that there was some relationship between political ideology and DT traits were supported by findings of western studies [33, 34, 35, 36, 37] and Indian study by Puthillam and Kapoor (2022) [21]. But DT traits had negative relationship with norms, hierarchies [21], while Duspara and Greitemeyer's (2017) [33] states positive relationship was present, Bell et al. (2021) [36] showed narcissism was negatively related to political ideology. While Furnham and Cuppello (2024) [38], stated negative relationship between DT traits and political beliefs. But relationship was not strong indicating other factors also play [19, 39]. The lack of relationship between economic ideology and DT traits aligns with Bartolo and Powell (2024) [40], Bell et al. (2021) [36]. findings. However, some link was present [37].

Many studies showed there can be potential mediating or moderating factors influencing relationship between political ideology and dark personality traits [19, 24]. The social worldviews influence relationship between DT traits and SDO/RWA [19], and childhood trauma interaction with openness trait in shaping political ideology [24]. Additionally, people with dark personality trait may view politicians with same trait less negatively, which indicates some bias in how dark traits influence political preferences was present [41]. The Bardeen and Michel's (2019) [35] showed relationship between social and economic dimensions of political ideology with DT traits varies. There have been mixed findings due to different sample characteristics, measurement tool, analysis methods, and cultural difference [40]. While some studies focused on broad political view [16, 17, 18], and others looked at specific political view [20, 42].

The individuals who often make automatic intuitive judgments (inferential intuition) and rely less on gut feeling (affective intuition) tends to more obey higher authority, and information related to them. This is due using automatic reasoning to process political information. The inferential intuition positive association with political ideology indicates, when an individual is first exposed to any political information or ideas, they process it analytically. But after repeated exposure to it they use more mental-schema and pre-existing belief to make quick decisions. The high economic ideology relationship with low holistic abstract and high affective indicates individual who are less focused on abstract principles, and more on gut feeling tend to support strong right wing economic views. This is so because their belief was formed by specific experience and constant reliance on gut feeling rather than looking at broad picture. This result was supported by findings of Dennin et al. (2022) [43], Talhelm et al. (2015) [44] which showed relationship between intuition and political belief, ideology. The difference in brain areas also play a role [45]. But no significant relationship between intuition and norms contrast Jones (2011) [22] study results indicating people purity aspect of moral intuition was related to political attitudes. This indicates other factors influence intuition and political ideology relationship.

However, the weak relationship between political ideology dimensions and types of intuition align with Lytwyn's (2012) [23] results indicating no significant correlation between sensing-intuition, thinking-feeling and their political ideology. This indicates that personality traits alone may not affect political ideology, and there are other factors [25, 46]. Other researches offer further insight [47, 48, 49, 50, 51]. Like conservatives have high inaccurate factual beliefs, but open-minded thinking style can weaken [49], and they think more intuitively, and less analytically [47], religious belief [51], and genetics also plays a role in political preferences in both male and female [48]. But political ideology influences individual moral values [52], and was related to MBTI (Li, 2021). Conservatism was not associated to intuitive thinking styles. But open-minded thinking played important role in inaccurate beliefs [49, 51].

The psychopathy traits relationship with holistic abstract intuition contrasts the findings of Čopková and Christenková, (2021) [53]. While individuals with machiavellianism traits may look at both broad or bigger picture and pre-existing belief, mental schema while taking decisions or manipulating others. This aligns with Došenović, and Dinić (2024) [54] results, and can be reason why they process positive and negative images a lot faster [55]. But overall weak relationship between DT traits, and intuition aligns with Furnham (2022) [56] and Furnham and Crump (2014) [29]. This indicated Sensation-Intuition component of MBTI had relationship with weak dark side traits [56], and very low relationship between MBTI, HDS [29]. The other factors may play a role in relationship between DT traits and intuition [15, 27].

5. Conclusion

The study provides insights into the possible relationships between political ideology dimensions, Dark Tetrad (DT) traits, and types of intuition. The significant relationships were found between norms and certain DT traits, as well as between hierarchies and specific types of intuition. But economic ideology showed no significant relationships with DT traits, and norms with types of intuition. Additionally, some DT traits were linked to specific types of intuition,

suggesting that personality trait role in intuition. These findings contribute to understanding the psychological perspective of political ideology.

The results of this study may assist researchers in making theoretical assumptions about political ideology, DT traits and types of intuition in Indian context. It can help mental health professionals understand how mental schemas, emotional response, perspective, and dark personality traits relate with people political belief, and their views towards economy, authority role, societal and cultural norms, which in turn will help mental health professionals understand their clients better and follow more eclectic approach. This study's findings should be interpreted considering limitations, that is the potential for bias introduced by convenience sampling and self-report measures. The future studies can use large, more diverse samples with different designs to investigate cause-effect relationship, age and gender differences, and explore the factors that may influence their relationships.

Compliance with ethical standards

Disclosure of Conflict of interest

No conflict of interest was reported.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Carmines EG, D'Amico NJ. Political Science: Political Ideologies. Emerging Trends in the Social and Behavioral Sciences. 2015 May 15:1-4.
- [2] Erikson RS, Tedin KL. American public opinion: Its origins, content, and impact. Routledge; 2019 Mar 13.
- [3] Puthillam A, Kapoor H. Who cares about the outgroup? Political ideology, empathy, and moral decision-making. 2021
- [4] Puthillam A, Kapoor H, Karandikar S. Beyond left and right: A scale to measure political ideology in India. Preprint]. <https://psyarxiv.com/fg387>. 2021 Feb 17.
- [5] Paulhus DL, Williams KM. The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. Journal of research in personality. 2002 Dec 1;36(6):556-63.
- [6] Paulhus DL, Buckels EE, Trapnell PD, Jones DN. Screening for dark personalities. European Journal of Psychological Assessment. 2020 Jul 27.
- [7] Campbell WK, Reeder GD, Sedikides C, Elliot AJ. Narcissism and comparative self-enhancement strategies. Journal of Research in Personality. 2000 Sep 1;34(3):329-47.
- [8] Twenge JM, Foster JD. Birth cohort increases in narcissistic personality traits among American college students, 1982–2009. Social Psychological and Personality Science. 2010 Jan;1(1):99-106.
- [9] Christie R, Geis FL. Studies in machiavellianism. Academic Press; 2013 Oct 22.
- [10] Shafiti SS. Machiavellianism: A critical appraisal. Clinical Research and Clinical Trials. 2023 March 22;7(2).
- [11] Hare RD. Psychopathy: A clinical and forensic overview. Psychiatric Clinics. 2006 Sep 1;29(3):709-24.
- [12] Paulhus DL, Dutton DG. Everyday sadism. The dark side of personality: Science and practice in social, personality, and clinical psychology. 2016 Jan;109-120.
- [13] Sinclair M, Ashkanasy NM. Intuition: Myth or a decision-making tool?. Management learning. 2005 Sep;36(3):353-70.
- [14] Pretz JE, Totz KS. Measuring individual differences in affective, heuristic, and holistic intuition. Personality and Individual differences. 2007 Oct 1;43(5):1247-57.
- [15] Pretz JE, Brookings JB, Carlson LA, Humbert TK, Roy M, Jones M, Memmert D. Development and validation of a new measure of intuition: The types of intuition scale. Journal of Behavioral Decision Making. 2014 Dec;27(5):454-67.

- [16] Jonason PK. Personality and politics. *Personality and Individual Differences*. 2014 Dec 1;71:181-4.
- [17] Lilienfeld SO, Latzman RD, Watts AL, Smith SF, Dutton K. Correlates of psychopathic personality traits in everyday life: Results from a large community survey. *Frontiers in psychology*. 2014 Jul 22;5:740.
- [18] Hodson G, Hogg SM, MacInnis CC. The role of “dark personalities”(narcissism, Machiavellianism, psychopathy), Big Five personality factors, and ideology in explaining prejudice. *Journal of research in personality*. 2009 Aug 1;43(4):686-90.
- [19] Hill VZ, Martinez JL, Vrabel JK, Ezenwa MO, Oraetue H, Nweze T, Andrews D, Kenny B. The darker angels of our nature: Do social worldviews mediate the associations that dark personality features have with ideological attitudes?. *Personality and Individual Differences*. 2020 Jul 1;160:109920.
- [20] Taylor CD. The dark tetrad, social dominance orientation, and online political discussion. West Virginia University; 2020.
- [21] Puthillam A, Kapoor H. Social and Personality Correlates of Political Ideology in India. 2022
- [22] Jones B. Intuitive Politics: How Moral Intuitions Shape Political Identities and Behavior. In APSA 2011 Annual Meeting Paper 2011 Aug.
- [23] Lytwyn T. The personality of policy preferences: Analyzing the relationship between Myers-Briggs personality types and political views. *Res Publica-Journal of Undergraduate Research*. 2012;17(1):11.
- [24] De Neve JE. Personality, childhood experience, and political ideology. *Political Psychology*. 2015 Feb;36(1):55-73.
- [25] Deppe KD, Gonzalez FJ, Neiman JL, Jacobs C, Pahlke J, Smith KB, Hibbing JR. Reflective liberals and intuitive conservatives: A look at the Cognitive Reflection Test and ideology. *Judgment and Decision making*. 2015 Jul;10(4):314-31.
- [26] Coolidge FL, Segal DL, Hook JN, Yamazaki TG, & Elliott JAC. An empirical investigation of Jung's psychological types and personality disorder features. *Journal of Psychological Type*. 2001;58:33.
- [27] Fox JL, Shirley DA. The nature and measurement of intuition: Cognitive and behavioral interests, personality, and experiences. *Creativity research journal*. 2003 Jul 1;15(2-3):207-22.
- [28] Furnham A, Crump J. Personality traits, types, and disorders: an examination of the relationship between three self-report measures. *European Journal of Personality*. 2005 Apr;19(3):167-84.
- [29] Furnham A, Crump J. The dark side of the MBTI: Psychological type and interpersonal derailers. *Psychology*. 2014 Feb 26;5(02):166.
- [30] El Othman R, El Othman R, Hallit R, Obeid S, Hallit S. Personality traits, emotional intelligence and decision-making styles in Lebanese universities medical students. *BMC psychology*. 2020 Dec;8:1-4.
- [31] Gangwar S, Kaur H, Sharma S, Pallavi P., Saha A. Standardisation Of Short Dark Tetrad (SD4) In Indian College-Going Population. *Journal of Chemical Health Risks*. 2023;13(4s), 595-608
- [32] Swaminathan A, Rathnasabapathy M. Role of intuition on problem solving style–Mediating effect of mindfulness. *MethodsX*. 2024 Dec 1;13:103067.
- [33] Duspara B, Greitemeyer T. The impact of dark tetrad traits on political orientation and extremism: An analysis in the course of a presidential election. *Heliyon*. 2017 Oct 1;3(10).
- [34] Furnham A, Horne G. The Tetradic Heart of Darkness: Comparing three dark-side instruments. *Personality and Individual Differences*. 2021 Sep 1;179:110918.
- [35] Bardeen JR, Michel JS. Associations among dimensions of political ideology and Dark Tetrad personality features. *Journal of Social and Political Psychology*. 2019 Apr 5;7(1):290-309.
- [36] Bell E, Kowalski CM, Vernon PA, Schermer JA. Political Hearts of Darkness: The Dark Triad as predictors of political orientations and interest in politics. *Behavioral Sciences*. 2021 Dec 8;11(12):169.
- [37] Furnham A, Horne G. Personality and demographic correlates of political ideology. *Personality and Individual Differences*. 2022 Feb 1;186:111320.
- [38] Furnham A, Cuppello S. Correlates of the dark tetrad. *Acta psychologica*. 2024 May 1;245:104222.

- [39] Ballout MH, Briggs A, Armstrong J, Clark CB. Assessing the relative contribution of Moral Foundation Theory, Right-Wing Authoritarianism, and Social Dominance Orientation in the prediction of political orientation. *Revista Interamericana de Psicología/Interamerican Journal of Psychology*. 2023 Dec 22;57(3):e1756-.
- [40] Bartolo A, Powell C. Associations between the dark tetrad and political orientation: A systematic review with meta-analysis. *Personality and Individual Differences*. 2024 Feb 1;218:112498.
- [41] Hart W, Richardson K, Tortoriello GK. Dark personality voters find dark politicians more relatable and fit for office. *Journal of Research in Personality*. 2018 Aug 1;75:59-68.
- [42] Moss J, O'Connor PJ. The Dark Triad traits predict authoritarian political correctness and alt-right attitudes. *Heliyon*. 2020 Jul 1;6(7).
- [43] Dennin A, Furman K, Pretz JE, Roy MM. The relationship of types of intuition to thinking styles, beliefs, and cognitions. *Journal of Behavioral Decision Making*. 2022 Dec;35(5):e2283.
- [44] Talhelm T, Haidt J, Oishi S, Zhang X, Miao FF, Chen S. Liberals think more analytically (more "WEIRD") than conservatives. *Personality and Social Psychology Bulletin*. 2015 Feb;41(2):250-67.
- [45] Panish A, Nam HH. The neurobiology of political ideology: Theories, findings, and future directions. *Social and Personality Psychology Compass*. 2024 Jan;18(1):e12916.
- [46] Yilmaz O, Saribay SA. An attempt to clarify the link between cognitive style and political ideology: A non-western replication and extension. *Judgment and Decision making*. 2016 May;11(3):287-300.
- [47] Bayrak F, Dogruyol B, Alper S, Yilmaz O. Multidimensional intuitive–analytic thinking style and its relation to moral concerns, epistemically suspect beliefs, and ideology. *Judgment and Decision Making*. 2023 Jan;18:e42.
- [48] Hatemi PK, Smith K, Alford JR, Martin NG, Hibbing JR. The genetic and environmental foundations of political, psychological, social, and economic behaviors: a panel study of twins and families. *Twin Research and Human Genetics*. 2015 Jun;18(3):243-55.
- [49] Kossowska M, Szwed P, Czarnek G. The role of political ideology and open-minded thinking style in the (in) accuracy of factual beliefs. *Political behavior*. 2023 Dec;45(4):1837-57.
- [50] Li K. The personalities of political identity: analyzing the relationship between the Myers-Briggs Indicator Traits and identification with political liberalism and conservatism. *Humanities Commons*. 2021.
- [51] Piazza J, Sousa P. Religiosity, political orientation, and consequentialist moral thinking. *Social Psychological and Personality Science*. 2014 Apr;5(3):334-42.
- [52] Hatemi PK, Crabtree C, Smith KB. Ideology justifies morality: Political beliefs predict moral foundations. *American Journal of Political Science*. 2019 Oct;63(4):788-806.
- [53] Čopková R, Christenková Z. The effect of dark triad traits on decision-making styles. *Psychological Thought*. 2021;14(1):74.
- [54] Došenović A, Dinić BM. Relationships between Dark Tetrad traits and beliefs in conspiracy theories: Mediation effects of cognitive styles. *Personality and Individual Differences*. 2024 Feb 1;218:112464.
- [55] Wertag A, Ribar M, Sučić I. A look through dark-colored glasses: The Dark Tetrad and affective processing. *Scandinavian journal of psychology*. 2024 Feb;65(1):26-31.
- [56] Furnham A. MBTI and aberrant personality traits: dark-side trait correlates of the Myers Briggs type inventory. *Psychology*. 2022 May 13;13(5):805-15.