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(RESEARCH ARTICLE)

Relationship between light triad of personality and self-monitoring and meaning in life among adults

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Abstract

The present study focuses on the relationship between the Johnson (2018) Light Triad Personality Traits (Empathy, Compassion, and Altruism), Self-Monitoring, and Meaning in Life (Presence and Search). Statistical analysis techniques Mann-Whitney U and Spearman's Rank-Order Correlation were employed to find the gender differences and relationships. In this cross-sectional research design, snowball sampling was used to collect data from 235 Indian adults (84 males and 141 females) who filled out the Self-monitoring Scale (Snyder, 1974), Meaning in Life Questionnaire (Steger, 2006) and Light Triad Scale (Johnson, 2018). The findings showed no significant gender differences in Compassion, Altruism, Presence and Self-monitoring but significant gender differences in Empathy and Search were found in females more than males. There was no relationship between Empathy, and Search, and of Altruism with Presence, and Search. But Compassion had a weak and significant relationship with Presence and Search. Self-monitoring had a weak association with Compassion. Moreover, self-monitoring had no relationship with Empathy, Altruism, Presence and Search.

Keywords: Light Triad Personality; Self-monitoring; Meaning in Life; Adults

1. Introduction

The definition and concept of personality have evolved over the years, and to this day, it remains one of the most interesting and popular topics for researchers to explore. The birth of concepts such as 'Dark Triad Personality' and 'Light Triad Personality' took place to address the controversy over whether a person could be inherently bad or good. With the help of these specific personality traits, one can identify whether a person exhibits dark triad personality traits or light triad personality traits. Paulhus & Williams (2002) [1] first used the term "Dark Triad " of personality (DT) to describe the unique mixture of traits including Machiavellianism, Narcissism, and Psychopathy. Paulhus (2014) [2] claims that people with dark personality traits can learn adaptive behaviors in specific situations. Whereas Kaufman and colleagues developed the "Light Triad" in line with the positive psychology movement to offer a more comprehensive view of people. It is a construct that includes benevolent personality traits, such as humanism, faith in humanity, and Kantianism. These traits are not merely the inverse of dark traits but offer unique insights into socio-psychological outcomes (Lukić & Zivanović, 2021) [3]. However, each subject's surroundings and experiences, eliciting both positive and negative feelings and behaviors in a human being, have the power to modify these features.

According to Kaufman and colleagues (2019) [4], humanism requires recognizing each person's worth. For example, someone who always celebrates the accomplishments of others is considered to possess high levels of humanism. The conviction that people are decent at their core is referred to as faith in humanity. A person with strong trust in humanity would be seen as forgiving to those who have harmed them. Kantianism is founded on the ideas of Immanuel Kant. Someone with high degrees of Kantianism would not often consider other people's possible ulterior intentions when

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speaking with them. Johnson (2018) [5] created the Light Triad Scale, which integrates the three personality traits to assess individual variations in prosocial orientation. The prosocial orientation factor is composed of "observing and responding to the emotional states of others (empathy - perspective-taking and empathy - emotional contagion); Compassion is the sense of caring for others, the desire to assist them, and the conviction that assisting others is the right thing to do (altruism - warm glow and altruism - principle of care)." (Johnson, 2018, p. 36) [5].

Self-monitoring is another personality trait that is based on the principle that individual differences can serve as the foundation for predicting behavior based on attitudes by analyzing his social environment and modifies his external demeanor. Mark Snyder (1974) [6] first proposed the concept of self-monitoring. The variations in self-control show how dependent individuals are on situational or dispositional factors. According to Snyder, "high self-monitors adopt strategic self-presentation strategies" because they form their behavior based on how they feel their audience wants them to behave, depending on the circumstances. Snyder claims that "low self-monitors adopt expressive self-presentation strategies" as their behavior is less flexible in response to changing contextual demands.

The term 'Meaning in Life' has been defined in multiple ways throughout the field. These definitions include coherence in a person's life (Battista & Almond, 1973 [7]; Reker & Wong, 1988 [8]), one's goals or purpose of life, (e.g., Ryff & Singer, 1988 [9]), and many more. According to Baumeister (1991) [10], by meeting the needs for value, purpose, efficacy, and self-worth one can find a feeling of meaning. Allport proposed the concept of self-transcendence which is also an important creator of meaning e.g., Allport, 1961 [11]; Seligman, 2002 [12]). Frankl (1963) [13] proclaimed that individuals have an inbuilt need to find meaning in their lives, which he called "will to meaning". He further claimed that when an individual fails to meet these needs, it leads to psychological distress.

From the literature review, it was evident that while a lot of earlier research focused on the relationship between the Dark Triad of personality and other variables, only a handful of them tried to shed light on the relationship between the Light Triad of Personality and Self-monitoring and Meaning in Life. However, a recent study examines the complex interplay between these three variables among healthcare professionals (Mewara, 2024 [14]), emphasizing how crucial positive personality characteristics and a sense of purpose are to promoting well-being within this population. Another study looked at the intricate associations between self-monitoring and the Dark Triad traits—Narcissism, Machiavellianism, and Psychopathy (Rauthmann, 2011 [15]) highlighting how individuals with dark personalities present themselves through manipulation and exploitation of others. On the other hand, Shaffer et al. (2015) [16] and Ogunfowora et al. (2013) [17] emphasize the study of self-monitoring behavior in diverse contexts, which gives insights into how individuals regulate their behavior in response to social cues and environmental demands. Research by Gulliford et al. (2019) [18], Mejía-Suazo et al. (2022) [19], and Khan & Imran (2019) [20], on personality traits like gratitude and the Dark and Light Triad sheds light on how internal factors in individuals affect their behavior and wellbeing. For instance, individuals high in empathy, compassion, and altruism, may be more likely to participate in prosocial behaviors and seek meaning in their lives via acts of kindness. Furthermore, people with greater levels of selfmonitoring behavior may tailor their actions to meet societal expectations, thereby affecting their sense of purpose and fulfillment. Some emerging research indicates that meaning in life is a fundamental need that strongly influences both psychological and physical well-being (Vail and Routledge (2020) [21]. Individuals who believe that their lives are meaningful live longer, healthier, and happier lives than those who view their lives as less significant or less meaningful.

In summary, while the reviewed literature has significant limitations, it provides a structural foundation for understanding the relationship between personality traits, self-monitoring behavior, and meaning in life among adults. This study tries to address these limitations and bridge the gap between the unexplored area and the already known findings.

2. Material and methods

2.1. Aim

To understand the relationship between Light triad of personality and Self-monitoring and Meaning in Life among adults.

2.2. Objective

- To find the significant difference in three subscales of Light triad of personality between males and females.
- To find the significant difference in two dimensions of Meaning in Life between males and females.
- To find the significant difference in Self-monitoring between males and females.
- To find the significant relationship between Light triad of personality traits and meaning in life among adults.

- To find the significant relationship between self-monitoring and Light triad of personality behavior among adults.
- To find the significant relationship between self-monitoring behavior and meaning in life among adults.

2.3. Hypothesis

- Ho1: There is no significant difference between males and females in Empathy, Compassion, and Altruism.
- Ho2: There is no significant difference between males and females in Presence and Search.
- Ho3: There is no significant difference between males and females in Self-monitoring.
- Ho4: There is no significant relationship between Empathy, Presence, and Search among adults.
- Ho5: There is no significant relationship between Compassion, Presence, and Search among adults.
- Ho6: There is no significant relationship between Altruism, Presence, and Search among adults.
- Ho7: There is no significant relationship between Self-monitoring, Empathy, Compassion, and Altruism among adults.
- Ho8: There is no significant relationship between Self-monitoring, Presence and Search among adults.

2.4. Sample

The sample size of 237 from India was selected via snowball sampling and has a correlational research design. The sample size was N = 235, where females were n = 141 (60%) while 94 participants (40%) were males, and most of the participants (89.4% or 210) belonged to the age group of 18-32 years, while 11 belonged to the age group 32 - 46 and to the age group 46 - 60 years.

2.4.1 Inclusion criteria

• Participants between 18-60 years old, both male and female.

2.4.2 Exclusion criteria

- Participants with physical disabilities
- Participants with diagnosed psychological illnesses

2.5. Research Tools

2.5.1 Self-Monitoring Scale

The Self-monitoring scale developed by Mark Snyder (1974) [6] consists of 25 items, which concerns personal reactions to several different circumstances by answering whether a statement is true or false. A score between 0-12 demonstrates that the respondent is a relatively low self-monitor, and a score of 13-25 demonstrates that the respondent is a relatively high self-monitor. As assessed by analysis of different methods, the reliability of the scale is 30, by the alpha coefficient, is 0.75, and by the K-R 20 formula is 0.72.

2.5.2 The Meaning in Life Questionnaire

The Meaning in Life Questionnaire by Steger (2006) [22] studies two dimensions of meaning in life using a 10-item scale. Items were scored on a 7-point Likert scale (7 = Absolutely True, 1 = Absolutely Untrue). The Presence of Meaning subscale assesses how fully respondents feel their lives are of meaning. The Search for Meaning subscale assesses how absorbed and inspired respondents are putting efforts to find meaning or deepen their knowledge of meaning in their lives. High Presence and low Search indicate satisfaction without active research, whereas high Search and low Presence indicate a lack of perceived aim with an active mission. Low scores on both indicate disappointment without active seeking. Both Presence (0.82) and Search (0.87) showed good reliability and validity.

2.5.3 Light Triad Scale (Light-3)

The Light Triad Scale (Light-3) founded by Laura K.D. Johnson (2018) [5], analyzes individual diversity in prosocial orientation. This scale consisting of 24 items has 3 subscales which are empathy, compassion, and altruism with 8 items each. Items were scored on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Thus, higher numbers demonstrate superior levels of Light Triad traits. The alpha Cronbach coefficients are 0.67 for Empathy, 0.80 for Compassion, and 0.79 for Altruism. The reliability coefficient of the instrument was (0.75). The construct validity of the

scale was determined by examining relationships with antisocial traits (i.e. the Dark Tetrad), other emotion-related traits, and broad personality scales.

2.6. Procedure

A pool of 237 samples was initially selected. Data was collected through a survey method by Google Forms. Due to consent issues, two data were removed, resulting in a final sample size of 235.

2.7. Statistical Analysis

IBM SPSS Statistics Version 29.0.1.0 (171) was used to analyze the data. Non-parametric tests were used to do the statistical analysis. The Mann-Whitney U test was used to find the gender differences between males and females. Spearman's Rank-Order Correlation was used to find the correlation between the scales.

2.8. Ethical Considerations

This study followed all the APA ethical guidelines, including confidentiality, data protection, consent, voluntary participation, et cetera. People's data were removed who did not give their consent. The participants were also informed that they could withdraw their participation whenever they wanted.

3. Results

It was important to check the distribution of the variables Empathy, Compassion, Altruism, Presence, Search and Selfmonitoring for choosing an appropriate statistical method. The test of normality was carried out. A Kolmogorov-Smirnov^a test shows that all three subscales of the Light Triad Scale, both the subscales of Meaning in Life, and Selfmonitoring deviated significantly from normal. The Empathy at D(235) = 0.079, p = 0.001. The Compassion at D(235) =0.078, p = 0.001. The Altruism at D(235) = 0.103, p < 0.001. The Presence at D(235) = 0.090, p < 0.001. The Search at D(235) = 0.096, p < 0.001. The Self-Monitoring at D(235) = 0.066, p = 0.016 (see Table 1). So, non-parametric test Mann-Whitney U was used to evaluate the gender difference and Spearman's Rank-Order Correlation was used to check the correlation.

Variables	Statistic	df	Sig.
Empathy	0.079	235	0.001
Compassion	0.078	235	0.001
Altruism	0.103	235	< 0.001
Presence	0.090	235	< 0.001
Search	0.096	235	< 0.001
Self-monitoring	0.066	235	0.016

Table 1 Test of Normality

The test revealed empathy scores were significantly lower in the males (Mdn = 28, n = 94) compared to the females (Mdn = 30, n = 141), U = 4587.500, z = - 4.007, p<0.001, r = 0.261. There was no significant difference in Compassion scores of males (Mdn = 31, n = 94) and females (Mdn = 31, n = 141), U = 6363.500, z = -0.517, p = 0.605, r = 0.033. There was also no significant difference in Altruism scores of males (Mdn = 32.50, n = 94) and females (Mdn = 33, n = 141), U = 5767.500, z = -1.688, p = 0.091, r = 0.11. Hence, Ho1 was rejected for Empathy and accepted for Compassion, Altruism.

The test revealed there was no significant difference in Presence scores of males (Mdn = 24, n = 94) and females (Mdn = 24, n = 141), U = 6392.000, z = -0.461, p = 0.645, r = 0.03. But Search scores were significantly lower in the males (Mdn = 26, n = 94) compared to the females (Mdn = 27, n = 141), U = 5436.000, z = -2.336, p = 0.019, r = 0.152 (see table 2). Hence, Ho2 was rejected for Search and accepted for Presence. There was no significant difference in Self-monitoring scores of males (Mdn = 11, n = 94) and females (Mdn = 11, n = 141), U = 6101.500, z = -1.033, p = 0.302, r = 0.067 (see table 2). Hence, Ho3 was accepted.

Variable	Gender	n	Mdn	U	Z	р
Empathy	Males	94	28	4587.500	-4.007	< 0.001
	Females	141	30			
Compassion	Males	94	31	6363.500	-0.517	0.605
	Females	141	31			
Altruism	Males	94	32.50	5767.500	-1.688	0.091
	Females	141	33			
Presence	Males	94	24	6392.000	-0.461	0.645
	Females	141	24			
Search	Males	94	26	5436.000	-2.336	0.019
	Females	141	27			
Self-monitoring	Males	94	11	6101.500	-1.033	0.302
	Females	141	11			

Table 2 The Mann-Whitney U results of Light Triad, Meaning in Life and Self-monitoring

The test revealed there was weak and positive correlation between Empathy and Presence ($r_s = 0.121$, n = 235, p = 0.063). But it was not statistically significant. There was negligible correlation between Empathy and Search among adults ($r_s = 0.012$, n = 235, p = 0.858). Hence, Ho4 was accepted.

The test revealed there was weak and positive correlation between Compassion and Presence ($r_s = 0.153^*$, 0 n= 235, p = 0.019). There was also weak and positive correlation between Compassion and Search ($r_s = 0.143^*$, n= 235, p = 0.028). Both were statistically significant. Hence, Ho5 was rejected.

The test revealed there was negligible correlation between Altruism and Presence ($r_s = 0.089$, n = 235, p = 0.174). Also, there was negligible correlation between Altruism and Search ($r_s = 0.051$, n = 235, p = 0.439). Hence, Ho6 was accepted.

Table 3 Spearman's Rank-Order Correlation between Empathy, Compassion, Altruism. Presence and Search

Variable	Presence	Search
Empathy	0.121	0.012
Compassion	0.153*	0.143*
Altruism	0.089	0.051

* Correlation significant at the 0.05 level

The test revealed that there was negligible correlation between Self-monitoring and Empathy among adults (r_s = -0.078, n= 235, p = 0.232). There was a weak and negative correlation between Self-monitoring and Compassion among adults (r_s = -0.109, n= 235, p = 0.095). There was negligible correlation between Self-monitoring and Altruism among adults (r_s = -0.084, n= 235, p = 0.198). They were not statistically significant. Hence, Ho7 was accepted (see table 4).

Table 4 Spearman's Rank-Order Correlation between Self-monitoring behavior, Empathy, Compassion and Altruism

Variable	Empathy	Compassion	Altruism	Presence	Search
Self-monitoring	-0.078	-0.109	-0.084	-0.088	0.028

The test revealed there was negligible correlation between Self-monitoring and Presence among adults (r_s = -0.088, n= 235, p = 0.178). There was also negligible correlation between Self-monitoring and Search among adults (r_s = 0.028, n= 235, p = 0.664). They were not statistically significant. Hence, Ho8 was accepted (see table 4).

4. Discussion

The current study investigated the gender differences and relationships between Empathy, Compassion and Altruism (Johnson, 2018) [5] and Presence, Search (Steger, 2006) [22] and Self-monitoring (Snyder, 1974) [6]. It was revealed that there were significant differences in Empathy between males and females, with females being more empathetic. This supports the findings of previous studies like Biswas et al. (2018) [23]; Duarte et al. (2016) [24]; Gupta and Kiran (2021) [25]; McDonald and Kanske (2023) [26]; Naseem et al. (2023) [27]; Shashikumar et al. (2014) [28]. According to the literature, females have high empathy due to various reasons like being able to discriminate facial expression better and having more experience in child care as per primary caretaker hypothesis (Babchuk et al., 1985) [29], them having more neural activation during empathy related task (Derntl et al., 2010) [30], showing more immediate and spontaneous emotional response to other emotions (Jie et al., 2019) [31], high levels of self-reported empathy than males (Löffler & Greitemeyer, 2023) [32].

While there were no significant differences between males and females in Compassion dimension of Light Triad. This finding was supported by previous study like Sundeep and Rao (2023) [33], who studied the gender difference in compassion of students from MBBS, BSc Nursing and Bachelors in Physiotherapy (BPT) in a medical college. But our findings were contradictory to the studies of McDonald and Kanske (2023) [26]; Pommier et al. (2020) [34]; Sousa et al. (2017) [35], Treichler et al. (2022) [36] which stated that females were found to be more compassionate than males. It was also revealed that males and females do not differ in the Altruism dimension of Light Triad Scale. This finding was supported by various studies like Abdullahi and Kumar (2016) [37], who stated there was no significant difference between males and females on the self-report altruism dimension of prosocial behavior in students. There was no significant difference in Altruism across gender as per one the study (Gahlot & Patil, 2022) [38]. But a study by Brañas-Garza et al. (2018) [39], through meta-analysis of more than 3500 studies stated that women were found to be more altruistic than men.

Our study discovered that Presence component of Meaning in Life does not differ significantly between males and females. The study by Kohli and Singh (2022) [40], found no significant difference between male and female police personnel. While it was revealed through our study that there was a significant difference in the Search component of Meaning in Life, with females more inclined toward seeking a deeper understanding of the meaning in life (Search) than males. This result was contradictory to the study of Sharma & Patra (2024) [41], stating older male adults had higher need for Search than older female adults. The studies of Huda et al. (2023) [42]; Deb et al. (2020) [43] states that there was no difference between males and females in Total Meaning in Life. But, Ogan et al. (2022) [44], used the Turkish version of meaning in life scale and revealed that female's the meaning of life, search for meaning in life and the existing meaning in life were significantly higher than male. We found there was no significant difference in Self-monitoring between males among adults. There are various studies which support our findings like Bagheri and Ghanizadeh (2016) [45]; Kowalski et al. (2018) [46]; Teleb et al. (2024) [47].

It was revealed that there was a weak, positive relationship between Empathy and Presence, and no relationship was found between Empathy, and Search component of Meaning in Life. Altruism had no relationship with Presence and Search. While Compassion had a weak, and positive relationship with Presence and Search that was significant. El Boghdady, and Ewalds-Kvist (2024) [48], study states that there was moderate relationship between Physician empathy and Presence of meaning in Life and Presence of meaning in Life was best predictor of Physician Empathy. Prosocial behavior had positive association with presence of meaning in life and search for meaning in life (Lui et al., 2022) [49]. As per He et al. (2023) [50], there was a positive relationship between Altruism and Presence meaning in life (Soosai-Nathan, 2015) [51]. The Self-Monitoring was found to have no relationship with Empathy, the Altruism component of Light Triad, and Presence, Search meaning in life. But there was a weak and negative relationship between Compassion and Self-Monitoring. We were not able to find any recent studies which would support or contradict these results.

5. Conclusion

The present study aims to focus on the relationship between the Johnson (2018) Light Triad Traits, Self-Monitoring, and Meaning in Life among adults. According to our findings, only Empathy and Search had significant gender differences. It was only Compassion that had a significant but weak association with Meaning in Life (Presence and Search) while

other variables had either a weak or no relationship between them. Even though present research has made a contribution to the field with regard to the relationship between the Johnson (2018) Light Triad Traits (Empathy, Compassion, and Altruism), Self-Monitoring, and Meaning in Life (Presence and Search), it is not without its limitations. First, the sample size mostly consisted of female university students aged 18–32 years. Second, the data was not normally distributed because of which non-parametric tests were used. This decreased the generalizability of our findings. Third, we did not shed light on the gender differences between high and low self-monitors and their relationship with Light Triad Traits and Meaning in Life. Fourth, other factors or indicators, such as individual differences or personal experiences, were not taken into account in this research, which could have affected self-monitoring and meaning in life among those adults.

Future research might aim to cover these shortcomings by taking a larger sample size and by including more middle and older adults. As our study focused more on university students, a more diverse sample could be used. Most importantly, researchers can investigate whether there is any gender difference between low and high self-monitors and what their relationship is with the variables studied in this research.

Compliance with ethical standards

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Disclosure of Conflict of interest

No conflict of interest was reported.

Statement of ethical approval

As this study was done for publication purpose, approval was taken from the college.

Statement of informed consent

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

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