




Article history:
Received 17 August 2023
Accepted 19 September 2023
Published online 01 March 2024

Comparison of Personality Organization in People with Dark and Bright Personality Traits

Azad Salman Nasab¹, Rahim Yusefi^{2*}, Hasan Yagubi²

¹ Master of General Psychology, Department of Psychology, Shahid Madani University of Azerbaijan, Tabriz, Iran.

² Associate Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, Shahid Madani University of Azerbaijan, Tabriz, Iran.

³ Associate Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, Shahid Madani University of Azerbaijan, Tabriz, Iran.

* Corresponding author email address: azadslmannsb@gmail.com

Article Info

Article type:

Original Research

How to cite this article:

Salman-nasab A, Yusefi R, Yaghubi H. (2023). Comparison of Cognitive and Emotional Deficiencies Between Parents of Children with Special Needs and Parents of Typically Developing Children. *Iranian Journal of Neurodevelopmental Disorders*, 5(2), 28-35.

<https://doi.org/>



© 2023 the authors. Published by Iranian Association for Intelligence and Talent Studies, Tehran, Iran. This is an open access article under the terms of the Creative Commons Attribution-Non-commercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Purpose: The dual aspects of human personality, characterized by the dark and light triads, significantly influence various psychological and behavioral outcomes. The dark triad includes narcissism, Machiavellianism, and psychopathy, while the light triad comprises empathy, compassion, and altruism. This study aimed to compare the personality organization of individuals with dark and light personality traits, focusing on Kornberg's dimensions: identity diffusion, primitive defenses, and reality testing.

Methodology: This causal-comparative study included a sample of 232 students from Shahid Madani University of Azerbaijan, selected using purposive sampling. Participants completed questionnaires assessing dark and light personality traits and the Personality Organization Inventory. Data were analyzed using SPSS-25, employing descriptive statistics and multivariate analysis of variance (MANOVA) to compare the groups.

Findings: Significant differences were found among individuals with dark traits, light traits, and normal individuals across all three dimensions of personality organization. Individuals with dark traits exhibited higher levels of primitive defenses ($M = 28.25$), greater identity diffusion ($M = 25.75$), and poorer reality testing ($M = 49.93$) compared to those with light traits ($M = 24.30$, $M = 22.37$, $M = 38.81$, respectively) and normal individuals ($M = 26.23$, $M = 22.28$, $M = 41.87$, respectively).

Conclusion: The findings highlight that individual with dark traits have a more fragmented personality organization, characterized by maladaptive coping strategies and distorted reality perception, which contribute to their manipulative and antisocial behaviors. In contrast, individuals with light traits exhibit more cohesive personality organization, leading to prosocial and adaptive behaviors. These insights are crucial for developing targeted interventions to promote psychological well-being and improve organizational fit.

Keywords: Dark Triad, Light Triad, Personality Organization, Identity Diffusion, Primitive Defences, Reality Testing, Psychological Well-being, Organizational Behaviour

1. Introduction

Personality traits are enduring patterns of thoughts, feelings, and behaviors that characterize individuals (Lodi-Smith et al., 2018). These traits are often categorized into two contrasting profiles: the dark and light triads of personality. The dark triad, introduced by Paulhus and Williams (2002), comprises narcissism, Machiavellianism, and psychopathy (Paulhus & Williams, 2002). These traits are associated with manipulative and self-centered behaviors, a lack of empathy, and antisocial tendencies (Buckels et al., 2013; Muris et al., 2017). In contrast, the light triad, a concept developed to counterbalance the dark triad, includes traits like empathy, compassion, and altruism, reflecting a more positive and prosocial disposition (Karimizadeh et al., 2015; Sevi & Doğruyol, 2020; Sevi et al., 2020).

Theoretical frameworks for the study of these traits often draw from humanistic and positive psychology, which emphasize the potential for growth and the importance of positive human qualities. In terms of personality organization, the dark and light triads can be understood through the lens of Kernberg's theory of personality organization, which includes dimensions such as identity diffusion, primitive defenses, and reality testing (Sleep et al., 2019). These dimensions provide a comprehensive understanding of how personality traits influence psychological functioning and behavior.

Research on the dark triad has shown its significant impact on various negative outcomes, including counterproductive work behaviors (Ferreira & Nascimento, 2016), aggressive behavior (Buckels et al., 2013), and manipulative social interactions (Muris et al., 2017). For instance, individuals high in narcissism often exhibit grandiosity and a sense of entitlement, leading to conflicts in interpersonal relationships and workplace settings (Peterson & Palmer, 2021). Machiavellianism is characterized by a strategic and manipulative approach to social interactions, often resulting in exploitative behaviors (Ferreira & Nascimento, 2016). Psychopathy, marked by impulsivity and a lack of empathy, is associated with antisocial and criminal behaviors (Buckels et al., 2013).

Conversely, the light triad has been associated with numerous positive outcomes. Empathy, a core component of the light triad, facilitates understanding and sharing the feelings of others, promoting prosocial behavior and effective communication (Kaufman et al., 2019). Compassion involves a deep awareness of others' suffering

and a desire to alleviate it, fostering supportive and nurturing relationships (Sevi & Doğruyol, 2020). Altruism, or selfless concern for the well-being of others, has been linked to higher levels of life satisfaction and well-being (Bidwell & Schweizer, 2021; Sevi et al., 2020; Simpson & Willer, 2008; Vollhardt, 2009).

The contrasting nature of these two triads highlights the dual aspects of human personality. Studies comparing these traits have provided insights into how they influence various aspects of life, including interpersonal relationships, work behavior, and overall mental health. For example, Kaufman et al. (2019) found that individuals high in light triad traits were more likely to engage in loving and supportive relationships (Kaufman et al., 2019), whereas those high in dark triad traits were more prone to infidelity and manipulative behaviors (Sevi et al., 2020).

Personality traits, while relatively stable, can change over time and in response to life experiences (Caspi et al., 2005; Roberts et al., 2006). This plasticity is particularly relevant in the context of personality organization, which refers to the structural aspects of personality that influence how individuals perceive themselves and interact with the world. Kernberg's model suggests that personality organization encompasses three main dimensions: identity diffusion, primitive defenses, and reality testing (Sleep et al., 2019).

Identity diffusion refers to a lack of clear and consistent sense of self, often resulting in confusion about one's goals, values, and roles. Primitive defenses are unconscious mechanisms that protect the individual from anxiety and conflict but often distort reality. Reality testing is the ability to accurately perceive and interpret external reality, a crucial aspect of adaptive functioning (Tasselli et al., 2018).

Research has shown that individuals with high levels of dark triad traits often exhibit poor identity diffusion and reliance on primitive defenses, leading to distorted perceptions of reality and maladaptive behaviors (Muris et al., 2017). In contrast, those with high levels of light triad traits tend to have a more integrated identity, use mature defense mechanisms, and possess strong reality testing abilities, contributing to better psychological health and social functioning (Karimizadeh et al., 2015; Kaufman et al., 2019).

The concept of person-organization fit (P-O fit) is crucial in understanding how personality traits influence organizational behavior. P-O fit refers to the compatibility between an individual and the organization, encompassing values, culture, and goals (O'Reilly et al., 1991). High P-O fit is associated with positive outcomes such as job

satisfaction, organizational commitment, and reduced turnover intentions (Silverthorne, 2004; Slaughter & Greguras, 2009).

Studies have shown that individuals with dark triad traits often experience poor P-O fit due to their self-serving and manipulative behaviors, which conflict with organizational norms and values (Ferreira & Nascimento, 2016). This misalignment can lead to counterproductive work behaviors and strained workplace relationships (Silverthorne, 2004). Conversely, those with light triad traits are more likely to experience high P-O fit, as their prosocial and cooperative nature aligns well with organizational values, promoting a positive work environment and job satisfaction (Kaufman et al., 2019).

Despite the extensive research on the dark and light triads, there is a paucity of studies examining how these traits influence personality organization, particularly in diverse cultural contexts. Furthermore, while the impact of these traits on individual and organizational outcomes is well-documented, less is known about the underlying mechanisms that drive these effects. This study aims to fill these gaps by comparing the personality organization of individuals with dark and light personality traits and normal individuals, using Kernberg's dimensions of identity diffusion, primitive defenses, and reality testing.

The primary objective of this study is to explore the differences in personality organization among individuals with dark and light traits. Specifically, it seeks to:

- Investigate the levels of identity diffusion, primitive defenses, and reality testing in individuals with dark and light personality traits compared to normal individuals.

2. Methods and Materials

2.1. Study Design and Participants

The present study was conducted using a causal-comparative design. The statistical population consisted of all students at Shahid Madani University of Azerbaijan during the second semester of the 2021-2022 academic year. The sample size was determined using the Morgan table. Given a population size of 7,500, the Morgan table estimated a sample size of 382 participants. Students were selected using purposive sampling. Data collection was field-based and conducted through questionnaires. Respondents were informed about the confidentiality of the research results and completed questionnaires on dark and light personality traits as well as the Personality Organization Inventory. Out of the

distributed questionnaires, 50 were excluded due to reasons such as incomplete responses, non-return, or lack of validity. Ultimately, 232 valid questionnaires were scored. After screening, at least 50 individuals from each of the three groups met the criteria for dark and light personality traits, as well as normal individuals.

Participants were asked to complete the questionnaires in a classroom setting to ensure a controlled environment. They were provided with detailed instructions and the assurance of confidentiality to encourage honest and accurate responses. The administration of the questionnaires took approximately 30 minutes.

2.2. Measures

2.2.1. Dark Triad Dirty Dozen (DTDD)

This tool, developed by Jonason and Webster, is a short version designed to measure dark personality traits. It consists of 12 items where respondents rate the extent to which each statement describes them on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Each of the three dark traits is assessed by 4 items: narcissism (items 1-4), Machiavellianism (items 5-8), and psychopathy (items 9-12). The original creators reported high validity and reliability, with test-retest reliability coefficients ranging from 0.76 to 0.87. In an Iranian sample, test-retest reliability ranged from 0.66 to 0.80, and Cronbach's alpha for internal consistency was between 0.68 and 0.77. In the current study, Cronbach's alpha for the dark personality traits was 0.88, and for narcissism, Machiavellianism, and psychopathy, it was 0.78, 0.75, and 0.83, respectively (Ghomrani et al., 2015; Jonason & Webster, 2010; Jonason et al., 2012).

2.2.2. Light Triad Scale

This scale, developed by Kaufman et al., measures light personality traits, which include empathy, compassion, and altruism. It comprises 24 items where participants respond on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Each trait is assessed by 8 items: empathy (items 1-8), compassion (items 9-16), and altruism (items 17-24), with reverse scoring for items 1, 4, 7, 8, 12, 15, 18, 20, 21, and 22. The original developers reported that the three-factor structure was confirmed, and the confirmatory factor analysis indicated good model fit. Cronbach's alpha for the total scale was 0.88, and for empathy, compassion, and altruism, it was 0.67, 0.80, and 0.79, respectively (Dudek et al., 2021; Kaufman et al., 2019; Tubb et al., 2020).

2.2.3. Kernberg's Personality Organization Inventory (POI)

In this study, the 37-item version of Kernberg's Personality Organization Inventory was used. The original inventory, which included 155 items, measures three major dimensions: primitive defenses, identity diffusion, and reality testing. The scoring is based on a 5-point Likert scale (1 = completely true to 5 = completely false). Factor analysis indicated that 10 items load on the primitive defenses factor, items 11-18 on identity diffusion, and items 19-37 on reality testing. The inventory currently includes 37 items after eliminating items with low factor loadings. Reliability coefficients for the total inventory and its dimensions (primitive defenses, identity diffusion, and reality testing) were 0.90, 0.82, 0.68, and 0.91, respectively. Concurrent validity was established through correlations with the Buss-Perry Aggression Questionnaire and the Positive and Negative Affect Schedule, with correlations ranging from 0.18 to 0.57 (Kernberg, 2015; Monajem et al., 2018).

2.3. Data Analysis

The collected data were analyzed using SPSS-25 software. Descriptive statistics were calculated to summarize the demographic characteristics of the sample. Analysis of variance (ANOVA) was employed to compare the personality organization among individuals with dark and light personality traits, and normal individuals. Post hoc tests were conducted to identify specific group differences. Statistical significance was set at $p < 0.05$.

3. Findings and Results

The study sample consisted of 232 students from Shahid Madani University of Azerbaijan. Among them, 123 were male (53%) and 109 were female (47%). The age range of participants was between 18 and 25 years, with a mean age of 21.3 years ($SD = 2.1$).

The central tendency and dispersion indices for the studied variables among individuals with dark, light, and normal personality traits are presented in Table 1.

Table 1

Descriptive Statistics Results

Variable	Group	Mean (M)	Standard Deviation (SD)
Primitive Defenses	Light Traits	24.30	6.66
	Dark Traits	28.25	7.07
	Normal	26.23	6.34
Identity Diffusion	Light Traits	22.37	5.34
	Dark Traits	25.75	5.77
	Normal	22.28	5.81
Reality Testing	Light Traits	38.81	14.45
	Dark Traits	49.93	11.18
	Normal	41.87	13.35

Participants with dark personality traits had higher mean scores in primitive defenses ($M = 28.25$), identity diffusion ($M = 25.75$), and reality testing ($M = 49.93$) compared to those with light personality traits and normal individuals. Specifically, individuals with dark traits scored significantly higher in primitive defenses and reality testing compared to their counterparts.

Before conducting the main analysis, assumptions for normality, homogeneity of variances, and homogeneity of regression slopes were checked and confirmed. The

Kolmogorov-Smirnov test indicated normal distribution of scores for the variables under study ($p > 0.05$). Additionally, skewness and kurtosis statistics were within acceptable ranges (-2 to +2), confirming normality. Levene's test and Box's M test results were non-significant ($p > 0.05$), indicating homogeneity of variances and covariance matrices.

Results of the multivariate analysis of variance (MANOVA) are presented in Table 2.

Table 2*The Results of Multivariate Analysis of Variance (MANOVA)*

Variable	Sum of Squares	Degrees of Freedom (df)	Mean Square	F Value	Significance (p)
Primitive Defenses	339.035	2	169.517	3.757	0.026
Identity Diffusion	335.235	2	167.617	5.265	0.006
Reality Testing	2865.263	2	1432.631	8.416	0.000

The MANOVA results indicated significant differences in mean scores of primitive defenses, identity diffusion, and reality testing among the groups ($p < 0.05$).

To further explore these differences, post hoc tests were conducted to compare the means of each group pairwise. The results are shown in [Table 3](#).

Table 3*Post-Hoc Analysis (Bonferroni Correction)*

Variable	Comparison Groups	p Value
Primitive Defenses	Light vs. Dark	0.026
	Light vs. Normal	0.433
	Dark vs. Normal	0.396
Identity Diffusion	Light vs. Dark	0.023
	Light vs. Normal	0.997
	Dark vs. Normal	0.023
Reality Testing	Light vs. Dark	0.001
	Light vs. Normal	0.572
	Dark vs. Normal	0.022

The post hoc comparisons revealed that individuals with dark personality traits significantly differed from those with light personality traits and normal individuals in all three personality organization variables. Specifically, individuals with dark traits had higher scores in primitive defenses, identity diffusion, and reality testing compared to those with light traits. Additionally, significant differences were found between individuals with dark traits and normal individuals in identity diffusion and reality testing. There were no significant differences between individuals with light traits and normal individuals in any of the measured variables.

These findings suggest that individuals with dark personality traits exhibit more pronounced primitive defenses, identity diffusion, and challenges in reality testing compared to those with light traits and normal individuals.

4. Discussion and Conclusion

The present study aimed to compare the personality organization of individuals with dark and light personality traits using Kernberg's dimensions: identity diffusion, primitive defenses, and reality testing. Our results revealed significant differences among individuals with dark traits, light traits, and normal individuals. Specifically, individuals with dark personality traits exhibited higher levels of primitive defenses, greater identity diffusion, and poorer

reality testing compared to those with light personality traits and normal individuals. Conversely, individuals with light personality traits demonstrated better identity integration, used more mature defense mechanisms, and had stronger reality testing abilities.

The findings align with existing literature on the psychological profiles of individuals with dark and light traits. The higher levels of primitive defenses observed in individuals with dark traits are consistent with their tendency to engage in manipulative and self-serving behaviors. Previous studies have shown that dark triad traits, such as narcissism, Machiavellianism, and psychopathy, are associated with maladaptive coping strategies and defense mechanisms that distort reality to protect the ego ([Buckels et al., 2013](#); [Muris et al., 2017](#)).

The significant identity diffusion among individuals with dark traits supports the notion that these individuals often struggle with a cohesive sense of self. This finding is consistent with Kernberg's theory, which suggests that identity diffusion is a hallmark of pathological personality organization, often seen in individuals with severe personality disorders ([Sleep et al., 2019](#)). Individuals high in dark triad traits often exhibit unstable self-concepts and conflicting self-perceptions, contributing to their

problematic behaviors and interpersonal difficulties (Muris et al., 2017).

Poor reality testing in individuals with dark traits further underscores their difficulties in accurately perceiving and interpreting external reality. This impairment can lead to maladaptive decisions and behaviors, as these individuals may misjudge social situations and the intentions of others (Buckels et al., 2013). Such distortions are likely to exacerbate interpersonal conflicts and contribute to the antisocial tendencies commonly associated with dark triad traits (Ferreira & Nascimento, 2016).

Conversely, individuals with light personality traits demonstrated more adaptive personality organization. Their lower levels of primitive defenses suggest a greater capacity for mature coping strategies, which facilitate healthier interpersonal relationships and better psychological adjustment (Kaufman et al., 2019). The strong identity integration observed in this group indicates a well-defined and stable sense of self, which is crucial for navigating social roles and personal goals effectively (Sevi & Doğruyol, 2020).

The superior reality testing abilities of individuals with light traits highlight their capacity to perceive and interpret social cues accurately. This skill is essential for empathic and prosocial behavior, as it allows individuals to respond appropriately to the needs and emotions of others (Sevi et al., 2020). These findings are consistent with research suggesting that light triad traits are associated with higher levels of emotional intelligence and social competence (Kaufman et al., 2019).

The current study's findings are in line with previous research on the dark and light triads of personality. For instance, Buckels et al. (2013) found that individuals high in dark triad traits exhibited behaviors consistent with everyday sadism, including a propensity for manipulation and exploitation. These behaviors can be understood as manifestations of primitive defenses and impaired reality testing, as individuals distort reality to justify their harmful actions (Buckels et al., 2013).

Similarly, Kaufman et al. (2019) reported that individuals with light triad traits are more likely to engage in altruistic and compassionate behaviors (Kaufman et al., 2019). Our findings extend this research by demonstrating that these prosocial behaviors are supported by a well-organized personality structure, characterized by strong identity integration and accurate reality testing.

The significant differences in identity diffusion between individuals with dark and light traits also echo the findings

of Peterson and Palmer (2021), who highlighted the unstable self-concepts of individuals high in dark traits. They noted that these individuals often seek power and control to compensate for their internal instability, leading to manipulative and aggressive behaviors. In contrast, individuals with light traits exhibit stable self-concepts that support consistent and prosocial behaviors (Peterson & Palmer, 2021).

The results of this study have important implications for organizational behavior, particularly in terms of person-organization fit (P-O fit). High levels of dark triad traits are often associated with poor P-O fit, as these individuals' self-serving behaviors and manipulative tactics clash with organizational norms and values (Ferreira & Nascimento, 2016; O'Reilly et al., 1991). This misalignment can lead to counterproductive work behaviors, reduced job satisfaction, and higher turnover intentions (Silverthorne, 2004).

In contrast, individuals with light personality traits are more likely to experience high P-O fit, as their prosocial behaviors and cooperative nature align well with organizational values (Kaufman et al., 2019). This alignment can enhance job satisfaction, organizational commitment, and overall workplace harmony (Slaughter & Greguras, 2009). Organizations can benefit from identifying and fostering these traits to create a more supportive and productive work environment.

Despite the valuable insights provided by this study, several limitations should be acknowledged. First, the cross-sectional design limits our ability to draw causal inferences about the relationship between personality traits and personality organization. Longitudinal studies are needed to explore how these traits and organizational patterns evolve over time. Second, the sample was drawn from a single university, which may limit the generalizability of the findings to other populations. Future research should include diverse samples to enhance external validity.

Additionally, while the study focused on Kernberg's dimensions of personality organization, other frameworks, such as the Five-Factor Model, could provide complementary insights into the relationship between personality traits and personality organization. Future research should consider integrating multiple theoretical perspectives to offer a more comprehensive understanding of these complex relationships.

The present study highlights significant differences in personality organization between individuals with dark and light personality traits. Those with dark traits exhibit greater identity diffusion, reliance on primitive defenses, and poorer

reality testing, contributing to their manipulative and antisocial behaviors. In contrast, individuals with light traits demonstrate better identity integration, mature defense mechanisms, and strong reality testing abilities, supporting their prosocial and adaptive behaviors.

These findings underscore the importance of considering both the dark and light aspects of personality in psychological research and practice. By understanding the underlying personality organization associated with these traits, researchers and practitioners can develop more targeted interventions to promote psychological well-being and improve organizational fit. As the field continues to explore the dual aspects of human nature, integrating theoretical frameworks and empirical findings will be essential for advancing our understanding of personality and its impact on behavior.

Authors' Contributions

In this article, the corresponding author was responsible for the intervention implementation, data analysis, and manuscript writing, while the other authors supervised the data analysis and manuscript writing.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We hereby thank all individuals for participating and cooperating us in this study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

References

- Bidwell, D., & Schweizer, P.-J. (2021). Public values and goals for public participation. *Environmental Policy and Governance*, 31(4), 257-269. <https://doi.org/10.1002/eet.1913>
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral Confirmation of Everyday Sadism. *Psychological Science*, 24(11), 2201-2209. <https://doi.org/10.1177/0956797613490749>
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality Development: Stability and Change. *Annual review of psychology*, 56(1), 453-484. <https://doi.org/10.1146/annurev.psych.55.090902.141913>
- Dudek, K. A., Dion-Albert, L., Kaufmann, F. N., Tuck, E., Lebel, M., & Menard, C. (2021). Neurobiology of resilience in depression: immune and vascular insights from human and animal studies. *European Journal of Neuroscience*, 53(1), 183-221. <https://doi.org/10.1111/ejn.14547>
- Ferreira, M. F., & Nascimento, E. d. (2016). Relationship Between Personality Traits and Counterproductive Work Behaviors. *Psico-USF*, 21(3), 677-685. <https://doi.org/10.1590/1413-82712016210319>
- Ghomrani, A., Samadi, M., Taghinejad, M., & Shamsi, A. (2015). The Study of the Validity and Reliability of the dark personality scale in students. *Psychological Models and Methods*, 6(20), 73-86. https://jpm.m.marvdasht.iau.ir/article_969_f7b8bb607d598368aa1b7b8bf79b6d76.pdf
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological assessment*, 22(2), 420-432. <https://doi.org/10.1037/a0019265>
- Jonason, P. K., Webster, G. D., Schmitt, D. P., Li, N. P., & Crysel, L. (2012). The Antihero in Popular Culture: Life History Theory and the Dark Triad Personality Traits. *Review of General Psychology*, 16(2), 192-199. <https://doi.org/10.1037/a0027914>
- Karimizadeh, A., Mahnam, A., Yazdchi, M., & Besharat, M. (2015). Individual Differences in Personality Traits. *Journal of Psychophysiology*, 29(3), 107-111. <https://doi.org/10.1027/0269-8803/a000141>
- Kaufman, S. B., Yaden, D. B., Hyde, E., & Tsukayama, E. (2019). The Light vs. Dark Triad of Personality: Contrasting Two Very Different Profiles of Human Nature. *Frontiers in psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00467>
- Kernberg, O. F. (2015). Narcissistic Defenses in the Distortion of Free Association and Their Underlying Anxieties. *The Psychoanalytic Quarterly*, 84(3), 625-642. <https://doi.org/10.1002/psaq.12022>
- Lodi-Smith, J., Rodgers, J. D., Cunningham, S. A., Lopata, C., & Thomeer, M. L. (2018). Meta-Analysis of Big Five Personality Traits in Autism Spectrum Disorder. *Autism*, 23(3), 556-565. <https://doi.org/10.1177/1362361318766571>
- Monajem, A., Monirpour, N., & Mirzahosseini, H. (2018). Structural Relationships of the Personality Organization, Object Relations and Defense Mechanisms with Pathological Eating Disorder. *Journal of Clinical Psychology*, 10(2), 1-14. <https://doi.org/10.22075/jcp.2018.14593.1413>



- Muris, P., Merckelbach, H., Otgaar, H., & Meijer, E. H. (2017). The Malevolent Side of Human Nature. *Perspectives on Psychological Science*, 12(2), 183-204. <https://doi.org/10.1177/1745691616666070>
- O'Reilly, C. A., Chatman, J. A., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal*, 34(3), 487-516. <https://doi.org/10.5465/256404>
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of research in personality*, 36(6), 556-563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Peterson, R. D., & Palmer, C. L. (2021). The Dark Is Rising: Contrasting the Dark Triad and Light Triad on Measures of Political Ambition and Participation. *Frontiers in Political Science*, 3. <https://doi.org/10.3389/fpos.2021.657750>
- Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Personality Traits Change in Adulthood: Reply to Costa and McCrae (2006). *Psychological bulletin*, 132(1), 29-32. <https://doi.org/10.1037/0033-2909.132.1.29>
- Sevi, B., & Doğruyol, B. (2020). Looking From the Bright Side: The Light Triad Predicts Tinder Use for Love. *Journal of Social and Personal Relationships*, 37(7), 2136-2144. <https://doi.org/10.1177/0265407520918942>
- Sevi, B., Urgancı, B., & Sakman, E. (2020). Who Cheats? An Examination of Light and Dark Personality Traits as Predictors of Infidelity. *Personality and individual differences*, 164, 110126. <https://doi.org/10.1016/j.paid.2020.110126>
- Silverthorne, C. (2004). The Impact of Organizational Culture and Person-organization Fit on Organizational Commitment and Job Satisfaction in Taiwan. *Leadership & Organization Development Journal*, 25(7), 592-599. <https://doi.org/10.1108/01437730410561477>
- Simpson, B., & Willer, R. (2008). Altruism and Indirect Reciprocity: The Interaction of Person and Situation in Prosocial Behavior. *Social psychology quarterly*. <https://doi.org/10.1177/019027250807100106>
- Slaughter, J. E., & Greguras, G. J. (2009). Initial Attraction to Organizations: The Influence of Trait Inferences. *International Journal of Selection and Assessment*, 17(1), 1-18. <https://doi.org/10.1111/j.1468-2389.2009.00447.x>
- Sleep, C., Lamkin, J., Lynam, D. R., Campbell, W. K., & Miller, J. D. (2019). Personality Disorder Traits: Testing Insight Regarding Presence of Traits, Impairment, and Desire for Change. *Personality Disorders Theory Research and Treatment*, 10(2), 123-131. <https://doi.org/10.1037/per0000305>
- Tasselli, S., Kilduff, M., & Landis, B. (2018). Personality Change: Implications for Organizational Behavior. *Academy of Management Annals*, 12(2), 467-493. <https://doi.org/10.5465/annals.2016.0008>
- Tubb, A. L., Croypley, D. H., Marrone, R. L., Patston, T., & Kaufman, J. C. (2020). The development of mathematical creativity across high school: Increasing, decreasing, or both? *Thinking Skills and Creativity*, 35, 100634. <https://doi.org/10.1016/j.tsc.2020.100634>
- Vollhardt, J. R. (2009). Altruism Born of Suffering and Prosocial Behavior Following Adverse Life Events: A Review and Conceptualization. *Social Justice Research*. <https://doi.org/10.1007/s11211-009-0088-1>