

# **The Relationship between Separation Individuation Process and Orthorexia**

## **Nervosa: The Mediator Role of Vulnerable Narcissism**

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## **Abstract**

In this study, it was aimed to examine the mediating role of vulnerable narcissism in the relationship between separation-individuation process and orthorexia nervosa. 238 participants ages between 18 and 49 participated in the study. “Sociodemographic Information Form”, “Separation-Individuation Form”, “Orto-11” and “Pathological Narcissism Inventory were used on participants. In the analysis, the first Pearson Correlation was applied to examine the relationship between separation-individuation, orthorexia nervosa and vulnerable narcissism. After the correlation analysis, the mediation was conducted to understand the mediating role of vulnerable narcissism effects of separation-individuation and orthorexia nervosa. The mediating role of analysis showed that separation-individuation were significantly and positively associated with the vulnerable narcissism. The direct effects of vulnerable narcissism on orthorexia nervosa were found to be positively significant. The total effect on separation-individuation to orthorexia nervosa was found to be positively significant. In general, higher levels of vulnerable narcissism were related to orthorexia nervosa tendency and higher levels of separation-individuation issues. Moreover, higher levels of separation-individuation issues were related to orthorexia nervosa. The results obtained by this research can be crucial to understand early relationships influence on personality and orthorexia nervosa’s relationship with it.

**Keywords:** Separation-individuation; orthorexia nervosa; vulnerable narcissism

## INTRODUCTION

Mahler and her colleagues (1989) separate the biological birth of human infants from psychological birth of the individual. According to Mahler and her colleagues (1989) psychological birth of the individual is called the separation-individuation process. Forerunners of separation-individuation phase are normal autistic phase and symbiotic phase. (Mahler et al,1989). The first weeks of an infant's life is called the normal autistic phase which lasts around 0 to 2 months. (Mahler et al., 1989). The newborn infant is not aware of the outside world, he could not acknowledge his own existence. When the infant slowly moves into a symbiotic phase which lasts for 2 to 5 months, he becomes slightly aware of his instinctual tensions such as hunger which comes from the outside world. He also starts to realize his painful experiences are also generated within himself (Mahler &Perriere, 1965). In the symbiotic phase infant cannot understand the difference between inner and outer, self and other, he does not understand that the stimuli are coming from the world outside (Mahler, 1974). Mahler et al. (1989) suggests that the separation-individuation phase consists of four subphases. The first subphase of the individuation process is differentiation which lasts about six months to next four to five months (Mahler &Perriere ,1965). The main character of differentiation subphase infant's bodily dependence to his mother decreases gradually. In this subphase infant's locomotor functions begin to develop (Mahler & Perriere,1965). The infant slowly starts to distance away from the mother's arms but still tends to stay close to her. The second subphase is the practicing period between 10-15 months. Child begins to master his motor skills and he explores his surroundings both humane and inanimate. The child during the second sub-phase starts to toddle, and his ability to crawl, right himself or padding becomes advanced. (Mahler & Perriere,1965). The main characteristic of this subphase is the child's great narcissistic investment of his own functions and body. The third subphase that captures the months between 14 to 22 is called rapprochement. Mahler (1974) describes this phase as the start of psychological birth. This subphase has two complementary parts: separation and individuation. In individuation the child explores his limits. In separation, the child experiments with his ability to move away and move toward the mother (Mahler &Perriere ,1965). In the rapprochement phase, the child starts to gain pleasure from the outside world. The key element during this phase is social interactions (Mahler, 1974). Rapprochement subphase is an important period for ego structuring and establishment of a cohesive self. The consolidation of individuality and the beginnings of emotion object constancy subphase is characterized by

unfolding of complex functions: verbal communication fantasy and reality testing 20/22 months to 30/36 months. The fourth phase has two dimensions; namely achievement of a definite and lifelong individuality and attainment of object constancy (Mahler et al, 1989). This phase has no final point. The unsuccessful separation individuation could lead to various psychopathologies such as depression, anxiety and eating disorders (San Demirdogen et al., 2020).

The literature suggests that there is a relationship between separation difficulties and the development of eating disorders. Masterson (1977) suggested that most patients with anorexia nervosa have difficulties at symbiotic or separation- individuation phase. The theory suggests that the main difficulty is the fear of loss of self (engulfment) or fear of loss of object (abandonment) that is linked with abandonment, depression, and separation anxiety (Evans & Street, 1995). According to Armstrong and Roth (1989) the symptoms of eating disorders help people to maintain their separation distress. Their study suggested that both anorexic and bulimic patients have separation anxiety (Armstrong & Roth, 1989). According to Smolak& Levine, 1993 They had a separation anxiety which led to under separation issues whereas the bulimic women were over separated (Smolak& Levine, 1993). Brath (2003) examines the ways eating disorders are affected by the separation issues of college students. According to Brath (2003) most of the eating disorders among college students arise from the “all or nothing” idea of separation (Barth, 2003). Brath (2003) concluded that overattachment to the caretakers could lead to the development of eating difficulties in adolescents. Although there are many studies that investigated the relationship between separation-individuation process and eating disorders, there are not many studies that investigated the relationship between the early experiences and orthorexia nervosa.

The term orthorexia is defined by Steven Bratman to describe a pathological eating pattern (Strahler et al., 2018). Orthorexia comes from the *ortho* and *orexis* which means “right appetite.” Orthorexia is an extreme or excessive preoccupation with eating healthy food. Orthorexia nervosa (ON) is a dysfunctional eating pattern that is based on the quality of the food the person consumes (Dunn & Hawkins, 2020). People with orthorexia nervosa avoid eating foods that contain fat, food additives, animal products or other components considered unhealthy (Barrada&Roncero, 2018). They have an intense fear of eating foods which are considered “impure”. In orthorexia nervosa the person becomes fixated about the quality of the food unlike other eating disorders where the person fixates on the quantity of the food (Bratman, 1997). These individuals have rigid dietary rules and violation of these rules causes great emotional distress. The prominent features of people

with orthorexia nervosa are anxiety, shame, and even panic about unhealthy foods. They would feel guilt and distress after violating their diet. According to Barrada and Roncero (2018) orthorexia nervosa symptoms are ego syntonic because individuals' eating habits and ideas give them a sense of identity. Individuals would feel superior to those who would eat bad (unhealthy) foods.

The current psychoanalytic theories put its emphasis on individuals' self-esteem problems which are coming from drives and unconscious conflicts to explain narcissism (McWilliams, 2011.). According to Kealy and Rasmusse (2012) pathological narcissism is an extreme care of self, ignoring others and having several difficulties with interpersonal relationships (Kealy & Rasmussen, 2012). The literature suggests there are two phenotypes of narcissism which are grandiosity and vulnerability (Pincus & Lukowitsky, 2010). The main characteristics of individuals with grandiose narcissism are self-assurance, immodesty, exhibitionism, and aggression. The characteristics of individuals with vulnerable narcissism are slightly different from grandiose narcissism. They have poor and negative self-image about themselves. In vulnerable narcissism grandiose fantasies are masked by opposite characteristics. They are generally self-critical, hypersensitive, and socially withdrawn (Pincus & Lukowitsky, 2010). Generally, the domain emotion in vulnerable narcissism and vulnerably narcissistic people generally feel self-conscious and helpless (Van Buren & Meehan, 2015). There is a relationship between separation-individuation and narcissism. Blum (1974) stated that disruption on rapprochement subphase of separation individuation process would cause a deviance in the developing ego functions and, he relates this disruption could be related with narcissistic disorder (Blum, 1974). Caregivers' reactions such as excitement, interest and joyfulness toward the baby are crucial during the rapprochement phase (Auerbach, 1990). During this period when the caretaker is emotionally unavailable the child's aggression turns into himself which would cause a feeling of helplessness and shame. These individuals have great difficulty in balancing their affects, self-esteem and they cannot maintain a cohesive sense of self. These would cause narcissistic disorders.

The literature suggests that there is a link between orthorexia nervosa and narcissism. In a recent study by Martinovic et al. (2022) explored the relationship between ON and its association with narcissism in fitness centers. This study finds a strong association between ON and narcissism. The study also suggests that ON behavior could be a result of distorted body image, low self-esteem, and the use of social media (Martinovic et al., 2022). Another study investigated the

association between ON and relationship satisfaction while including moderating effects of Dark Triad which refers to machiavellianism, narcissism, and psychopathy (Brunett&Oberle, 2022). One of the crucial findings of this study is ON symptomatology is positively correlated with all three components of the dark triad. The main aim of this study is to examine the mediating role of vulnerable narcissism between separation-individuation process and orthorexia nervosa. The hypothesis of this study is the relationship between separation-individuation issues and orthorexia nervosa will be mediated by vulnerable narcissism.

## **Method**

Convenient sampling is used in this study and all participants voluntarily completed the questionnaires. There are 238 participants 198 female (83.2 %) 39 male (16,4%) and 1 other (0,4 %) in this study. The mean age is  $M= 24,26$  with standard deviation of  $SD= 4,65$  and a range of 18-49 years.

## **Measurement Instruments**

In the present study participants were asked to fill following from and scales: social demographic form, separation-individuation inventory (Göral, 2010), orto-11 scale (Arsuoğlu et al, 2008) and pathological narcissism inventory (Büyükgüngör, 2016).

**Study Desig**The data collected by using “Google Forms” and convenience sampling method will be used for the data collection process. The participants completed an informed consent form. This form will inform the participant briefly about the aim of the study without revealing the hypothesis. The participant process of this study was voluntary, and they could withdraw from the study without any penalty. After informed consent was completed the participants completed Turkish forms of Separation Individuation Inventory, Orto-11 Scale, Pathological Narcissism Inventory and Socio Demographic Form. After all the forms have been completed a debriefing form was given which revealed the true hypothesis of the study. The entire data collection process took approximately about 10-15 minutes.

## RESULTS

### Correlation Analysis

Correlation analysis is conducted to understand the relationship between variables. Findings are presented in Table 1. According to the results separation individuation scores were significantly and negatively correlated with orthorexia nervosa scores  $r = (-.535, p < 0.01)$ . Since in Orto-11 scale lower scores indicate higher orthorexic tendencies. The negative correlation between separation-individuation and orthorexia nervosa scores indicates statistically significant positive correlation. Separation individuation scores were significantly and positively correlated with vulnerable narcissism scores  $r = (.735, p < 0.01)$ . Orthorexia nervosa scores were significantly and negatively correlated with vulnerable narcissism scores  $r = (-.570, p < 0.01)$ . The negative correlation between orthorexia nervosa scores and vulnerable narcissism scores indicates a significant positive correlation because of Orto-11 scales scoring system. Separation individuation score were significantly and positively correlated with vulnerable narcissism scores  $r = (.735, p < 0.01)$ .

### Mediation Analysis

Mediation model for vulnerable narcissism on the relationship between separation individuation issues and orthorexia nervosa. According to the result of the mediation analysis separation individuation scores were significantly associated with vulnerable narcissism scores ( $a = .45, SE = .0273, p < .00$ ). It indicates that individuals with separation individuation issues are more likely to have vulnerable narcissistic personalities. When we looked at the direct effect of vulnerable narcissism on orthorexia nervosa the results showed that there were a significant and negative effect on orthorexia nervosa ( $b = -.05, SE = .0109, p < .00$ ). This negative effect statistically suggests a positive effect on these two variables because lower scores in orthorexia nervosa indicate higher orthorexic tendencies. Overall, this indicates that individuals with vulnerable narcissistic personalities are more likely to have orthorexia nervosa. The total effect on separation individuation to orthorexia nervosa was found significant ( $c = -.046, SE = .0048, p < .00$ ). The direct effect of separation individuation on orthorexia nervosa was also found statistically significant ( $c' = -.022, SE = .0067, p < .01$ ). There is a significant indirect relationship between the separation

individuation and orthorexia nervosa through vulnerable narcissism is statistically significant ( $a \times b = -.024$ ,  $SE = .005$ , %95 CI  $[-.0351, -.0149]$ ). The general model was significant ( $R^2 = .35$   $F(2, 236) = 64.52$ ,  $p < .00$ ) and explained 35 % variance.

## **DISCUSSION**

The aim of the current study is to understand the role of vulnerable narcissism in the relationship between separation individuation process and orthorexia nervosa. It was hypothesized that the relationship between separation-individuation issues and orthorexia nervosa will be mediated by vulnerable narcissism.

### **Interpretation of Correlational Analysis**

The study suggests the participants with high separation-individuation scores have lower orthorexia nervosa scores. Since in Orto-11 scale lower scores indicated higher orthorexic tendencies the result of the current study suggests there is a statistically significant and positive correlation between separation-individuation and orthorexia nervosa. Previous studies indicated that orthorexia nervosa share similarities with both eating disorders and obsessive-compulsive disorders (Biswajit et al., 2013; Scarff, 2017). Separation-individuation theory explains how separate sense of self is being established from the primary love object (Mahler, 1974). The difficulty in this period causes serious emotional difficulties which later can be features as eating disorder. The literature suggests that dependency conflicts and eating pathology have a strong relationship (Friedlander & Siegel, 1990). Studies suggest that separation and attachment difficulties are the significant elements in eating disorders (Armstrong and Roth, 1989). Armstrong and Roth, 1989's study suggests that separation anxiety is associated with eating disorders. Sugerma et al. (1981) study suggests that unsuccessful separation-individuation from the maternal object is associated with anorexic symptoms. Eating pathology symptoms can be viewed as a defense against separation experiences (Sugerma et al., 1981). Orthorexia nervosa viewed as a disordered eating behavior (Cane et al., 2019). The literature also suggests that the history of eating disorders significantly predicts orthorexia nervosa (Barnes & Caltabiano, 2017). The study found a positive correlation between separation-individuation scores and vulnerable narcissism scores. Separation-individuation disturbances significantly related with borderline and narcissistic personalities (Settlage, 1977). Pine (1979) dives separation-individuation pathology into two



forms. Lower- order disturbances form individuals lack self-other boundaries. Higher- order disturbances form individuals cannot tolerate being alone. In an unsuccessful resolution of separation-individuation process the individuals have a hard time building and obtaining close relationships (Grotevant& Cooper, 1986). Dysfunctional separation-individuation could lead individuals to have an avoidant relationship with others. They could be emotionally distant and feel uncomfortable with being close to another (Kins et al., 2013). In vulnerable narcissism individuals are generally shy, fear criticism and rejection (Aktar,2003). They avoid social contact to keep their self-esteem in balance (Dickinson & Pincus, 2008). The positive correlation between separation-individuation scores and vulnerable narcissism can be understood from this point.

The finding of the current study indicated that there was a negative correlation between vulnerable narcissism and orthorexia nervosa. However, since the lower Orto-11 scores are indicative of higher orthorexic tendencies the outcome indicates there is a positive correlation between orthorexia nervosa and vulnerable narcissism as expected. The literature suggests that there is a relationship between orthorexia nervosa and narcissism. Oberle et al. (2017) study found that narcissism and perfectionism are positively correlated with orthorexia nervosa symptomatology. They stated that individuals with high ON feel superior to others about their diet (Oberle et al., 2017). Furthermore, a recent study that investigates the ON association with narcissism among young fitness center users found that there is a positive correlation between orthorexic and narcissistic behavior (Martinovic et al., 2022). The existing literature suggests that there is a positive relationship between ON and narcissism. The findings of current study showed that vulnerable narcissism significantly mediated relationship between separation-individuation and orthorexia nervosa as expected. The pathological narcissism is divided into two themes as narcissistic grandiosity and narcissistic vulnerability based on the defects in self-esteem (Pincus & Lukowitsky, 2010). This thesis focuses on vulnerable narcissism's relationship with separation-individuation process and orthorexia nervosa. Vulnerable narcissism is strongly associated with distrustful, hostile interpersonal relationships which are driven by negative emotionality, problematic attachment styles and early childhood abuse or neglect (Miller et al., 2012). Separation-individuation process is crucial for establishment for autonomy, independence, and identity. The difficulties during separation-, individuation process could cause a number of psychopathologies and one of them is narcissistic personality disorder (Blum, 2004). Insecurely attached infants are more likely to develop narcissistic personalities as adults (Blum, 2004).

Vulnerably narcissistic individuals are more likely to have attachment anxiety (Rohmann et al., 2021). The significant and positive relationship between vulnerable narcissism and separation-individuation issues can be understood from this view as well.

### **Interpretation of Mediation Analysis**

Literature suggests there is an association between orthorexia nervosa symptomology and narcissism (Brunett & Oberle, 2022). Martinovic et al. (2021) study investigates orthorexia nervosa and narcissism relationship among fitness center users. They suggest that there is a positive relationship between the tendency to orthorexia nervosa behavior and the tendency to narcissistic behavior (Martinovic et al., 2021). Bandi et al. (2019) study also investigates the relationship between orthorexia nervosa and complex forms of narcissism. Their findings suggest that there is a positive correlation between orthorexia nervosa and narcissism. It suggests that vulnerable narcissism has a major impact on developing orthorexia nervosa symptoms because of its connection with lower self-esteem (Bandi et al., 2019). There is link between lower self-esteem and orthorexia nervosa (Bona et al., 2021). Individuals' perfect diet may help them to overcompensate for their low self-worth (Muscolino et al., 2015). Narcissistic personalities also struggle with maintaining their self-esteem. They generally have a fragile sense of self (McWilliams, 2011). There is a relationship between lower self-esteem and eating disorders (Mantilla et al., 2015; Cervera et al., 2003). The positive relationship between separation-individuation and orthorexia nervosa is consistent with the literature since orthorexia nervosa has eating disorder characteristics. Narcissistically structured people have lower levels of self-esteem or self-coherence (McWilliams, 2011). The low levels of self-esteem also can be related with early difficulties in separation-individuation process (Aslan, 2013) and development of orthorexia nervosa (Bona et al., 2021). Individuals with lower self-esteem are more vulnerable to developing eating disorders (Mora et al., 2022). Low self-esteem is the common denominator for development of eating disorders (Colmsee et al., 2021). Lower self-esteem is also a predictor for orthorexia nervosa (Oberle et al., 2017). In the light of the literature vulnerable narcissism characteristic low self-esteem plays an important role on both separation individuation disturbance and orthorexia nervosa. In the light of psychotherapy process the findings of the thesis have various implications for early relationships with caregivers, eating attitudes and personality disorders. Findings suggest

that separation-individuation issues indicate higher levels of vulnerable narcissism and lower levels of orthorexia nervosa.

### **Clinical Implications**

In a clinical setting it can be viewed as when a person cannot achieve this separate and autonomous self, they could be more vulnerable to developing personality disorders such as narcissistic personalities. This study showed that orthorexia nervosa has a positive relationship with both separation-individuation issues and vulnerable narcissism. In clinical setting orthorexia nervosa could be investigated from self-esteem dimension and, the way early childhood experiences affect its development later into adulthood. The most important implication of this study is the significance of how early childhood relationships could affect the way a person builds his or her personality and eating attitude.

### **Limitations and Future Directions**

The data collected from 238 participants: 198 female, 39 male and 1 other. The generalizability of our findings to general population is very limited due to low number of participants who are mainly females. In later research increased and balanced number of male and female participants could be more beneficial to examine the relationship between the variables. The data collected online by using self-report questionnaires forms. The absence of face-to-face communication during the data collection process could have prevented us from assessing participants' objectivity. The participants could have given more desirable answers. In later researchers adding a face-to-face interaction with the participants could help to limit possible unobjectively problem. The general population used in this study. The use of clinical sample group could be more beneficial to understand the orthorexia nervosa and vulnerable narcissism relationship with separation - individuation issues. The clinical sample could be helpful to have more in depth understanding of how early relationships could have effect on both orthorexia nervosa and vulnerable narcissism.

### **CONCLUSION**

This study examined the mediating role of vulnerable narcissism between the separation-individuation process and orthorexia nervosa. The vulnerable narcissism is found to have a mediating relationship between variables. According to our results, there is a positive and

significant relationship is found between separation-individuation, orthorexia nervosa, and vulnerable narcissism. To our knowledge, it is the only study that examined the mediating role of vulnerable narcissism on separation-individuation and orthorexia nervosa. This study also only examined Turkish culture. The current study contributes to the literature by trying to understand the relationship between these variables. Further studies should also use more varied participant groups by gender and other cultures should be looked at as well.

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## Tables and Figures

### Tables

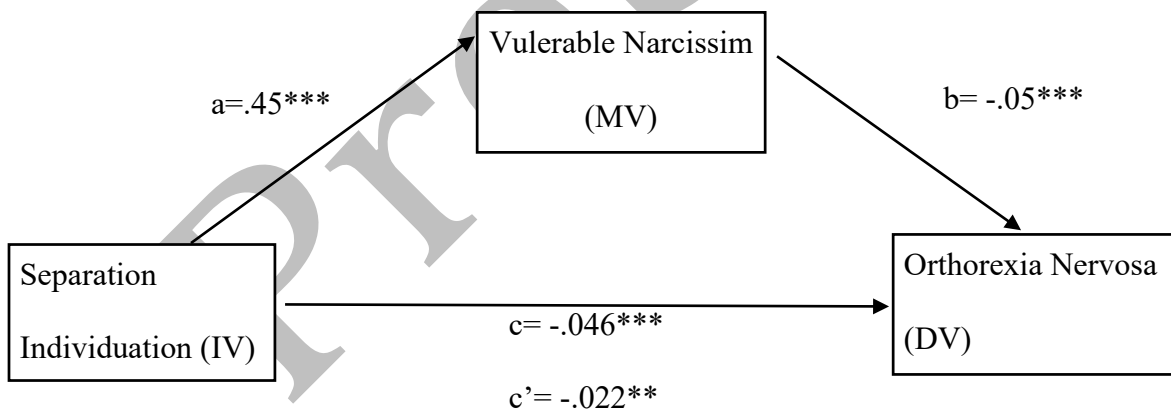
**Table 1.**

*Correlational Findings between the Study Variables N (= 238)*

	1	2	3
Separation	1	-.535**	.735**
Individuation			
Orthorexia Nervosa	-.535**	1	-.570**
Vulnerable	.735**	-.570**	1
Narcissism			

\*\*p<0.01

### Figures



\*\*\*p<.00, \*\*p<.01

Figure 1. *Mediation analysis with separation individuation, orthorexia nervosa and vulnerable narcissism*

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