

A Structural Model of Compassionate Love for Humanity Based on Narcissistic Status: The Mediating Role of Self-Differentiation

Atousa. Malekabadi¹, Roshanak. Khodabakhsh Pirkalani^{2*}, Ghazal. Zandkarimi³

¹ Department of Psychology, SR.C, Islamic Azad University, Tehran, Iran

² Associate Professor, Department of Psychology, Faculty of Education and Psychology Alzahra University, Tehran, Iran

³ Associate Professor, Refah Nonprofit University, Tehran, Iran

* Corresponding author email address: rkhodabakhsh@alzahra.ac.ir

Article Info

Article type:

Original Research

Section:

Clinical Psychology

How to cite this article:

Malekabadi, A., Khodabakhsh Pirkalani, R., & Zandkarimi, G. (2027). A Structural Model of Compassionate Love for Humanity Based on Narcissistic Status: The Mediating Role of Self-Differentiation. *KMAN Counseling and Psychology Nexus*, 5, 1-15.

<http://doi.org/10.61838/kman.psynexus.6344>



© 2027 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

This study aimed to test a structural model of compassionate love for humanity based on narcissistic status, with self-differentiation as a mediating variable among university students. This descriptive, cross-sectional correlational study was conducted using structural equation modeling. The statistical population consisted of university students in Tehran during the 2023–2024 academic year, from whom 300 participants were selected using purposive and convenience sampling based on predefined inclusion and exclusion criteria. Data were collected using the Brief Pathological Narcissism Inventory, the Differentiation of Self Inventory, and the Revised Short Compassionate Love Scale for Humanity. Descriptive statistics and Pearson correlation coefficients were calculated using SPSS version 26, and the proposed structural model was evaluated using AMOS version 24 with maximum likelihood estimation. Model fit was assessed using χ^2/df , RMSEA, CFI, NFI, GFI, and AGFI indices, and indirect effects were examined through mediation analysis. The structural model demonstrated satisfactory fit ($\chi^2/df = 1.76$, RMSEA = .05, CFI = .98, NFI = .96, GFI = .95, AGFI = .92). Grandiose narcissism did not have a significant direct effect on compassionate love for humanity ($\beta = -0.02$, $p = .329$), and the direct effect of vulnerable narcissism was also nonsignificant ($\beta = 0.03$, $p = .168$). Self-differentiation had a significant positive direct effect on compassionate love for humanity ($\beta = 0.44$, $p < .001$). Grandiose narcissism showed a significant negative indirect effect on compassionate love through self-differentiation ($\beta = -0.08$, $p = .001$), and vulnerable narcissism also had a significant negative indirect effect through self-differentiation ($\beta = -0.02$, $p = .010$). Self-differentiation appears to be a key psychological mechanism linking narcissistic status to compassionate love for humanity, such that higher differentiation is associated with greater compassion and mediates the negative indirect effects of both grandiose and vulnerable narcissism.

Keywords: Compassionate love for humanity; Narcissism; Grandiose narcissism; Vulnerable narcissism; Self-differentiation.

1. Introduction

Compassionate love for humanity refers to a broad and enduring orientation toward the welfare of other people that extends beyond close interpersonal bonds and includes concern for strangers, sensitivity to suffering, motivation to alleviate distress, and willingness to act benevolently toward humanity in general. This construct differs from affection directed toward specific attachment figures because it reflects a generalized prosocial orientation grounded in empathy, care, and a sense of connectedness with others. Compassionate love has increasingly attracted attention in psychological research because it is associated with interpersonal adjustment, psychological well-being, prosocial motivation, and the capacity to respond constructively to the needs of others. Evidence suggests that compassionate concern is not merely an emotional reaction but is linked to broader processes of self-awareness, self-regulation, and self-transcendence that enable individuals to shift attention beyond immediate self-interest and respond to others in a balanced and meaningful manner (Miller & Verhaeghen, 2022). Research has also shown that compassionate love can contribute positively to psychological well-being across the lifespan, suggesting that caring for others may function as a meaningful interpersonal and psychological resource rather than simply an altruistic behavioral tendency (Kahana et al., 2021).

The psychological foundations of compassion have been examined particularly closely in relation to self-compassion, emotion regulation, personality processes, and self-evaluative functioning. Self-compassion involves responding to one's own suffering with kindness, balanced awareness, and recognition of shared human vulnerability rather than harsh self-judgment or isolation (Neff, 2023). Although self-compassion and compassionate love for humanity are distinct constructs, both involve a nondefensive orientation toward suffering and require the ability to regulate self-focused distress sufficiently to remain receptive to emotional experience. Reviews of self-compassion research have documented its associations with adaptive emotion regulation, psychological resilience, reduced self-criticism, and improved mental health (Neff, 2023). Similarly, self-awareness and self-regulation appear to provide important pathways through which compassionate responses emerge, because individuals must be able to recognize their own internal states without becoming dominated by them before they can effectively attend to the suffering of others (Miller & Verhaeghen,

2022). This conceptual overlap suggests that psychological structures regulating the boundaries between self and others may be particularly important in explaining individual differences in compassionate love for humanity.

Research has also demonstrated that compassion is shaped by stable individual differences. For example, studies examining personality and self-compassion have found meaningful associations between dispositional traits and the capacity for compassionate responding (Özer, 2022; Yang et al., 2023). Evidence from Iranian samples has similarly shown that self-compassion varies according to individual and demographic characteristics, supporting the view that compassionate functioning is not uniformly distributed across individuals (Noforosti et al., 2024). Self-compassion has also been examined as a mechanism through which personality-related processes are associated with behavioral and psychological outcomes (Zavardeh et al., 2024). These findings reinforce the importance of examining compassion within a broader structural model that includes self-related psychological characteristics rather than treating compassionate concern as an isolated disposition.

One psychological construct that may be especially relevant to compassionate love for humanity is narcissism. Narcissism is a multidimensional construct involving disturbances in self-regulation, self-esteem maintenance, interpersonal functioning, and the management of self-image. Contemporary conceptualizations distinguish between grandiose and vulnerable narcissism, which share a self-centered motivational core but differ substantially in their emotional and interpersonal expression (Miller et al., 2021). Grandiose narcissism is typically characterized by entitlement, superiority, dominance, exhibitionism, exploitativeness, and an inflated self-view, whereas vulnerable narcissism is associated with insecurity, hypersensitivity to criticism, shame, contingent self-worth, defensiveness, and negative emotionality. These dimensions should not be regarded as interchangeable because their associations with adaptation and interpersonal functioning may differ considerably (Yu et al., 2025). Indeed, recent evidence suggests that the interpersonal consequences of narcissism depend partly on the form of narcissism expressed and on contextual or regulatory factors that shape how narcissistic tendencies are translated into behavior (Yu et al., 2025).

Narcissistic functioning is particularly relevant to compassion because compassionate responding requires the ability to recognize the needs of others without consistently subordinating those needs to self-enhancement, self-

protection, or validation seeking. Empirical findings indicate that narcissistic traits can be associated with reduced other-directed compassion even when self-directed compassion is preserved or elevated, suggesting an imbalance between concern for oneself and concern for others (Freund et al., 2022). This distinction is important because it implies that narcissism may not simply reduce compassionate capacity globally; rather, it may selectively affect the direction and interpersonal expression of compassion. Research has also demonstrated associations among narcissism, self-compassion, self-worth, and self-evaluative processes, indicating that narcissistic characteristics may exist along a continuum involving different configurations of self-regard and self-directed kindness (Sarafraz et al., 2021). Additional work has shown that self-compassion can mediate relationships between self-esteem, emotional maturity, behavioral patterns, and narcissism, underscoring the relevance of regulatory and self-relational processes in narcissistic functioning (Mousavi & Khaleghipour, 2024).

The psychological mechanisms underlying grandiose and vulnerable narcissism differ in ways that may have implications for compassionate love. Grandiose narcissism is often supported by defensive processes that preserve superiority and protect an idealized self-image, whereas vulnerable narcissism is more closely associated with shame, insecurity, emotional instability, and hypersensitivity to perceived rejection (Kampe et al., 2021). Both forms may therefore interfere with other-oriented concern, but through different pathways. Grandiosity may diminish compassion through entitlement and self-enhancement, whereas vulnerability may restrict compassion by increasing self-focused distress and defensive attention. Recent research has found that emotions play an important role in explaining associations between grandiose and vulnerable narcissism and psychological symptoms, highlighting the regulatory significance of emotional processes in narcissistic functioning (Akıncı & Gençöz, 2025). Vulnerable narcissism has also been associated with emotion dysregulation and adverse psychological outcomes, further indicating that difficulties in managing emotional states may intensify the interpersonal consequences of narcissistic vulnerability (Ponzone et al., 2021).

Shame appears to be another central emotional process in narcissism. Young people with narcissistic traits may experience significant attachment-related difficulties when shame is activated, suggesting that interpersonal threat and self-conscious emotion can destabilize their relational

functioning (van Schie et al., 2021). Shame, guilt, and related self-evaluative emotions have also been examined in relation to dark and pathological personality characteristics and high-risk behavioral patterns, emphasizing their importance in understanding maladaptive self-regulation (Ghaderi Baghejan, 2022). Experimental evidence further shows that self-critical rumination can intensify shame and stress, demonstrating how repetitive negative self-focus may amplify emotional distress (Milia et al., 2021). These findings are relevant to compassionate love because persistent self-focused distress can consume attentional and regulatory resources that might otherwise support sensitivity to the needs of others.

The interpersonal consequences of pathological narcissism are also strongly connected with identity functioning. Evidence indicates that identity disturbance may be a central contributor to interpersonal problems among individuals with pathological narcissism (Biberdzic et al., 2023). When individuals lack a stable and coherent sense of self, interpersonal relationships may become organized around validation, fear of rejection, defensive withdrawal, or attempts to regulate self-esteem through others. Such patterns are conceptually incompatible with stable compassionate concern, which requires sufficient psychological security to engage with other people without excessive dependence on external validation. This perspective is consistent with findings showing that attachment plays an important role in emotional reactions to rejection among individuals with pathological narcissistic traits (Reis et al., 2021). Narcissistic characteristics have also been examined as mediators between attachment patterns and psychopathology, with vulnerable narcissism and self-compassion emerging as important intervening mechanisms (Set, 2021). Together, these findings suggest that the relationship between narcissistic status and compassionate love may depend on deeper processes governing self-definition, attachment, and emotional regulation.

A construct particularly well suited to capturing these processes is differentiation of self. Rooted in Bowen family systems theory, self-differentiation refers to the capacity to maintain a clear sense of identity while remaining emotionally connected to significant others. It involves balancing autonomy and intimacy, distinguishing thought from emotion, regulating emotional reactivity, maintaining a stable I-position, and avoiding excessive fusion or emotional cutoff. A comprehensive scoping review has shown that differentiation of self is a multidimensional

construct with significant implications for psychological functioning, relational adjustment, and mental health (Calatrava et al., 2022). Higher differentiation is generally associated with greater emotional stability and more adaptive interpersonal functioning, whereas lower differentiation is characterized by greater reactivity, fusion, dependence on others' approval, and withdrawal in response to relational stress.

The relevance of self-differentiation to young adults and university students is especially notable because this developmental period involves increasing autonomy alongside continued dependence on close relational systems. Research among young adults has shown that family functioning and differentiation of self are significantly related to anxiety, indicating that the ability to maintain emotional autonomy within relationships is closely tied to psychological adjustment (Dolz-Del-Castellar & Oliver, 2021). Iranian qualitative research has further highlighted the contextual and relational conditions that shape differentiation of self within Iranian families, emphasizing that differentiation develops within specific cultural and family processes rather than as an exclusively individual characteristic (Seyedmajidi et al., 2025). Other Iranian research has found that differentiation of self is associated with personality dimensions and religiosity, supporting the view that differentiation is embedded within broader patterns of psychological and value-based functioning (Aysham & Mousavipour, 2023).

Self-differentiation may be particularly important in the relationship between narcissism and compassionate love because it directly addresses the regulation of self–other boundaries. Individuals with high differentiation can remain emotionally engaged with others while preserving a stable self-concept and tolerating relational disagreement or distress. This capacity may reduce the need to rely on narcissistic defenses, external validation, or emotional withdrawal. In contrast, poorly differentiated individuals may be more vulnerable to interpersonal threat because their self-esteem and emotional stability depend more strongly on others' responses. Consistent with this interpretation, research has shown that vulnerable narcissism can mediate the relationship between differentiation of self and internal distress (Hosack et al., 2023). This finding suggests that lower differentiation may create conditions under which narcissistic vulnerability becomes more psychologically consequential.

The relationship between differentiation and compassion is also supported by emerging evidence. Research among

married students has reported a meaningful association between differentiation of self and self-compassion, suggesting that greater differentiation may facilitate a more balanced and accepting relationship with oneself (Dabbagh et al., 2023). Because both self-compassion and compassionate love require emotional openness without overidentification, differentiation may provide a foundational regulatory capacity that supports compassionate responding in multiple directions. Individuals who can recognize their own emotions without being overwhelmed by them may be better able to remain available to the emotional experiences of other people. Conversely, high emotional reactivity, fusion, or emotional cutoff may interfere with compassion by increasing defensiveness, dependence, or avoidance.

The potential mediating role of self-differentiation becomes even more plausible when narcissism is considered as a disturbance in the balance between self-focus and interpersonal relatedness. Pathological narcissism often involves either exaggerated self-importance or fragile self-worth, and both can create difficulties in maintaining stable relationships. Self-differentiation may function as an intermediate regulatory process through which narcissistic characteristics influence compassionate concern. For example, an individual with grandiose traits may be less likely to exploit or dismiss others when possessing a stable sense of self that does not depend heavily on dominance or superiority. Similarly, an individual with vulnerable narcissistic tendencies may remain more emotionally available to others when capable of tolerating criticism and relational tension without becoming overwhelmed by shame or rejection sensitivity.

Research on mentalization and self-compassion also supports the importance of intermediate self-regulatory processes in narcissism. In men, self-compassion and mentalization have been found to mediate associations between idealistic expectations, alexithymia, and narcissism, suggesting that reflective awareness of mental states and compassionate self-relating can influence narcissistic functioning (Almasi Koupayi & Khaleghipour, 2025). Related findings indicate that self-compassion is associated with narcissism in multiple relational contexts and may help explain how self-esteem and emotional maturity are connected to narcissistic characteristics (Mousavi & Khaleghipour, 2024). Research on self-objectification has also identified meaningful relationships among self-compassion and narcissism in women seeking cosmetic surgery, highlighting the broader relevance of self-

evaluative processes to narcissistic self-presentation and bodily self-perception (Behrouzizadeh et al., 2023).

Compassion itself is increasingly understood as a regulatory capacity rather than solely as a moral or emotional disposition. In organizational psychology, self-compassion has been conceptualized as an adaptive resource that may reduce distress and support constructive functioning under challenging conditions (Dodson & Heng, 2022). Broader research on compassion, self-criticism, and dark personality traits has likewise shown that compassionate and self-critical processes are related to emotion regulation and maladaptive behavioral outcomes (Sharpe et al., 2024). These findings suggest that the ability to respond compassionately may depend substantially on how individuals regulate threat, shame, self-evaluation, and emotional vulnerability. Such processes are directly relevant to narcissistic functioning and differentiation of self.

The interpersonal context in which these variables operate is also important. Interpersonal sensitivity and perceived social support have been identified as meaningful factors in behavioral and psychological adjustment, suggesting that relational resources can alter the impact of heightened sensitivity on maladaptive outcomes (Tahmasebi et al., 2021). Narcissistic vulnerability similarly involves heightened interpersonal sensitivity, while low self-differentiation increases susceptibility to relational pressure. These converging findings indicate that the capacity to maintain stable self-functioning within emotionally significant relationships may determine whether individuals respond to interpersonal challenges with defensiveness and self-focus or with greater openness and compassion.

Culture may further shape the expression of narcissism and interpersonal functioning. Research comparing independent and interdependent cultural contexts has shown that narcissistic traits can manifest differently depending on cultural norms concerning autonomy, relatedness, and self-definition (Jauk et al., 2021). This is particularly relevant when examining Iranian university students, whose relational development occurs within a cultural context that places substantial emphasis on family bonds, social interdependence, and interpersonal obligations. The culturally situated nature of differentiation of self documented in Iranian families further reinforces the importance of examining these variables within the local context rather than assuming that findings from Western samples generalize directly (Seyedmajidi et al., 2025). Accordingly, a structural model incorporating narcissism, self-differentiation, and compassionate love may provide a

culturally relevant account of how self-regulatory and relational processes are associated with generalized compassion.

The measurement of compassionate love toward humanity has also advanced through the development and validation of concise psychometric instruments. The Persian short revised version of the Compassionate Love Scale for Humanity has demonstrated acceptable psychometric properties, providing a culturally appropriate means of assessing generalized compassionate concern in Iranian populations (Ghorbani et al., 2022). This development makes it possible to investigate compassionate love empirically alongside established measures of narcissism and self-differentiation. At the same time, the available literature shows that these constructs have largely been studied separately: narcissism has frequently been examined in relation to psychopathology, shame, attachment, self-compassion, and emotion dysregulation (Akinci & Gençöz, 2025; Kampe et al., 2021; Ponzoni et al., 2021; Reis et al., 2021), whereas self-differentiation has primarily been studied in relation to family functioning, anxiety, psychological distress, and relational adjustment (Calatrava et al., 2022; Dolz-Del-Castellar & Oliver, 2021; Hosack et al., 2023). Much less attention has been devoted to integrating these constructs into a single explanatory framework focused specifically on compassionate love for humanity.

This gap is important because direct associations between narcissistic traits and compassion may not capture the full psychological process. Individuals with similar levels of narcissistic grandiosity or vulnerability may differ considerably in their ability to regulate emotions, maintain relational boundaries, tolerate criticism, and preserve a coherent sense of self. Self-differentiation may therefore help explain why narcissistic status is associated with compassionate love in some individuals more strongly than in others. A mediation model can clarify whether narcissistic tendencies are related to compassionate love partly through their association with the individual's capacity for emotional autonomy and connectedness. Such a model is theoretically consistent with current evidence linking narcissism to emotional and interpersonal regulation and differentiation to psychological and relational adaptation (Biberdzic et al., 2023; Hosack et al., 2023).

Accordingly, the aim of the present study was to test a structural model of compassionate love for humanity based on narcissistic status, with self-differentiation as a mediating variable among university students.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a descriptive, cross-sectional correlational design and used structural equation modeling (SEM) to examine the structural relationships among narcissistic status, self-differentiation, and compassionate love for humanity, with self-differentiation considered as a mediating variable. The statistical population consisted of all students enrolled at universities located in Tehran, Iran, during the 2023–2024 academic year. Considering the analytical requirements of structural equation modeling and the necessity of an adequate sample size for obtaining stable parameter estimates, a sample of 300 university students was included in the study. Methodological recommendations concerning multivariate analyses indicate that SEM and factor-analytic procedures require relatively large samples, with a sample of approximately 200 participants generally regarded as acceptable and a sample of approximately 300 participants regarded as adequate for obtaining more stable estimates. Accordingly, a sample size of 300 was considered sufficient for testing the proposed structural model. Participants were recruited using purposive and convenience sampling procedures according to predefined eligibility criteria. The inclusion criteria were being enrolled as a student at a university in Tehran during the study period, being at least 18 years old, providing voluntary informed consent to participate, and completing the study questionnaires carefully and in their entirety. The exclusion criteria consisted of voluntary withdrawal at any stage of data collection, substantial missing responses, incomplete questionnaires, evidence of invalid response patterns such as providing identical responses to nearly all items or responding randomly, and data judged to be unreliable because of insufficient cooperation or nonserious responding. Following the necessary institutional and ethical approvals, eligible students were invited to participate through direct access at universities as well as through student groups and social media platforms. Before completing the questionnaires, participants received information regarding the purpose of the study, voluntary nature of participation, confidentiality of their responses, anonymity of the collected information, and their right to withdraw from the study at any time without any consequences. Written or electronically documented informed consent was obtained before participation. The questionnaires were administered in a self-report format, and participants completed the measures of narcissistic status,

self-differentiation, and compassionate love for humanity. Questionnaires containing substantial missing data or clearly invalid response patterns were excluded before statistical analysis.

2.2. Instruments

Differentiation of Self Inventory. Self-differentiation was assessed using the Differentiation of Self Inventory developed by Skowron and Friedlander on the basis of Bowen family systems theory. The instrument is a self-report measure designed to assess individuals' capacity to maintain a clearly defined sense of self while remaining emotionally connected to significant others, particularly within close and family relationships. The questionnaire contains 46 items and assesses four dimensions of differentiation: emotional reactivity, emotional cutoff, I-position, and fusion with others. Items are rated on a 6-point Likert-type scale, producing a total score ranging from 46 to 276, with designated items reverse-scored before calculation of the total score. Higher total scores indicate a higher level of self-differentiation, whereas lower scores reflect greater emotional dependence, reactivity, fusion, or difficulty in maintaining an autonomous sense of self in interpersonal relationships. Previous Iranian psychometric evaluations have supported the content, face, and criterion validity of the instrument and have reported acceptable internal consistency, with Cronbach's alpha coefficients exceeding .70. The instrument was therefore used in the present study to operationalize the proposed mediating construct of self-differentiation.

Brief Pathological Narcissism Inventory. Narcissistic status was assessed using the Brief Pathological Narcissism Inventory, a shortened version of the original 52-item Pathological Narcissism Inventory developed by Pincus and colleagues. The brief version was developed by Schoenleber and colleagues in collaboration with Pincus to provide a more efficient assessment of pathological narcissism while retaining the conceptual structure of the original measure. The instrument consists of 28 self-report items rated on a 6-point Likert-type scale ranging from responses indicating that a statement is "not at all like me" to "very much like me." The scale assesses two broad dimensions of pathological narcissism, namely narcissistic grandiosity and narcissistic vulnerability, through seven component domains. Grandiose narcissism is represented by exploitativeness, self-sacrificing self-enhancement, and grandiose fantasy, whereas vulnerable narcissism is

represented by contingent self-esteem, hiding the self, devaluing, and entitlement rage. Higher scores indicate a greater degree of pathological narcissistic characteristics. Research on the brief version has demonstrated satisfactory internal consistency, with reliability coefficients for the subscales generally exceeding .71, and its factorial structure has shown substantial correspondence with that of the original full-length instrument. The psychometric properties of the scale have also been examined in an Iranian population, with confirmatory factor analysis supporting the grandiose and vulnerable dimensions. Reported reliability coefficients for the subscales have ranged approximately from .68 to .83, while Cronbach's alpha coefficients for the total scale and its components have ranged from .64 to .83. A 15-day test-retest reliability coefficient of approximately .98 has also been reported, supporting the temporal stability of the measure.

Revised Short Compassionate Love for Humanity Scale. Compassionate love for humanity was measured using the revised short form of the Compassionate Love Scale for Humanity. The original Compassionate Love Scale was developed by Sprecher and Fehr in 2005, and the shortened revised version was introduced by Chiesi and colleagues in 2020. The short form consists of nine items selected from the original 21-item version and retains a unidimensional structure. The scale assesses compassionate concern and altruistic orientation toward humanity, including feelings of care toward strangers, willingness to engage in selfless concern for others, and motivation to provide help and support to people beyond one's immediate interpersonal network. Each item is rated on a 7-point Likert-type scale ranging from 1, indicating that the statement is "not at all true of me," to 7, indicating that it is "very true of me." Higher scores represent a greater degree of compassionate love for humanity. In the validation study of the short form, the instrument demonstrated excellent internal consistency, with a Cronbach's alpha coefficient of approximately .91. Evidence of convergent validity was also reported through positive associations with self-esteem, positive affect, and life satisfaction, whereas negative correlations with negative affect and anxiety supported discriminant validity. The measure has also been psychometrically evaluated in Iranian samples, and satisfactory internal consistency has been reported, including a Cronbach's alpha coefficient of approximately .88 for the total score. In the present study, the scale was used as the primary measure of the outcome construct, compassionate love for humanity.

2.3. Data analysis

Data analysis was conducted using both descriptive and inferential statistical procedures. Initially, the collected questionnaires were screened for completeness, response validity, and data-entry accuracy, and questionnaires with substantial missing values or clearly invalid response patterns were excluded from the final dataset. Descriptive statistics, including the mean, standard deviation, minimum and maximum values, range, skewness, and kurtosis, were calculated to summarize the distributions of the principal study variables. The distributional characteristics of the observed variables were examined before conducting the structural analyses to determine whether the data adequately satisfied the assumptions required for maximum likelihood estimation. Pearson product-moment correlation coefficients were then calculated to examine the preliminary bivariate relationships among narcissistic status, self-differentiation, and compassionate love for humanity. Descriptive statistics and correlation analyses were conducted using IBM SPSS Statistics version 26.

The hypothesized model was subsequently tested using structural equation modeling in AMOS version 24. Maximum likelihood estimation was applied to estimate the parameters of the model. The analytical model specified narcissistic status as the predictor variable, compassionate love for humanity as the outcome variable, and self-differentiation as the mediating variable. The SEM procedure was used to estimate both the direct association between narcissistic status and compassionate love for humanity and the indirect pathway operating through self-differentiation. Prior to interpretation of the structural paths, the adequacy of the measurement model was evaluated to determine whether the observed indicators represented their corresponding latent constructs satisfactorily. The structural model was then examined on the basis of the estimated standardized path coefficients, their statistical significance, and the overall goodness of fit of the proposed model. Model fit was evaluated using multiple indices rather than relying solely on the chi-square statistic because chi-square is sensitive to sample size. The indices included the chi-square to degrees-of-freedom ratio (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Normed Fit Index (NFI), Incremental Fit Index (IFI), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), and Root Mean Square Error of Approximation (RMSEA). A χ^2/df value below 5 was considered indicative of an acceptable fit, while values of the incremental and comparative fit indices

approaching .90 or higher and lower RMSEA values were interpreted as evidence of satisfactory model fit. The mediating effect of self-differentiation was examined by estimating the indirect effect of narcissistic status on compassionate love for humanity through self-differentiation using a bootstrap procedure. Bootstrap confidence intervals were used to determine the statistical significance of the indirect pathway; an indirect effect was considered statistically significant when its confidence interval did not include zero. Statistical significance for the primary analyses was evaluated at an alpha level of .05.

Table 1

Descriptive Statistics for the Study Variables

Variable	Mean	SD	Skewness	Kurtosis
Grandiose narcissism	62.40	12.60	0.199	-0.107
Vulnerable narcissism	84.80	15.30	-0.220	0.301
Fusion with others	39.10	7.42	-0.010	-0.149
I-position	37.90	7.24	0.124	0.025
Emotional cutoff	38.30	7.06	-0.070	0.001
Emotional reactivity	38.40	7.02	0.130	0.003
Total self-differentiation	153.90	27.60	0.030	-0.028
Compassionate love for humanity	35.09	6.90	0.166	0.607

As shown in Table 1, the mean scores for grandiose and vulnerable narcissism were 62.40 (SD = 12.60) and 84.80 (SD = 15.30), respectively. The mean scores for the four dimensions of self-differentiation were 39.10 (SD = 7.42) for fusion with others, 37.90 (SD = 7.24) for I-position, 38.30 (SD = 7.06) for emotional cutoff, and 38.40 (SD = 7.02) for emotional reactivity, while the mean total self-differentiation score was 153.90 (SD = 27.60). The mean score for compassionate love for humanity was 35.09 (SD = 6.90). The absolute values of skewness and kurtosis for all study variables were well below 3, indicating that their univariate distributions did not show substantial departures from normality.

Prior to structural equation modeling, the data were screened for missing values, outliers, normality, linearity, and multicollinearity. Missing observations were identified for grandiose narcissism (9 values), vulnerable narcissism (6 values), fusion with others (5 values), I-position (7 values), emotional reactivity (4 values), emotional cutoff (8 values), and compassionate love for humanity (3 values), and these missing values were replaced using the median of the corresponding variable. Standardized scores were subsequently examined to identify univariate outliers, using

3. Findings and Results

The study included 300 university students with a mean age of 32.20 years (SD = 7.60), ranging from 18 to 45 years. Regarding educational level, 161 participants (53.7%) were undergraduate students, 101 (33.7%) were master's students, and 38 (12.7%) were doctoral students. In terms of gender, 147 participants (49.0%) were women and 153 (51.0%) were men. Regarding employment status, 127 participants (42.3%) were employed, whereas 173 (57.7%) were unemployed. With respect to marital status, 134 participants (44.7%) were single, 139 (46.3%) were married, and 27 (9.0%) reported another marital status.

$|z| > 2.58$ as the criterion. Outlying observations were detected for grandiose narcissism ($n = 2$, maximum $|z| = 4.16$), vulnerable narcissism ($n = 2$, maximum $|z| = 4.21$), fusion with others ($n = 6$, maximum $|z| = 3.79$), I-position ($n = 5$, maximum $|z| = 4.13$), emotional reactivity ($n = 4$, maximum $|z| = 4.02$), emotional cutoff ($n = 2$, maximum $|z| = 3.73$), and compassionate love for humanity ($n = 3$, maximum $|z| = 3.66$); these values were replaced by the mean of the respective variable. Univariate normality was supported by skewness and kurtosis values falling within the ± 3 range, while multivariate normality was supported by a Mardia multivariate kurtosis coefficient of 2.80, which was below the criterion value of 5. Inspection of the scatterplots supported the assumption of approximately linear relationships among the variables. Multicollinearity was also evaluated using tolerance and variance inflation factor indices. For the self-differentiation dimensions, tolerance values ranged from .119 to .134 and VIF values ranged from 7.47 to 8.42, whereas the narcissism dimensions showed substantially lower VIF values. Because all tolerance values exceeded .10 and all VIF values remained below 10, no severe multicollinearity was identified. Collectively, these findings indicated that the principal assumptions required for

maximum likelihood structural equation modeling were adequately satisfied.

The proposed structural model demonstrated satisfactory overall fit to the observed data. The chi-square to degrees-of-freedom ratio was 1.76, which was below the recommended upper threshold of 3. The RMSEA was .05, indicating a small approximation error. The comparative and incremental fit indices were also satisfactory, with CFI = .98 and NFI = .96. In addition, the GFI was .95 and the AGFI

was .92. Taken together, these indices indicated that the hypothesized structural model adequately represented the observed covariance structure. The measurement component for self-differentiation was also statistically supported, as fusion with others, I-position, emotional cutoff, and emotional reactivity loaded significantly on the self-differentiation construct (all $p = .001$), providing support for use of the latent self-differentiation variable in the structural model.

Table 2

Direct and Indirect Path Effects in the Structural Model

Predictor	Outcome	Effect	Standardized β	Test statistic	p
Grandiose narcissism	Compassionate love for humanity	Direct	-0.02	-0.09	.329
Vulnerable narcissism	Compassionate love for humanity	Direct	0.03	1.38	.168
Self-differentiation	Compassionate love for humanity	Direct	0.44	7.30	< .001
Grandiose narcissism	Compassionate love for humanity	Indirect through self-differentiation	-0.08	-3.29	.001
Vulnerable narcissism	Compassionate love for humanity	Indirect through self-differentiation	-0.02	-2.58	.010

As presented in Table 2, neither dimension of narcissism had a statistically significant direct effect on compassionate love for humanity. The direct effect of grandiose narcissism was negative but nonsignificant ($\beta = -0.02$, test statistic = -0.09, $p = .329$), while the direct effect of vulnerable narcissism was positive and nonsignificant ($\beta = 0.03$, test statistic = 1.38, $p = .168$). In contrast, self-differentiation had a positive and statistically significant direct effect on compassionate love for humanity ($\beta = 0.44$, test statistic = 7.30, $p < .001$), indicating that higher self-differentiation was associated with greater compassionate love for humanity. The mediation analysis further showed that grandiose narcissism had a significant negative indirect effect on compassionate love for humanity through self-differentiation ($\beta = -0.08$, test statistic = -3.29, $p = .001$). Vulnerable narcissism likewise demonstrated a significant negative indirect effect through self-differentiation ($\beta = -0.02$, test statistic = -2.58, $p = .010$). Thus, although the direct paths from both narcissism dimensions to compassionate love for humanity were nonsignificant, their indirect effects through self-differentiation were statistically significant, supporting the mediating role of self-differentiation in the association between narcissistic status and compassionate love for humanity.

4. Discussion

The present study examined a structural model of compassionate love for humanity based on narcissistic status, with self-differentiation considered as a mediating

variable among university students. The overall structural model demonstrated satisfactory fit, indicating that the proposed relationships among grandiose narcissism, vulnerable narcissism, self-differentiation, and compassionate love for humanity were empirically compatible with the observed data. The findings showed that neither grandiose narcissism nor vulnerable narcissism had a statistically significant direct effect on compassionate love for humanity. In contrast, self-differentiation had a positive and significant direct effect on compassionate love for humanity. More importantly, both grandiose and vulnerable narcissism showed significant negative indirect effects on compassionate love for humanity through self-differentiation. Thus, the findings suggest that narcissistic status may be associated with compassionate love primarily through its relation to the individual's level of self-differentiation rather than through a simple direct pathway.

The absence of significant direct effects of grandiose and vulnerable narcissism on compassionate love for humanity is noteworthy. At first glance, this finding may appear inconsistent with the assumption that narcissistic characteristics are necessarily associated with reduced concern for others. However, contemporary research increasingly suggests that narcissism is multidimensional and that its interpersonal consequences are not uniformly negative or expressed in the same way across individuals and contexts. Grandiose and vulnerable narcissism share a self-focused core but differ markedly in emotional regulation, self-esteem dynamics, interpersonal style, and sensitivity to

threat (Miller et al., 2021). Recent evidence also indicates that the adaptive or maladaptive interpersonal consequences of narcissism may depend on moderating and regulatory factors rather than emerging as direct and invariant effects (Yu et al., 2025). Accordingly, the nonsignificant direct paths found in the present study may indicate that narcissistic tendencies alone are insufficient to explain generalized compassionate concern toward humanity.

This interpretation is consistent with evidence showing that narcissistic traits may have differentiated relationships with compassion depending on whether compassion is directed toward oneself or toward others. Freund and colleagues reported that narcissistic characteristics may coexist with relatively preserved self-directed compassion while being associated with reduced compassion toward others, suggesting an imbalance in the direction of compassionate responding rather than a simple global deficit (Freund et al., 2022). Similarly, research on the continuum of narcissism, self-worth, and self-compassion has shown that the relationship between narcissistic characteristics and compassionate processes is complex and depends on how self-evaluation and self-regulation are organized (Sarafraz et al., 2021). Therefore, the absence of a direct effect on compassionate love for humanity in the present model may reflect the fact that the consequences of narcissism become evident only when the intervening relational and regulatory processes are taken into account.

The findings regarding vulnerable narcissism are also compatible with previous evidence emphasizing the role of emotional processes. Vulnerable narcissism has been associated with heightened negative affect, shame, emotional instability, and psychological symptoms, while emotion dysregulation appears to be an important mechanism linking vulnerable narcissism to adverse outcomes (Akıncı & Gençöz, 2025; Ponzoni et al., 2021). Likewise, emotional reactions to rejection among individuals with pathological narcissistic traits are influenced by attachment-related processes (Reis et al., 2021). These findings suggest that vulnerable narcissism may not directly reduce compassion in every circumstance; instead, its effects may operate through difficulties in emotional regulation, attachment, self-definition, or relational security. This is highly consistent with the present finding that self-differentiation mediated the relationship between vulnerable narcissism and compassionate love for humanity.

A similar explanation can be applied to grandiose narcissism. Grandiose narcissism is generally associated

with superiority, entitlement, self-enhancement, interpersonal dominance, and defensive protection of a positive self-image, but these features may not invariably translate into reduced generalized compassion. Defense mechanisms have been shown to play a central role in both grandiose and vulnerable narcissism, suggesting that narcissistic expression is partly determined by how individuals manage threat and maintain self-coherence (Kampe et al., 2021). In addition, cultural factors can influence the expression of narcissistic tendencies, especially in contexts where independence and interdependence are valued differently (Jauk et al., 2021). Consequently, the interpersonal meaning of grandiose narcissism may differ across individuals and sociocultural environments, and its association with compassionate love may become apparent only through mechanisms that regulate the boundary between self and others.

The strongest direct finding in the present study was the positive effect of self-differentiation on compassionate love for humanity. Students with higher levels of self-differentiation tended to report greater compassionate love toward humanity. This result is theoretically coherent because self-differentiation involves the capacity to maintain a stable sense of self while remaining emotionally connected to others. Highly differentiated individuals are better able to regulate emotional reactions, distinguish thoughts from feelings, maintain personal convictions, and remain engaged in relationships without excessive fusion or emotional withdrawal. A comprehensive review of the construct has shown that differentiation of self is closely related to psychological adjustment, emotional functioning, and relational health (Calatrava et al., 2022). These capacities are directly relevant to compassionate love because generalized compassion requires emotional openness to others without becoming overwhelmed by their distress or losing one's own psychological boundaries.

The positive association between self-differentiation and compassionate love is also supported by findings linking differentiation of self to self-compassion. Dabbagh and colleagues found that higher self-differentiation was associated with greater self-compassion among married students (Dabbagh et al., 2023). Although self-compassion and compassionate love for humanity are distinct constructs, both require a balanced orientation toward emotional suffering, reduced self-criticism, and an ability to respond with understanding rather than defensiveness. Neff's broader theoretical and empirical work similarly suggests that compassion-related processes depend on balanced

awareness, emotional regulation, and reduced overidentification with distress (Neff, 2023). In this sense, self-differentiation may create the psychological conditions necessary for compassion by enabling individuals to remain connected to emotional experiences without becoming fused with them.

The present findings may also be explained through the self-regulatory components of compassion. Compassion is increasingly conceptualized as involving self-awareness, self-regulation, and self-transcendence rather than merely emotional sympathy (Miller & Verhaeghen, 2022). From this perspective, self-differentiation can be understood as a relational form of self-regulation that allows individuals to manage their own emotional responses while maintaining concern for others. When differentiation is high, individuals may be more capable of tolerating ambiguity, disagreement, rejection, and emotional intensity without responding through withdrawal, overdependence, or self-protective reactivity. These capacities may support more stable compassionate engagement with others, including strangers and members of the broader human community.

The significant negative indirect effect of grandiose narcissism on compassionate love through self-differentiation provides further support for this interpretation. This finding indicates that higher grandiose narcissistic tendencies were associated with lower compassionate love insofar as they were linked to lower levels of self-differentiation. One possible explanation is that grandiose narcissism may involve greater dependence on self-enhancement and external confirmation of superiority, which can interfere with the development of a stable and internally grounded sense of self. When self-definition depends heavily on status, admiration, or dominance, relational engagement may become more defensive or instrumental. Identity disturbance has been identified as a central contributor to interpersonal problems in pathological narcissism (Biberdzic et al., 2023), suggesting that difficulties in maintaining a coherent self may underlie dysfunctional interpersonal patterns. Self-differentiation may therefore represent one mechanism through which grandiose narcissism becomes associated with reduced compassionate orientation.

The significant negative indirect effect of vulnerable narcissism through self-differentiation is similarly understandable. Vulnerable narcissism is characterized by insecurity, shame, hypersensitivity, and unstable self-worth, all of which may make it difficult to maintain a stable sense of self under relational pressure. Evidence indicates that

vulnerable narcissism is associated with attachment difficulties, emotional responses to rejection, and internal distress (Reis et al., 2021; van Schie et al., 2021). Furthermore, Hosack and colleagues found that vulnerable narcissism mediated the relationship between differentiation of self and internal distress, directly demonstrating an empirical connection between self-differentiation and narcissistic vulnerability (Hosack et al., 2023). The present findings extend this literature by suggesting that self-differentiation may also function in the opposite explanatory direction within a broader structural model, helping to explain how vulnerable narcissism is associated with reduced compassionate love toward humanity.

Shame-related processes may also help explain the mediating mechanism. Individuals with vulnerable narcissistic tendencies may be especially reactive to experiences that threaten self-worth or expose perceived inadequacy. Shame can intensify self-focused attention and reduce psychological availability for the needs of others. Research has shown that narcissistic traits in young people are closely related to shame and attachment challenges (van Schie et al., 2021), while self-critical rumination has been found experimentally to increase both shame and stress (Milia et al., 2021). When such reactions occur in individuals with low differentiation, emotional distress may be more likely to result in fusion, withdrawal, defensiveness, or unstable self-positioning. These processes can reduce the capacity for sustained, nondefensive compassionate concern toward others.

The mediating role of self-differentiation is also consistent with studies showing that self-compassion and mentalization operate as mechanisms in narcissistic functioning. Almasi Koupayi and Khaleghipour found that self-compassion and mentalization mediated relationships between idealistic expectations, alexithymia, and narcissism in men (Almasi Koupayi & Khaleghipour, 2025). Mousavi and Khaleghipour likewise identified self-compassion as a mediator in relationships involving self-esteem, emotional maturity, behavioral patterns, and narcissism in couples (Mousavi & Khaleghipour, 2024). These studies support the broader proposition that narcissism affects psychological and interpersonal outcomes through regulatory processes rather than only through direct effects. The present findings contribute to this line of research by identifying self-differentiation as another potentially important mechanism linking narcissistic status to compassionate interpersonal orientation.

The result is also compatible with research emphasizing the importance of self-compassion in broader narcissistic and self-evaluative processes. Behrouzizadeh and colleagues reported relationships among self-compassion, narcissism, and self-objectification in women seeking cosmetic surgery (Behrouzizadeh et al., 2023). Set similarly demonstrated that narcissism, vulnerable narcissism, and self-compassion can serve mediating roles between attachment dimensions and psychopathology (Set, 2021). Together with the present findings, these studies suggest that the consequences of narcissistic functioning may depend heavily on how individuals organize self-awareness, emotional regulation, and self–other boundaries.

The current model may also be understood within the developmental context of university students. Young adulthood is a period in which identity, autonomy, intimate relationships, and family differentiation remain active developmental concerns. Research among young adults has shown that family functioning and differentiation of self are associated with anxiety and psychological adjustment (Dolz-Del-Castellar & Oliver, 2021). Iranian research has further shown that differentiation of self develops within specific family and cultural conditions (Seyedmajidi et al., 2025) and is associated with broader psychological and value-based characteristics (Aysham & Mousavipour, 2023). These findings are particularly relevant because Iranian university students often navigate increasing independence while remaining embedded in strong familial and relational networks. Under these conditions, the ability to maintain autonomy without emotional cutoff and connection without excessive fusion may be especially important for compassionate functioning.

The cultural dimension may further explain why direct narcissism–compassion pathways were not significant while indirect pathways through self-differentiation were. Narcissistic expression varies across cultural contexts characterized by different balances between independence and interdependence (Jauk et al., 2021). In a relationally oriented context, narcissistic tendencies may be constrained, reshaped, or expressed through family and interpersonal dynamics. Self-differentiation may therefore be particularly important as a mechanism through which narcissistic characteristics influence broader prosocial orientations. Rather than narcissism automatically translating into reduced concern for humanity, its effects may depend on whether individuals can maintain a coherent self while staying connected to others.

The findings also have implications for understanding compassion as an interpersonal resource. Compassionate love has been associated with improved psychological well-being, suggesting that concern for others may itself be beneficial to psychological functioning (Kahana et al., 2021). The validated Persian short form of the Compassionate Love Scale for Humanity has provided a reliable means of assessing this construct in Iranian populations (Ghorbani et al., 2022). The current results extend this literature by suggesting that compassionate love may be rooted partly in relational self-regulation. This is also consistent with broader evidence that compassionate and self-compassionate processes are related to emotion regulation, self-criticism, and personality characteristics (Özer, 2022; Sharpe et al., 2024; Yang et al., 2023). Accordingly, compassionate love may be better understood not simply as a moral tendency but as an outcome of how effectively individuals regulate self-related and interpersonal processes.

5. Conclusion

Overall, the present findings support a mediated rather than purely direct model. Grandiose and vulnerable narcissism did not independently predict compassionate love once the full structural model was considered, whereas both forms were indirectly associated with lower compassionate love through self-differentiation. Self-differentiation also showed a substantial positive direct association with compassionate love. These results suggest that the individual's ability to regulate emotional reactivity, maintain a stable I-position, avoid excessive fusion, and remain connected without resorting to emotional cutoff may be a central psychological mechanism linking narcissistic tendencies to generalized compassionate concern. This interpretation is consistent with evidence connecting self-differentiation to adjustment (Calatrava et al., 2022), vulnerable narcissism to relational and emotional difficulties (Hosack et al., 2023; Ponzoni et al., 2021), and compassion to self-regulation and self-transcendence (Miller & Verhaeghen, 2022). Therefore, the findings contribute to a more process-oriented understanding of narcissism by showing that its association with compassionate love toward humanity may depend substantially on the quality of self–other differentiation.

Several limitations should be considered when interpreting the findings. First, the cross-sectional correlational design does not permit conclusions regarding

temporal or causal relationships among narcissistic status, self-differentiation, and compassionate love for humanity. Although the structural model was theoretically specified and showed satisfactory fit, alternative directional models cannot be excluded. Second, all variables were assessed using self-report questionnaires, which may be affected by social desirability, self-presentation, response bias, and participants' level of insight into their own interpersonal functioning. This limitation may be particularly relevant for narcissistic characteristics and compassionate tendencies because both involve socially sensitive self-evaluations. Third, the sample consisted exclusively of university students in Tehran, which limits the generalizability of the findings to nonstudent populations, other age groups, individuals from different regions, and populations with different cultural or socioeconomic characteristics. Fourth, convenience and purposive sampling may have introduced selection bias and reduced representativeness. Finally, although the model focused on theoretically relevant variables, other factors such as attachment style, empathy, shame, emotion regulation, family functioning, perceived social support, and mentalization may also influence the relationships observed and were not included in the present structural model.

Future studies should employ longitudinal designs to determine the temporal ordering of narcissistic characteristics, self-differentiation, and compassionate love and to examine whether changes in differentiation predict subsequent changes in compassionate functioning. Experimental and intervention-based studies could also test whether enhancing self-differentiation leads to measurable improvements in compassionate orientation, particularly among individuals with elevated narcissistic vulnerability or grandiosity. Replication is recommended in more heterogeneous samples, including nonstudent adults, adolescents, married individuals, clinical groups, and participants from different cultural and regional backgrounds. Future structural models could incorporate attachment style, shame, emotion regulation, empathy, mentalization, family functioning, and social support to identify additional direct, mediating, and moderating mechanisms. It would also be useful to examine grandiose and vulnerable narcissism at the facet level rather than only as broad dimensions, as different narcissistic components may show distinct relationships with self-differentiation and compassionate love. Multi-method research using informant reports, behavioral tasks, clinician ratings, and ecological momentary assessment could reduce reliance on self-report

measures and provide a more comprehensive understanding of the interpersonal processes underlying compassion.

The findings suggest that programs aimed at strengthening compassionate interpersonal functioning may benefit from focusing on self-differentiation rather than attempting to address narcissistic characteristics only at the level of overt attitudes or behaviors. University counseling centers and psychological services could incorporate interventions designed to improve emotional regulation, clarify personal values and boundaries, strengthen a stable sense of self, reduce excessive emotional fusion, and decrease defensive emotional cutoff. Psychoeducational workshops for students may also help individuals distinguish healthy autonomy from interpersonal distancing and encourage the development of relationships characterized by both connection and psychological independence. For students showing marked narcissistic vulnerability, intervention may be especially useful when it focuses on tolerating criticism, managing shame, reducing rejection sensitivity, and maintaining self-worth without excessive dependence on external validation. For those showing stronger grandiose tendencies, work on interpersonal reciprocity, perspective taking, awareness of others' needs, and nondefensive self-reflection may be beneficial. More broadly, educational and counseling programs that cultivate stable self-definition together with emotional connectedness may provide a practical pathway for strengthening compassionate concern toward others and humanity as a whole.

Authors' Contributions

Authors equally contributed to this article.

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 would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

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

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

References

- Akıncı, İ., & Gençöz, T. (2025). How Do Grandiose and Vulnerable Narcissism Relate to Psychological Symptoms? The Role of Emotions. *Psychological Reports*, 128(5), 3108-3128. <https://doi.org/10.1177/00332941231197167>
- Almasi Koupayi, M., & Khaleghipour, S. (2025). The Mediating Role of Self-Compassion and Mentalization in the Relationship of Idealistic Expectations and Alexithymia with Narcissism in Men. *Behavioral Sciences Research*, 23(3), 486-506.
- Aysham, M. H., & Mousavipour, S. (2023). Predicting Differentiation of Self Based on Personality Dimensions and Religiosity. *Islam and Psychological Research*, 9(20), 129-148.
- Behrouzadeh, H., Chalmeh, R., & Khorramdel, K. (2023). Predicting Self-Objectification Based on Self-Compassion and Narcissism in Women Seeking Cosmetic Surgery. *Bandar Abbas*.
- Biberdzic, M., Tan, J., & Day, N. J. S. (2023). 'It's Not You, It's Me': Identity Disturbance as the Main Contributor to Interpersonal Problems in Pathological Narcissism. *Borderline personality disorder and emotion dysregulation*, 10(1), 3. <https://doi.org/10.1186/s40479-022-00209-6>
- Calatrava, M., Martins, M. V., Schweer-Collins, M., Duch-Ceballos, C., & Rodríguez-González, M. (2022). Differentiation of Self: A Scoping Review of Bowen Family Systems Theory's Core Construct. *Clinical psychology review*, 91, 102101. <https://doi.org/10.1016/j.cpr.2021.102101>
- Dabbagh, M., Mahmoudjanlou, M., & Farzi, H. (2023). Examining the Relationship between Differentiation of Self and Self-Compassion among Married Students.
- Dodson, S. J., & Heng, Y. T. (2022). Self-Compassion in Organizations: A Review and Future Research Agenda. *Journal of Organizational Behavior*, 43, 168-196. <https://doi.org/10.1002/job.2556>
- Dolz-Del-Castellar, B., & Oliver, J. (2021). Relationship between Family Functioning, Differentiation of Self and Anxiety in Spanish Young Adults. *PLoS One*, 16(3), e0246875. <https://doi.org/10.1371/journal.pone.0246875>
- Freund, V. L., Peeters, F., Meesters, C., Geschwind, N., Lemmens, L. H. J. M., Bernstein, D. P., & Lobbestael, J. (2022). Narcissistic Traits and Compassion: Embracing Oneself While Devoiding Others. *Frontiers in psychology*, 13, 914270. <https://doi.org/10.3389/fpsyg.2022.914270>
- Ghaderi Baghejan, K. (2022). *Structural Modeling of Self-Harm, Suicide, and High-Risk Behaviors among Youth in Tehran Based on Dark Traits, Vulnerable Dark Traits, and DSM-5 Proposed Pathological Personality Traits with the Mediation of Shame and Guilt Capacity* Allameh Tabataba'i University, Department of Clinical Psychology]. Tehran.
- Ghorbani, V., Mohammadpour, M., Foroughi, A. A., Mohebban, F., Derakhshani, M., & Soltanabadi, S. (2022). Psychometric Properties of the Persian Short Revised Version of the Compassionate Love Scale for Humanity. *Cognitive Psychology and Psychiatry*, 9(1), 95-105.
- Hosack, L. L., Welton, G. L., & Homan, K. J. (2023). Differentiation of Self and Internal Distress: The Mediating Roles of Vulnerable Narcissism and Maladaptive Perfectionism. *Clinical Social Work Journal*, 51, 65-75. <https://doi.org/10.1007/s10615-022-00851-1>
- Jauk, E., Breyer, D., Kanske, P., & Wakabayashi, A. (2021). Narcissism in Independent and Interdependent Cultures. *Personality and individual differences*, 177, 110716. <https://doi.org/10.1016/j.paid.2021.110716>
- Kahana, E., Bhatta, T. R., Kahana, B., & Lekhak, N. (2021). Loving Others: The Impact of Compassionate Love on Later-Life Psychological Well-Being. *The Journals of Gerontology: Series B*, 76(2), 391-402. <https://doi.org/10.1093/geronb/gbaa188>
- Kampe, L., Bohn, J., Remmers, C., & Hörz-Sagstetter, S. (2021). It's Not That Great Anymore: The Central Role of Defense Mechanisms in Grandiose and Vulnerable Narcissism. *Frontiers in Psychiatry*, 12, 661948. <https://doi.org/10.3389/fpsyg.2021.661948>
- Milia, C., Kolubinski, D. C., & Spada, M. M. (2021). The Effects of Self-Critical Rumination on Shame and Stress: An Experimental Study. *Behavioural and Cognitive Psychotherapy*, 49(3), 272-286. <https://doi.org/10.1017/S1352465820000727>
- Miller, J. D., Lynam, D. R., Hyatt, C. S., & Campbell, W. K. (2021). Controversies in Narcissism. *Annual Review of Clinical Psychology*, 17, 329-356.
- Miller, J. T., & Verhaeghen, P. (2022). Mind Full of Kindness: Self-Awareness, Self-Regulation, and Self-Transcendence as Vehicles for Compassion. *BMC psychology*, 10(1), 188. <https://doi.org/10.1186/s40359-022-00888-4>
- Mousavi, A. A., & Khaleghipour, S. (2024). The Mediating Role of Self-Compassion in the Relationship of Self-Esteem, Emotional Maturity, and Behavioral Patterns with Narcissism in Couples. *Islamic Research Journal of Women and Family*, 12(1), 1-15.
- Neff, K. D. (2023). Self-Compassion: Theory, Method, Research, and Intervention. *Annual review of psychology*, 74, 193-218. <https://doi.org/10.1146/annurev-psych-032420-031047>
- Noforosti, A., Moradi, H., & Amshkani, M. (2024). Self-Compassion in Iran: Predicting Self-Compassion Based on Demographic Factors. *Rooyesh-e-Ravanshenasi Journal*, 13(12), 205-214.
- Özer, E. (2022). Five Factor Personality Traits in Self-Compassion, Coping Strategies and Communication Skills. *Turkish Psychological Counseling and Guidance Journal*, 12(64), 131-153. <https://doi.org/10.17066/tpdrd.1096027>
- Ponzoni, S., Beomonte Zobel, S., Rogier, G., & Velotti, P. (2021). Emotion Dysregulation Acts in the Relationship between Vulnerable Narcissism and Suicidal Ideation. *Scandinavian journal of psychology*, 62, 468-475. <https://doi.org/10.1111/sjop.12730>
- Reis, S., Huxley, E., Eng Yong Feng, B., & Grenyer, B. F. S. (2021). Pathological Narcissism and Emotional Responses to Rejection: The Impact of Adult Attachment. *Frontiers in psychology*, 12, 679168. <https://doi.org/10.3389/fpsyg.2021.679168>

- Sarafraz, M. R., Amirbeigi, M., Ghasemi, O., & Firouzabadi, A. (2021). The Continuum Hypothesis of Narcissism, Self-Worth, and Self-Compassion. Jiroft.
- Set, Z. (2021). Mediating Role of Narcissism, Vulnerable Narcissism, and Self-Compassion in the Relationship between Attachment Dimensions and Psychopathology. *Alpha Psychiatry*, 22(3), 147-152.
- Seyedmajidi, S., Salehi, K., Madani, Y., & Shahmoradi, S. (2025). A Qualitative Study of the Conditions of Differentiation of Self in Iranian Families. *Counseling Culture and Psychotherapy*, 16(62), 1-36.
- Sharpe, E. E., Schofield, M. B., Roberts, B. L. H., Kamal, A., & Maratos, F. A. (2024). Exploring the Role of Compassion, Self-Criticism and the Dark Triad on Obesity and Emotion Regulation. *Current Psychology*, 43(13), 11972-11982. <https://doi.org/10.1007/s12144-023-05319-0>
- Tahmasebi, M., Baradaran, M., & Mirzaei, M. (2021). Moderating Role of Social Support in the Relationship between Interpersonal Sensitivity and Cyber Addiction.
- van Schie, C. C., Jarman, H. L., Reis, S., & Grenyer, B. F. S. (2021). Narcissistic Traits in Young People and How Experiencing Shame Relates to Current Attachment Challenges. *BMC psychiatry*, 21(1), 246. <https://doi.org/10.1186/s12888-021-03249-4>
- Yang, F., Hagiwara, C., Kotani, T., Hirao, J., & Oshio, A. (2023). Comparing Self-Esteem and Self-Compassion: An Analysis within the Big Five Personality Traits Framework. *Frontiers in psychology*, 14, 1302197. <https://doi.org/10.3389/fpsyg.2023.1302197>
- Yu, Q., Ren, Y., Zuo, C., Qiu, S., Zhang, F., Guo, S., & Huang, S. (2025). Is Narcissism Always Bad? Allostatic Load Moderates the Different Relationships between Grandiose and Vulnerable Narcissism and Adolescents' Interpersonal Adaptation. *Personality and individual differences*, 246, 113340. <https://doi.org/10.1016/j.paid.2025.113340>
- Zavardeh, S. Z. M., Ashoori, M., & Bazzazian, S. (2024). Self-Compassion in the Relationship between Personality Traits and Bedtime Procrastination. Shahid Sadoughi University of Medical Sciences.