Narcissism and Adult Attachment: A Multivariate Approach

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The primary purpose of this study was to examine the relationship between maladaptive narcissism, attachment anxiety, and attachment avoidance. The secondary objective of the present research was to explore further the differences between overt and covert forms of narcissistic vulnerability. Female participants (N = 171) completed measures of adult attachment, overt narcissism, and covert narcissism. Canonical correlation analysis (CCA) explored the multivariate relationship between overt and covert narcissism, on one hand, and adult attachment dimensions of anxiety and avoidance, on the other hand. CCA indicated the two linear combinations of variables overlapped significantly and shared about a quarter of their variance in common. The most important variable within the narcissism set was covert narcissism; and within the adult attachment set, both anxiety and avoidance were important, but the former more than the latter. The implications of the present findings are discussed in the context of past and future research on personality, attachment, and the experience of emotions.

According to theory and research in developmental and social psychology, attachment refers to characteristic patterns of experiencing relationships that stem from beliefs about the self and others originating in early childhood. Attachment theorists believe that the quality of the initial bond between caregiver and child plays a powerful role in determining the quality of that child’s future intimate relationships as a young adult and beyond. Within the personality and self-concept literature, early childhood experiences have also been implicated in the development of narcissism. The narcissism construct stems from psychodynamic theory and is most frequently described as a personality trait defined by a combination of grandiosity and vulnerability. Although narcissism and attachment have traditionally been examined from different perspectives, recent research suggests the two constructs may share a similar underlying structure (Brennan & Shaver, 1998; Feintuch, 1998). Pistole (1995) proposed that the different forms of insecure attachment, characterized by varying degrees of avoidance and/or anxiety, may actually have the same purpose in that they are manifestations of defense mechanisms employed by individuals high in narcissistic vulnerability. While a few studies have looked at the
relationship between attachment and narcissism, results so far have been somewhat inconclusive.

One reason for the lack of clear findings may be the failure to differentiate between two forms of maladaptive narcissism. According to Wink (1991), one form encompasses individuals who are overtly self-absorbed (i.e., overt narcissism), while the other characterizes individuals who are covertly self-absorbed (i.e., covert narcissism). While both forms have an underlying sense of entitlement and a tendency towards exploitativeness, overt narcissism is characterized by a need for dominance, a lack of affiliative concerns, self-reliance, and suspicions of other people, while covert narcissism is typified more by feelings of unworthiness, hypersensitivity, negative emotionality, and self-focused attention (Hendin & Cheek, 1997).

**Maladaptive Narcissism and Insecure Attachment**

Self theorists believe parental feedback lacking in empathy and attention may eventually undermine inherently healthy narcissistic potential and lead a child to remain fixated at an infantile, self-centered, “grandiose” stage of development, constantly craving attention (Watson, Hickman, Morris, Milliron, & Whiting, 1993). According to Kohut (1971), overt narcissism results when the rudimentary self formed in childhood fails to be integrated properly with the rest of the personality, owing to inadequate mirroring (i.e., encouraging praise and expressions of acceptance that inform the child it is “good”) by the parent. In an attempt to resume the psychological growth process and fulfill unmet infantile needs, the narcissistic individual continues to express grandiosity and exhibitionism into adulthood.

Although the covert narcissist has the same exhibitionistic need for attention, grandiose fantasy is less conscious and only apparent with close contact (Kernberg, 1975). The covert narcissist has a greater sense of vulnerability, characterized by extreme sensitivity, ineffective emotional regulation, and feelings of inferiority (Hendin & Cheek, 1997). According to Kohut (1971), the covert narcissist’s inability to regulate his/her emotions stems from parental failures in responding to troubled emotions expressed by the child. This deficit in supportive parenting may result in the lack of appropriate strategies for dealing with intense emotions and excessive reliance on defense mechanisms to regulate one’s self-concept and emotions (Pistole, 1995).

These defense mechanisms are illustrated in Ainsworth’s (1970, 1989) study of infant and childhood attachment styles in an anxiety-provoking situation. By temporarily separating young children from their mother, Ainsworth was able to observe children’s reactions in response to the mother’s return and found that children could be classified into categories of secure, avoidant, and anxious/ambivalent attachment styles. Defense mechanisms were evident in the two latter styles: Avoidant subjects ignored the mother upon return and failed to seek her comfort when distressed; while anxious/ambivalent children showed both clinging and distancing behaviors.

**Attachment and Narcissism in Romantic Relationships**

Following Ainsworth’s early work (e.g., 1970), Hazan and Shaver (1987) identified three adult romantic attachment styles (secure, anxious–ambivalent, and avoidant). These have since been reconceptualized into a four-category model (secure, preoccupied, fearful, and dismissing) based on a two dimensional space defined by anxiety and avoidance (Brennan, Clark, & Shaver, 1998). The dimensions of
attachment anxiety (hereafter AAnx) and attachment avoidance (hereafter AAvoid) help to illustrate how the two forms of maladaptive narcissism and adult romantic attachment may intersect within the attachment theory construct of internal working models. The AAnx dimension is associated with preoccupation, jealousy/fear of abandonment, and fear of rejection. Thus, AAnx is characterized by a negative affective experience associated with perceptions of threat, which is believed to stem from the negative model of self that arises from inaccessible and/or unresponsive parenting (Bowlby, 1973). With respect to narcissistic vulnerability and romantic attachment, AAnx may relate to higher levels of covert narcissism because covertly narcissistic individuals are reportedly less tolerant of stressful events and more prone to being overwhelmed by distress and experiencing unpleasant emotions (Mikulincer & Florian, 1998). AAnx individuals may feel inferior as romantic partners and unworthy of the affections of others, which creates a sense of anxiety; or they may feel anxious because they have had experiences with undependable or unpredictable attachment figures in the past.

AAvoid is associated with early childhood experiences with rejecting and/or inexpressive caregivers and encompasses avoidance of intimacy, discomfort with closeness, and excessive self-reliance (Brennan et al., 1998). The covert narcissist’s low threshold for threat (i.e., anxiety-provoking situations), combined with mixed perceptions of support, would contribute to frequent activation of the attachment system, leading to distress. Thus, avoidance may be a coping strategy for the hypersensitivity of covert narcissists.

In the context of social interaction and relationships, overt narcissism is characterized by a need for dominance, a lack of affiliative concerns, self-reliance, and suspiciousness toward others (Wink, 1991). When someone chronically lacks support from an attachment figure, he/she may develop an increased threshold for experiencing negative emotions or perceiving attachment needs and thus exhibit what Bowlby (1973) called “compulsive self-reliance.” In the case of the overt narcissist, the importance of social ties is dismissed, and interpersonal exploitation and exhibitionism are employed to create an illusion of self-importance. Thus, the prospect of romantic relationships may not be associated with high levels of AAnx for the overt narcissist. However, although they may not report feeling anxious, Robbins and Dupont (1992) suggested that a primary reason for their dismissal of close relationships may be the threat relationships pose to their self-concept, thus leading to high levels of AAvoid.

In sum, the following predictions were made. It was hypothesized that AAnx would be related solely to covert narcissism. Since overt narcissism is characterized by dismissal of the importance of attachment, levels of overt narcissism were not hypothesized to relate to AAnx. In contrast, the level of AAvoid was expected to be augmented for higher scorers on both covert and overt narcissism, since for both it can be viewed as a mechanism of psychological defense.

The present study sought to examine how the combination of covert and overt narcissism was multivariately related to adult attachment dimensions for a sample of Canadian university women. Toward this end, we employed canonical correlation analysis (hereafter CCA), a technique that assesses the relationship between two linear combinations of variables. CCA is “one of the most general of the multivariate techniques,” of which multiple regression, discriminant function analysis, and MANOVA are special cases (Tabachnick & Fidell, 1996, p. 196), as is correspondence analysis in the case of only categorical variables (Clausen, 1998).
Psychologists increasingly employ CCA when both independent and dependent variables are multivariate; and the interest is in how the two sets of variables as a whole, rather than singly on one or both sides, relate to one another (Shell & Husman, 2001). Relationships between variables may differ when examined as part of a multivariate variable set compared to when they are examined separately or in isolation from other related but nonredundant variables. CCA “summarizes the between domains covariance in as few statistically reliable dimensions as possible,” thus providing an elegant and powerful solution to the question of the multivariate relationship between two sets of variables (Wingard, Huba, & Bentler, 1979, p. 135).

Method

Participants

Participants were 171 female undergraduates enrolled in introductory psychology at the University of Toronto. Respondents were between 17 and 39 years of age, with a median of 19 years. Most participants (93.5%) classified themselves as single or dating someone regularly.

Procedure

The present study was advertised on the psychology course web page as part of a larger study concerning perceptions of one’s familial environment, childhood experiences, and attitudes towards self and others. Participants were tested in group sessions of up to six people, with people seated at separate desks. To maintain respondents’ anonymity, consent forms were signed and collected prior to administering the questionnaire, which the participants had 50 minutes to complete. Upon its completion, they were individually debriefed and any questions and concerns were addressed. For taking part, students received a point toward the final mark.

Measures

The following three scales were used to assess the constructs of interest: (1) the Hypersensitive Narcissism Scale, which measures levels of hypersensitive or covert narcissism; (2) the Narcissistic Personality Inventory, which measures levels of overt narcissism; and (3) the Experience of Close Relationships Scale, which measures anxiety and avoidance dimensions of attachment. These measures were assessed for reliability by computing coefficient alphas (hereafter $\alpha$) and average inter-item correlations (hereafter AIC). A scale is generally considered to be internally consistent when its alpha is .70 or higher and the average inter-item correlation is .20 or better (Briggs & Cheek, 1986).

Hypersensitive Narcissism Scale. The ten-item Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997) was derived from Murray’s (1938, as cited in Hendin & Cheek, 1997) Narcism Scale and has been found to possess appropriate psychometric qualities to be useful as a measure of covert narcissism. Using three independent samples of college students, Hendin and Cheek (1997) found that the HSNS and an MMPI-based composite measure of covert narcissism showed similar
patterns of correlation with the Big Five Inventory, and both showed near zero correlations with the Narcissistic Personality Inventory, a measure of overt narcissism.

Items on this measure had a Likert scale format scored from 1 (disagree strongly) to 5 (agree strongly). Our reliability analysis of the HSNS showed that deleting two items improved reliability. Thus, an 8-item index of covert narcissism was created, with $\alpha = .70$ and AIC = .23.

**Narcissistic Personality Inventory.** Overt narcissism was assessed with an abridged version of the Narcissistic Personality Inventory (NPI, Raskin & Hall, 1979), comprised of 40 forced-choice items. The NPI is the pre-eminent measure of narcissism in research on the normal range of individual differences, and its validity has been examined in numerous studies. These studies have shown that the NPI does assess some important aspects of the multidimensional construct of narcissism, particularly the overt form (Hendin & Cheek, 1997).

Since overt narcissism is known to consist of several dimensions, principal axis factoring was employed to identify sets of intercorrelated items. The results of parallel analysis were used to determine the number of factors to retain. Parallel analysis is a statistical procedure in which eigenvalues derived from random data based on the number of items in the measure and the number of respondents are compared to eigenvalues produced by factor analysis of actual data (Longman, Cota, Holden, & Fekken, 1989). Based on parallel analysis, the principal axis solution was varimax-rotated to four factors. However, these four factors accounted for only 24% of the variance, with substantial overlap in items between the factors (i.e., there were several doublets). As a result, we decided that a unidimensional index would better represent the construct. Thus, overt narcissism was assessed by a 40-item NPI index with an $\alpha = 0.80$ and AIC = .21.

**Experience of Close Relationships Scale.** Adult attachment was assessed using the 36-item Experience of Close Relationships Scale (Brennan et al., 1998). Participants answered items only if they were presently involved in a romantic relationship or had been in the past. Respondents referring to a past relationship were instructed to answer the questions for the most recent one. Participants indicated how true each statement was of their relationship, by selecting a number from 1 (strongly disagree) to 7 (strongly agree). The measure was scored in accordance with Brennan et al.’s (1998) instructions for the two dimensions of AAvoid and AAnx. The AAnx index was composed of 18 items with $\alpha = .90$ and AIC = .33. The AAvoid index consisted of 16 items, with $\alpha = .93$ and AIC = .33.

**Results**

**Bivariate Correlation Analyses**

Bivariate correlations were computed for the four variables of interest (i.e., overt narcissism, covert narcissism, AAvoid, AAnx). The bivariate correlation coefficient between overt and covert narcissism was insignificant ($r = .075$, $df = 166$), as were the bivariate correlation coefficients between overt narcissism and AAvoid and AAnx ($r = .124$, $df = 148$ and $r = –.037$, $df = 148$ respectively). The bivariate correlation coefficient between AAvoid and AAnx was significant ($r = .172$, $df = 148$).
The largest bivariate correlation coefficients were between covert narcissism and AAvoid and AAnx. Specifically, covert narcissism was positively correlated with both AAvoid and AAnx ($r = .238$, $df = 150$, $p < .01$ and $r = .447$, $df = 150$, $p < .01$, respectively).

**Canonical Correlation Analyses**

Canonical correlation analysis (CCA) was performed between the set of narcissism variables (i.e., overt narcissism and covert narcissism), on one hand, and adult attachment variables (i.e., avoidance and anxiety), on the other hand. We used the canonical correlation syntax routine in SPSS Windows to perform the CCA. The first canonical correlation, $r_{C1}$, was .485, indicating a 23% overlap or “common variance” between the two linear combinations of variables. The first canonical variate was significant, $\chi^2 (4) = 42.08$, $p < .001$, indicating a significant degree of overlap or common variance between the two domains or linear combinations of variable sets. Once the first canonical correlation was removed, however, no further reliable relationship between the two variable sets was evident, as indicated by a nonsignificant $\chi^2 (1) = 2.85$, $p = .09$, for the second canonical correlation, $r_{C2} = .14$.

Although the latter canonical correlation is marginally significant, we did not interpret it. According to Tabachnick and Fidell (1996, p. 221), “most researchers do not interpret . . . a canonical correlation lower than .30, because [it represents] less than 10% overlap in variance.” Accordingly, only the first canonical variate and its associated statistical output are presented in Table 1. Table 1 presents the standardized canonical coefficients, the canonical loadings, the percent of variance of the variable set accounted for by its own canonical variate, and the redundancy (i.e., the percent of variance in one variable set accounted for by the “opposite canonical variate” for the other variable set). As shown in Table 1, the first canonical variate accounted for nearly 50% of the variance in the set of narcissism variables and slightly more than 55% of the variance in the adult attachment variable set. As well, the redundancy values indicate the

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Canonical Correlation Analysis of Narcissism and Adult Attachment</th>
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<tbody>
<tr>
<td><strong>First Canonical Variate</strong></td>
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<tr>
<td><strong>Coefficient</strong></td>
<td><strong>Loading</strong></td>
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<td><strong>Narcissism Set</strong></td>
<td></td>
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<tr>
<td>Overt narcissism</td>
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<tr>
<td>Covert narcissism</td>
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<tr>
<td>Percent variance</td>
<td>$.492$</td>
</tr>
<tr>
<td>Redundancy</td>
<td>$.116$</td>
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<tr>
<td><strong>Adult Attachment Set</strong></td>
<td></td>
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<tr>
<td>Avoidance</td>
<td>$.287$</td>
</tr>
<tr>
<td>Anxiety</td>
<td>$.904$</td>
</tr>
<tr>
<td>Percent variance</td>
<td>$.567$</td>
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<tr>
<td>Redundancy</td>
<td>$.133$</td>
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<tr>
<td><strong>Canonical correlation</strong></td>
<td>$.485$</td>
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$^a$Standardized Canonical Coefficient.

$^b$Canonical Loading (aka Structure Coefficients).
proportion of variance in one variable set accounted for by the other variable set. In both cases, redundancies were between 10–15%.

Canonical variates are defined by both the canonical coefficients and the canonical loadings (also known as structure coefficients). Canonical coefficients and loadings potentially provide independent but complementary information about the multivariate relationship between two sets of variables, especially when variables in a set are not highly correlated (see Shell & Husman, 2001). Canonical coefficients indicate the weighting of each variable in the discriminant function defining the canonical variate. Like a regression weight, canonical coefficients indicate the independent contribution of each variable to the canonical variate with the other variables in the set partialled out. The pattern of weightings, however, can be arbitrary when variables in the set are highly correlated. In such instances, canonical loadings are preferred for interpretation. When the variables in a set are not highly correlated, however, the original variables have more of a chance to contribute independently to defining the canonical variate. In the present study, the bivariate correlation was .08 for the two narcissism variables and only .17 for anxiety and avoidance in the attachment set. Since these intercorrelations are weak, the canonical coefficients are used to interpret the canonical variate. Finally, since standardized canonical coefficients are not scaled within a bounded range, no particular “absolute value” represents a meaningful contribution. Accordingly, a value of .20 was taken as a cutoff for interpretive purposes, following Shell and Husman (2001).

Canonical coefficients. As shown in Table 1, three of the four variables in the two variable sets contributed meaningfully to the canonical variate. Covert narcissism and anxiety attachment contributed most strongly. Avoidance attachment had a smaller but still notable contribution to the canonical variate.

Canonical loadings. The loadings yielded a generally similar pattern to that of the canonical coefficients. Canonical loadings are correlations between participants’ scores on the original variables and the canonical variate. Loadings indicate which variables are associated with the canonical variate and are analogous to factor loadings in factor analysis. Using a cutoff value of .30, three of the four variables loaded on the canonical variate, with covert narcissism and anxiety attachment having by far the highest loadings, and avoidance attachment having a smaller though still quite substantial loading. Taking the sign of the loadings into account provides further information. High scores on covert narcissism were associated with high scores on both anxiety and avoidance attachment.

Discussion

Nearly a quarter of the variance was shared between the covert narcissism and attachment domains. Knowing a person’s score for covert narcissism has predictive value for estimating individual differences in adult attachment, especially anxiety attachment, and vice versa.

This multivariate relationship supports conceptualizations from research and theorizing on narcissism as well as attachment. It is mainly the covert aspect of narcissism, reflecting vulnerability and hypersensitivity to rejection by others, that relates to adult attachment, rather than overt narcissism, which reflects self-aggrandizement and grandiosity. Interpersonally, overt narcissists are defensive, cold, and emotionally detached. Thus, although they may not have an underlying
positive self-concept, they manage to cope by dismissing interpersonal goals and focusing on self-centered goals relating to power and entitlement. Covert narcissists, on the other hand, may experience high levels of anxiety in romantic relationships because they have not learned to cope with their negative self-concept and fear others will see them as unworthy of their affections. Hendin and Cheek (1997) concluded that along with individual differences in sensitivity to rejection (Downey & Feldman, 1996) to which it is likely related, covert narcissism was part of a more general personality construct of psychological insecurity. Downey, Freitas, Michaelis, and Khouri (1998) showed that women high in rejection sensitivity behaved negatively toward a male romantic partner during interaction so as to elicit rejection and fulfill their prophecy of expected rejection. The covert narcissist might likewise be prone to such self-fulfilling prophecies in close or intimate relationships. Levy, Ayduk, and Downey (2001) speculated about ways to break the rejection sensitivity cycle, through providing supportive social relationships and other strategies, which may also benefit covert narcissists.

The stronger association of covert narcissism to anxiety attachment than avoidance attachment is also in keeping with contemporary attachment theory (Fraley & Shaver, 2000). Anxiety attachment reflects a proneness to anxiety and vigilance concerning rejection and abandonment by others. By contrast, avoidance attachment, which primarily reflects discomfort with closeness to others, should relate less strongly to the dynamics of covert narcissism. However, the small association found between covert narcissism and avoidance attachment suggests that avoidance may be used as a defense strategy in order to protect the self from anxiety stemming from fear of rejection (Pistole, 1995). Thus, by avoiding relationships, the covert narcissist is able to conceal attachment-related distress and protect a fragile self-concept. Fraley and Shaver's (2000) interpretation of attachment dimensions in terms of emotional and behavioral regulation suggests that covert narcissists might have particular difficulty regulating their emotions and behavior in the context of attachment relationships and perhaps interpersonal relationships generally—an idea perhaps worth exploring in future research.

Our results lend further credence to previous findings of two distinct forms of narcissistic vulnerability (Feintuch, 1998; Wink, 1991) that may be distinguished in terms of their underlying cognitive-affective structure and differential associations with working models of attachment. This conclusion is supported by a recent study examining the two subtypes of pathological narcissism in relation to attachment orientations and interpersonal functioning. Consistent with our findings, Dickinson and Pincus (2003) found that vulnerable narcissism was associated with high ratings on avoidant personality disorder and fearful attachment, which is characterized by anxiety and avoidance in relationships. They also found that overt narcissism was associated with secure or dismissive attachment, both reflecting low anxiety in relationships.

Limitations of our research include its correlational design (which precludes identifying causes), exclusive use of self-report measures, and having a homogeneous college student sample of women as participants. Future research should examine the relationship between narcissism and attachment in more diverse samples with broader variation of age, gender, and cultural background.

Future research should also consider the role of attachment and narcissism in the development of interpersonal problems and psychopathology. Highly sensitive individuals avoid novel, unpredictable situations because they do not deal well with the distress from uncertainty (Aron & Aron, 1997). Since early phases of close
relationships are often unpredictable and uncertain, hypersensitive people may experience emotional conflict as extremely distressing, evoking both unpleasant emotions and anxiety (Pistole, 1995). As a result, not only may high levels of covert narcissism interfere with romantic relationships but their inability to use social resources may put them at a greater risk for psychological distress (Emmons & Colby, 1995).

By examining how covert narcissism and adult attachment are linked to clinical issues pertaining to self-worth and relationships, strategies can be developed to better address problems of people with dysfunctional narcissism and attachment in a therapeutic setting.

References


