NARCISSISM: REALITY TESTING AND THE
EFFECT OF NEGATIVE FEEDBACK

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A number of clinicians have reported that narcissists show grandiosity in self-concept and rage after receiving disconfirming feedback. This is the first empirical study to test these claims. Subjects with differing levels of narcissism and self-esteem were compared on distortion in self-perception and emotional reaction to negative feedback.

Ninety-six college students predicted their levels of intelligence, attractiveness, and interpersonal understanding (empathy) as compared to their peers. Objective measures of these characteristics were obtained, and subjects' predictions, with their actual scores held constant, provided measures of reality distortion in self-perception. Subjects were given feedback comparing their predictions to objective measures at the end of the experiment, and reaction to feedback was assessed by comparing subjects' pre- and post-feedback scores on the Multiple Affect Adjective Checklist-Revised (Zuckerman & Lubin, 1985). Narcissists were expected to react to negative feedback with greater hostility than non-narcissists.
Narcissists evidenced significant distortion in perceptions of their own intelligence, attractiveness, and interpersonal understanding. This finding provided empirical evidence supporting the clinical phenomenon of grandiosity. Narcissists did not react with greater hostility after negative feedback, but as compared to non-narcissists, they did react with less depression following negative feedback. This supported Kernberg's (1980) assertion that narcissists do not react to loss with depression. In contrast to the inflated self-image associated with narcissism, self-esteem was associated with a comparatively accurate view of self.
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CHAPTER I

INTRODUCTION

Narcissism was derived from the Greek myth of Narcissus, the story of a youth who fell in love with his own reflection in the water and died, unable to tear himself away (Akhtar & Thomson, 1982; Dyrud, 1983; Marks, 1985; Mone, 1983). Ellis (1898) first used narcissism in the psychological literature to describe a type of sexual perversion in which the self is chosen as the primary sexual object. Freud’s first use, recorded in the minutes of the Vienna Psychoanalytic Society (1909), viewed narcissism as a normal intermediary phase in the transition between autoeroticism and object love (Rothstein, 1979; Wong, 1980). During the phase of autoeroticism, libido is completely invested in the id, since the ego has not yet formed. With maturation, some libido is transferred to the ego and the child begins to develop self-restraint. During this normal narcissism, the ego is the only available object cathexis, for the child has not yet acquired the ability to differentiate the self from the environment (Balint, 1960). Since it has not developed the ability to invest the self in others, the child is completely self-centered. Freud later differentiated primary from
secondary narcissism, defining the former as a normal developmental phase and the latter as a pathological deviation (Freud, 1986; Russell, 1985). Secondary narcissism occurs after the development of object relations, as libido is withdrawn from previously cathected objects and re-invested in the ego (Mone, 1983). According to Freud’s economic view of libido, this re-direction limited the libido available for investment in others, resulting in impoverished object relations.

Otto Kernberg and Heinz Kohut, widely viewed as the two most prominent contemporary theorists of narcissism, have elaborated the etiology of Freud’s secondary narcissism. Kernberg views this as a deviation from normal development during the late oral stage, occurring when a child’s emotional needs are not fulfilled by the mother. As such, although she may appear to others as warm and nurturing, the mother actually interacts with the child in a cold, aggressive manner (Akhtar & Thomson, 1982; Goldstein, 1985; Russell, 1985). In response to unmet needs for nurturance, the child becomes enraged, withdraws all affection from the mother, and cathects the self. From this cathexis, the grandiose self develops to compensate for these unmet needs and is used by the child for self nurturance. The grandiose self combines the admired aspects of the self, with an idealized image of a loving mother. Often incorporated are aspects of the self reflecting
actual talent that has been over-emphasized by parent and child (Kernberg, 1970).

According to Miller (1979/1981), many narcissists were gifted children who received affection and attention only for their accomplishments and were not accepted as persons in their own right. Parents viewed these children as an extension of themselves, responding affirmatively only to behaviors which gratified their own unmet needs for reassurance and support (Russell, 1985). Through such interactions, the child came to believe he or she must be perfect to be loved (Rothstein, 1984). This conditional love produced an unstable self system that requires constant external validation to maintain a positive self-image.

Kernberg's theory resembles Freud's in two ways. Kernberg sees the withdrawal and re-direction of libido as fundamental to narcissism, and he uses an economic explanation of libido. Like Freud, Kernberg maintains that narcissism greatly reduces the libido available for object relations.

In contrast to Kernberg's description of narcissism as a pathological deviation in the oral stage, Kohut views narcissism as an arrest in normal development that can originate at any time from the late oral period through latency (Robbins, 1982). As the infant moves beyond primary narcissism and begins to experience separation between self
and other, psychological tension results. In an attempt to reinstate the comforting oneness of primary narcissism, the infant develops a grandiose self image and an idealized parental image. The idealized parental image is developed as the child internalizes the parent's praise of age-appropriate accomplishments. The child uses the idealized parental image and the grandiose self image for self nurture. Parental praise becomes the basis of a realistic self image as gradual incorporation of this praise results in modification of the grandiose self image into a realistic self image (Patton, Connor, & Scott, 1982). The idealized parent imago also becomes more realistic through incorporation of normal parental disappointments and failures in empathy (Stevens, Pfost, & Skelly, 1984).

For Kohut, gross parental shortcomings lead to arrested development (Kohut & Wolf, 1978). Should parents provide either too much or too little praise, the grandiose self is retained and the child becomes fixated at this developmental stage (Russell 1985). The failure to provide adequate mirroring (praise) often occurs when parents lack a positive self view and ascribe their own shortcomings to the child. The child may also retain the idealized parent imago due to deficits in parental limit-setting or because of dramatic disappointments in the parents. These disappointments can lead to the idealized parent imago being retained to compensate for overwhelming feelings of
loss and abandonment. Along these lines, Mandelbaum (1980) documented a high incidence of early childhood trauma such as parental death, divorce, suicide, or alcoholism in narcissists.

To summarize, Kohut views narcissism as an arrest in normal development than can occur from the late oral stage through latency, as parents fail to provide appropriate praise or limits. These failures result in the retention of infantile grandiosity and parental idealization instead of their modification into realistic views of self and parents. Conversely, Kernberg describes narcissism as a miscarriage of development occurring during the late oral stage, when the child becomes enraged at an unempathetic mother. In response to unmet needs for nurturance, the child withdraws affection from the mother, and invests libido in the self, forming the grandiose self.

Since Kohut views narcissism as a fixation, his treatment of this disorder involves the completion of the developmental process in therapy by providing the empathy lacking in the narcissist’s childhood. Kernberg’s treatment, on the other hand, focuses on confronting the narcissist’s defense mechanisms. Kohut and Kernberg also disagree on the age of onset for this disorder. While Kohut extends the origination period throughout development, Kernberg confines it to the late oral stage. Despite these differences, important similarities remain.
Both argue that parental shortcomings cause the formation of an inflated self image. They likewise agree that this inflated self is weak and defective, unable to maintain a positive self-representation without extensive distortions of reality.

Narcissism and Self-Esteem

Although narcissism is generally considered a pathological or undesirable condition, it is also used by some authors to describe a state of health (Bursten, 1982; Marks, 1985; Mone, 1983; Stolorow, 1975; Weiner & White, 1982). Regarding this latter sense, Pulver (1970) noted that healthy narcissism is used as a more technical name for self-esteem. Interestingly, no other term in the psychological literature is used to describe both a healthy and a pathological state. Marks (1985) defined healthy narcissism as having a sense of oneself as an integrated person which remains stable in the midst of a disconfirming environment. Similarly, Mone (1983) described it as a self view which can tolerate negative feedback without decompensation, allowing the individual to love and be loved by others. The congruency between these uses of narcissism and self-esteem can be seen in Wells and Marwell’s (1976) description of self-esteem as the ability to maintain the stability of the self system during conditions of strain. Eagle (1984) suggested that definitions of healthy narcissism and self-esteem are so
similar that the use of the term self-esteem instead of healthy narcissism would be clearer and more consistent.

In contrast, the relationship between pathological narcissism and self-esteem has been extensively discussed in the literature (Baker, 1979; Bromberg, 1983; Kohut & Wolf, 1978; Marks, 1985). The purpose of narcissistic mental activity is to maintain a positive self view, but because narcissists are incapable of maintaining a sense of self internally, they must seek external support to bolster this intrapsychic structure. Having no internalized sense of being valued by others, narcissists must constantly confirm their value externally (Baker, 1979; Bromberg, 1983; Kohut, 1971), seeking out others who will mirror their grandiosity and devaluing those perceived as critical (Marks, 1985).

Kohut and Wolf (1978) summarized the differences between healthy and narcissistic selves by stressing that a healthy self can tolerate both success and failure. As such, it can experience joy in success, as well as despair in failure, without accompanying rises and falls in the view of self. In contrast, the narcissists’s self-view varies according to affirming or disconfirming external responses, reflecting a weakened, defective sense of self. Thus an important difference between narcissism and healthy self-esteem is the capacity to accept disconfirming or negative feedback.
Defensive Functioning

According to Goldstein (1985) narcissists make extensive use of the defense mechanisms of grandiosity, denial, and splitting to protect their self-esteem. Grandiosity is a primary defense that protects against fluctuations in the external and internal environment of the narcissist. For example, external criticism is defended against by viewing the self as perfect and incapable of mistakes. Underlying feelings of worthlessness or of being unloved are fended off by viewing the self as special or having extraordinary qualities (Russell, 1985). Along these lines, Tobacyk and Mitchell (1987) found that narcissism is related to self-report of paranormal abilities, perhaps reflecting the narcissist's need for a sense of self-importance, uniqueness and superiority.

The narcissist maintains a sense of grandiosity through the use of denial by substituting pleasing fantasies of superiority for underlying self-deprecatory feelings (Hanly, 1984; Modell, 1975). The narcissist, however, is only partially aware of these negative feelings, experiencing them as a vague sense of discomfort. Denial and distortion are used to minimize self-deprecatory feelings and to maintain the narcissist's self view as unique and special. For example, criticism or negative feedback is filtered and rejected to protect the self. The
extent of this denial prevents the narcissist from receiving realistic criticism which usually would modify the grandiose self. Thus, denial not only protects a distorted self-view, but perpetuates it. As a result, pervasive self-righteousness also characterizes the narcissist's interpersonal style. The narcissist invariably insists that he or she is right, thereby providing a sense of superiority which enhances self-esteem (Lax, 1975). Because of this, admitting a mistake constitutes an overwhelming threat to the narcissist's precariously maintained self-image and cannot be tolerated.

The defense mechanism of splitting is also used to dissociate feedback perceived as threatening to the self. While pathological in adults, it is a normal developmental process in young children, helping them to separate good images, on which they must depend for nurturance, from bad or threatening images. For example, a young child may experience aggression in response to a frustration and perceive this internal tension as capable of destroying the significant, frustrating other on whom the child depends. As the child has not developed the realization that internal feelings do not cause actual harm to others, dissociating these threatening impulses from consciousness prevents what the child perceives as catastrophic, annihilating anger toward important others. According to Gerson (1984), the image of the good, nurturing mother must
remain distinct and separate from the image of the
critical, depriving mother, so that the nurturing mother
can be kept "safe" from the child's aggressive impulses.
When the child is able to manage this aggression and
integrate such feelings into the self-system, splitting is
no longer needed.

Theoretically, in narcissists, splitting continues to
be used to maintain a positive self-image (Goldstein, 1985;
Russell, 1985). Developmentally appropriate integration of
aggression has failed, resulting in the projection of
unintegrated aspects of the self which threaten the
narcissist's fragile self-system. On one hand, projection
of grandiose aspects of the self results in the
idealization of others in order to identify with, and
thereby share in their status and perfection. On the other
hand, projection of unaccepted aspects of the self results
in the devaluation of others and provides an outlet for
aggression without disturbing a positive self view. Thus,
narcissists tend to alternate between the extremes of
idealization and devaluation. Projection of the good and
bad aspects of the self, and the resulting idealization and
devolution of others, thereby produces a personality style
based on significant distortion in interpersonal
relationships.

Finally, narcissists possess very limited
psychological insight into the nature of their defensive
style (Averbach, 1984; Emmons, 1984; Watson, Grisham, Trotter, & Biderman, 1984). Empirical support for this is provided by Emmons (1981, 1984) who found that those scoring high on a measure of narcissism were less likely to identify the purpose of the instrument than those obtaining low scores. From clinical observations, Svrakic (1985) similarly noted that the narcissist is unaware of rapidly fluctuating emotions, because of defensive processes that shield the narcissist from feedback that might disconfirm the grandiose self.

**Emotional Functioning**

Kernberg (1980) described the unintegrated self structure of the narcissist as being incapable of sustained positive feelings. While narcissists require constant gratification to maintain positive self representation, any such gratification is instantly consumed, leaving no reserve for future self-nurturing. Kernberg cited clinical evidence that, as compared to non-narcissists, narcissists remember past successes, but only vaguely recall their accompanying feelings. Since positive feelings are transitory, the narcissist endlessly searches for new sources of gratification. Emmons (1981) found a relationship between narcissism and sensation seeking which may represent evidence of this unending search for new gratifications. When these new gratifications are not available, narcissists frequently experience emptiness and
boredom, a result of the internal vacuum in their self structure (Hartcollis, 1980; Kohut, 1971; & Svrakic, 1985).

Kernberg (1980) also described the narcissistic tendency to spoil accomplishments through devaluation. Gratifications, such as success or feelings of satisfaction, raise expectations and create a threat that the future may not live up to the past. Therefore, the narcissist devalues present satisfactions in order to protect against future disappointments.

Envy is also typical of the narcissist’s emotional experience (Bursten, 1982; Kernberg, 1970). Although narcissists require support and encouragement from others, they cannot fully accept it, as support implies dependency. Dependency, in turn, conflicts with attempts to acquire self-esteem through grandiosity and feelings of superiority (Kernberg, 1980). Support and associated dependency also provoke envy of the independence and self-sufficiency of others (Kernberg, 1978). But as envy is incompatible with grandiosity, the narcissist must devalue both the person and the support provided (Svrakic, 1985). Narcissists seldom recognize these feelings of envy, as doing so would mean admitting to threatening imperfections (Hartcollis, 1980).

Narcissistic rage (Kohut & Wolf, 1978) occurs in response to real or imagined slights which are perceived by
the narcissist as being malicious, irrational insults (Rothstein, 1984). The narcissist must have absolute control over an object in order to maintain the precarious balance of his or her self-esteem. When an object’s inevitable short-comings occur, rage and aggression often result (Russell, 1985). In this instance, frustration is perceived as a momentary loss of personal perfection (Rothstein, 1984), with the rage reaction representing a quick rejection of the frustrating object to protect against this loss (Goldstein, 1985; Solomon, 1985; Svrakic, 1985).

There is considerable debate over whether narcissists actually experience depression (Wong, 1980). Kernberg (1970, 1978) believes narcissists are incapable of depression, since the experience of sadness and loss is too threatening for their fragile self-systems. What appears to be depression is found, on deeper exploration, to be anger and resentment against the person lost, rather than real sadness. Rothstein (1979) disagrees, arguing that narcissists experience profound and deep depression when the defensive functioning of narcissistic rage fails to protect their grandiose, perfectionistic self view.

The anger and resentment of narcissistic rage frequently isolate the narcissist from others, leading to feelings of alienation. To protect themselves from alienation, narcissists evoke an attitude of grandiose
self-sufficiency. This grandiosity frequently takes the form of scorn and contempt for others since seeing oneself as superior increases the narcissist's illusion of independence (Hartcollis, 1980).

**Interpersonal Functioning**

The interpersonal relationships of narcissists are superficial, and disturbances in these relationships frequently form the presenting complaint bringing the narcissist into therapy (Kernberg, 1978). Narcissists lack the capacity to understand and participate in deep emotional relationships (Svrakic, 1985), instead seeking immediate gratification in relationships that provide the constant positive feedback required to maintain their self-view. Threatened by the frustrations and disappointments inherent in relationships, narcissists often terminate relationships when they are no longer receiving immediate gratification (Hartcollis, 1980).

Narcissists' relationships are superficial and disturbed, in part, because of a lack of empathy (Kernberg, 1970; Stevens, Pfost, & Skelly, 1984). Clinically, Kernberg (1978) has observed that narcissists respond solely on the basis of the gratifications others can provide, and are deficient in their capacity to understand the needs of others. Empirical corroboration was provided by Watson, Grisham, Trotter, & Biderman (1984), who found a
negative relationship between narcissism and two measures of empathy.

Along with this lack of empathy, narcissists exploit others (Kernberg, 1970) to obtain gratification, although they typically are adept at hiding their exploitative motives behind a facade of charm and friendliness. Sexual exploitation is one way in which narcissist's gratify their excessive needs for affirmation (Kernberg, 1978). For example, narcissists may appear attentive and solicitous toward a sexually attractive acquaintance, but this lasts only until the need for conquest is gratified, as they are easily bored with the same sex partner (Emmons, 1981). In addition to terminating relationships out of boredom, narcissists frequently terminate love relationships when they begin to fear abandonment, rejecting others before they can be rejected (Hartocollis, 1980). Supporting this view, Solomon (1982) found that narcissism was negatively related to involvement in a satisfying love relationship.

Approaches to Diagnosis

The DSM-III-R (American Psychiatric Association, 1987) incorporates a behavioral checklist approach to diagnosis, requiring five of nine criteria to diagnose a Narcissistic Personality Disorder. The characteristics described include the narcissistic rage reaction, interpersonal exploitation, grandiosity, and the belief that one's problems are unique and can be understood only by special
people. Also included are fantasies of success, power, and brilliance, a sense of entitlement, the need for constant attention and admiration, lack of empathy, and feelings of envy.

Some authors have suggested that narcissism is more prevalent in males than in females (Ahktar & Thomson, 1982; Masterson, 1981). However, with the exception of one study (Carroll, 1987), the empirical literature does not support this contention (Gerson, 1984; Raskin & Hall, 1981; Solomon, 1982; Watson, Grisham, Trotter, & Biderman, 1984). The DSM-III-R provides no sex ratio information for the psychiatric diagnosis of narcissistic personality disorder.

Goldstein (1985) has noted that DSM-III criteria represent a compilation of Kernberg and Kohut's clinical descriptions of narcissistic pathology. Yet, the diagnostic process used by each is radically different from the behavioral checklist approach of DSM-III-R. DSM-III-R criteria contain behavioral characteristics which can be observed during interviews with narcissists and their significant others. Kernberg and Kohut, however, use manifestations of transference to diagnose narcissism. For Kernberg (1980), narcissistic transference is characterized by a greater loss of boundaries between the analyst and the patient than occurs in other transference relationships. For example, narcissistic patients often idealize the analyst, believing that the analyst is the greatest
therapist alive. They may also view themselves as the only patient of their analyst, fantasizing that when they are not together with the analyst, the analyst dies or is no longer brilliant. Narcissistic patients may also completely forget the analyst during vacations, being unable to permit themselves the mourning that typically occurs with other patients. Kernberg believes this narcissistic transference, whether with the analyst or a significant other, reactivates the historical relationship of the patient with his or her mother.

For Kohut, narcissistic transference is idealizing and self-aggrandizing (Rothstein, 1979). In the idealizing transference, the analyst serves as an idealized parental image for the narcissist. In the self-aggrandizing transference, the analyst serves as a mirror for the patient’s grandiose self by reflecting back to the patient, the patient’s own fantasies of feeling special and of desiring the analyst’s admiration (Cannon, 1984; Russell, 1985). In contrast to Kernberg, who believes narcissistic transference is a reactivation of the patient’s relationship with his mother, Kohut also includes reactivation of the early relationship with the self. He characterizes narcissistic transference as a reactivation of early infantile imagos (the grandiose self and the idealized parental image). While disagreeing on which early relationships are manifested in the therapeutic
relationship, both Kernberg and Kohut base diagnosis of narcissistic pathology on this evolving relationship in therapy, avoiding the symptom checklist approach of DSM-III-R.

DSM-III-R proposes Borderline and Histrionic Personality Disorders as concurrent diagnoses for the Narcissistic Personality Disorder. In contrast, Kernberg classifies the Narcissistic Personality Disorder as a subtype of the borderline (Goldstein, 1985). According to this view, narcissists, like borderlines, use the defenses of splitting and primitive dissociation, yet the narcissist has achieved a higher degree of ego integration. The grandiose self of the narcissist, while unstable, does provide sufficient structure for minimal integration of good and bad object relations. Thus, the narcissist has a greater capacity than the borderline to integrate liked and disliked characteristics of a single person and more generally, to maintain interpersonal relationships. Kernberg also believes that borderline pathology develops earlier than narcissistic pathology, prior to the development of ego boundaries (Russell, 1985).

Kohut, on the other hand, maintains a clear distinction between the narcissistic and borderline personalities. The difference between Kohut and Kernberg, however, seems primarily one of terminology, as their descriptions of these two disorders are strikingly similar.
For example, Kohut describes the narcissist as possessing a minimal level of ego integration, and he considers the narcissist as vulnerable to temporary breakdown and fragmentation, yet stable enough to withstand the confrontation of analysis. The borderline's sense of self, however, is viewed as too fragile to tolerate the stress of analysis (Russell, 1985).

Akhtar and Thomson (1982) provide specific criteria to differentiate narcissistic from borderline, sociopathic, histrionic, and obsessive personality disorders. They agree with Kohut's differentiation between borderline and narcissistic disorders, viewing the self structure of the narcissist as more stable and less subject to fragmentation. The narcissist, as a result of this more cohesive self, is more successful in work and social situations and has better impulse control than the borderline.

The capacity for consistency and success in work distinguishes the narcissist from the antisocial personality as well. The sociopath does not have this capacity for consistent vocational success. In addition, the sociopath's violations of social and moral standards are more consistent, calculated, and ruthless than those of the narcissist, who only sporadically engages in antisocial behaviors.
Finally, comparison to histrionic and obsessive personality disorders yields several distinguishing features. Although the narcissist and the hyster are both dramatic and exhibitionistic, the hysteric demonstrates more warmth and caring than does the narcissist, whose exhibitionism is cold and exploitative. The narcissist may be similar to the obsessive in perfectionism and need for control, but the narcissist presents himself as perfect, while the obsessive seeks perfection without claiming it. Additionally, the value system of the narcissist is more easily corrupted than that of the obsessive. The obsessive has a genuine belief system rigidly adhered to, while the values of the narcissist change to facilitate their manipulation of others.

Treatment

Kohut and Kernberg have developed the most extensive treatments for narcissism. Kohut advocates an analytic approach, emphasizing empathy by the analyst (Mone, 1983). Since Kohut views narcissism as an arrest in development, empathy completes the developmental process by serving as a replacement for the parental deficits that occurred in early childhood. Narcissistic grandiosity is gradually modified as the narcissist's unmet needs for nurturance are fulfilled through the analytic process (Kohut & Wolf, 1978). An important aspect of therapeutic empathy involves
providing realistic praise for accomplishments, a process thought to be lacking in the narcissist's childhood (Stevens, Pfost, & Skelly, 1984). Working through unavoidable failures on the part of the analyst (such as absences and vacations), which the narcissist experiences as rejections, also represents an important curative factor (Russell, 1985). Kohut's descriptions of counseling goals and procedures are similar to those of Carl Rogers, who also views clients as lacking a unified sense of self and requiring empathy in therapy (Stevens, Pfost, & Skelly, 1984).

Kernberg's (1970) treatment of narcissism is more classically analytic than Kohut's, emphasizing the interpretation of both positive and negative transference. In particular, he interprets the defensive function of the narcissist's grandiosity as protection against both underlying rage and its accompanying guilt (Stevens, Pfost, & Skelly, 1984). Grandiose idealization of the analyst sustains the therapeutic relationship by providing gratification through association with the "all-perfect analyst". Kernberg feels that ignoring these aspects of the transference increases the patient's fear of his or her own unacknowledged aggression, reinforcing the need for the grandiose self (Russell, 1985).

Kernberg (1970) also emphasizes the analysis of countertransference. Accordingly, the analyst should bring
countertransference into the analytic process by interpreting the analyst's own reactions to the underlying intention of the patient's behavior. For example, if the patient’s antisocial behavior results in the analyst worrying more over this behavior than the patient does, the patient may be trying to make the analyst feel the concern and worry which the narcissist cannot tolerate.

Kernberg (1970) considers the prognosis for narcissistic patients to be guarded. The extreme rigidity of their defensive structure, as well as their superficial interpersonal style, provide the gratification needed to maintain a positive self view while isolating themselves from the experience of pain in relationships. Prognosis is more favorable if they have moderate levels of impulse control and anxiety tolerance, and if they can experience feelings of guilt and shame. The capacity for impulse control and anxiety tolerance indicates an ability to delay gratification as well as a greater potential for insight and introspection. Those who can experience guilt and shame evidence some level of superego integration and an ability to see how their actions affect others.

Measures of Narcissism

Several instruments have been used to measure narcissism, among them projective instruments such as the T.A.T., Rorschach, and Early Recollections (Exner, 1969; Shulman & Ferguson, 1988). While the combined use of these
projectives is more reliable than the use of a single projective (Harder, 1979; Urist, 1977), the validity of projectives as measures of narcissism has yet to be established (Solomon, 1982).

Other instruments have been developed as subscales of objective personality measures. Two scales measuring narcissism have been developed from the MMPI. The MMPI Narcissistic Personality Disorder Scale (Ashby, Lee, & Duke, 1979) has limited empirical support (Gerson, 1984; Solomon, 1982), as is also the case with a scale devised by Morey, Waugh, and Blashfield (1985) (Raskin & Novacek, 1989).

The Interpersonal Checklist, measuring Leary’s (1956) circumplex model of interpersonal behavior, has a narcissism scale. While this narcissism scale has also received some empirical support (Paddock & Nowicki, 1986), its support has been limited.

The Millon Multiaxial Clinical Inventory (MCMI) also contains a subscale measuring narcissism. Millon’s (1983) evidence for the validity of the MCMI consists of correlations with the MMPI Hypomania scale and negative correlations with the MMPI Social Introversion, Depression, Psychasthenia and Schizophrenia scales. The MCMI was developed using both rational and empirically-based methods of test construction with a general psychiatric population as the comparison group (Millon, 1983). Its Narcissism
Scale has been criticized, however, for not differentiating among normals (Averbach, 1984).

The most extensively researched instrument is the Narcissistic Personality Inventory (NPI) developed by Raskin and Hall (1979), using DSM-III diagnostic criteria. The original NPI consists of 54 forced-choice items, with a coefficient alpha reliability of .86 (Averbach, 1984). The NPI can be administered in two forms, with an alternate-form reliability of .72 over eight weeks (Raskin & Hall, 1981). It yields equivalent means for males and females (Raskin & Hall, 1981) and is moderately correlated (rs range from .55 to .66) with the MCMI Narcissism Scale (Averbach, 1984; Prifitera & Ryan, 1984). Raskin and Terry (1988) improved the psychometric properties of the original 54-item NPI by removing 14 items. The 40-item version correlates .98 with the original.

A considerable amount of evidence supports the validity of the NPI. As hypothesized, Raskin and Hall (1981) found a positive relationship between the NPI and the Psychoticism and Extroversion Scales of the Eysenck Personality Questionnaire (EPQ). They drew parallels between narcissists and those high on the Psychoticism Scale, describing both as solitary, hostile, and low in empathy. Narcissists were described as similar to those high on the Extroversion Scale in being impulsive, uninhibited, quick to anger, and gregarious. Raskin and
Hall also found an unpredicted but significant negative correlation between the EPQ Lie Scale and the NPI. High scores on the Lie Scale indicate social naivete, so Raskin and Hall hypothesized that narcissists obtaining low scores on this scale might indicate they possess heightened social awareness. Heightened social awareness may contribute to the narcissist’s ability to manipulate others.

While narcissists can be expected to be socially aware of how others respond to them, they are likely to be deficient in social interest, or concern for the welfare of others. Jourbert (1986) provided support for this hypothesis by obtaining a negative correlation between the NPI and the Social Interest Scale. As would also be expected, studies have also found negative correlations between the NPI and measures of empathy (Biscardi and Schill, 1985; Miller, Smith, Wilkinson, & Tobacyk, 1987; Watson, Grisham, Trotter, and Biderman, 1984).

As a pathological trait, narcissism should be inversely related to a measure of psychological health, such as self-actualization. Leak (1984), using the Personal Orientation Inventory, confirmed that self-actualization and the NPI were negatively related.

A study administering both the NPI and the MMPI to college students found that the NPI was positively related to the Mania scale and negatively related to the Depression, Psychasthenia, Social Introversion, Anxiety,
Repression and Ego Control Scales (Raskin & Novacek, 1989). The authors cited similarities between characteristics associated with this pattern of MMPI scores and clinical descriptions of narcissists. Raskin and Novacek found the most frequent two-point code type of narcissists was 98/89, a code type indicative of persons who are self-centered, immature, grandiose, and attention-seeking.

McCann and Biaggio (1989) found individuals high in narcissism, as measured by the NPI, were more likely to express anger than those low in narcissism. The most frequent mode of anger expression was verbal hostility.

Emmons (1984), using college students, found relationships between the NPI and the Dominance, Aggression, and Exhibition subscales of the Edwards Personal Preference Scale (EPPS). The NPI was also negatively related to Abasement and Deference. Each of these correlations support use of the NPI to measure narcissism.

Performing a principal components factor analysis of the NPI, Emmons found four factors which he later replicated (Emmons, 1984, 1987). One factor, Exploitativeness/Entitlement, measures interpersonal manipulation, such as the expectation of favors, as narcissists often expect special treatment and may demand that exceptions be made for them. A second factor, Leadership/Authority, measures the narcissist’s enjoyment
of being seen in a position of authority. Interestingly, peer ratings correlated with this factor indicate that others do not view them as effective leaders. The third factor, Superiority/Arrogance measures the grandiose self of the narcissist, while the fourth, Self-Absorption/Self-admiration, taps traditional narcissistic traits of excessive self concern and obsession with personal appearance.

The Exploitativeness/Entitlement factor was significantly correlated with EPPS Achievement and Aggression scales. Emmons interpreted the Achievement correlation as reflecting the typical competitiveness of narcissists. The Leadership/Authority factor correlated most highly with EPPS Dominance, while Superiority/Arrogance was positively correlated with Autonomy and negatively correlated with Succorance, reflecting striving for independence and defending against dependence. Interestingly, Self-Absorption/Self-Admiration, while negatively correlated with other factors, was positively correlated with Abasement, supporting the notion that the narcissist’s self-admiration may function as a defense against negative feelings of self worth.

Some correlations of the NPI, such as those with achievement, dominance, and autonomy (Emmons, 1984), are with traits usually considered healthy. Indeed, some narcissistic qualities are considered advantageous in
modern society (Lasch, 1979). For example, ruthless leadership and the ability to manipulate, are characteristics sometimes admired in business. Perhaps it is the lack of flexibility in the narcissistic style which differentiates narcissists from healthy individuals who may, at times, employ similar strategies.

Raskin and Terry (1988) conducted factor analysis of the 40-item NPI and found seven factors, Authority, Self-Sufficiency, Superiority, Exhibitionism, Exploitativeness, Vanity, and Entitlement. Five of the seven factors (Authority, Self-Sufficiency, Exhibitionism, Superiority, and Exploitativeness) were supported by observers' rankings of the extent of narcissistic traits exhibited by subjects. All seven factors were positively correlated with the narcissism measure of the Interpersonal Checklist (Leary, 1956).

Raskin (1980) found, as predicted, that the NPI was related to creativity as measured by the Barron Symbolic Equivalents Test (Barron, 1974). Raskin cited evidence that those high on creativity tend to be impulsive, exhibitionistic, and concerned with power and recognition. He suggested that these characteristics are similar to those of the narcissist, and speculated that creativity might be a core characteristic of narcissism.

The NPI does not appear to be contaminated by subjects' attempts to present themselves in a favorable
manner, as indicated by non-significant correlations with social desirability (Averbach, 1984; Mullins & Kopelman, 1988; Watson, Grisham, Trotter, and Biderman, 1984). Watson et al. (1984) suggested that narcissists may not present themselves in a socially desirable manner because of their limited psychological insight. Since narcissistic pathology is typically ego syntonic, narcissists may not be able to recognize that anything is abnormal in their behavior. This idea is supported by Emmon’s (1981) finding that narcissists identified a measure of narcissism as assessing self-esteem, while non-narcissists correctly identified it as a measure of self-conceit.

Although the NPI was developed on a normal population under an assumption of continuity between normality and abnormality (Raskin & Hall, 1979), it also has utility in psychiatric populations. Prifitera and Ryan (1984) found 74% agreement between the NPI and the MCMI in classifying narcissists in a psychiatric sample.

In addition to validity data obtained by comparing the NPI to other paper and pencil measures of narcissism, interview assessments of narcissism also support the validity of the NPI. Shulman and Ferguson (1988) found a significant concordance rate between classification of narcissists by experienced clinicians and classification using the NPI.
Introduction to Pilot Study

The clinical literature presents an ambiguous picture of the relationship between narcissism and self-esteem. Healthy narcissism is used as a synonym for self-esteem (Marks, 1985; Mone, 1983), but the most common use of narcissism describes a pathological condition that is in sharp contrast to self-esteem. For example, self-esteem has been described as the ability to accept negative feedback without decompensation (Wells & Marwell, 1976), while narcissism, on the other hand, is characterized by an inability to tolerate criticism without hostility or distortion of the information (Russell, 1985). Also, persons with self-esteem are thought to possess a positive, yet relatively realistic view of self, while narcissists substitute a grandiose, inflated view to compensate for underlying feelings of worthlessness (Patton, Connor, & Scott, 1982). In other words, narcissists present themselves as having a positive self view, yet this presentation may reflect an attempt to conceal feelings of inadequacy.

Although the clinical literature almost universally presents self-esteem and narcissism as being mutually exclusive, Emmons (1984) found a positive correlation between measures of these constructs. One possible explanation for these findings is that narcissism and self-esteem are not mutually exclusive, but instead are
related in ways not elaborated in the clinical literature. One such relationship is that both self-esteem and narcissism involve positive self evaluation. Silber and Tippet (1965) described self-esteem as a positive, yet realistic self-image, in contrast with narcissism's unrealistically high self-appraisal. Pulver (1970) and Stolorow (1975) also differentiated self-esteem from narcissism on the basis of accuracy in self-appraisal. Although the view of self in self-esteem is reality based, as opposed to being distorted in narcissism, a positive self evaluation might form the basis for the observed overlap between these constructs. If this proves true, the correlation between them should be relatively low, as other aspects of self-esteem and narcissism should not overlap.

Another interpretation of the overlap between constructs is that both may tap an inflated self view. A distorted self image would be characteristic of both narcissists and those with self-esteem, leading narcissism and self-esteem to differ in degree rather than in type. Indeed, studies by Tennen and Herzberger (1987) and by Fitch (1970) indicated that self-esteem is associated with a positive, self-enhancing bias. While self-esteem and narcissism may both include distortion in self-image, narcissism, as a pathological trait, would be expected to include the greater distortion. If both narcissism and self-esteem embody distortion in self-image, Lasch's (1979)
proposal may be correct, that in modern society, narcissism is common, desired, and in some ways adaptable, even though it is not "healthy". It may be that a moderate amount of grandiosity is viewed favorably in our culture and has become incorporated into popular views of self-esteem.

Another possible explanation for the overlap is that the measures used by Emmons are not valid measures of narcissism and self-esteem, as these constructs have been described in the literature. If so, overlap between measures of self-esteem and narcissism may indicate contamination due to inclusion of more than positive self evaluation, or by the failure to measure anything but a positive self evaluation. For example, a self-esteem measure highly correlated with narcissism may be measuring grandiosity and not tapping accurate self view, a possibility that would be problematic in light of psychology's reliance on measures of self-esteem as indicators of healthy functioning (Wells & Marwell, 1976). Equally possible is the contamination of narcissism measures by self-esteem, so that what may instead be measured is a positive and accurate, rather than a grandiose self view. If so, current measures may not adequately assess the pathological component of narcissism.

In summary, several explanations may account for Emmons' (1984) finding of a positive relationship between narcissism and self-esteem. One possible explanation is
that current theories are incorrect in presenting narcissism and self-esteem as being divergent and oppositional in terms of reality contact. Another interpretation is that they are divergent in all aspects other than positive self evaluation, and so they legitimately share a small degree of overlap. However, if a distorted self-image accounts for the overlap between narcissism and self-esteem, narcissism would be expected to be associated with greater distortion in self-image. Conversely, another level of explanation for the overlap between narcissism and self-esteem is that theories contrasting narcissism and self-esteem in their grandiose versus accurate self view are correct, but current measures of these constructs are invalid. If this is the case, narcissism measures may be contaminated by self-esteem and/or self-esteem measures contaminated by narcissism.

Pilot Study

A pilot study was conducted to determine if narcissism and self-esteem could be meaningfully separated using current measures. In other words, if the correlation between scales approached the individual scale reliabilities, then these measures would not be discriminating between the theoretical constructs of narcissism and self-esteem. Emmons’ (1984) correlation between narcissism and self-esteem (r = .56, p < .01) was conducted using the NPI to measure narcissism and the Self-
Perception Inventory (Solares & Solares, 1965) to measure self-esteem. As the internal consistency of the NPI is .86 (Averbach, 1984) and that of the Self-Perception Inventory is .79 (Shepard, 1978), the correlation of .56 between these scales was high enough to question whether separate constructs were being measured. It was decided to run a pilot study to obtain another estimation of the correlation between narcissism and self-esteem, but this time with a different, more widely used measure of self-esteem, the Tennessee Self-Concept Scale (TSCS) (Roid & Fitts, 1988).

Subjects included 63 student volunteers who received extra credit in their psychology courses for participation (51 females and 12 males, mean age = 25 years). Subjects were given the NPI and the TSCS (Total P).

The mean NPI score obtained (21.5), compares favorably with R. Raskin and C.S. Hall's (personal communication, October 23, 1987) standardization sample mean (20.9), and with Averbach's (1984) mean (19.0) using college students. The mean Total P score provided in the TSCS Manual (Roid & Fitts, 1988) was 345.0, and the score obtained in this pilot was 344.8. The resulting NPI correlation with the Total P score was .31 ($p < .01$). This correlation is lower than that obtained by Emmons (1984), indicating that narcissism and self-esteem could be meaningfully separated using the NPI and the TSCS. With approximately 10% of the variance in one measure accounted for by variance in the other, this
could indicate that the NPI and the TSCS share a degree of overlap that would be consistent with their sharing only the characteristic of positive self evaluation.

A scatterplot was constructed using the NPI and the Total P of the TSCS to determine optimal separation of those higher and lower in self-esteem and narcissism. This plot indicated that while these measures correlate, it is possible to obtain subjects high in narcissism and low in self-esteem.

**Purpose**

Degree of grandiosity was investigated in the present study. The clinical literature, based on unquantified observation, indicates that narcissists distort reality to protect their fragile view of self, seeing themselves as unique, special, and as having extraordinary abilities (Russell, 1985; Tobacyk & Mitchell, 1987). According to this literature, narcissists exaggerate their accomplishments and present themselves as without fault, adopting an attitude of superiority towards others (Lax, 1975). They are experts in manipulation (Biscardi & Schill, 1985; Stevens, Pfost, & Skelly, 1984) and therefore are likely to see themselves as interpersonally skilled. Thus narcissists present a grandiose view of themselves in all major areas of functioning (Akhtar & Thomson, 1982). While grandiosity is a central characteristic in descriptions of narcissistic pathology, this characteristic
has not been verified empirically. This study investigated grandiosity in cognitive abilities, appearance, and social functioning by comparing narcissists' self descriptions with objective measures, providing an empirical test of distorted self-perception. If narcissism and self-esteem differ on the basis of accuracy of self-appraisal (Patton, Connor, & Scott, 1982; Pulver, 1970; Stolorow, 1975), narcissism should produce an inflated view of self, whereas, self-esteem should provide a positive, yet accurate self view. If narcissism and self-esteem are similar in type but different in degree, both narcissism and self-esteem would be expected to produce inflation in views of self, with narcissism associated with greater self distortion.

According to Gerson (1984), narcissists also use defensive splitting to protect their self-esteem. Narcissists continue to use splitting beyond the stage of developmental appropriateness, perhaps due to parental failures in providing praise and limit-setting (Kernberg, 1978; Russell, 1985). When children are not praised for accomplishments, rage develops as a consequence of their resulting unmet needs, whereas failures in limit-setting result in over-gratification, leaving natural aggression unrestrained. Splitting is used to protect the narcissist's self-esteem by allowing the externalization of aggression following disappointment or criticism.
Generally, this externalization occurs by devaluing the source of criticism. Splitting also provides positive feedback for the self, as those who gratify the narcissist are idealized, increasing the narcissist's sense of self importance through association with idealized others. Splitting results in severe reality distortion due to the narcissist's inability to integrate liked and disliked aspects of a single person. The narcissist either idealizes or devalues others according to the narcissist's perception of them as either gratifying or critical.

Insufficient attention has been given to the empirical investigation of grandiosity and defensiveness in narcissists. In one study, Biscardi and Schill (1985), using Gleser and Ihilevich's (1969) Defense Mechanisms Inventory, found that narcissism was correlated with projection. In the only other study on defensiveness, Gerson (1984) developed a self-report inventory measuring the use of defensive splitting and found that splitting was related to narcissism. These studies have investigated distortion indirectly using self-report inventories of defensiveness.

The present study investigated grandiose distortion in self-presentation more directly by comparing the narcissist's prediction of his or her levels of intelligence, attractiveness and interpersonal understanding to objective measures of these constructs.
Previous research has not provided quantifiable evidence that narcissistic grandiosity actually represents an inflated as opposed to an accurate self-view. Defensiveness is investigated using Gerson's (1984) Splitting Scale. It is expected that splitting will be positively related to reality distortion.

When a grandiose, inflated view of self is not sufficient to protect the narcissist from information which threatens this view, the narcissistic rage reaction is frequently a second line of defense. According to the clinical literature, when faced with feedback contradicting their view of themselves as superior, narcissists become enraged. Criticism which would produce only mild frustration or irritation in others is perceived by the narcissist as an insult, producing anger or rage. As such, narcissists distort constructive criticism, viewing it as a personal, malicious, attack (Rothstein, 1984). Splitting typically accompanies the rage reaction and can be observed as an angry devaluation of the source of criticism in a defensive attempt to lessen negative impact on the self.

While case studies in the clinical literature have emphasized the importance of the narcissistic rage reaction (Hanly, 1984; Mone, 1983; & Robbins, 1982), this phenomenon has not been investigated empirically. The present study examined rage reactions in narcissists following a psychological injury produced by giving realistic feedback
contradicting their inflated self view, with the expectation that narcissists will evidence greater hostility in response to negative feedback than will non-narcissists. In addition, the narcissist's tendency to devalue the source of the negative feedback was also tested. Also investigated were the relationships among splitting, the rage reaction, and grandiosity, with positive relationships expected in each case.

This study explored the extent of overlap between measures of self-esteem and narcissism. Relatively little overlap may indicate that both narcissism and self-esteem share a positive self evaluation. Greater overlap might call into question the validity of current measures of these constructs. Narcissism measures may be contaminated by inclusion of healthy self-esteem, or self-esteem measures may be contaminated by narcissism.

Hypotheses

1) As compared to those low in narcissism, high narcissists will demonstrate more grandiosity in self-perception for the areas of intelligence, interpersonal understanding, and attractiveness.

2) As compared to those low in narcissism, high narcissists will demonstrate more defensive pathology (greater splitting, self-deception, hostile reaction to negative feedback, and devaluation of the source of negative feedback).
3) Those high in narcissism and low in self-esteem will demonstrate the greatest levels of grandiosity and defensive pathology, while those high in self-esteem and low in narcissism will show the lowest levels on these measures.

4) Positive relationships among splitting, grandiosity, self-deception, hostile reaction to negative feedback, and devaluation of the source of negative feedback are predicted.

5) This study also determined whether narcissism without self-esteem is a better predictor of distortion than narcissism alone. If so, this suggests that the NPI may be contaminated with healthy self-esteem. Similarly, this study tested whether self-esteem with narcissism removed is a better predictor of reality contact than is self-esteem alone. If so, self-esteem may be contaminated with pathological narcissism.
CHAPTER II

METHOD

Subjects

Participants were 96 student volunteers who received extra credit in undergraduate psychology classes in return for their participation. The literature indicates no sex differences in narcissism (Gerson, 1984; Mullins & Kopelman, 1988; Raskin & Hall, 1981; Solomon, 1982; Watson, Grisham, Trotter, & Biderman, 1984; Watson, Taylor & Morris, 1987), and because of constraints on the availability of males, subjects were included in a two to one ratio of females to males. The study utilized a four-cell design, with sixteen females and eight males per cell. For additional analysis, an eight-cell design was incorporated with a minimum of seven subjects per cell.

Measures

The 40-item Narcissistic Personality Inventory (NPI) was used to measure narcissism (Raskin & Terry, 1988) (see Appendix A). The validity and reliability of the NPI have been previously described.

The Tennessee Self-Concept Scale (TSCS) Total P score was used to measure self-esteem (Roid & Pitts, 1988). This consists of 90 items which subjects rank on a Likert type scale (1 = completely false, 5 = completely true). It
has a test-retest reliability of .92 (two week interval), with an alpha coefficient greater than .80 (Tzeng, Maxey, Fortier, & Landis, 1985). The TSCS is one of the most widely used measures of self-esteem available (Stanwyck & Garrison, 1982). It has discriminated psychiatric groups from normals (Crites, 1965) and has been used to predict treatment outcome in substance abuse patients (Gross, 1971; O'Leary, Chaney, & Hudgins, 1978).

There is controversy in the psychological literature regarding whether global measures of self-esteem, which assess overall or total self-esteem, or multi-dimensional measures which assess unique facets, more accurately reflect the concept of self-esteem. Some researchers argue that dimensional measures of self-esteem have more utility. They contend that global measures are defined too generally and have too much overlap with other constructs (Fleming & Courtney, 1984). An additional argument against the use of global measures of self-esteem questions the sensitivity of global measures in assessing changes in self-esteem. Global measures of self-esteem assume that self-esteem is a relatively stable characteristic. Thus Demo (1985), who views self-esteem as constantly fluctuating, proposes that multi-dimensional measures of self-esteem are more responsive in assessing changes in self-esteem.

In contrast, other researchers support the use of global measures of self-esteem. Shavelson, Hubner, and
Stanton (1976), who developed the most widely accepted model of self-esteem, proposed that global self-esteem is a superordinant category encompassing other aspects of the self-concept. For example, global self-esteem would include subordinant constructs such as social self-esteem or academic self-esteem. They developed a hierarchical arrangement of the various facets of self-esteem with global self-esteem at the apex of this hierarchy. They maintain that global self-esteem is stable and is differentiable from other constructs. Fleming and Watts (1980) suggest that the decision of whether to use a global or a dimensional measure of self-esteem should be based on the theoretical knowledge of the constructs to be measured. Thus, at times, measures of general self-esteem may be more appropriate. In the present study a global measure of self-esteem was used because theories of narcissism refer to global self-esteem in narcissists. In addition, the NPI produces a global narcissism score, therefore it is more appropriate to compare global narcissism to global self-esteem, keeping both constructs at similar levels of generality.

The Splitting Scale (Gerson, 1984) was used to measure defensive functioning (see Appendix B). It is a fourteen-item, forced-choice, self-report measure using a seven-point Likert format for each item. Possible scores range from 14 to 98 with a mean of 53.0 and a standard deviation
of 11.5. The alpha coefficient is .70 and test-retest reliability over a three week period is .84. The Splitting Scale correlated .25 (p < .01) with the Narcissistic Personality Disorder MMPI Scale and is negatively correlated with the Rosenberg Self-Esteem Scale -.40 (p < .001). There is no difference between male and female scores. Glassman (1986) found a similar mean (55.0) and standard deviation (9.8) using the Splitting Scale with 130 undergraduates.

A shortened version of the Self-Deception Questionnaire was used as an additional measure of defensiveness (Paulhus, 1984) (see Appendix C). The original Self-Deception Questionnaire was developed by Sackeim and Gur (1979) to assess defensiveness which is not under conscious control. The items on the scale are considered universally true, yet psychologically threatening. Individuals high on self-deception are less likely to report pathology. Paulhus (1984) developed a shortened version of the scale using the five most reliable items. The alpha coefficient of the scale is .62 (Mellor, Conroy, and Masteller, 1986). Mellor, Conroy, and Masteller (1986) have used the shortened scale to discriminate recovering alcoholics from an adult control group.

The Shipley Institute of Living Scale served as a measure of intelligence, (Zachary, 1986). The scale
contains two subtests, Vocabulary and Abstraction, with each administered for ten minutes. The combined reliability of the two subtests is .92, and test-retest reliability over twelve weeks is .78. The test correlated .74 with the WAIS-R (Zachary & Gorsuch, 1985) and is considered a valid estimation of general IQ (Zachary, Crumpton, & Spiegel, 1985).

The total score of the Mehrabian and Epstein (1972) Empathy Scale functioned as a measure of empathy (see Appendix D). Subjects respond by rating each of 33 items from +4 (very strong agreement) to -4 (very strong disagreement). As expected, there is a significant difference between males and females in empathy (Mehrabian & Epstein, 1972). The mean for males is 23, (SD = 22), while the mean for females is 44 (SD = 21). The Mehrabian-Epstein Empathy Scale is not significantly affected by social desirability (Mehrabian & Epstein, 1972; Watson, Grisham, Trotter, & Biderman, 1984). Construct validity is supported by a negative relationship with aggression and a positive relationship with helping behavior (Mehrabian & Epstein, 1972). This scale is also moderately correlated with other measures of empathy (Watson, Grisham, Trotter, & Biderman, 1984).

Changes in mood before and after objective feedback were measured by the Multiple Affect Adjective Check List-Revised Today Form (MAACL-R; Zuckerman & Lubin, 1985).
The 132 adjectives of the MAACL-R comprise the subscales Anxiety, Hostility, Depression, Positive Affect, and Sensation Seeking. The MAACL-R also contains two composite scores, Dysphoria and PASS, measuring negative and positive affect, respectively. Developed to assess changes in mood as a function of external conditions, the MAACL-R has shown internal consistencies ranging between .80 and .93. Test-retest reliabilities measured after five days ranged from .00 to .34, reflecting a sensitivity to mood fluctuation. The MAACL-R provides improved discriminant validity (Zarske, 1988) with scale intercorrelations between .4 and .6 (Zuckerman & Lubin, 1985). Subscales are not significantly correlated with social desirability. The manual also provides validity data which includes correlations of the scale with self, peer, and observer ratings. Gosselin, Lubin, and Sokoloff (1983) found significant correlations between MAACL-R scales and the POMS, a similar multi-affect mood scale.

A seven-point Likert scale was employed asking subjects to rate the extent to which the study would contribute to the field of psychology (from 1 = almost no contribution, to 7 = very important contribution). The purpose of this instrument was to evaluate the extent to which devaluation of the experiment might be related to narcissistic injury.
Attractiveness

Physical attractiveness was measured by comparing photographs of subjects against a set of selected yearbook photographs. Three hundred photographs of each sex were randomly selected from the university yearbook. Same sex photographs were compared to each other by ten undergraduates (five males and five females) who sorted the male and female photographs separately. First the undergraduates sorted pictures of one sex into high, medium, and low levels of attractiveness. Next, raters were provided seven category descriptors (from 1 = extremely low attractiveness, to 7 = extremely high attractiveness) and the number of pictures to be sorted into each category so as to approximate a normal distribution (Geiselman, Haight, & Kimata, 1984). Six pictures were placed in the extremely low attractiveness pile, 48 in very low attractiveness, 60 in low attractiveness, 72 in medium attractiveness, 60 in high attractiveness, 48 in very high attractiveness and six in extremely high attractiveness. These descriptors, in numerical order with the appropriate number of pictures for each category, were written on a chart placed on a flat surface, forming a 7-point scale. Raters were instructed to work from the extremes to the middle of the scale since it is easier to classify extremes (Liebert & Spiegler, 1970). Starting with the previously sorted high attractiveness pile, raters were instructed to
distribute these pictures in the category where they felt they belonged. Next, the same procedure was performed with the low and then the medium piles. Thus these pictures represented a normally-distributed continuum of attractiveness. The undergraduates then repeated the same procedure with pictures of the other sex.

For each category, the pictures most consistently rated in that category were selected. From these consistently rated pictures, fifty pictures were chosen which represented a normal distribution. In the final selection, there was one picture from extremely low attractiveness, eight from very low attractiveness, ten from low attractiveness, twelve from medium attractiveness, ten from high attractiveness, eight from very high attractiveness, and one from extremely high attractiveness. Separate sets of pictures of each sex were randomly ordered on a chart to be used as a comparison for rating pictures of subjects during the experiment.

The two female experimenters who rated subjects during the experiment were trained in rating pictures against the standardized set of pictures until inter-rater reliability reached acceptable limits ($r = .80$). Raters agreed to consider hairstyle and facial expressions in addition to facial features in rating pictures in order to increase their agreement. Ratings were obtained by comparing the subject's picture with each standard picture of the same
sex. Raters indicated whether the subject was more or less attractive than each standardized picture (Mueser, Grau, Sussman, & Rosen, 1984). A subject’s percentile attractiveness rating was twice the average of the number of pictures for which they were rated as more attractive by the two experimentors. As each standardized set contained fifty pictures, each picture represented every second percentile in a normally-distributed continuum of attractiveness.

**Procedure**

Subjects were required to sign an informed consent form which contained a statement of the general purpose of the experiment (see Appendix E). Subjects were also given a brief questionnaire assessing psychiatric history (see Appendix F). Seven subjects with previous psychiatric history were not given the opportunity to receive feedback at the end of the experiment as a safeguard to protect them from the stress of receiving negative feedback. Subjects with psychiatric history were not included in the sample. Subjects were then administered a demographics questionnaire (see Appendix G), which required subjects to rate on a percentile scale, as compared to the average college student, their own intelligence, attractiveness, and ability to understand another person’s condition or state of mind (empathy). Subjects were instructed to put their demographics questionnaire in a folder when returning
it to the experimenter to prevent experimenters from seeing subjects’ self ratings. The MAACL-R was also administered at this time and subjects were informed it would be readministered to assess their level of fatigue at the conclusion of the experiment.

After these self-report measures were completed and returned to the examiner, shoulder-level pictures were taken of each subject using an automatically developing camera against a standardized background. While subjects’ pictures were being taken, subjects without a psychiatric history (as indicated by the questionnaire previously administered) were individually asked if they would like to receive feedback on their performance at the end of the experiment. Next, subjects were administered the Shipley-Hartford and then the Empathy Scale to allow time for these instruments to be scored in order to provide feedback later in the experiment. The Tennessee Self Concept Scale, NPI, Splitting Scale, and Self-Deception Questionnaire were then administered in a randomized order. While subjects were completing the written measures, each of the two female experimenters independently rated pictures of the subjects in a separate room.

After completing the written measures, subjects who requested feedback were given a rating sheet listing their predicted and actual percentile scores for intelligence, attractiveness, and the ability to understand another’s
condition or state of mind, as well as an explanation of the meaning of percentile scores. As a safeguard to prevent subjects from being unduly upset by negative feedback, a cap was placed on feedback scores so that no subject was given feedback more than 25 percentile points below their predicted score. If subjects asked how these percentile scores were obtained, they were informed that intelligence and empathy scores were obtained using written measures which were standardized and widely used. They were told their attractiveness score was derived by comparing their picture to a standardized set of pictures representing a normal distribution of attractiveness.

Next, subjects were re-administered the MAACL-R. At this time, subjects were also given a seven point Likert scale asking them to rate the extent to which they felt this study would contribute to the field of psychology.

Subjects were also shown a copy of the NPI and asked to indicate in a few words what they thought the instrument measured. Next, a more structured assessment was obtained by asking subjects to rate the purpose of the NPI on a continuum from 1 to 7, with self-esteem and self-conceit as the poles. Subjects were instructed that if they thought the instrument measured self-esteem, they were to circle a number between one and three with one indicating the instrument was completely a measure of self-esteem. Subjects were given similar instructions regarding self-
conceit, with seven indicating the instrument was completely a measure of self-conceit. If subjects thought the instrument measured neither self-esteem nor self-conceit, they were instructed to choose the number four. This assessment provided a test of Emmons' (1981) informal observation that narcissists thought the NPI measured self-esteem while non-narcissists correctly identified the NPI as a measure of conceit or self-love.

At the end of the experiment, subjects were asked to indicate their perception of the purpose of the experiment to insure that subjects did not guess the purpose of assessing mood following feedback. Three subjects’ statements indicated that they may have identified the reason for providing feedback and then re-administering the MAACL-R. These subjects were not included in the sample.

After the manipulation check was completed, subjects were de-briefed by a master’s-level graduate student who asked if they had any questions or comments regarding the experiment. Negative feedback regarding the experiment was encouraged by asking subjects to identify aspects of the experiment which they both liked and did not like. Any subjects who had any questions regarding feedback scores were informed of the error variance inherent in the measures used. These subjects were also given information on research indicating the adaptiveness of positive distortions and positive thinking. After debriefing by the
master’s-level student, subjects were also debriefed by a doctoral-level student who answered any further questions and documented credit subjects had earned by participating in the experiment. All subjects were given the opportunity to attend a group debriefing session held after data collection had been completed to explain the hypotheses of the experiment.

**Design**

Subjects were assigned to one of four cells on the basis of their NPI and TSCS scores. The mean scores from the standardization samples (NPI=15, TSCS=345) were used to divide the subjects into high and low narcissism and self-esteem groups.
CHAPTER III

RESULTS

Descriptive Findings

Means and standard deviations of measures used are presented in Table H-1. Gerson's (1984) mean of 53.0 for the standardization sample of the Splitting Scale, although slightly lower than the mean obtained (60.2), was not significantly different. The sample in this study was equivalent to standardization samples of the measures used with the exception of the Mehrabian-Epstein Empathy Scale. The present sample appears to be more empathic than Mehrabian and Epstein’s standardization sample. Their means and standard deviations for both males (M = 23.0, SD = 22.0) and females (M = 44.0, SD = 21.0) (Mehrabian & Epstein, 1972) reflected significantly lower levels of empathy than those obtained in this sample t(131) = 27.8, p < .001 for males, t(163) = 27.2, p < .001 for females). A more recent study (Bohmeyer, Burke, & Helmostadter, 1985) using the Mehrabian-Epstein scale with 135 undergraduates obtained means which were higher than the standardization means, but still significantly lower than the means in this study t(165) = 19.3, p < .001 for males, t(231) = 28.3, p < .001 for females).
Bohlmeyer, Burke, and Helmstadter (1985) found females had a mean of 50.8 ($SD = 20.8$) and males a mean of 29.9 ($SD = 22.0$).

**Correlational Findings**

The correlation between the ratings of the two experimenters who rated pictures of subjects during the experiment was $0.67$ ($p < 0.0001$) demonstrating an adequate level of inter-rater reliability. This correlation is similar to that obtained by Geiselman, Haight, and Kimata (1984) ($r = 0.71$) in a study which also involved rating attractiveness using yearbook photographs.

The correlation between the Tennessee Self-Concept Scale (TSCS) Total P and the older version of the Narcissistic Personality Inventory (NPI) obtained in the pilot study was $0.31$ ($p < 0.01$). The correlation obtained in this study between Total P and the new 40-item NPI was $0.12$, a non-significant correlation. Correlations among measures of reality distortion and defensiveness are presented in Table H-2. The three measures of reality distortion were highly related, indicating that distortion in one area of self evaluation tended to be associated with distortion of other aspects of self image. Splitting was negatively related to grandiose estimation of interpersonal understanding and positively related to hostility after feedback.
Correlations between the NPI, Total P and measures of reality distortion and defensiveness are presented in Table H-3. Splitting was negatively related to self-esteem, but was not related to narcissism. Self-deception was positively associated with narcissism; however, self-deception was also correlated with self-esteem. Correlations between actual empathy with narcissism and with self-esteem are similar; the empathy measure did not indicate different levels of empathy in narcissists and those high in self-esteem. Distortion in all three life areas was related to narcissism at the .01 level, while only interpersonal distortion was related to self-esteem (p < .05).

Analysis of Covariance—Reality Distortion

Three 2x2 ANCOVAS (high and low narcissism by high and low self-esteem) were performed on estimated intelligence, interpersonal understanding, and attractiveness, with subjects’ actual percentile scores in each area used as covariates. Thus, these analyses tested for degree of reality distortion in each separate life area. Multiple analysis of covariance was not performed as each dependent variable required a unique covariate. Main effects for narcissism were observed for intelligence, F(1,96) = 5.56, p < .05; interpersonal understanding, F(1.96) = 6.26, p < .01; and attractiveness, F(1.96) = 3.96, p < .05. Narcissists significantly overestimated their intelligence,
attractiveness, and interpersonal understanding as compared to those low in narcissism. A main effect for self-esteem was also observed, $F(1,96) = 4.27, p < .05$, with those higher in self-esteem demonstrating more distortion in predictions of their interpersonal understanding. No significant interactions were observed between narcissism and self-esteem.

Scores on the Empathy Scale in this study were significantly higher than those in the standardization sample. Higher actual scores necessitated even higher predictions to result in significant distortion, as the covariates used were based on the means and standard deviations of the standardization samples. A 2x2 ANOVA performed on empathy scores revealed no main effects or interactions, indicating that narcissists and those high in self-esteem did not differ in their actual levels of interpersonal understanding.

Analysis of Variance—Defensiveness

The 2x2 ANOVA performed on Splitting scores demonstrated a main effect for self-esteem, $F(1,96) = 13.58, p < .0001$, with those lower in self-esteem evidencing higher levels of splitting. No significant effects were observed for narcissism or for the narcissism by self-esteem interactions.

The 2x2 ANOVA used to analyze the abbreviated Self-Deception Scale indicated a main effect for self-esteem,
Those higher in self-esteem utilized self-deception. An additional main effect for narcissism approached significance, $F(1, 96) = 3.72, p = .057$ with those who are more narcissistic also more frequently employing the defense of self-deception. There was no narcissism by self-esteem interaction.

The $2 \times 2$ ANOVA performed on subjects' responses to the item providing an opportunity to devalue the experiment yielded no main effects or interactions. The opportunity to berate the experiment did not reveal differences in externalization of blame by narcissists or by those high in self-esteem.

Analysis of Covariance—Response to Feedback

The $2 \times 2 \times 2$ ANCOVA (narcissism by self-esteem by positive/negative feedback) performed on subjects' post-feedback hostility scores with their pre-feedback hostility scores held constant was not significant. Additional $2 \times 2 \times 2$ ANCOVAs were conducted on the other scales of the MAACL-R with pre-feedback scores as covariates. Post hoc analyses of significant two-way interactions were conducted using Cicchetti's test (Cicchetti, 1972). All cell comparisons reported were significant at the .05 level.

The $2 \times 2 \times 2$ ANCOVA with the MAACL-R Anxiety Scale (pre-feedback Anxiety covaried) revealed a main effect for narcissism, $F(1, 96) = 9.90, p < .01$, with the high narcissism group demonstrating less anxiety than the low
The narcissism group regardless of type of feedback. No significant interactions were obtained.

For the MAACL-R Depression Scale, the 2x2x2 ANCOVA, with pre-feedback depression held constant, revealed a two-way interaction between narcissism and type of feedback, $F(1,96) = 4.73, p < .05$. Post hoc analysis ($p < .05$) indicated those higher in narcissism demonstrated less depression after receiving negative feedback than did those lower in narcissism. An additional two-way interaction on the Depression Scale between self-esteem and type of feedback approached significance $F(1,96) = 3.71, p = .057$. Post hoc analyses, significant at the .05 level, indicated those higher in self-esteem were less depressed than those lower in self-esteem after either positive or negative feedback. Those low in self-esteem receiving negative feedback evidenced greater depression after feedback than those low in self-esteem receiving positive feedback.

The 2x2x2 ANCOVA performed on the MAACL-R Sensation Seeking Scale, with pre-feedback sensation-seeking as the covariate, indicated a main effect for self-esteem, $F(1,96) = 10.08, p < .01$, with those higher in self-esteem demonstrating higher levels of sensation-seeking regardless of whether feedback was negative or positive. No interactions were significant.

The MAACL-R PASS composite scale is a summation of the two positive affect scales, Sensation-Seeking and Positive
Affect. The 2x2x2 ANCOVA with the PASS composite scale (pre-feedback PASS scores were covaried) revealed a main effect for type of feedback approached significance $F(1,96) = 3.72, p = .057$, with those receiving positive feedback evidencing higher levels of positive affect. A two-way interaction between narcissism and self-esteem was also significant, $F(1,96) = 4.00, p < .05$. Post hoc analyses ($p < .05$) indicated that, regardless of feedback, those higher in narcissism and lower in self-esteem demonstrated more positive affect than those lower in narcissism and lower in self-esteem. Additionally, the high self-esteem low narcissism group evidenced greater positive affect than the low self-esteem low narcissism group. Thus, both self-esteem and narcissism were related to positive affect. This interaction between narcissism and self-esteem, while not predicted, was the only significant interaction between narcissism and self-esteem obtained in the study.

The Chi-Square performed on subjects’ responses to the unstructured assessment of what the NPI measured indicated narcissists and non-narcissists were equally likely to identify the NPI as a measure of self-esteem. Few subjects in either group identified the NPI as a measure of self-conceit. Subjects responses to the structured assessment of what the NPI measured were not significantly related to narcissism ($r = .08$).
A total distortion score was obtained by adding the differences between subjects' predicted and actual intelligence, attractiveness, and interpersonal understanding scores. The NPI predicted total distortion at the .01 level ($r = .31$). The NPI with the effects of self-esteem controlled also predicted total distortion at the .01 level ($r = .29$). Computation of $R$ to $Z$ transformations indicated these correlations were not significantly different. The Total P score of the TSCS did not predict total distortion at the .05 level ($r = .19$). Controlling the effects of narcissism on self-esteem did not enhance the ability of the Total P score to predict total distortion ($r = .16$, $p > .05$). The relative independence of narcissism and self-esteem in the study indicated that the study was not affected by the small degree of overlap between the NPI and Total P.
The means and standard deviations of measures used were comparable to those of the standardization samples with the exception of the Mehrabian-Epstein Empathy Scale. The means obtained for both males and females were significantly higher than standardization means ($p < .05$). As subjects’ percentile actual empathy scores were based on the standardization means, subjects’ predicted empathy scores had to be even more inflated in order to produce a significant difference between predicted and actual scores. The range of Narcissistic Personality Inventory (NPI) scores obtained was 4 to 31.

To comply with ethical considerations and give subjects an opportunity to refuse feedback, subjects were asked if they would like to receive feedback. All subjects indicated they would like feedback. After receiving feedback, no subjects appeared to be upset. Subjects who asked questions regarding how scores were obtained seemed reassured during the debriefing by explanations of the error variance inherent in the measures used. Explanations of the adaptiveness of positive thinking were also provided and appeared to encourage subjects who had received negative feedback. Only three subjects’ explanations of
their perception of the purpose of the experiment indicated they may have guessed the reason for the second MAACL-R administration after the feedback, and scores of these subjects were not included in the sample.

This study found that narcissists evidenced higher grandiosity than non-narcissists in all three life areas measured, intelligence, attractiveness, and interpersonal understanding (empathy). Those high in self-esteem demonstrated more grandiosity in interpersonal understanding than those low in self-esteem.

Findings with measures of pathological defensiveness indicated that those lower in self-esteem used more splitting than those high in self-esteem. Those higher in self-esteem used more self-deception than those lower in self-esteem, and those higher in narcissism also used more self-deception than those lower in narcissism.

Measurement of mood response to feedback revealed no findings for hostility; however, narcissists demonstrated less anxiety following feedback than non-narcissists regardless of the type of feedback, and narcissists were less depressed than non-narcissists after negative feedback. Those high in self-esteem were less depressed than those low in self-esteem after both positive and negative feedback.

Subjects’ responses indicating what qualities they felt the NPI measured, indicated that narcissists and non-
narcissists were equally likely to identify the NPI as a measure of self-esteem. The ability of the NPI to predict distortion was not improved by removing the effects of self-esteem. Likewise, the ability of the self-esteem measure to predict distortion was not improved by removing the effects of narcissism.

**Hypothesized Findings**

The first hypothesis, that narcissists would demonstrate more grandiosity in self-perception in the areas of intelligence, interpersonal understanding and attractiveness was strongly supported. Main effects for narcissism were significant for the three measures of grandiosity. The finding that narcissists possess an inflated self view as measured by exaggerated perceptions of their intelligence, attractiveness and interpersonal skill lends empirical support to the widely reported clinical phenonmena of narcissistic grandiosity (Lax, 1975; Russell, 1985; Tobacyk & Mitchell, 1987). This study demonstrated that grandiosity was present in a non-clinical sample of narcissists, suggesting that this characteristic is likely to be present in a clinical sample as well. A more pathological clinical sample would be expected to demonstrate even greater levels of distortion in self-perception. Confirming grandiosity in a sample of normal narcissists also lends support to Raskin and Hall’s (1979) conceptualization of narcissism as a trait existing not
only in clinical populations but on a continuum in normal populations as well.

Grandiosity is an important diagnostic criterion for narcissism, and previous research had not provided quantitative evidence that narcissistic grandiosity actually represents an inflated self evaluation. While grandiosity is one of nine criteria used to diagnose Narcissistic Personality Disorder in DSM-III-R (American Psychiatric Association, 1987), inclusion of this characteristic has been based on clinical descriptions of narcissism. This study provides empirical validation of pervasive distortion in narcissists, supporting the inclusion of grandiosity in the DSM-III-R diagnostic criteria for this disorder.

Empirical evidence confirming narcissistic grandiosity is also important in substantiating the theories of Kernberg and Kohut. Both theorize that grandiosity develops to provide the narcissist with self reinforcement or self nurture to compensate for parents who do not meet the child’s needs for nurturance. While this study did not attempt to validate their theories regarding the etiology of narcissism, finding that narcissists demonstrate grandiosity across a variety of areas, and at a level greater than that of non-narcissists, supports Kernberg and Kohut’s view that grandiosity is a central characteristic of narcissism. Previously, theories of
grandiosity in narcissists had been based solely on clinical descriptions.

According to Kernberg and Kohut, grandiosity is also a factor in the impoverished and superficial interpersonal relationships of narcissists. The superior, self-righteous attitude of narcissists frequently alienates them from others. Grandiosity also prevents sustained interpersonal relationships. In order to protect a grandiose self, the narcissist terminates relationships prematurely to prevent rejection which would threaten the narcissist’s grandiose self-perception.

The second hypothesis, that those high in narcissism would demonstrate more defensive pathology as indicated by greater splitting, self-deception, hostile reaction to negative feedback, and devaluation of the source of negative feedback was partially supported. Main effects for narcissism were observed for the Self-Deception Scale.

In this study using college students, as well as in a previous study with a general adult population (Gerson, 1984), the Splitting Scale was more highly associated with low self-esteem than with narcissism. Theories of splitting have characterized splitting as a defense used by narcissists and borderlines (Gerson, 1984). Instead of being unique to borderline and narcissistic functioning, splitting may instead, be indicative of low functioning in general. Splitting was not present in this sample of non-
clinical narcissists suggesting that it may only be used by narcissists with clinically significant levels of pathology. If splitting is indicative of low functioning, normal narcissists may function adequately and not utilize splitting under conditions of average or moderate stress. If enough stress occurs to cause a deterioration of functioning, normal narcissists may resort to the more primitive defense of splitting. Assessing the stress level of narcissists might reveal an association between splitting and stress in normal narcissists.

Another possible explanation for finding splitting only in those low in self-esteem is that the Splitting Scale may be overly influenced by items measuring negative self evaluation. The scale contains items such as "When I’m with someone really terrific I feel dumb" and "Some people have too much power over me" which may reflect negative, rather than narcissistic self evaluation. Narcissists may not have been willing to admit to items so overtly self-effacing. In contrast, those low in self-esteem may be overly inclined to report negative self statements.

The use of self-deception by narcissists was supported in this study. It was hypothesized that self-deception would be a defense of narcissists only and not be used by those with healthy self-esteem. This prediction was not supported as those high in self-esteem also used self-
deception. Finding self-deception in normal narcissists as well as in those high in self-esteem indicates that self-deception is a defense used by normal populations, in contrast to splitting which appears to be a more pathological defense. Self-deception may be a defense used by those who are functioning adequately while splitting may occur only in persons who are experiencing functional difficulties.

Another possible explanation for finding self-deception in both narcissists and those high in self-esteem is that normal and pathological groups may be similar in using self-deception to defend against highly threatening material, while only those with greater pathology would defend against material with a milder threat value. On the abbreviated scale nearly all the items appear to be highly threatening. For example, there are items describing homosexuality and suicidality, which are likely to threaten most subjects. The abbreviated scale may not have enough items assessing varying degrees of psychological threat to reveal differences in the extent of self-deception between narcissists and those high in self-esteem. Thus, using the abbreviated scale may make it appear as though narcissists and those high in self-esteem are similar in their use of self-deception, when these groups may differ in the need to screen out less threatening material. The abbreviated scale was used in
this study because of time constraints. Administration of
the entire scale, containing items which appear to be less
overtly pathological, might reveal differences in the
extent of self-deception between narcissists and those high
in self-esteem. Narcissists would be expected to employ
self-deception to a greater degree than those high in self-
estee who might be able to admit to items with less threat
value.

A main effect for narcissism was not observed on
hostility scores following negative feedback. Since the
narcissistic rage reaction has been so consistently
described in the clinical literature (Kohut & Wolf, 1978;
Rothstein, 1984; Russell, 1985; Solomon, 1985; & Svrakic,
1985), it may be premature to call this phenomenon into
question based on the present findings. As anger and
frustration could be expected as a typical reaction in
normal populations following negative feedback, it was
predicted that this reaction could be observed in a
population of normal narcissists. Because rage has been
observed repeatedly in clinical populations and could also
be expected on a more limited basis in a normal population,
finding that normal narcissists did not react with anger to
negative feedback may imply limitations in the ability of
the experimental procedures to induce and measure a
narcissistic rage reaction. In revising the MAACL,
Zuckerman and Lubin (1985) removed from the negative scales
positive affect words which were scored if not checked. Removing these adjectives reduced scale intercorrelations; however, for the Hostility Scale, removing these items may have also reduced sensitivity to mild forms of anger. The revised Hostility Scale contains words such as enraged, furious, and hostile which are indicative of strong feelings of anger, but which may not discriminate more subtle forms of anger. The MAACL-R Hostility Scale may not have been sensitive enough to identify angry feelings of narcissists after receiving negative feedback. In addition, McCann & Biaggio (1989) found that narcissists were less likely than non-narcissists to admit to anger. Thus narcissists may have been angered by feedback, but unwilling to admit to the intensity of anger assessed by the MAACL-R.

Another possible explanation for the absence of hostile reactions in narcissists is that, due to ethical considerations, the importance of the feedback was not emphasized. This may have reduced the impact of negative feedback. The feedback cap placed on negative feedback may also have lessened its impact. For over half the sample, the feedback cap was employed on at least one of the three variables (intelligence, attractiveness, and interpersonal understanding), making it likely that this cap may have reduced the anger response of narcissists.
Narcissists did not devalue the experiment after receiving feedback. During debriefing, subjects who questioned the feedback they received were more likely to question the validity of the measures used than to make negative comments regarding the experiment as a whole. Thus, providing an opportunity to berate the experiment may have been too global a response to measure the narcissistic defense of devaluation. The opportunity to devalue specific aspects of the experiment, such as the measures used to obtain objective scores, might have been more sensitive to devaluation.

As devaluation is a characteristic of narcissism heavily documented in clinical case studies (Hartcollis, 1980; Kernberg, 1980), theories describing devaluation cannot be disproved by negative findings for devaluation in this study. In addition to extensive case study data documenting devaluation in clinical samples, there is one empirical study confirming devaluation in normal narcissists. Using the Defense Mechanisms Inventory (Gleser & Ihilevich, 1969) to assess devaluation, Biscardi & Schill (1985) found that devaluation was employed by narcissists. This Inventory contains stories describing fictional conflicts, and respondents are asked to indicate how they would respond if they were involved in a similar conflict. The stories describe conflicts involving authority, independence, and competition. In the present
study feedback was given within the context of comparing the subject’s performance to that of the average college student. Thus, the context of feedback implied competition with other students; however, this implied competition was deemphasized due to ethical concerns that subjects might become overly stressed by negative feedback. Increasing subjects’ feelings of competition in this study might have facilitated devaluation. Perhaps giving subjects feedback comparing their scores to scores of others in the study would have heightened feelings of competition in narcissists and resulted in greater devaluation.

The third hypothesis, that those high in narcissism and low in self-esteem would demonstrate the greatest levels of grandiosity, and pathological defenses, while those high in self-esteem and low in narcissism would show the least, was not supported as no interactions were significant between narcissism and self-esteem. Grandiosity in narcissists and positive self-enhancing bias in those with high self-esteem may have negated differences in grandiosity between the high narcissism, low self-esteem and high self-esteem, low narcissism groups. Positive self-enhancing bias in the high self-esteem low narcissism group could have been similar enough to grandiosity in the high narcissism low self-esteem group to result in no differences between these groups on reality distortion. As previously discussed, the measures of splitting and
devaluation, did not differentiate between high and low narcissistic groups as expected. If splitting is a defense used only by clinical narcissists and not by normal narcissists, then differences in splitting between the four cells would not be expected. Due to ethical considerations, measurement of devaluation was weakened as the extent and importance of negative feedback was minimized to protect subjects. Therefore, finding no effects for devaluation in the four cells is most likely a result of the reduced impact of negative feedback. Diminishing the importance of negative feedback is likely to have similarly influenced hostile response to feedback in the four cells.

The fourth hypothesis, that positive relationships would be observed among grandiosity measures, splitting, hostile response to feedback, and devaluation, received strong support for the three measures of grandiosity and limited support for measures of defensive pathology. Significant correlations are listed in Table 1. The three measures of reality distortion were related, indicating that different aspects of subjects’ distortion in self-perception tended to covary. Thus, subjects who distorted their intelligence, also tended to distort their attractiveness and interpersonal understanding. Grandiosity appears to be pervasive and not just specific to one life area. In addition, finding that different
aspects of the self-concept tend to correspond with each other supports Shavelson, Hubner, and Stanton’s (1976) hierarchical theory of self-esteem with global self-esteem as an over-all category encompassing other aspects of the self-concept.

The finding that splitting was positively related to hostility after feedback, supports the validity of the Splitting Scale (see Table 1), as splitting is described as a defense used to externalize aggression following disappointment (Gerson, 1984). This finding also indicates that for those who use splitting, negative feedback did have an impact. Splitting is theorized to maintain a positive self-image following criticism (Goldstein, 1985; Russell, 1985). This study indicates that splitting may be associated with more pathological levels of functioning in general, rather than solely with narcissistic or borderline functioning. Thus, a characteristic of low functioning may be the inability to protect self-esteem, when faced with mild disappointments, without instituting the disfunctional defense of splitting.

The fifth hypothesis, that narcissism without self-esteem would be a better predictor of distortion than narcissism alone, and that self-esteem without narcissism would be a better predictor of reality contact than self-esteem alone, was not supported. The revision of the NPI (Raskin & Terry, 1988), as previously discussed, reduced the
intercorrelation of the NPI and the Total P score. Because of this, it is not surprising that this improved scale is a significant predictor of distortion and that controlling for effects of self-esteem does not improve the scale's ability to predict distortion.

The attempt to replicate Emmons' (1981) finding that narcissists identified the NPI as a measure of self-esteem and non-narcissists correctly identified the NPI as a measure of self-conceit was not successful as few persons in either group correctly identified the NPI as assessing self-conceit. Emmons used the old NPI, however, so the results of his study are not directly comparable. As the revised NPI has a lower correlation with self-esteem, it should be easier to identify it as a measure of conceit. A possible explanation for finding that the revised NPI, which is less contaminated with self-esteem than the old measure, was not correctly identified, is that the items removed during the revision reflected self-conceit. Examples of items removed include, "Superiority is something you are born with" and "People just naturally gravitate towards me". Four of the twelve items removed appeared to represent strongly conceited statements. If items removed were more easily identified as assessing conceit, even though the NPI is less contaminated with self-esteem, it may be a less obvious measure of narcissistic pathology.
Another possible explanation of the failure to replicate Emmons’ (1981) finding is that narcissistic values may have become so accepted in society, that narcissistic traits do not appear pathological today. Emmons had concluded that narcissists identifying the NPI as a measure of healthy functioning and non-narcissists correctly identifying the measure as pathological indicated narcissistic pathology was ego-syntonic. Perhaps rather than narcissistic pathology being ego-syntonic to narcissists, as Christopher Lasch (1979) has suggested, narcissistic pathology has become ego-syntonic to society. Emmons’ study was conducted in 1981, perhaps societal attitudes towards the acceptability of narcissistic behavior have changed during the years since Emmons’ study so that subjects now did not view NPI questions as representing socially undesirable attributes. If narcissism has become more acceptable since Emmons’ study we might expect to see an increase in narcissism scores since Raskin and Hall (1979) normed the instrument. However, comparison of the standardization sample mean (20.9) with the mean obtained using the old NPI in the present pilot study (21.5), indicated no significant increases ($t(132) = 1.26, p > .05$).

Even though there has not been an increase in narcissism scores, society may still be more narcissistic than in 1981 if, as Kernberg (1978) believes, society has
become more accepting of narcissistic values without an increase in the actual number of narcissists. Kernberg views narcissism as formed in childhood through parental aggression which results in unmet emotional needs in the child. The child becomes completely self-centered in an attempt to meet its own needs. Arguing that narcissism originates in early childhood, Kernberg feels that society's stimulation of narcissistic needs does not produce more narcissists, but instead, persons already narcissistic, appear more socially appropriate.

Kernberg (1970), based on observations with clinical patients, notes that while narcissists are often creative and productive leaders, very few seem to reach their full potential, as their productivity over a long period of time is limited. Their superficial interpersonal relationships and difficulty in delaying gratification frequently reduce sustained productivity over a period of years. If Kernberg’s clinical observations are accurate for the majority of narcissists, and if society has become more narcissistic, narcissistic values may decrease the productivity of society over time. For example, if society promotes immediate gratification over waiting for long-term goals, aspects of society which necessitate delayed gratification, such as obtaining an education or saving for long-term investments may suffer decline.
**Unhypothesized Findings**

**Reality distortion.** The high self-esteem group positively distorted their interpersonal understanding. This unpredicted distortion among those high in self-esteem may be clarified by research indicating that limited distortion of reality may be useful in maintaining self-esteem. In their landmark study, Alloy and Abramson (1979) found that non-depressives overestimated their personal control over desired outcomes and that this illusion of control appeared to preserve or maintain self-esteem. Subsequent research has provided further support for a self-serving attributional bias used to maintain self-esteem (Alloy & Ahrens, 1987; Norem & Cantor, 1986; Taylor & Brown, 1988). In addition, Tennen & Herzberger (1987) found that self-esteem is a good predictor of self-serving positive bias.

In the present study those high in self-esteem exhibited a generally accurate view of self, exhibiting bias only in predictions of their interpersonal understanding. Bradley’s (1978) review offers evidence providing a possible explanation for why those high in self-esteem would not also positively bias perceptions of their intelligence and attractiveness. Bradley concluded that self-serving attributional bias is most likely to occur in situations in which individuals feel they have control over the outcome of an action and feel responsible
for that outcome. Perhaps subjects in this study felt a higher degree of personal responsibility and control over their interpersonal understanding. They may not have felt this same degree of control over their intelligence or attractiveness, attributing these characteristics to genetic predispositions or to fate.

While those high in self-esteem may distort their interpersonal understanding, and clinical descriptions of narcissists explicitly describe them as inflating their interpersonal abilities, narcissists and those high in self-esteem should differ in their actual levels of interpersonal understanding. In a review of the literature regarding the development of empathy, Barnett (1987) cited evidence indicating that empathy is correlated with the development of positive self-esteem. In contrast, narcissists have been described as possessing low levels of empathy (Kernberg, 1970; Stevens, Pfost, & Skelly, 1984). Empirical validation of low empathy in narcissists is provided by Watson, Grisham, Trotter & Biderman (1984) who found the NPI was negatively related to the Mehrabian-Epstein Empathy Scale ($r = -.20$, $p < .01$). The correlation between the NPI and the Mehrabian-Epstein scale in this study ($r = -.11$), while negative, was not significant. The correlation between Total P and the Mehrabian-Epstein scale ($r = -.05$) also was not significant. Watson et al. used the 54-item NPI while the revised measure was used in this
study. Seven of the twelve items removed from the NPI, such as "My basic responsibility is to be aware of my own needs" and "I usually dominate any conversation" may reflect lowered sensitivity to the feelings of others. Thus items removed may have reduced sensitivity to low empathy. As there were no significant differences in actual empathy between those high in narcissism and those high in self-esteem, reduced sensitivity of the 40-item NPI to low empathy may have lessened differences between narcissistic and self-esteem groups. Since narcissists and those high in self-esteem were not significantly different in empathy, despite expectations that they should be, it is uncertain whether those high in self-esteem were inflating their level of empathy or accurately describing their legitimately high level of empathy.

Defenses. Those lower in self-esteem employed greater splitting, and this finding replicated the work of Gerson (1984). Splitting is considered a more primitive defense mechanism than, for example, repression or intellectualization. Those low in self-esteem may have relatively inadequate defenses, and thus have to resort to more primitive defenses such as splitting. In this study the low self-esteem group appeared to be more pathological than the high narcissism group, as those low in self-esteem used splitting and were not protected from depression after negative feedback as were the narcissists. While normal
narcissists may employ splitting when under stress, splitting in those low in self-esteem appears to be more pervasive. Those low in self-esteem also appear to lack the defenses needed to maintain positive mood during stress as their depression was significantly greater than those high in self-esteem after negative feedback. In contrast, narcissists were less depressed than non-narcissists after negative feedback indicating they have the ability to maintain positive mood after negative feedback. Thus, having low self-esteem maybe more disfunctional than being narcissistic when receiving information disconfirming to the self.

Response to feedback. Finding that narcissists reacted with less depression after disconfirming feedback than non-narcissists, provides empirical support for Kernberg’s (1970, 1978) assertion that narcissists are not capable of experiencing sadness following a loss due to the fragility of their self-systems. Kernberg views sadness as too threatening for the narcissist, so the narcissist turns sadness into anger. While this study did not find evidence of anger after disconfirming feedback, narcissists did react to loss with less depression than did non-narcissists.

Narcissists also evidenced lower anxiety after feedback than did non-narcissists, suggesting that they may be generally underreactive to negative feedback. Depression
and anxiety are likely to represent a threat to self-esteem in narcissists as these emotions would disturb an internal sense of well-being. As the self-esteem of narcissists is not strong enough to tolerate internal fluctuations in their sense of self (Goldstein, 1985; Stevens, Pfost, & Skelly, 1984), narcissists presumably defend against depression and anxiety to protect themselves against disruption in their fragile self systems.

Narcissists experienced less depression than non-narcissists after negative feedback. It is not clear which defensive processes narcissists employed to protect themselves from disconfirming feedback, as the defense mechanisms assessed in the present study did not adequately differentiate narcissistic from high self-esteem groups. The study does provide evidence that the defensive processes of narcissists result in greater distortion in self-perception than do those of individuals high in self-esteem. This grandiose distortion could function to maintain a positive mood after negative feedback if the narcissist’s belief in superiority aids the discounting of negative feedback. Grandiosity could function as a filter protecting the narcissist from acknowledging the accuracy of negative feedback. For example, the narcissist may feel that one instance of negative feedback is not believable in light of all the other evidence perceived as supporting their superiority.
The distortion utilized by narcissists may involve a cost, if greater distortion in reality results in an inability to utilize feedback to make changes in behavior. Narcissists may distort input from their external environment to such an extent that they are unable to recognize aspects of their behavior which need modification. Indeed, clinical reports of narcissists describe an inability to accept realistic criticism for use in changing their behavior (Lax, 1975).

Those high in self-esteem demonstrated less depression than those low in self-esteem after both negative and positive feedback, indicating that high self-esteem is generally associated with lower depression. Self-esteem was significantly correlated in this study with lower depression prior to feedback as assessed by both the MAACL-R Depression (r = -.47, p < .0001) and Dysphoria Scales (r = -.43, p < .0001). Previous research has also found that self-esteem was negatively related to depression in undergraduates (Meyers & Wong, 1988). Thus, there is evidence in this study and in previous research that self-esteem is characterologically associated with lower levels of depression.

A different process appears to protect narcissists and those high in self-esteem from depression. In those high in self-esteem protection from depression appears to be the result of a characterological association between self-
esteem and low levels of depression. In contrast, narcissistic protection from depression appears to be a situational process, occurring as a buffer against stress. There were no differences between narcissists and non-narcissists in pre-feedback depression, and narcissism was not significantly correlated with measures of depression. It appears that a defensive process is activated in narcissists in stressful situations which preserves positive mood. One candidate for this defensive process may be grandiosity, which enables the narcissist to discount negative feedback.

**Reality Contact and Health.** This study provides some support for traditional notions of reality contact as indicative of health, and reality distortion as indicative of pathology (Taylor & Brown, 1988). The narcissistic group evidenced grandiosity in all three characteristics measured in comparison to non-narcissists, supporting the notion that pathology is associated with distortion. The high self-esteem group, as compared to those low in self-esteem, accurately predicted two of the three traits measured, partially supporting a relationship between health and accurate reality contact. Furthermore, as discussed above, results from the third trait, empathy, may also reflect accurate perception.

Distortion of interpersonal understanding in the high self-esteem group must be interpreted cautiously as, in
contrast to predictions in the literature, there were no
differences in actual empathy between narcissists and those
high in self-esteem. If this finding of grandiosity in
interpersonal understanding can be replicated in future
research, it has important implications for traditional
notions of pathology and mental health. As Taylor and
Brown (1988) noted, the theory that accurate reality
contact is associated with mental health, and distortion
associated with pathology, was derived from a clinical or
abnormal population. Increasingly, research with normal
populations indicates that self-esteem is associated with a
positive, self-serving bias (Tennen & Herzberger, 1987).
For example, Fitch (1970) found that high self-esteem
subjects attributed failure to external causes, such as
luck, while low self-esteem subjects attributed failure to
internal causes, such as their own ability. McFarland and
Ross (1982) found that failure attributed to task
difficulty was associated with greater self-esteem than
failure attributed to personal ability. Thus, there is
mounting evidence that the relationship between pathology
and mental health cannot be characterized simply by greater
reality distortion indicating greater pathology and greater
reality contact indicating greater mental health, since
normal populations demonstrate a significant level of
distortion. At present, the relationship between
distortion and pathology is unclear, and further research
on self-serving bias which incorporates different diagnostic groups is needed to clarify this relationship. The only clinical group which has been studied extensively is depressives, who demonstrate greater reality contact than non-depressives (Alloy & Abramson, 1979; Alloy & Ahrens, 1987; Dykman, Abramson, Alloy, & Hartlage, 1989). In this study, narcissists demonstrated greater reality distortion than those high in self-esteem, which provides the first direct assessment of positive distortion in this diagnostic group.

**Limitations of the Present Study**

The cap placed on negative feedback may have lessened the impact of disconfirming feedback. The cap was set at a level 25 percentile points below the subject’s predicted score. At this level, while several subjects questioned the accuracy of feedback, no subjects became distressed while receiving feedback. Increasing the cap might improve the ability of this experimental manipulation to produce an anger response and still protect subjects from significant stress.

In addition to the reduced potential of negative feedback to induce anger, the MAACL-R Hostility Scale may not have been sensitive enough to measure subtle forms of anger. Use of a different measure, with adjectives representing a wider gradation of angry feelings, might be more sensitive to narcissistic rage.
The measure used to assess devaluation was too global to identify the anger response of narcissists. Use of a more specific measure, perhaps assessing the subject’s opinion of the accuracy of feedback, might have been more sensitive to devaluation.

The empathy scale used did not differentiate narcissists from those high in self-esteem. As a result, it is uncertain whether those high in self-esteem actually inflated their interpersonal understanding.

**Suggestions for Future Research**

This study provided empirical validation of pervasive grandiosity, an important diagnostic characteristic of narcissism; however, further study is needed to confirm theories describing the development of narcissism. Surveys could be conducted assessing characteristics described in developmental theories as associated with the etiology of narcissism. If those high in narcissism report a higher incidence of the family characteristics theorized as instrumental in the development of narcissism, etiological theories would be supported. For example, the clinical literature indicates many narcissists were gifted, or possessed some unusual talent or skill, for which they were overly valued by their parents (Kernberg, 1970; Miller 1979, 1981). Clinical descriptions of narcissists’ early childhood also indicate a high incidence of trauma involving the narcissist’s parents. This trauma is thought
to lead to the child suffering severe disappointment in the parents and becoming overly self-focused. Surveys indicating the presence of these, as well as other family characteristics theorized to be associated with narcissism, would provide support for developmental theories. While such retrospective studies would not provide conclusive evidence to support the development of narcissism, they would be a logical first step before conducting more expensive longitudinal investigations.

Future studies might incorporate additional types of defenses such as denial, repression, and somatization. Somatization may be an important defense as clinical descriptions indicate narcissists express many vague physical complaints (Akhtar & Thomson, 1982; Stevens, Pfost, & Skelly, 1984). In addition to the types of defenses used by narcissists and those high in self-esteem, it is important to assess the extent of defensive functioning. While narcissists evidenced greater distortion than those high in self-esteem, their increased distortion might result from use of a greater number of different defenses or from use of more primitive defenses, associated with more extensive distortion. Greater distortion could also be a result of narcissists employing defenses more frequently than those high in self-esteem. Narcissists might employ defenses even when the threat value of feedback received would be considered low by most
people, whereas those high in self-esteem might employ defenses only when feedback is highly threatening.

Previous research has shown that positive biases increase as threats to the self increase (Bradley, 1978; Taylor & Brown, 1988). In this study it was suggested that narcissists and those high in self-esteem did not differ in their use of self-deception because the shortened Self-Deception Scale contained items which were highly threatening to both narcissists and those high in self-esteem. Future research employing the entire scale might have subjects rate the threat value of Self-Deception Scale items. This rating could reveal differences between narcissists and those high in self-esteem in the use of self-deception according to perceived threat.

Future investigation is also needed to clarify further the relationship between distortion and mental health. Further research might assess the types of attributes likely to be distorted by healthy individuals as well as answer the question of how much distortion is too much. Related research questions include, at what point does distortion interfere with healthy functioning? and, at what point does distortion become so great that it interferes with the ability to incorporate external feedback for use in adaptative behavior? Kohut and Wolf (1978) contend that narcissists and those with healthy self-esteem differ in their ability to accept disconfirming feedback. Asking
subjects to recall feedback given to them earlier might reveal whether narcissists forget negative feedback at a faster rate than non-narcissists. An alternative way to measure acceptance of feedback might be to ask subjects to rate the believability or accuracy of feedback. If narcissists discount negative feedback more than non-narcissists, narcissists may not distort the actual content of feedback, but instead may doubt the source of feedback to protect positive mood.

Another possible way to assess acceptance of feedback would be to provide subjects the opportunity to use feedback to modify their behavior. Such a manipulation could indicate differences in the extent to which narcissists and those high in self-esteem can incorporate feedback in changing behavior. Distortion in those high in self-esteem would not appear to be disfunctional if they can continue to use feedback in an adaptive manner.

Another measure which might differentiate levels of pathology in self-esteem and narcissistic groups is assessment of attributions for failure and success. Previous research has indicated that those high in self-esteem tend to make external attributions for failure and internal attributions for success (Fitch, 1970; McFarland & Ross, 1982). Narcissists have been described in clinical reports as externalizing blame (Rothstein, 1984), so they would also be expected to assign attributions in a manner
similar to those high in self-esteem. Narcissists, however, might be expected to externalize blame to a greater extent than those high in self-esteem as the self of the narcissist has been described as too fragile to tolerate even mild criticism (Kohut & Wolf, 1978). Having subjects assign attributions for positive and negative feedback received and then having them quantify how much they believed these attributions could reveal differences in the extent to which narcissists and those high in self-esteem utilize external attributions. While both narcissists and those high in self-esteem might be expected to assign external attributions for negative feedback and internal attributions for positive feedback, asking subjects to quantify their attributions on a continuum scale could indicate a greater degree of externalization of blame in narcissists.

In summary, narcissists experienced significant distortion in their perceptions of their own intelligence, attractiveness and interpersonal understanding. This finding provides empirical validation of the widely reported clinical phenomenon of narcissistic grandiosity (Hanly, 1984; Marks, 1985; Modell, 1975; Russell, 1985), which is important because this characteristic of narcissism had not been empirically validated in prior research. Grandiosity in one of the diagnostic criteria for Narcissistic Personality Disorder in the DSM-III-R
(American Psychiatric Association, 1987), as well as a central characteristic in many clinical descriptions of narcissism. This study provides empirical support for the extensive clinical literature documenting this characteristic.

While narcissism was associated with pervasive distortion of self-perception, self-esteem was associated with a generally accurate view of self. The exception to this accurate view of self was a possible distortion of interpersonal understanding among those high in self-esteem.

Defensive processes investigated indicated that splitting may be indicative of lower levels of functioning in general and may not be a defense used exclusively by narcissists and borderlines as described in the literature. Self-deception, rather than being a pathological defense, may be used by healthy groups to protect the self from highly threatening input. The defensive processes of narcissists appear to have protected them from negative or disturbing emotions following disconfirming feedback; however, this protection may result from increased reality distortion, since narcissists evidenced greater distortion than did those high in self-esteem.
Appendix A

Read each pair of statements and choose the statement which seems closer to your own personal feelings about yourself. Indicate your answer by drawing a circle around the letter that precedes the statement. Do not skip any items.

1. A I have a natural talent for influencing people.  
   B I am not good at influencing people.

2. A Modesty doesn’t become me.  
   B I am essentially a modest person.

3. A I would do almost anything on a dare.  
   B I tend to be a fairly cautious person.

4. A When people compliment me I sometimes get embarrassed.  
   B I know I am good because everybody keeps telling me so.

5. A The thought of ruling the world frightens the hell out of me.  
   B If I ruled the world it would be a much better place.

6. A I can usually talk my way out of anything.  
   B I try to accept the consequences of my behavior.

7. A I prefer to blend in with the crowd.  
   B I like to be the center of attention.

8. A I will be a success.  
   B I’m not too concerned about success.

9. A I am no better or no worse than most people.  
   B I think I am a special person.

10. A I am not sure if I would make a good leader.  
    B I see myself as a good leader.

11. A I am assertive.  
    B I wish I were more assertive.

12. A I like having authority over other people.  
    B I don’t mind following orders.

13. A I find it easy to manipulate people.  
    B I don’t like it when I find myself manipulating people.
14. A I insist upon getting the respect that is due me.
   B I usually get the respect that I deserve.

15. A I don't particularly like to show off my body.
   B I like to display my body.

16. A I can read people like a book.
   B People are sometimes hard to understand.

17. A If I feel competent I am willing to take
   responsibility for making decisions.
   B I like to take the responsibility for making
   decisions.

18. A I just want to be reasonably happy.
   B I want to amount to something in the eyes of the
   world.

19. A My body is nothing special.
   B I like to look at my body.

20. A I try not to be a show off.
    B I am apt to show off if I get the chance.

21. A I always know what I am doing.
    B Sometimes I'm not sure of what I am doing.

22. A I sometimes depend on people to get things done.
    B I rarely depend on anyone else to get things done.

23. A Sometimes I tell good stories.
    B Everybody likes to hear my stories.

24. A I expect a great deal from other people.
    B I like to do things for other people.

25. A I will never be satisfied until I get all that I
    deserve.
    B I take my satisfactions as they come.

26. A Compliments embarass me.
    B I like to be complimented.

27. A I have a strong will to power.
    B Power for its own sake doesn't interest me.

28. A I don't very much care about new fads and fashions.
    B I like to start new fads and fashions.

29. A I like to look at myself in the mirror.
    B I am not particularly interested in looking at
    myself in the mirror.
30. A I really like to be the center of attention.
B It makes me uncomfortable to be the center of attention.

31. A I can live my life in any way I want to.
B People can't always live their lives in terms of what they want.

32. A Being an authority doesn't mean that much to me.
B People always seem to recognize my authority.

33. A I would prefer to be a leader.
B It makes little difference to me whether I am a leader or not.

34. A I am going to be a great person.
B I hope I am going to be successful.

35. A People sometimes believe what I tell them.
B I can make anybody believe anything I want them to.

36. A I am a born leader.
B Leadership is a quality that takes a long time to develop.

37. A I wish someone would someday write my biography.
B I don't like people to pry into my life for any reason.

38. A I get upset when people don't notice how I look when I go out in public.
B I don't mind blending into the crowd when I go out in public.

39. A I am more capable than other people.
B There is a lot that I can learn from other people.

40. A I am much like everybody else.
B I am an extraordinary person.
APPENDIX B
Appendix B

The following items describe how people feel. Circle a number between 1 and 7 (from 1 = not at all true, to 7 = very true) to indicate the extent to which the item describes yourself.

1. I hate to hear someone close to me being criticized.  
   1  2  3  4  5  6  7

2. When I’m with someone really terrific, I feel dumb.  
   1  2  3  4  5  6  7

3. When I’m angry, everyone around me seems rotten.  
   1  2  3  4  5  6  7

4. My friends don’t know how much I’d like to be admired by people.  
   1  2  3  4  5  6  7

5. It’s hard for me to get angry at people I like.  
   1  2  3  4  5  6  7

6. It’s very painful when someone disappoints me.  
   1  2  3  4  5  6  7

7. I have absolutely no sympathy for people who abuse their children.  
   1  2  3  4  5  6  7

8. Sometimes I feel I could do anything in the world.  
   1  2  3  4  5  6  7

9. There are times my wife (husband)/girlfriend (boyfriend) seems as strong as iron, and at other times as helpless as a baby.  
   1  2  3  4  5  6  7

10. I often feel that I can’t put the different parts of my personality together, so that there is one "me."  
    1  2  3  4  5  6  7

11. Sometimes I feel my love is dangerous.  
    1  2  3  4  5  6  7

12. When I’m in a new situation, there’s often one person I really dislike.  
    1  2  3  4  5  6  7
13. It’s hard for me to become sexually excited when I’m depressed.

1 2 3 4 5 6 7

14. Some people have too much power over me.

1 2 3 4 5 6 7
Appendix C

1. Have you ever enjoyed your bowel movements?  yes  no

2. Have you ever been uncertain as to whether or not you are homosexual?  yes  no

3. Have you ever doubted your sexual adequacy?  yes  no

4. Have you ever thought that your parents hated you?  yes  no

5. Have you ever thought of committing suicide in order to get back at someone?  yes  no
Appendix D

-4 -3 -2 -1 0 +1 +2 +3 +4
very strongly strongly slightly neutral slightly strongly strongly very
disagree disagree disagree disagree agree agree agree agree

1. It makes me sad to see a lonely stranger in a group. _____
2. People make too much of the feelings and sensitivity of animals. _____
3. I often find public displays of affection annoying. _____
4. I am annoyed by unhappy people who are just sorry for themselves. _____
5. I become nervous if others around me seem to be nervous. _____
6. I find it silly for people to cry out of happiness. _____
7. I tend to get emotionally involved with a friend’s problem. _____
8. Sometimes the words of a love song can move me deeply. _____
9. I tend to lose control when I am bringing bad news to people. _____
10. The people around me have a great influence on my moods. _____
11. Most foreigners I have met seemed cool and unemotional. _____
12. I would rather be a social worker than work in a job training center. _____
13. I don’t get upset just because a friend is acting upset. _____
14. I like to watch people open presents. _____
15. Lonely people are probably unfriendly. _____
16. Seeing people cry upsets me. _____
17. Some songs make me happy. _____
18. I really get involved with the feelings of the characters in a novel. _____
19. I get very angry when I see someone being ill-treated. _____
20. I am able to remain calm even though those around me worry. _____
21. When a friend starts to talk about his problems, I try to steer the conversation to something else. 

22. Another’s laughter is not catching for me. 

23. Sometimes at the movies I am amused by the amount of crying and sniffing around me. 

24. I am able to make decisions without being influenced by people’s feelings. 

25. I cannot continue to feel OK if people around me are depressed. 

26. It is hard for me to see how some things upset people so much. 

27. I am very upset when I see an animal in pain. 

28. Becoming involved in books or movies is a little silly. 

29. It upsets me to see helpless old people. 

30. I become more irritated than sympathetic when I see someone’s tears. 

31. I become very involved when I watch a movie. 

32. I often find that I can remain cool in spite of the excitement around me. 

33. Little children sometimes cry for no apparent reason.
APPENDIX E

INFORMED CONSENT
Appendix E

Informed Consent

NAME OF SUBJECT:_____________________________________

1. I hereby give consent to Marsha Gabriel to perform or supervise the following investigational procedure or treatment:

--administer questionnaires, take a photograph, and provide feedback on my performance, to obtain information regarding the personality characteristics of college students. There are no known risks involved in completing these procedures.

2. I have seen a clear explanation and understand the nature of the procedure or treatment; possible appropriate alternative procedures that would be advantageous to me; and the attendant discomforts or risks involved and the possibility of complications which might arise. I have seen a clear explanation and understand the benefits to be expected. I understand that the procedure or treatment to be performed is investigational and that I may withdraw my consent. With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to the procedure or treatment designated in Paragraph 1 above.

Date:____________________________________

Signed:__________________________________
APPENDIX F
Appendix F

1. Have you ever been hospitalized for psychiatric or emotional reasons?
   _____ yes           _____ no

2. Are you presently receiving any type of psychotherapy or counseling?
   _____ yes           _____ no
Appendix G

Age: ______

Sex: ______

Race: ______

Circle your year in school:


Rank yourself compared to the average college student on the following qualities using a scale of 1 to 100.

I am more intelligent than ______% of college students.

I am more attractive than ______% of college students.

In interpersonal situations, I can understand another's condition or state of mind better than ______% of college students.
APPENDIX H

TABLES
Table H-1

Means and Standard Deviations of Measures

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td>NPI</td>
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<td>Total P</td>
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</tr>
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<tr>
<td>Anxiety</td>
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<td>1.8</td>
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<tr>
<td>Depression</td>
<td>0.7</td>
<td>2.0</td>
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<tr>
<td>Sensation-Seeking</td>
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<td>2.7</td>
</tr>
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<td>Positive-Affect Composite</td>
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<td>8.1</td>
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<tr>
<td>Empathy Male</td>
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<td>Empathy Female</td>
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<td>Shipley Total</td>
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<tr>
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\(^a\)Differences between predicted and actual percentile scores.
Table H-2
Correlations Among Measures of Reality Distortion and Defensiveness

<table>
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<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
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<tr>
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<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Attractiveness</td>
<td>.49****</td>
<td>--</td>
<td></td>
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<tr>
<td>3. Interpersonal</td>
<td>.44****</td>
<td>.43****</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Splitting</td>
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<td>-.02</td>
<td>-.31**</td>
<td>--</td>
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<tr>
<td>5. Self-Deception</td>
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<td>-.17</td>
<td>.01</td>
<td>.04</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>6. Reaction to Feedback</td>
<td>.15</td>
<td>.17</td>
<td>.06</td>
<td>.21*</td>
<td>.19</td>
<td>--</td>
</tr>
<tr>
<td>7. Devaluation</td>
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<td>-.16</td>
<td>-.01</td>
<td>.04</td>
<td>.02</td>
<td>-.00</td>
</tr>
</tbody>
</table>

\(^{a}\)Difference scores equal to subjects predicted minus actual scores.

\(^{b}\)Post-feedback MAACL-R Hostility scores.

\(* p < .05\); \(** p < .01\); \(*** p < .001\); \(**** p < .0001\).
Table H-3

Correlations of Narcissism and Self-Esteem with Distortion and Defensiveness

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</thead>
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<td>.41****</td>
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<td>Devaluation</td>
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<td>-.33***</td>
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<tr>
<td>Predicted</td>
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<td>Intelligence</td>
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<tr>
<td>Attractiveness</td>
<td>.34***</td>
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<tr>
<td>Interpersonal</td>
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<td>.30**</td>
</tr>
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<td></td>
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<tr>
<td>Intelligence</td>
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<tr>
<td>Attractiveness</td>
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<td>.06</td>
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<tr>
<td>Interpersonal</td>
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<td></td>
</tr>
<tr>
<td>Intelligence</td>
<td>.26**</td>
<td>.17</td>
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<tr>
<td>Attractiveness</td>
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<td>.02</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.23**</td>
<td>.24*</td>
</tr>
</tbody>
</table>

<sup>a</sup> Difference scores equal to subjects' predicted minus actual scores.

*<sup>p</sup> < .05; **<sup>p</sup> < .01; ***<sup>p</sup> < .001; ****<sup>p</sup> < .0001.
REFERENCES


