

## Narcissistic Injury and Its Relationship to Early Trauma, Early Resources, and Adjustment to College

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This study used structural equation modeling to test the hypothesized model that the effects of early trauma are buffered by early resources and that these variables, in turn, affect psychological damage and subsequent adjustment. In addition, the utility of the Narcissistic Injury Scale (NIS; S. L. Slyter, 1991), an operationalization of A. Miller's (1981) construct of narcissistic injury, was assessed. Students ( $n = 250$ ) completed questionnaires measuring past trauma, early resources, psychological damage, and adaptation to college. Results supported the reliability and validity of the NIS. Structural equation analyses resulted in a final model with a very good overall fit. The path linking early trauma to psychological damage and then subsequent adjustment accounted for the most variance. The hypothesized buffering effects of early resources were not supported. Counseling and research applications are discussed.

There has been growing attention in the theoretical and applied counseling literature to psychoanalytic concepts and ideas related to "self" and "self-disturbance." The concept of self as the fundamental building block of identity-personality and the theoretical notion that healthy self-development follows from adequate parental-environmental responses to a child's needs for respect and understanding emanate from the object relations (Fairbairn, 1952) and self-psychology (Kohut, 1971) perspectives, which differ from orthodox psychoanalytic models that focus on instinctual drives to explain personality and development. The appeal of these alternative psychoanalytic models for counseling psychology scholars and practitioners is easily understood. First, as Gelso and Fassinger (1992) have suggested, these approaches focus on healthy development and emphasize familiar and salient constructs such as self-esteem and empathy. Second, they provide for practical, theory-based treatment to clients in emotional pain (Cashdan, 1988; Patton & Meara, 1992). Given the appeal of these constructs and their relevance to counseling psychology, attempts to define and operationalize them and to study their interrelationships seem useful and important.

One construct to emerge from the just-described perspectives that has conceptual appeal and clinical utility is *narcissistic injury*, a term used to refer to the psychological damage that results when a child's narcissistic (i.e., self) needs for respect, understanding, and mirroring are denied (Miller, 1981). In *The Drama of the Gifted Child*, Miller (1981) drew heavily from object relations and self theorists

such as Winnicott (1960, 1965), Mahler (1968), and Kohut (1971, 1977) to first explain the conditions necessary for healthy narcissistic development. In doing so, she argued that a child has a primary need to be respected and understood and to be the central actor in his or her experience. Healthy development proceeds when the caregiver and environment respond adequately to the child by reliably and flexibly adapting to the child's needs. Miller also described the effects of growing up with narcissistically disturbed parents who, because of their own narcissistic impairment, cannot respond to the child's needs. Such parents, who often suffer from serious self-esteem problems and depression, place emotional demands on the child that require the child to attend to and act solely in response to parental needs. Consequently, these children develop an unusual sensitivity to the narcissistic needs of others and experience injuries to their own narcissistic development, resulting in a lack of awareness of their own feelings and needs. Thus, the child's own needs cannot be integrated into his or her developing personality. He or she cuts off authentic feelings of the true self and conforms to an idealized "false" self. According to Miller, abandoning the true self results in depression or grandiosity as a defense against underlying depression, as well as difficulties in coping and problems in relationships.

Miller's (1981) model appears to have widespread utility for understanding many client self-esteem and identity problems. Indeed, the constructs and theories that have influenced Miller have recently been used to explain a child's reaction to other dysfunctional family situations. For example, Wood (1987), in her book on adult children of alcoholics, argued that children growing up in alcoholic families experience injuries that result in the erection of a false self that allows them to cope in a traumatic world. However, she noted that these individuals later suffer from isolation, depression, and difficulties with separation and individuation. Courtois (1988), in *Healing the Incest Wound*, applied these same theoretical notions to incest survivors and survivors of childhood abuse and trauma in general. She suggested that trauma resulting from chronic child abuse leads to injuries in the self that make one

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prone to shame, low self-esteem, identity diffusion, and difficulties in relationships.

These writers have posited relationships among the experience of traumatic events in childhood, psychological damage or injury, the development of the self, and injuries to the self that, in turn, have an adverse effect on development. These traumas result in extreme pain, self-blame, and later adjustment. Trauma, in this sense, is used to refer to situations, events, or patterns of behavior that result in damage or a sense of danger that causes the individual to inhibit the true self (feelings or awareness) and retreat behind a self-protective, false facade. Examples of such trauma include more extreme forms of child abuse and more subtle but chronic failures on the part of caregivers to accept and act empathically on the child's feelings or needs.

Most writers agree, however, that parental failures and other traumas are inevitable aspects of living and do not necessarily lead to psychological damage or subsequent adjustment problems. Kohut (1971), for example, suggested that optimal (as opposed to chronic or acute) levels of frustration of a child's narcissistic needs at the appropriate time can facilitate healthy development. Greenacre (1967) argued that the crucial question is not whether trauma occurs (because it inevitably does) but its timing, type, and intensity. Other writers have pointed to specific variables that moderate the effects of trauma on resulting psychological damage and subsequent adjustment, including timing, contextual factors, strength of character, natural resiliency, availability of social support, presence of a stable and consistent alternative caregiver, and interventions such as counseling (Cole & Putnam, 1992; Courtois, 1988).

In summary, many writers have hypothesized an interrelationship among childhood trauma, psychological damage (e.g., injuries to the self), and subsequent adjustment. Although these constructs and theories have intuitive appeal and clinical utility, there have been few attempts to operationalize them or to investigate them empirically. The purpose of the current study was to test a psychodynamic model

that posits relationships among early trauma, early resources, psychological damage, and subsequent adjustment. Another goal was to provide further support for an operationalization of Miller's (1981) concept of narcissistic injury.

Slyter (1989) used Miller's (1981) book, *The Drama of the Gifted Child* (concerning adults who grew up with narcissistically impaired parents), to develop the Narcissistic Injury Scale (NIS). She took many of Miller's detailed descriptions of adult functioning given this type of parenting and developed corresponding items for the NIS. The scale was designed to measure several key aspects of narcissistic injury, including restriction of affect, grandiosity, depression, perceptions of the parent-child relationship, and other feelings about the self. The NIS was then used as one measure of psychological damage in the paradigm detailed in this article.

The underlying theoretical constructs and hypothesized relationships that were studied are summarized in Figure 1. In general, this study tested the theory that early trauma and early resources affect psychological damage, which, in turn, affects subsequent adjustment. Because of the causal nature of the theory-based hypotheses and the correlational nature of the data, structural equation modeling (Bentler, 1980) was used to test our hypotheses. This methodology allows for the specification of a causal structure among a set of unobserved theoretical constructs, each of which is measured by a set of observed indicator variables. Fassinger (1987), in reviewing this methodology and discussing its merits for counseling psychology research, stated that structural equation modeling permits testing of causal hypotheses and theory, examination of psychometric adequacy, and enhancement of the explanatory power of correlational data that characterize counseling research. Thus, this methodology was expected to provide information on the adequacy of measurement of the observed variables as well as goodness-of-fit data concerning how well the proposed model described the observed data.

The proposed model, presented in Figure 1, contains four latent variables (unobserved theoretical constructs, depicted

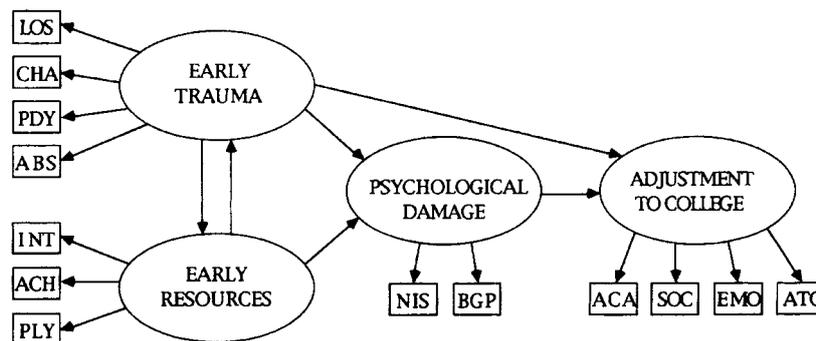


Figure 1. Proposed full structural equation model of the effects of early trauma, early resources, psychological damage, and adjustment. (LOS = loss; CHA = chaos; PDY = parental dysfunction; ABS = abuse; INT = interpersonal relationships; ACH = achievement; PLY = play; NIS = Narcissistic Injury Scale; BGP = Bell Global Psychopathology Scale; ACA = Academic Adjustment subscale of the Student Adaptation to College Questionnaire [SACQ]; SOC = Social Adjustment subscale of the SACQ; EMO = Emotional Adjustment subscale of the SACQ; ATC = Attachment subscale of the SACQ.)

by circles), each of which is a dependent or endogenous variable (i.e., presumed to be the result of other variables in the study). Each latent variable is measured by a set of two to four indicators (observed variables, depicted in the boxes adjacent to each circle). The arrows between the latent variables indicate the direction of the predicted relationships; two arrows indicate a reciprocal relationship.

On the basis of the literature cited earlier, it was hypothesized that early trauma would directly affect the degree of psychological damage. More important, however, it was hypothesized that the effects of early trauma on psychological damage and subsequent adjustment would be moderated by available resources. A reciprocal relationship between early trauma and early resources was hypothesized to account for theories that suggest that the effects of trauma are influenced by preexisting conditions within and surrounding the individual (Horowitz, 1974, 1976). With respect to the measurement of psychological damage, the indicator variable of primary interest was narcissistic injury (as measured by the NIS). However, we were also interested in the relationship between the NIS and more traditional measures of damage; thus, a measure of global psychopathology was also included.

## Method

### Participants

The participants for this study were 250 introductory psychology students at a large, state-supported eastern university. Participants volunteered for the study on the basis of a brief description and were given 1 hr of experimental credit for their participation. Participants were between 17 and 35 years of age ( $M = 19.4$ ). The sample was predominantly female (70%), White (70%), and single (98%). Forty-seven percent of the participants were freshmen, 28% were sophomores, 16% were juniors, and 9% were seniors. As a result of errors in completing the questionnaires and because of missing data, the sample size used in the LISREL data analyses was 228.

### Variables and Instrumentation

The variables studied are depicted in the full structural equation model represented in Figure 1. Each of the four latent variables (early trauma, early resources, psychological damage, and adjustment to college) was measured by a set of indicator (observed) variables depicted in the boxes adjacent to each circle. The observed variables for each latent variable are described in detail in the following paragraphs.

**Psychological damage.** As mentioned earlier, the psychological damage measure of most interest was the NIS (Slyter, 1991). Originally, Slyter started with 130 items measuring feelings about the self, as well as perceptions of childhood parent-child relationships, using a 6-point Likert scale ranging from *definitely most uncharacteristic of you* (1) to *definitely most characteristic of you* (6). An initial pilot study ( $n = 99$ ) yielded a coefficient alpha of .88 (Slyter, 1989). The item pool was then reduced to 50 items, 40 measuring the construct and 10 included to reduce response set bias (only the substantive items were intended to be scored). These final items were selected on the basis of their ability to discriminate the top 25% and lowest 25% of the total scale scores. Two of the remaining 40 items were eliminated because of multicollinearity. The resulting coefficient alpha was .94. The items for the instrument (see

the Appendix) are scored by summing the ratings, which yields a possible range of 38 to 228 (Slyter, 1991). Evidence for the construct validity of the NIS was presented by Rios and Hill (1993). These authors found that the NIS correlated positively with depression, grandiosity, and difficulties in coping and negatively with self-esteem and parental bonding.

The Bell Global Psychopathology Scale (BGP; Schwab, Bell, Warheit, & Schwab, 1979), a standardized measure of psychopathology that produces a global severity score as well as subscale scores, was included as a second measure of psychological damage. The subscales include depression, anxiety, phobias, obsessive-compulsiveness, serious psychopathology, and alcohol/drug abuse. The BGP consists of 36 items describing psychological symptoms, fears, and personal habits. Individuals rate themselves on a 5-point Likert scale that indicates the frequency of various experiences. The scale has been shown to have adequate reliability; both internal consistency and test-retest values were greater than .80 (Schwab et al., 1979). In terms of validity, the scale has been shown to accurately classify psychiatric inpatients and outpatients into "high-risk" categories (Schwab et al., 1979) and to discriminate clients from nonclients in a college sample (Ostrow, Dark, & Poulton, 1982). This particular measure was selected because of its brevity and ease of administration, as well as its adequate psychometric properties. The total severity score, as opposed to subscale scores, was used in the present study.

**Adjustment.** The four subscales of the Student Adjustment to College Questionnaire (SACQ; Baker & Siryk, 1984, 1989) were used as indicators of adjustment. This scale was developed to measure specific aspects of adjustment as opposed to global adjustment. It consists of 67 self-report items, each of which requires a response on a 9-point scale ranging from *applies closely to me* (1) to *doesn't apply to me at all* (9). The SACQ is divided into four subscales, each of which focuses on different aspects of college adjustment: Academic, Social, Personal-Emotional, and Attachment. There are separate norms for first-semester freshmen versus all other levels, as well as for men versus women. Internal consistency measures for the SACQ have ranged from .92 to .95 for the full scale, .81 to .90 for the Academic subscale, .83 to .91 for the Social subscale, .77 to .86 for the Personal-Emotional subscale, and .85 to .91 for the Attachment subscale. Numerous criterion-related validity studies have demonstrated relationships between the SACQ scales and real-life behaviors that may be assumed to reflect the influence of variables measured by the instrument (e.g., grade point average, social participation indexes, and use of counseling services; Baker & Siryk, 1989). Other studies have demonstrated adequate concurrent validity by assessing the correlations of SACQ scales with other measures of psychological functioning such as coping (Savino, Reuter-Krohn, & Costar, cited in Baker & Siryk, 1989), self-esteem (Saracoglu, cited in Baker & Siryk, 1989), anxiety, and self-concept (Adan & Felner, cited in Baker & Siryk, 1989).

**Early trauma.** The Early Trauma Checklist (Zamostny, Slyter, & Rios, 1991b), a checklist of 18 traumas considered to relate (either directly or indirectly) to psychological damage, in general, and to development of the self, more specifically, was developed for purposes of this research. Despite the measurement limitations of a checklist format, this type of scale was selected because the focus was more on whether the event occurred than on the magnitude of the event. Items were grouped according to four theoretically derived factors that then served as indicators for early trauma: Loss (i.e., death of parent, death of close friend, death of sibling, or serious personal illness), Abuse (i.e., physical, psychological, or sexual abuse in the family; psychological abuse from peers; or sexual assault outside the family), Chaos (i.e., serious financial problems, frequent moves, serious employment problems, or divorce), and Parental Dysfunction (i.e., serious physical illness or

injury to parent or caregiver, serious psychological illness in parent or caregiver, alcoholism or drug abuse in parent or caregiver, alcoholism or drug abuse in grandparent, or parent being a survivor of trauma). Participants were instructed to place a check next to those life events they had experienced in the first 15 years of their lives. Frequencies within each factor were summed to obtain scores in each category.

*Early resources.* The Early Resources Checklist (Zamostny, Slyter, & Rios, 1991a), a checklist of 10 sources of support considered to buffer the effects of early trauma, was also developed for this research. The checklist format was selected for the same reasons cited earlier. Items were grouped according to three theoretically derived factors that then served as indicators for early resources: Interpersonal Relationships (i.e., close family member, good friends, close neighbor, relationships with teachers, and pets), Achievement (i.e., academic success in school, sports-athletics, and creative pursuits), and Play (i.e., hobbies, toys, and games). Participants were asked to place a check next to those resources or sources of support they experienced during the first 15 years of their lives. Frequencies within each factor were summed to obtain the scores for each category.

### Procedure

Participants were administered the questionnaires in groups of 15 to 20. After the request for informed consent to participate in the experiment, participants received a packet containing the five counterbalanced questionnaires just described. After completing the instruments, participants received a written debriefing statement. In addition, they were offered a copy of an interview with Alice Miller (Connors, 1987) in which some of her more pertinent ideas were discussed.

### Analysis

Structural equation modeling is designed to provide information on both the measurement model (i.e., how well the indicator variables measured the underlying constructs of interest) and the structural model (i.e., how well the paths specified in the model fit the sample data). In addition, the analysis yields estimates of the path coefficients specified in the model. A hypothesized model is supported if its overall fit to the observed data is adequate and if the coefficients reflecting the strength of the paths between latent variables are significant and in the appropriate direction. It should be noted that several alternative models can be generated that fit the data. Thus, the theoretical soundness of a model becomes the essential criterion for acceptance.

The computer programs PRELIS and LISREL 7 (SPSS, Inc., 1990) were used in conducting data analyses. PRELIS was used to calculate data transformations and generate the covariance matrix for subsequent analysis by LISREL. The two-step method recommended by Anderson and Gerbing (1988) was followed. Accordingly, the measurement model was confirmed first, and then the structural model was tested. A maximum likelihood estimation procedure was used in testing the model. One loading on each latent variable was set to the value of 1.0 to establish a common metric (Long, 1983).

The steps in the analysis were as follows: First, the proposed model was defined as suggested by relevant literature. Second, a series of equation and parameter matrices that described both the measurement and path models was generated. Third, the covariance structure of the model (as provided by a maximum likelihood or unweighted least squares solution) and the observed sample covariance matrix were compared to determine how well the observed

data fit the theoretical model specified. Fourth, the proposed model was modified in substantively meaningful ways to improve the fit. Finally, the modified models were reanalyzed until a maximum fit was achieved.

## Results

### Descriptive Statistics

Table 1 presents the means, standard deviations, and ranges for the variables. Summary statistics for the BGP and the SACQ were within the ranges expected for college student samples. The NIS summary statistics reflected adequate variability and range.

### Measurement of Narcissistic Injury

The sample of 249 participants was used to perform a reliability analysis of the NIS. The internal consistency of the instrument, as measured by coefficient alpha, was .94, indicating a high degree of internal consistency.

A principal-axis extraction method and varimax rotation procedure (SPSS, Inc., 1988) were used to perform an exploratory factor analysis of the NIS. Attempts to extract multiple factors (separate analyses were performed calling for two, three, and four factors) were unsuccessful and indicated that the instrument appears to reflect one general factor rather than several underlying dimensions of narcissistic injury. For example, in the two-factor solution, only one item loaded (greater than .45) on the second factor. All other items loaded on the general factor (loadings from .28 to .75), with only four items loading below .40. The general factor accounted for 30% of the variance of the solution.

The correlations among the observed variables are presented in Table 2. Of particular interest are the correlations for the NIS relative to those for the BGP. As predicted, the correlation between the NIS and the BGP was moderately

Table 1  
Summary of Means, Standard Deviations, and Ranges for Questionnaire Data Using the Student Sample ( $N = 249$ )

Scale	<i>M</i>	<i>SD</i>	Range
Early Trauma Checklist			
Full scale	2.2	1.9	0-10
Loss	0.6	0.8	0-4
Chaos	0.7	1.0	0-4
Parental Dysfunction	0.4	0.7	0-3
Abuse	0.4	0.7	0-4
Early Resources Checklist			
Full scale	6.0	2.5	0-12
Social	3.3	1.5	0-6
Achievement	1.7	0.9	0-3
Play	0.8	0.8	0-2
Narcissistic Injury Scale	107.1	28.6	45-207
Bell Global Psychopathology Scale	39.8	13.3	4-88
Student Adaptation to College Questionnaire			
Full scale	339.4	64.5	231-528
Academic	138.3	26.0	67-202
Social	120.7	25.0	55-172
Personal-Emotional	82.2	21.3	35-133
Attachment	100.7	18.0	49-134

Table 2  
Correlation Matrix for the Observed Indicator Variables

Variable	Early trauma				Early resources			Damage		Adjustment			
	1	2	3	4	5	6	7	8	9	10	11	12	13
1. LOS	—	.07	.04	.06	.07	.01	-.07	.12	.19**	-.06	-.14**	-.18**	-.12
2. CHA		—	.18**	.21**	-.02	-.06	-.12	.20**	.07	-.02	-.05	-.14**	.01
3. PDY			—	.28**	-.07	-.06	-.11	.23**	.15*	-.12	-.13*	-.29**	-.09
4. ABS				—	-.21**	-.16**	-.13*	.43**	.24**	-.19**	-.29**	-.24**	-.20
5. INT					—	.46**	.35**	-.25**	-.07	.09	.25**	.07	.13*
6. ACH						—	.47**	-.20**	-.05	.13*	.17**	.05	.11
7. PLY							—	-.20**	-.09	.13*	.11	.12	.08
8. NIS								—	.64**	-.47**	-.46**	-.58**	-.41
9. BGP									—	-.39	-.29**	-.58**	-.32
10. ACA										—	.40**	.58**	.47**
11. SOC											—	.43**	.79**
12. EMO												—	.41**
13. ATC													—

Note. LOS = loss, CHA = chaos, PDY = parental dysfunction, ABS = abuse, INT = interpersonal relationships, ACH = achievement, PLY = play, NIS = Narcissistic Injury Scale, BGP = Bell Global Psychopathology Scale, ACA = Academic Adjustment subscale of the Student Adaptation to College Questionnaire (SACQ), SOC = Social Adjustment subscale of the SACQ, EMO = Emotional Adjustment subscale of the SACQ, ATC = Attachment subscale of the SACQ.

\*  $p < .05$ . \*\*  $p < .01$ .

strong ( $r = .64$ ) and significant at the .01 level. The correlations between the NIS and all the measures of trauma except loss were stronger than those for the BGP and also significant at the .01 level. Similarly, the NIS correlated significantly ( $p < .01$ ) and negatively with all measures of early resources, whereas the BGP correlations were very low and nonsignificant. Both the NIS and the BGP showed significant ( $p < .01$ ) negative correlations with the indicators of adjustment, although the correlations for the NIS were considerably higher on all variables except emotional adjustment.

### LISREL Analysis

As a starting point, the hypothesized measurement model was tested with confirmatory factor analysis to establish that valid and unconfounded latent variable indicators were being used. These results indicated that the proposed set of indicators was satisfactory because each indicator loaded appropriately (in terms of size and direction) on its respective hypothesized factor (i.e., latent variable). Thus, all indicator variables were retained in the proposed model, and this model was used in testing the structural model.

Although a detailed description of the structural equation modeling process is beyond the scope of this article, it is helpful at this point to generally review the mechanisms by which a final model is obtained. Once the proposed model has been determined by the theoretical literature, a series of mathematical equations and matrices can be computed on the basis of the specific relationships in the hypothesized measurement model (as evidenced by which indicators load on which latent variables) and structural model (as evidenced by the paths specified between latent variables). This allows for the computation of a proposed model covariance matrix that can then be compared with the actual observed covariance matrix for the data set. If 20 attempts to fit the proposed

model to the observed data are unsuccessful—either because the analysis will not run (as is often the case at the outset) or because the fit of the obtained solution is poor—then the model must be modified. Possible modifications include eliminating indicator variables, adding or deleting paths between latent variables, and specifying correlations between variables in the model. Any such modification in the model necessarily alters the covariance matrix, which, in turn, will result in changes in the goodness-of-fit analysis, the actual loadings of indicators on latent variables, and the values of the path coefficients. Thus, the actual modeling process involves a complex (and sometimes arbitrary) manipulation of model parameters with simultaneous consideration of fit indexes and theoretical constraints.

Relatively few modifications were necessary to fit the observed data to the theoretical model being proposed in this study. In the following paragraphs, goodness-of-fit data, as well as modeling process details, are discussed.

*Model 1 solution.* It was relatively easy to obtain an initial solution to evaluate. Figure 2 contains the path diagram and standardized LISREL parameter estimates for the initial solution, and Table 3 presents the fit information for the model. A comparison of the initial solution in Figure 2 and the proposed model in Figure 1 reveals that these models are almost identical, except for the addition of a reflexive path between adjustment and psychological damage in Model 1, and suggests that these latent variables mutually influence each other. As indicated in Table 3, the overall fit measures were quite strong, suggesting that Model 1 is viable. More specifically, the overall chi-square value was nonsignificant, indicating that the observed model is a plausible one for the population. In addition, the goodness-of-fit indexes were high (in the low .90s to mid .90s), and the root-mean-square residual was low (.06). However, examination of more detailed fit information in Table 3 revealed a problem with Model 1. Although the coefficient of determination for the

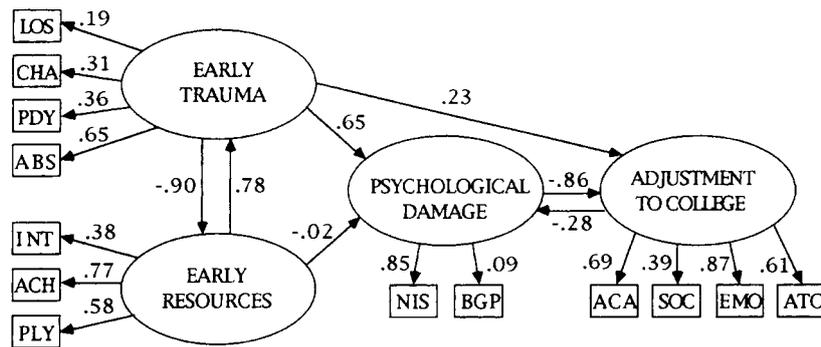


Figure 2. Initial model of the effects of early trauma, early resources, psychological damage, and adjustment. (Significant paths and standardized LISREL estimates are indicated. LOS = loss; CHA = chaos; PDY = parental dysfunction; ABS = abuse; INT = interpersonal relationships; ACH = achievement; PLY = play; NIS = Narcissistic Injury Scale; BGP = Bell Global Psychopathology Scale; ACA = Academic Adjustment subscale of the Student Adaptation to College Questionnaire [SACQ]; SOC = Social Adjustment subscale of the SACQ; EMO = Emotional Adjustment subscale of the SACQ; ATC = Attachment subscale of the SACQ.)

dependent variables—an indication of how well the indicator variables measured the underlying latent constructs—was very high (.99), suggesting that the variables were well measured overall, the coefficient of determination for the structural equations was moderately low (.47). This indicated problems with the path structure specified in the model; that is, the specified path structure was not reflecting the observed data very well. Closer examination of the parameter estimates in Figure 2 revealed further problems with this model. When the paths were specified as needed in Model 1, the measurement of psychological damage became problematic, as evidenced by the high factor loading of the NIS (.85), and the low factor loading of the BGP (.09), on psychological damage. The BGP also loaded significantly on the adjustment factor, suggesting that, in this model, the BGP may have been measuring a lack of adjustment rather than the presence of damage. These results conflict not only with theoretical assumptions underlying the model but also with results from the confirmatory fac-

tor analysis conducted earlier, which established that both the NIS and BGP were adequate measures of psychological damage.

Because of the low coefficient of determination for the structural model (.47) and the measurement problems reflected in Figure 2, Model 1 was rejected and further modifications were made. Consequently, the path coefficients will not be discussed for this model.

*Model 2 solution.* Figure 3 contains the path diagram and standardized LISREL parameter estimates for Model 2, and Table 3 presents the fit information for this model. A comparison of Model 1 (as represented in Figure 2) and Model 2 (Figure 3) shows two path changes. First, the reflexive relationship between early trauma and early resources has been eliminated, making early trauma an independent or exogenous latent variable (i.e., early trauma is presumed to be the result of variables outside the scope of the study). Second, the reflexive relationship between psychological damage and adjustment has also been eliminated, with damage only causing or affecting adjustment and not vice versa.

The overall fit information summarized in Table 3 indicates that Model 2 is also viable. The overall chi-square value approached significance but did not allow for a rejection of the null hypothesis, suggesting that the sample did not differ significantly from the population model. Furthermore, the goodness-of-fit indexes remained high and the root-mean-square residual was low, also supporting the viability of Model 2.

The more detailed fit information presented in Table 3 also lend support to the model. First, because Model 2 consisted of one exogenous variable and three endogenous variables, two measurement coefficients of determination resulted: one for the independent variable and one for the dependent variables. The coefficient of determination for the dependent variables remained high (.98), indicating that the measurement of resources, damage, and adjustment was quite reliable. However, the coefficient of determination for the independent variable (in this case, trauma) was moderate (.40),

Table 3  
Overall Fit Information and Coefficients of Determination for Model 1 and Model 2

Measure	Model 1	Model 2
Overall fit		
Model	59.90**	69.98*
Degree of freedom	58	58
Goodness-of-fit index	.96	.95
Adjusted goodness of fit	.94	.93
Root-mean-square residual	.06	.05
Coefficient of determination		
Dependent variables	.99	.98
Independent variable	— <sup>a</sup>	.40
Equations	.47	.88

<sup>a</sup> Model 1 had no exogenous variable specified in the model solution; thus, there was no coefficient of determination for this variable (see explanation in the text).

\*  $p = .14$ . \*\*  $p = .41$ .

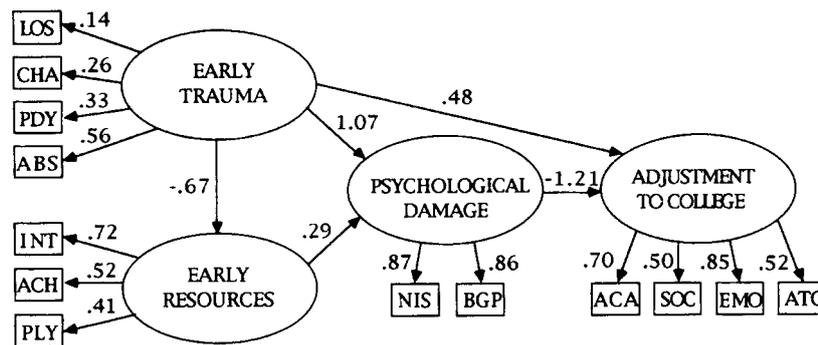


Figure 3. Final model of the effects of early trauma, early resources, psychological damage, and adjustment. (Significant paths and standardized LISREL estimates are indicated. LOS = loss; CHA = chaos; PDY = parental dysfunction; ABS = abuse; INT = interpersonal relationships; ACH = achievement; PLY = play; NIS = Narcissistic Injury Scale; BGP = Bell Global Psychopathology Scale; ACA = Academic Adjustment subscale of the Student Adaptation to College Questionnaire [SACQ]; SOC = Social Adjustment subscale of the SACQ; EMO = Emotional Adjustment subscale of the SACQ; ATC = Attachment subscale of the SACQ.)

suggesting weaker reliability support for the measurement of the early trauma variable. The coefficient of determination for the structural model was very high (.88), indicating that the path structure specified in Model 2 represents a good fit to the observed data.

Further examination of the parameter estimates for Model 2 detailed in Figure 3 revealed that the measurement problem present in Model 1 had been solved. The factor loadings for psychological damage indicated that the NIS and the BGP both loaded highly on damage and not on adjustment, making this model consistent with theory as well as the initial confirmatory factor analysis.

When all of the indexes and factors were taken into account, Model 2 appeared to be a much better solution than did Model 1. Further modifications (including the addition of a direct path between resources and adjustment) were made in Model 2 to try to improve the measurement and structural models. However, none of these changes resulted in significant improvements; in some cases, they even resulted in a much poorer fit. Thus, Model 2 was retained as a final solution.

The standardized path coefficients for Model 2, indicating the relative strength and direction of the causal relationships, are presented in Figure 3. The path values detailed in the figure are beta values (strength of the path relationship between an exogenous and an endogenous variable) and gamma values (strength of the path relationship between two endogenous variables). Although all of the respective *t* values (not reported) for the path coefficients were significant, there was considerable variation in the size of the coefficients. The largest coefficients (indicating the strongest causal relationships) were those reflecting the direct effect of early trauma on psychological damage ( $\beta = 1.07$ ) and the direct effect of psychological damage on adjustment ( $\beta = -1.21$ ). The direct effect of early trauma on adjustment was moderate but significant ( $\gamma = 0.48$ ). There was also a significant moderate direct effect of early trauma on early resources ( $\gamma = -0.67$ ). The path of most interest (because we had proposed it as the

most salient to our theoretical model) was that assessing the indirect effect of trauma through resources on damage and subsequent adjustment. Indirect path weights were computed by taking the product of the direct paths constituting the indirect path. This indirect path (linking trauma, resources, damage, and adjustment) was low in size and nonsignificant ( $\gamma = -0.24$ ). The strongest path overall, accounting for the most variance in the sample, was the indirect path reflecting the effect of early trauma on damage and subsequent adjustment ( $\gamma = 1.30$ ).

## Discussion

The purpose of the current study was twofold: (a) to test a psychodynamic model that hypothesizes relationships among early trauma, early resources, and subsequent adjustment and (b) to gather additional information on the utility of the NIS (Slyter, 1991). Because the psychometric properties and the utility of the NIS are central in interpreting the model, they are discussed first.

Results pertaining to the psychometric properties of the NIS were generally strong and favorable. First, the instrument appears to measure one unidimensional construct consistently. Second, narcissistic injury, as measured by the NIS related strongly to general psychopathology; however, the two constructs were not identical. This made sense theoretically because narcissistic injury appears to be a more specific type of psychological damage focusing on feelings about the self and past relationships related to development of the self, whereas general psychopathology is a more global, multidimensional assessment of dysfunctional symptoms related to broad psychological impairment. Further validity support for the instrument was provided by the moderate negative correlation between the NIS and adjustment to college. Again, this was a desired outcome theoretically because narcissistic injury, as a specific form of psychological impairment, should be related to and indeed predictive of behavioral functioning to some degree. However, many more

intrapyschic and external variables other than narcissistic functioning relate to subsequent adjustment, so the overall correlation would not be expected to be extremely high. It should be noted, however, that the  $-.49$  correlation between the NIS and SACQ was strong when compared with the other validity relationships documented in the SACQ manual (Baker & Siryk, 1989), suggesting that narcissistic injury might be more relevant to behavioral functioning than numerous other psychological constructs. Finally, the NIS appears to be more relevant and useful in research on the self and on self-disturbance than is global psychopathology. This is reflected by the NIS's stronger correlations with most of the early trauma variables and all of the early resource variables.

The current study has some implications for future research concerning further validation of the NIS. Because of possible limitations of the BGP, including lack of widespread use, further research documenting the relationship between the NIS and other measures of damage and psychopathology would be helpful. In addition, the relationship between narcissistic injury and other psychodynamic measures of narcissistic functioning, such as the Narcissistic Personality Scale (Raskin & Hall, 1979, 1981), the Superiority and Goal Instability Scales (Robbins & Patton, 1985), and the Inventory of Self Psychology (Slyter, 1989), needs to be studied. It would also be interesting to understand the relationship between narcissistic injury and other aspects of psychological functioning such as depression and self-esteem. Finally, to the extent that psychological constructs are most useful in their relevance to understanding behavior, it will be important to document the relationship between various degrees of narcissistic injury and general adjustment to life, performance in relationships, and other kinds of life experiences.

The LISREL analysis resulted in strong support for most aspects of the proposed model. The final model showed a very good overall fit to the data. The model also indicated that the measurement of trauma, resources, damage, and adjustment was reliable, and the paths specified in the model were very descriptive of the actual data. The one relatively weak aspect of the final model was the measurement of early trauma. The loss variable, in particular, loaded poorly on trauma, suggesting that loss may be different than the other kinds of trauma measured in the present study. For example, some theorists have argued that abuse and dysfunctional family situations lead to self-blame, which, in turn, places more strain on the survivor's sense of self. This might not be true for instances of loss, thereby suggesting that loss should not be related to self-disturbance, as these data do, in fact, demonstrate. Another possible source of measurement problems is the nature of the initial data (i.e., a checklist of low-frequency, uncorrelated events). The restricted range of the trauma variable, as well as the dichotomous scaling, might have led to measurement difficulties. Future research using more reliable and sophisticated measures of trauma (e.g., the Impact of Events Scale; Horowitz, Wilner, & Alvarez, 1979) would be useful.

An interesting result of the LISREL analysis concerns the causal paths for early trauma, which suggest that trauma affects adjustment in three ways. First, the direct path between

trauma and adjustment was moderately positive, suggesting that trauma can directly enhance adjustment. This finding perhaps supports the notion of some theorists (e.g., Anthony & Cohler, 1987) that individuals become stronger when they are forced to cope with crises and that they develop resilience for coping with future traumas. The strongest causal path, however, was the indirect path linking early trauma, psychological damage, and adjustment. This is, then, perhaps the most logically explained effect of trauma (i.e., trauma results in greater psychological damage, which, in turn, results in an impairment of adjustment). The weakest causal path in the model was that reflecting the buffering effects of early resources on trauma, although its inclusion in the final model and the significant path parameter argue that it accounted for a small but significant part of the variance.

Perhaps the lack of evidence for strong buffering effects of early resources on early trauma relative to the other causal paths reflects the true nature of trauma effects; that is, trauma most frequently leads to psychological damage and resulting adjustment problems, and an individual is far less often able to mobilize resources to offset the effects of the trauma. Another possibility, however, is that the nature of the relationship between early trauma and early resources is more complex than originally conceptualized and measured through this methodology and instrumentation. For example, an individual may be less likely to use resources (e.g., teachers and sports) in an abuse situation, even though the resources are available, as a result of shame or excessive control by the abuser. Perhaps it will be necessary to assess coping responses in the context of a specific type of trauma (e.g., incest) to fully understand the relationship between trauma and resources.

A related and trickier issue concerns a variation of the "chicken-egg" phenomenon: whether character defines trauma or trauma defines character. Some theorists (Basch, 1981; Forman, 1984; Glenn, 1984; Rothstein, 1986; Ulman & Brothers, 1988) have argued that trauma produces psychological symptoms that, in turn, lead to the development of self-pathology. Others (Abraham, 1907; Hendlin & Haas, 1984; Horowitz, 1974, 1976) have argued that characterological issues already exist in varying degrees when a trauma occurs and that the characterological style heightens the impact of or causes the trauma symptoms. The proposed model conceptualized in this initial study attempted to combine these two points of view by positing a reciprocal relationship between trauma and resources. That reciprocal relationship was deleted early in our analysis for reasons already detailed. This might suggest that the more compelling causal path is that trauma causes symptoms. However, our formulation of a reciprocal relationship might not have accurately addressed this aspect of trauma theory. Furthermore, as Bentler (1980) pointed out, nonrecursive structures (i.e., those that allow for reciprocal causation between latent variables) are generally more difficult to estimate and to interpret causally, which may be a possible explanation for the early rejection of the proposed model.

From a methodological perspective, the successful application of structural equation modeling in the current study

points to the utility of this technique. For example, the measurement model provided useful information on the exploratory measures of trauma and resources developed for this research and simultaneously took the measurement error into account in the analysis. The structural model demonstrates how frequently articulated and widely accepted but largely unstudied constructs and causal processes can be operationalized and empirically studied. Although the results are far from conclusive, they do support some aspects of current self theory and are of considerable heuristic value for future research.

Several limitations of the current study are important to remember, especially in the context of structural equation modeling. First, a key component of this technique is the selection of multiple indicators of each latent variable. As Bentler (1980) discussed, the number of indicators that are selected and which ones are included have significant implications for the results. The current study used relatively few indicators for each latent variable and, with the exception of psychological damage, did not use separate instruments as indicators, which may have added to the clarity of the results and the strong fit of the model. Future research using separate instruments as indicators of latent variables is needed to further validate the latent variables and relationships. Second, the model specified was not intended to be a comprehensive model of the effects of trauma. Thus, the number of latent variables studied was relatively small and not exhaustive of all variables thought to account for the psychological effects of trauma. Finally, the variables studied are retrospective and self-report in nature and, thus, reflect the potential biases of such measures. Furthermore, in this study the variables were assessed at the same time even though the model made inferences about variables operating at different points in time. In future research, the timing of the measurement of indicator variables should reflect this time lag.

The current study has several implications for counseling and psychotherapy. Theorists and practitioners alike have argued that many individuals typical of those swelling clinical caseloads (e.g., people with depression, adult children of alcoholics, and incest survivors) have been injured narcissistically (Courtois, 1988; Miller, 1981; Wood, 1987). The current research empirically links such injury to early trauma and subsequent adjustment. If, as these data suggest, trauma causes injury and adjustment problems, then treatment approaches that directly consider traumas and focus on healing subsequent injuries are supported. The operationalization of narcissistic injury presented in this investigation (NIS; Syster, 1991) might be of value in identifying individuals who are at risk for various psychological and adjustment difficulties. One problem in the treatment of abuse and trauma survivors is that they often separate themselves from these experiences through defenses such as denial, repression, and dissociation (Courtois, 1988). These data suggest that the NIS might be a useful way to determine the likelihood of early trauma, which could then help to determine the nature and course of treatment. Further research on the NIS using clinical populations is needed to answer questions concerning its psychometric properties with respect to a clinical sample, its utility in discriminating between clients in thera-

peutically useful ways, and its relationship to the counseling process.

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## Appendix

### Narcissistic Injury Scale Items

The Narcissistic Injury Scale, developed from a pilot version of 130 items (Slyter, 1989), is copyrighted by Susan L. Slyter, 1991. Reprinted by permission.

1. I have an amazing ability to perceive the needs of others who are important to me.
2. I am constantly asking myself what impression I am making, how I ought to be reacting, or what feelings I ought to have.
3. I have a sense of really being alive.
4. I experience a wish to control others or events around me.
5. I must excel in everything I undertake, or I just won't attempt it.
6. I long for understanding from others.
7. I am special.
8. I always had to be strong for my parents.
9. I tend to make excessive demands upon myself.
10. I must not show any dissatisfaction or disappointment with my parents, since this would lead to their withdrawal and loss of affection.
11. My parents were critical whenever anyone displayed weakness.
12. I feel constricted.
13. I have failed to live up to the ideal image I have of myself.
14. I feel a sense of inner emptiness.
15. I have a need to demonstrate my own superiority to others.
16. I have a feeling of being abandoned.
17. I have had grandiose ("pie in the sky") fantasies.
18. I find it difficult to tolerate loss.
19. I feel humiliated.
20. I have sympathy for the child I once was.
21. I lack confidence in my own feelings and wishes.
22. Because others need me constantly, I feel I am breaking down under the responsibility.
23. I must always be good and measure up to what everyone else expects or is doing.
24. I may experience feelings of agonizing shame and painful nakedness when I feel that I am on display.
25. I treat feelings with ridicule and irony.
26. My parents reacted negatively to any expression of anger on my part.
27. I suffer from the feeling of guilt, in the sense of not having lived up to what my parents expected of me.
28. I long for attention.
29. I have feelings of helplessness.
30. I become aware of feelings only after several days when feelings have already passed.
31. I know not only what I do *not* want but also what I want, and I am able to express this, whether or not I will be accepted or rejected for it.
32. I long for echoing from others.
33. I usually feel that the demands are too great, but that I cannot change that.
34. I complain of self-alienation and emptiness at times.
35. As a child, I had "been good," suffering quietly and without crying.
36. I see myself as a failure.
37. I tend to deny my own emotional reactions and feelings.
38. My parents saw me as the person I really was.
39. I have had the feeling of being an inner prison.
40. My parents understood me.
41. I fear a loss of love.
42. I feel alienated from myself.
43. I have a sense of futility.
44. I am aware of my needs and feelings, and the possibility of expressing them.
45. I suffer from depression at times.
46. I can love myself as I really am.
47. My parents respected my feelings.
48. I lack real emotional understanding.
49. I have the sense that my life has no meaning.
50. I have the sense of what my needs are.

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