The Reliability and Validity of a Measure of Self-Understanding of Interpersonal Patterns

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Change in self-understanding of maladaptive interpersonal patterns has been an important mechanism of symptom change in theories of dynamic psychotherapy and has been specified as an important treatment outcome by psychotherapy clients. The current investigation evaluated the reliability and validity of a new self-report measure of Self-Understanding of Interpersonal Patterns (SUIP). The measure was administered to 3 clinical samples and a student sample. The measure demonstrated good internal consistency, test-retest reliability, and discriminant validity. The SUIP further demonstrated convergent validity with measures of analytical and self-improving personality traits in a clinical sample. Finally, there was significantly greater change in self-understanding in a dynamic psychotherapy as compared with a medication treatment condition, despite comparable symptom change across both treatment conditions.

Self-understanding has been postulated by dynamic theorists to be an important mediator of symptom change in dynamic psychotherapy and has been reported by clients to be an important dimension of psychotherapy outcome in its own right. Little research has been devoted to this crucial construct, and to date no reliable and valid measures exist for assessing the construct of self-understanding. The purpose of the current article is to present the development of a new measure of self-understanding. The psychometric properties of this new measure are explored across four samples,

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Since the origins of psychoanalysis, the construct of self-understanding has maintained a central role in theories of psychotherapeutic change. The terms self-understanding and *insight* have often been used interchangeably in the theoretical literature, although the exact definition of insight has not always been clear. As outlined by Freud, the goal of psychoanalysis was to uncover and understand "the situations which had given rise to the formation of the symptom" (Freud, 1914/1958, p. 147). As psychoanalytic theory developed, this definition of insight evolved. In modern approaches to dynamic psychotherapy (Luborsky, 1984; Strupp & Binder, 1984), the terms self-understanding and insight have been used to represent the understanding that clients gain regarding their current maladaptive relationship patterns. Strupp and Binder use the term insight defined as "the affective experiencing and cognitive understanding of current maladaptive patterns of behavior that repeat childhood patterns of interpersonal conflict" (Strupp & Binder, 1984, pp. 24-25).

Luborsky's (1984) supportive-expressive (SE) model of psychotherapy uses self-understanding to represent the client's understanding of maladaptive interpersonal patterns. The core conflictual relationship theme method (CCRT; Luborsky, 1977; Luborsky & Crits-Christoph, 1990) is used to more precisely define the content of the client's self-

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understanding. The CCRT represents three main components of the client's maladaptive relationship patterns: the client's wishes or needs, perceived responses of others toward the client, and the client's responses in interpersonal relationships. The SE model includes self-understanding of maladaptive relationship patterns as the most significant curative factor of psychotherapy. The model postulates that as the client becomes able to recognize his or her relationship problems and understand the recurrent nature of these problems, he or she is able to find more adaptive ways of behaving. Luborsky (1984) pointed out that enhanced self-understanding is also important in its own right in "helping the client gain mastery over the impairing relationship conflicts" (p. 28). Thus, in the SE model, selfunderstanding is viewed as both a therapeutic process that leads to symptom reduction and as an important therapeutic outcome.

The construct of self-understanding has also been identified as one of the most important change dimensions by clients treated in dynamic psychotherapy. Investigations of important therapeutic factors have revealed that selfunderstanding is considered an important change by clients treated in psychotherapy groups (Bloch & Reibstein, 1980; Kapur, Miller, & Mitchell, 1988; MacKenzie, 1987), shortterm groups in the hospital (Kapur et al., 1988; Schaffer & Dreyer, 1982), short-term dynamic psychotherapy (Connolly & Strupp, 1996), and group therapy for borderline personality disorder (Macaskill, 1982). These investigations indicate that self-understanding is an important dimension of psychotherapy change from the perspective of the client.

Despite the vital role of self-understanding in both theories of dynamic psychotherapy and clients' perceptions of beneficial outcomes, few investigations have assessed precisely what the client comes to understand about himself or herself in psychotherapy. An examination of the empirical literature reveals that few measures have achieved content validity as described by Cronbach and Meehl (1955). Although some studies failed to explicitly define the construct (Luborsky et al., 1980; Sifneos, 1984), others defined the content as something much different than the selfunderstanding described by dynamic theorists (Kelman & Parloff, 1957; Mann & Mann, 1959; Smith, 1959; Tolor & Reznikoff, 1960). Those measures designed with adequate construct definitions in mind often failed to establish instrument reliability or relied on single item ratings (Eskey, 1958; Høglend, Engelstad, Sorbye, & Heyerdahl, 1994; Husby et al., 1985; Luborsky, 1962; Rosenbaum, Friedlander, & Kaplan, 1956). Three measures that were based on transcript analysis revealed good content validity but were costly and time-consuming (Dymond, 1948; Crits-Christoph & Luborsky, 1990; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988; Vargas, 1954). After almost 50 years of research on self-understanding, there appear to be no reliable and valid measures of self-understanding that can be easily implemented in psychotherapy research.

For the current investigation, self-understanding was defined as the understanding of maladaptive interpersonal patterns as described in modern theories of short-term dynamic psychotherapy. We operationalized the content of interpersonal patterns by using Luborsky's CCRT method, which defines the content of interpersonal patterns as the individual's wishes, his or her responses in the interpersonal situation, and the response of others toward the client in these situations. Self-understanding was further defined across a continuum from mere recognition of a problem area to a deeper understanding of the historical origins of the pattern. Using this definition, the client can gain selfunderstanding by coming to recognize his or her own wishes, responses of self, and responses of others. The next level of understanding involves the recognition that these interpersonal patterns are replicated across different relationships. Deeper understanding occurs when the client comes to understand the interpersonal origins of these wishes and responses.

The Self-Understanding of Interpersonal Patterns (SUIP) Scale is a brief self-report inventory designed to operationalize this definition of self-understanding. The original items for the SUIP were selected from three sources: (a) problems in self-understanding reported by psychotherapy clients (Connolly & Strupp, 1996), (b) contributions from expert therapists and graduate students, and (c) the CCRT standard category list (Barber, Crits-Christoph, & Luborsky, 1990). Both the item wording and the test format were refined over a series of iterations using both expert and client feedback. Following the suggestions of Jackson (1970), multiple psychometric criteria were used to select appropriate items.

This iterative process led to the current version of the SUIP (see Appendix for copy). Participants first rate whether each of 19 interpersonal patterns is perceived as a current problem. Each item is designed to represent a possible CCRT, containing a wish, perceived response of other, and response of self. Those interpersonal patterns endorsed as problematic are then rated on a 4-point scale designed to assess a dimension of self-understanding from recognition of a problem area to a deeper understanding of the history of the pattern. Two scores can be obtained from the SUIP. The average self-understanding across the items endorsed as problematic represents the client's level of self-understanding of recognized problem areas. In addition, the client's recognition of problem areas can be represented by the total number of items (i.e., interpersonal patterns) endorsed as problematic. Recognition scores range from 0 to 19, and self-understanding scores range from 1 to 4. An end of treatment version of the SUIP was implemented in order to assess change in self-understanding across treatment. For each client, the items that he or she recognized at treatment intake were circled to ensure that clients rated their termination level of self-understanding for all items recognized at intake. Participants took less than 15 min to complete the SUIP.

This final version of the SUIP was given to 5 experts with considerable clinical and research experience to rate the content validity of the measure. These experts were on average 49 years old, reported an average of 19 years of postdoctoral clinical experience, and defined their orientation as psychodynamic. These experts included researchers, clinical practitioners, and experts who do a combination of research and clinical work. The experts rated the overall clarity of the construct definition as very clear and agreed that the definition of self-understanding on which the SUIP was based represented the theory of self-understanding inherent in Luborsky's (1984) model of supportiveexpressive psychotherapy. The experts agreed that the 19 items as well as the self-understanding scale were very relevant, clearly worded, and as a whole very representative of the kinds of interpersonal patterns reported by clients receiving psychological services.

Five studies were conducted in order to evaluate the content validity, internal consistency, test-retest reliability, discriminant validity, convergent validity, and construct validity of the SUIP. These studies used three separate clinical samples and a student sample to evaluate aspects of the reliability and validity of the measure.

Study 1

The purpose of Study 1 was to evaluate the internal consistency and discriminant validity of the SUIP using a clinical sample. We evaluated internal consistency by using Cronbach's alpha coefficient and corrected item-total correlations. We chose not to pursue a factor analysis to further evaluate the dimensionality of the measure. Although one could factor analyze the recognition scores to evaluate the dimensions of interpersonal patterns assessed, the selfunderstanding ratings could not be factor analyzed because clients rate only those items that uniquely represent their interpersonal worlds. We feel that this is an important aspect of the scale, as it allows us to measure self-understanding in an easily administered self-report format while still maintaining the uniqueness of the client's interpersonal experience. Thus, it is not possible to perform a factor analysis that would elucidate the underlying dimensions of self-understanding. We chose, rather, to focus on internal consistency as a measure of how well the items hang together to measure a coherent construct.

It was hypothesized that the SUIP would not be correlated with measures of concurrent measures of psychiatric symptoms and interpersonal problems. Theories of dynamic psychotherapy postulate that clients' gains in self-understanding, rather than absolute levels of self-understanding, mediate improvements in interpersonal functioning and symptom reduction. One might hypothesize that individuals who, through life experiences, gain greater levels of selfunderstanding will decrease their maladaptive interpersonal tendencies and thus have more fulfilling interpersonal relationships and fewer symptoms. However, it is probable that there are multiple pathways to the development of psychopathology. Whereas some people who have poor selfunderstanding in the face of interpersonal conflict may experience symptoms as a result, other clients may become symptomatic through alternative routes, such as a biological vulnerability. Therefore, level of self-understanding should not be related to concurrent level of symptomatology for a sample consisting of clients with diverse causal pathways to symptoms.

Method

Participants

Forty-nine clients with a primary diagnosis of major depressive disorder were recruited from the adult outclient clinic of the Department of Psychiatry at Vanderbilt University Medical Center for the current investigation. All clients participated in a medication protocol for the treatment of depression and were diagnosed using the structured clinical interview for the *Diagnostic and Statistical Manual of Mental Disorders*, third edition revised (SCID-P; Spitzer, Williams, Gibbon, & First, 1990). The clients were mostly women (71%), on average 39 years old, and had an average of 14 years of education.

Measures

Symptom Checklist-90-R (SCL-90-R). The global severity index from the SCL-90-R (Derogatis, 1977) was used to assess psychiatric symptoms. The SCL-90-R has demonstrated high internal consistency and test-retest reliability (Derogatis, 1977).

Inventory of Interpersonal Problems (IIP). The IIP (Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988) was used to assess interpersonal problems. Horowitz et al. (1988) demonstrated high internal consistency, test-retest reliability, and high sensitivity to clinical change for the IIP.

Procedures

At treatment intake, all clients completed the SUIP along with measures of psychiatric symptoms and interpersonal problems.

Results and Discussion

Descriptive statistics for the SUIP self-understanding score and recognition score are provided in Table 1. The sample sizes for the self-understanding scores were slightly lower because some clients did not recognize any patterns as relevant in their worlds, thus they did not receive a self-understanding score. Each item was endorsed by between 14% and 69% of clients. Clients on average recognized 9 interpersonal problems as relevant in their own worlds and scored an average of 2.43 on the selfunderstanding scale. The corrected item-total correlations for the self-understanding items ranged from .26 to .80 for the items, with the exception of item 16, which demonstrated a corrected item-total correlation of -.26. Both the recognition score ($\alpha = .75$) and the self-understanding score $(\alpha = .88)$ demonstrated good internal consistency, indicating that these items fit together well to measure a coherent construct.

The means and standard deviations for each of the measures as well as the correlations with the SUIP scores are provided in Table 2. The sample sizes varied for each measure because of missing data. As hypothesized, the SUIP self-understanding score was not significantly correlated with either the symptom measure or the IIP total score, indicating that the SUIP is not a measure of psychiatric severity or interpersonal distress. The recognition score of the SUIP, however, was significantly correlated with the IIP. These results are consistent with the definition of the

SELF-UNDERSTANDING

Scale	Study						
	1. Major depression	2. Cocaine dependence	3. Students	4. Generalized anxiety			
Self-understanding score							
Sample size	48	241	85	80			
M	2.43	2.47	2.43	2.31			
SD	.78	.95	.67	.88			
Range	1.00-4.00	1.00-4.00	1.00-4.00	1.00-4.00			
α	.88	.79	.70	.83			
Recognition score							
Sample size	49	274	85	86			
M	9.41	6.46	11.30	8.40			
SD	3.85	4.68	3.84	4.70			
Range	0-18	0-19	1-19	0-18			
α	.75	.94	.70	.97			

Scale Means and Internal Consistency for Self-Understanding of Interpersonal Pattern.	s
Self-Understanding and Recognition Scores	

Note. The recognition score is the total number of items out of 19 selected as relevant to the patient. The self-understanding score is the average self-understanding rating for interpersonal items recognized as relevant.

recognition score as a measure of the number of maladaptive interpersonal patterns recognized as problematic.

understanding would be uncorrelated with measures of symptoms and interpersonal problems.

Method

Study 2

The purpose of Study 2 was to replicate the findings regarding the internal consistency and discriminant validity of the SUIP with a second clinical sample and to evaluate the stability of the measure across a 1-month interval. In terms of discriminant validity, it was hypothesized that self-

Participants

Two hundred seventy-four clients with a primary diagnosis of cocaine dependence participated in the current investigation. All clients participated in the training phase of a multisite collaborative

Table 2

Table 1

Means, Standard Deviations, and Pearson Correlations Between Self-Understanding of Interpersonal Patterns Scale and Measures of Other Important Psychotherapy Constructs

1							
Study	Sample size M		SD	Self- understanding	Recognition		
1 Maine dennesten		· ·····					
1. Major depression							
Global Severity Index	47	1.34	0.67	.03	.23		
IIP	46	1.56	0.64	.11	.54**		
2. Cocaine dependence							
Brief Symptom Inventory	254	.50	0.49	10	.44**		
IIP	265	1.06	0.61	04	.48**		
3. Student	200		0.01	101			
Self-Concept Test	85	84.17	10.00	.15			
NEO feelings	85	61.47	8.85	.09			
NEO ideas	85	59.13	9.59	.08			
Psychological mindedness	85	131.22	11.57	03			
4. Generalized anxiety							
Beck Anxiety Inventory	85	17.80	8.58	.17	.18		
IIP	85	1.43	0.64	07	.54**		
Repressive defensiveness	83	31.65	8.90	08	25*		
Denial of distress	83	23.67	6.21	10	51**		
PRF understanding	19	9.00	3.77	.54*			
PRF achievement	19	9.53	3.19	.45*			
PRF sentience	19	8.53	2.25	.10			

Note. IIP = Inventory of Interpersonal Problems; PRF = Personality Research Form. *<math>p < .05. **p < .001.

study on the treatment of cocaine addiction (Crits-Christoph et al., 1997; Crits-Christoph et al., 1999). All clients were diagnosed with the SCID-P (Spitzer et al., 1990). The clients were on average 33 years old, mostly men (70%), and received an average of 13 years of education.

Measures

Brief Symptom Inventory (BSI). The Global Severity Index of the BSI (Derogatis, 1992) was used to assess symptomatology. This measure consists of 58 items selected from the SCL-90-R (Derogatis, 1977). The BSI has demonstrated good test-retest reliability (Derogatis, 1992).

IIP-Short Form. The short form of the IIP (Alden, Wiggins, & Pincus, 1990) was used to assess interpersonal problems. Horowitz et al. (1988) demonstrated high internal consistency, test-retest reliability, and high sensitivity to clinical change for the IIP.

Procedures

All clients completed the SUIP, along with measures of psychiatric symptoms and interpersonal problems, at treatment intake. In addition, a subset of 134 clients completed the SUIP at 2 time points separated by a 1-month interval.

Results and Discussion

All items on the SUIP were endorsed by between 15% and 63% of clients in the current sample. Clients recognized an average of six interpersonal patterns as relevant and scored an average of 2.47 on the 4-point self-understanding scale for these interpersonal patterns (see Table 1). All items demonstrated adequate corrected item-total correlations (between .37 and .80). Internal consistency was good for both the recognition ($\alpha = .94$) and self-understanding ($\alpha = .79$) scores, indicating that the items measured a coherent construct.

The correlations between the SUIP scores and the measures of symptoms and interpersonal problems are provided in Table 2. As hypothesized and consistent with the results of Study 1, self-understanding was not significantly related to either symptoms or interpersonal problems, indicating that the SUIP measures a distinct construct. The recognition score was significantly related to both symptoms and interpersonal problems, consistent with its function as a measure of the number of problematic interpersonal patterns.

Test-retest reliability was evaluated for 134 clients with cocaine dependence across a 1-month interval. Because the current investigation was focused solely on evaluating the stability of the SUIP, clients were evaluated at Months 5 and 6 of the treatment protocol in order to minimize the treatment effects and to ensure greater stability of cocaine use. Only 95 clients are included in the analyses of self-understanding scores because 39 clients received a recognition score of 0 at one time point. The 5-month scores on the SUIP correlated significantly with the 6-month scores for both the recognition score (r = .82, p < .001) and the self-understanding score (r = .76, p < .001). In addition, neither the self-understanding score, t(94) = .22, p = .825, nor the recognition score, t(133) = 1.87, p = .064, changed significantly across the 1-month interval. These results indicate that the SUIP measures a stable construct.

Study 3

The purpose of Study 3 was to evaluate the internal consistency and discriminant validity of the SUIP in a nonclinical sample. A measure of self-esteem was used to evaluate discriminant validity. It was hypothesized that self-understanding would not be related to self-esteem. This sample was also used to evaluate the convergent validity of the SUIP. Because of the lack of reliable and valid measures of self-understanding, the SUIP was compared with constructs that some might expect to be moderately related to self-understanding, including measures of psychological mindedness and openness. One would expect that individuals who are psychologically minded and open to exploring their thoughts and feelings might, through life experiences, come to understand their own interpersonal patterns. Thus, we see self-understanding as a construct that is stable over time but influenced by personality variables.

Method

Participants

One hundred undergraduate students were recruited from the University of Pennsylvania. Students were on average 20 years old, had completed an average of 15 years of education, and 53% were women.

Measures

Beck Self-Concept (BSC) Test. Self-esteem was assessed in the student sample using the BSC (Beck, Steer, Epstein, & Brown, 1990). The BSC is designed to assess an individual's self-evaluation across a set of descriptors. The final score represents how good the participant feels about himself or herself. The BSC has demonstrated good internal consistency ($\alpha = .82$) and good 1-week test-retest reliability (r = .88, p < .001). In addition, the BSC has demonstrated good discriminant validity with measures of psychopathology and good discriminant validity with measures of nonpsychological constructs such as vocabulary knowledge (Beck et al., 1990).

Psychological Mindedness (PM). A revised version of the 65-item scale originally used by Lotterman (1979) was used to assess PM in the student sample. PM was defined as one's ability to access emotions, see the relation between feelings and behavior, open up to others, and to be interested in the meaning of one's behaviors (Conte et al., 1990). The revised version consists of 45 items each rated on a 4-point Likert scale ranging from strongly agree to strongly disagree. A sample item is "I often find myself thinking about what made me act in a certain way." Conte et al. (1990) demonstrated good internal consistency for the revised PM scale ($\alpha = .82$). In addition, the revised PM scale demonstrated convergent validity with measures of assertion, sociability, ego strength, and discriminant validity with measures of depression and conflict (Conte, Buckley, Picard, & Karasu, 1995).

The Revised NEO Personality Inventory (NEO-PI-R). The NEO-PI-R (Costa & McCrae, 1992) was used to assess openness to experience. The NEO-PI-R assesses five basic dimensions of personality, with each dimension broken down into six facets. The current investigation used the standardized scores of the feelings and ideas facets from the openness to experience dimension. These facets alone were administered to decrease participant burden and because these facets of openness seemed most closely related to our construct of self-understanding of interpersonal patterns. The NEO-PI-R has been extensively researched and validated (Costa & McCrae, 1992).

Validity items. All students completed the PM and the NEO-PI-R openness to feelings and ideas facets along with three randomly placed validity items derived from the Weinberger Adjustment Inventory validity scale (Weinberger, 1991). Students rated whether they agreed with each of the three questions, including "I have never met anyone younger than I am," "I am answering these questions truthfully," and "everyone makes mistakes once in a while." Students who failed at least one of these validity checks were excluded from all analyses.

Procedures

All students were recruited from a university campus through advertisement. Interested participants were asked to complete the packet of measures and were paid \$10 on completion.

Results and Discussion

Fifteen participants from the student sample were excluded from all analyses because they failed at least one of the validity items, indicating that they were not attending to the task. Of the 85 students retained in the student sample, each SUIP item was endorsed by between 36% and 79% of the participants. Participants recognized on average 11 interpersonal patterns, and the average self-understanding score was 2.43. The internal consistency was adequate for the recognition score ($\alpha = .69$) and the self-understanding score ($\alpha = .70$). The corrected item-total correlations ranged from .12 to .66, with 9 items revealing corrected item-total correlations less than .40.

The discriminant validity of the SUIP was evaluated in the current sample by comparing the recognition and selfunderstanding scores with the BSC (see Table 2). Selfconcept, as measured by the BSC, was not significantly correlated with the self-understanding score or the recognition score of the SUIP. These results indicate that selfunderstanding, as measured by the SUIP, is not related to how good the participant feels about himself or herself.

The convergent validity of the SUIP in assessing selfunderstanding was assessed by comparing the SUIP selfunderstanding and recognition scores with other important personality constructs (see Table 2). The self-understanding score was not significantly related to openness to feelings, openness to ideas, or psychological mindedness. Further, there was no significant association between recognition of interpersonal patterns and psychological mindedness, openness to feelings, and openness to ideas.

Study 4

The purpose of Study 4 was to further examine the internal consistency, discriminant validity, and convergent validity of the SUIP using a third clinical sample. Although convergent validity was also assessed in the student sample, the current sample was useful in exploring the relation of personality variables to self-understanding in a clinical sample. In addition, a construct validity approach (Cronbach & Meehl, 1955) was used to evaluate the SUIP. On the basis

of the SE model of psychotherapy, interpretive techniques help clients gain self-understanding of their maladaptive interpersonal patterns, which in turn lead to symptom reduction. Self-understanding is viewed as both an important mechanism of symptom change and an important therapeutic outcome in its own right. This model suggests two substantive hypotheses that were evaluated in the current sample: (a) Psychotherapies using interpretive techniques will result in significant change in self-understanding, whereas treatments such as pharmacotherapy will not lead to gains in self-understanding; and (b) within dynamic psychotherapy, changes in self-understanding will be associated with changes in symptoms. Finally, this sample was used to evaluate the relation between defensiveness and the self-report of self-understanding. Highly defensive individuals might not be open to self-exploration and thus might have lower levels of self-understanding. It was hypothesized that defensiveness would reveal a small relation to clients' self-reported self-understanding.

Method

Participants

Eighty-six clients with a primary diagnosis of generalized anxiety disorder (GAD) or anxiety disorder not otherwise specified were recruited from the Center for Psychotherapy Research and the Pharmacotherapy Research Unit in the Department of Psychiatry at the University of Pennsylvania. Thirty-three clients participated in a research protocol designed to test the efficacy of short-term dynamic psychotherapy (Crits-Christoph, Connolly, Azarian, Crits-Christoph, & Shappell, 1996), and 53 clients participated in 1 of 3 studies on the efficacy of medication for the treatment of GAD. All clients were diagnosed using the SCID-P (Spitzer et al., 1990). Clients were on average 42 years old, and 49% were women. Clients had received an average of 15 years of education.

Only clients who completed at least 12 weeks of treatment were used to assess changes in the SUIP. Twenty-nine clients completed SE psychotherapy for GAD (Crits-Christoph et al., 1996), and 25 clients completed at least 12 sessions of pharmacotherapy for GAD. The clients in the SE condition did not differ significantly from the medication clients at intake on age, t(54) = 1.49, p =.143, education, $\chi^2(4, N = 54) = 2.85$, p = .42, gender, $\chi^2(1, N = 54) = .24$, p = .63, marital status, $\chi^2(3, N = 54) = 1.80$, p =.77, recognition of interpersonal patterns, t(54) = 1.05, p = .30, self-understanding of interpersonal patterns, t(48) = -.18, p =.86, or symptoms as measured by the Beck Anxiety Inventory (BAI), t(54) = 1.79, p = .08.

Measures

(*BAI*). The BAI (Beck, Epstein, Brown, & Steer, 1988) was used to assess psychiatric symptoms in the GAD sample. The BAI has demonstrated high internal consistency ($\alpha = .92$), good test-retest reliability, and has been used to discriminate anxiety disorders from nonanxiety disorders (Beck et al., 1988).

IIP-short form. See Study 2.

Weinberger Adjustment Inventory—Repressive Defensiveness (RD) and Denial of Distress (DD) Subscales. The RD and DD subscales (Weinberger, 1991) were included in the GAD sample in order to evaluate whether the SUIP was related to defensiveness. The RD subscale contains 11 items designed to discriminate individuals with repressive styles. RD is defined as claims of

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extreme suppression of egoistic desires and self-restraint. The DD subscale contains 11 items designed to assess defensiveness about normative experiences of distress. Each item is rated on a 5-point Likert scale ranging from *false* to *true*. The internal consistency of these scales range from .76 to .79 for adult clinical clients (Weinberger, 1991). In addition, Weinberger (1991) demonstrates good convergent and discriminant validity for the WAI.

Personality Research Form (PRF). The PRF (Jackson, 1989) was administered to a subset of 19 clients at treatment intake in order to evaluate the convergent validity of the SUIP. The PRF consists of 440 items, broken down into 22 subscales, designed to assess personality traits. We hypothesized that 3 personality subscales of the PRF should be moderately correlated with the self-understanding score of the SUIP. Defining traits of the understanding subscale of the PRF include analytical, reflective, and curious. The achievement subscale assesses whether participants are striving and accomplishing, including self-improving. The sentience subscale assesses whether one is aware, feeling, sensitive, and open to experience. We hypothesized that participants characterized as reflective, self-improving, and open to experience would be more likely to achieve greater self-understanding.

Procedures

All clients completed the SUIP, as well as measures of psychiatric symptoms, interpersonal problems, and defensiveness at treatment intake and again after 16 weeks. A subset of clients also completed a measure of personality at treatment intake.

Results and Discussion

Each SUIP item was endorsed by between 18% and 65% of clients in this sample. Clients recognized on average 8 interpersonal patterns and revealed an average self-understanding of 2.31. Both the recognition score ($\alpha = .97$) and the self-understanding score ($\alpha = .83$) demonstrated good internal consistency, with individual items revealing corrected item-total correlations between .46 and .85. Consistent with the previous studies, the self-understanding score demonstrated good discriminant validity with the measures of symptoms and interpersonal problems (see

Table 3

Table 2), whereas the recognition score correlated significantly with interpersonal problems. The self-understanding score was not significantly associated with either the RD or DD subscales, whereas the recognition score of the SUIP was significantly negatively associated with both defensiveness subscales. Defensive individuals tend to report fewer interpersonal patterns as relevant to their worlds, but defensiveness does not relate to the level of self-understanding for patterns that are recognized.

The self-understanding score also demonstrated good convergent validity with the some of the PRF subscales. Both the understanding scale and the achievement scale of the PRF were significantly positively associated with the self-understanding score (see Table 2), indicating that clients who were characterized as reflective and self-improving demonstrated greater self-understanding of interpersonal patterns. The sentience subscale of the PRF was not significantly associated with the self-understanding score (r = .10, p = .69), indicating that greater awareness and openness to experience was not related to greater self-understanding.

Further analyses were performed to evaluate the role of self-understanding as a dimension of outcome in dynamic psychotherapy and as a mediator of symptom reduction. The results presented in Table 3 indicate that clients in both conditions changed significantly on symptoms of anxiety, but only the SE condition demonstrated significant improvements in self-understanding. An analysis of covariance predicting termination self-understanding from treatment group, covarying intake self-understanding, was used to evaluate whether the treatment groups differed significantly in the amount of change on self-understanding. Although clients were not randomized to the two treatment groups, an evaluation of demographics and pretreatment assessment scores revealed no statistically significant pretreatment differences. There was a significant main effect for treatment group, F(1, 47) = 5.35, p = .025, with a between-groups effect size, using Cohen's d (Cohen, 1969), of .67 which is in the medium to large range. Both groups demonstrated

Measure	Intake		Termination			
	М	SD	М	SD	t	Sig. of t
Dynamic psychotherapy						
SUIP-SU	2.23	0.74	3.14	0.85	-4.82	.000
SUIP-REC	9.07	5.48	10.69	5.39	-3.34	.002
BAI	19.95	8.71	9.53	11.10	5.31	.000
IIP	1.22	0.63	1.05	0.59	2.52	.018
Medication						
SUIP-SU	2.28	0.89	2.63	0.74	-1.72	.101
SUIP-REC	7.64	4.29	8.88	4.30	-3.30	.003
BAI	15.92	7.66	8.33	6.13	5.45	.000
IIP-SF	1.40	0.60	1.24	0.52	1.62	.118

t Tests Comparing Intake to Termination on All Assessments for Generalized	ł
Anxiety Disorder Sample	

Note. SUIP = Self-Understanding of Interpersonal Patterns; SU = self-understanding; REC = recognition; BAI = Beck Anxiety Inventory; IIP = Inventory of Interpersonal Problems; Sig. = significance; SF = short form.

significant improvement in the recognition of interpersonal patterns across treatment.

A preliminary evaluation of self-understanding as a mediator of symptom change was performed by correlating change in self-understanding with change in symptoms. Residual change scores were computed for the self-understanding score and the BAI by partialling out variance because of intake scores from termination scores. Contrary to the hypotheses, residual change in self-understanding from treatment intake to termination was not correlated with residual change in symptoms as measured by the BAI (r = -.01, p = .964) for the SE condition.

Study 5

Method

The four samples collected as part of Studies 1 through 4 were combined in order to evaluate the relation between the SUIP scores and demographic variables. It was hypothesized that SUIP scores would not be related to demographic status.

Participants

See description of participants in Studies 1 through 4.

Measures

All participants completed a demographic sheet assessing age, gender, and education.

Procedures

For the clinical sample, all participants completed the demographic sheet and the SUIP prior to treatment. The students completed both measures and were reimbursed \$10.

Results and Discussion

Because of some missing data, the full sample size for these analyses was 442. A multiple regression, partialling out variance because of sample, revealed that age (sr = .09, p = .06), number of years of education (sr = -.07, p = .12), and gender (sr = -.03, p = .58) were not significantly associated with the self-understanding score. A second regression, also partialling out sample, revealed that age (sr = -.06, p = .18), years of education (sr = .04, p = .32), and gender (sr = .08, p = .06) were not significantly related to the recognition score. These results indicate that the SUIP scores can be used across a diverse demographic population.

General Discussion

The SUIP appears to be a promising first step in the development of a reliable and valid measure of selfunderstanding. The SUIP demonstrates good content validity. The measure was designed to be consistent with modern dynamic theories of psychotherapeutic change, and the items reflect the kinds of interpersonal patterns reported by psychotherapy clients. Further, the measure is easily administered to large samples, unlike more costly and timeconsuming methods of assessing self-understanding.

The SUIP is also a reliable measure of the construct of self-understanding of interpersonal patterns. The recognition score demonstrated good internal consistency across all of the clinical samples and the student sample. The selfunderstanding score revealed high internal consistency along with adequate corrected item-total correlations in the clinical samples, suggesting that the items together measure a coherent construct. In the student sample, 9 items had lower corrected item-total correlations with the self-understanding score than were found in the clinical samples, although the self-understanding score itself demonstrated adequate internal consistency as assessed by the alpha coefficient.

An examination of the means and standard deviations (see Table 1) suggests that the student sample demonstrated less variation on the self-understanding score than the clinical samples. For example, the standard deviation of the self-understanding score in the student sample was 24% smaller than in the GAD sample. Levene's test for equality of variances showed that the variance in self-understanding scores in the GAD sample was significantly greater than in the student sample, F(1, 163) = 9.45, p = .002. Perhaps the corrected item-total correlations found in the student sample do not adequately represent the reliability of the items because of the restricted range of the total score. By contrast, the good item reliability evident in the clinical samples might better represent the internal consistency of the measure.

The reliability of the SUIP in assessing the construct of self-understanding was further demonstrated by an evaluation of test-retest reliability in the cocaine sample. Both the recognition and self-understanding scores revealed good test-retest correlations, suggesting that the SUIP is measuring a stable construct that is not related to fluctuating situational or symptomatic factors.

Scores on the SUIP were not related to demographic variables. Neither the self-understanding score nor the recognition score was associated with client age, years of education, or gender. Further, the self-understanding score was not significantly associated with measures of defensiveness, whereas the recognition score demonstrated a moderate association to defensiveness. Although highly defensive individuals report fewer interpersonal patterns, their level of self-understanding for the items they do recognize is not related to their level of defensiveness. The SUIP appears to be a measure that can be appropriately used with diverse adult client samples.

The self-understanding score of the SUIP also revealed good discriminant validity with measures of psychiatric severity and interpersonal problems. Across the clinical samples, the self-understanding score was uncorrelated with the measures of symptoms and interpersonal problems. The self-understanding score appears not to be influenced by a general distress factor. In contrast, the recognition score had a statistically significant association with the measure of interpersonal problems in all clinical samples and a significant association with the measure of symptoms in the cocaine sample. This result is fully consistent with the definition of the recognition score as a measure of the number of problematic interpersonal patterns. The number of interpersonal patterns recognized by the participant is associated with the participant's level of distress, whereas his or her reported self-understanding of these patterns is independent of psychiatric distress. The SUIP self-understanding score further demonstrated good discriminant validity in the student sample. Specifically, self-understanding scores were not associated with how good participants felt about themselves.

Convergent validity was assessed by comparing selfunderstanding scores in the student and GAD samples with scores on personality measures. In the student sample, self-understanding was not significantly associated with openness to feelings, openness to ideas, or psychological mindedness. In addition, recognition of interpersonal patterns was not significantly associated with openness or psychological mindedness, suggesting that the SUIP is measuring a distinct construct. However, in the GAD sample, the self-understanding score of the SUIP was significantly associated with personality traits such as analytical, reflective, and self-improving.

One might expect that personality traits such as openness and psychological mindedness should be associated with the level of self-understanding. However, as operationalized in the SUIP, self-understanding is defined specifically as the understanding of maladaptive relationship patterns. Such understanding is defined along a continuum from recognition to a deeper understanding of the pervasiveness and historical origins of the patterns, consistent with the levels of understanding targeted by modern dynamic psychotherapies. Whereas psychological mindedness and openness to ideas might be good prerequisites for attaining selfunderstanding within psychotherapy, it is unlikely that such a motivation is sufficient in attaining self-understanding outside of therapy for younger participants. In fact, the clients in the GAD sample were significantly older than the students (t = 18.36, p = .000). The GAD sample represents an older population in which such personality traits along with life experience might be sufficient to attain higher levels of self-understanding.

It is possible that the construct of self-understanding is associated with constructs such as psychological mindedness and openness, even among younger people who have not explored their interpersonal relationships, but that the relation is attenuated in the student sample because of the restriction of range of the self-understanding score. It is possible that a more diverse sample of normal controls would have yielded different results. Further research is needed to better understand the relation between personality traits of openness and psychological mindedness and one's actual level of self-understanding, in light of possible moderating variables such as age and life experience.

The SUIP also demonstrated some validity as a construct as defined in dynamic models of psychotherapy. Selfunderstanding, as measured by the SUIP, changed significantly across dynamic psychotherapy but not across pharmacotherapy, despite comparable symptom change in both treatment conditions. These results suggest that the SUIP is measuring the changes in self-understanding that occur in dynamic psychotherapies. These findings are particularly important given the failure of previous investigations to demonstrate mode-specific changes across treatment (Imber et al., 1990). However, our sample was not randomized to treatment with dynamic psychotherapy or pharmacotherapy, suggesting that future randomized trials are needed to confirm the mode-specific effects of the SUIP. Contrary to our hypotheses, change in self-understanding was not associated with change in symptoms across dynamic psychotherapy for GAD. This result suggests that perhaps the SUIP is not measuring the breadth of self-understanding changes occurring in short-term dynamic psychotherapy or that the theoretical model for symptom change should be reevaluated. It is possible that in brief treatments, a longer time frame is necessary for self-understanding to impact on the symptom course. Future investigations should evaluate whether changes in self-understanding have the greatest influence on the extended follow-up course of symptoms, rather than the acute symptom course, which may be affected by other aspects of the treatment process.

The results of this investigation suggest that the SUIP is a promising first step in the development of a reliable and valid measure of self-understanding. As a first step toward this aim, the current investigation contains a number of limitations that should be considered. The SUIP might be improved in future investigations by expanding the list of possible interpersonal patterns. Because a small number of clients scored a 0 on the recognition score, it is possible that all interpersonal patterns experienced by psychotherapy clients are not represented in the current list. On the other hand, the high internal consistency coefficients for the recognition score suggest possible redundancy of items. The SUIP might be improved by expanding the list to include all possible interpersonal patterns while deleting redundant items.

In addition, the SUIP assesses self-understanding from the perspective of the client. Although the client's perspective is important in its own right, and self-reports are often more economical to use in large-scale research projects, it will be important to see how the self-report of self-understanding relates to other perspectives such as independent expert observers. Because the SUIP only measures clients' levels of self-understanding for patterns that they recognize in their current worlds, ratings made by independent observers might help elucidate to what degree clients are able to report on their own self-understanding.

Finally, the current investigation served only as the first study aimed at evaluating the construct validity of the SUIP. Although the results suggested that the SUIP measured changes specific to dynamic psychotherapies, randomized treatment samples would be necessary to evaluate the mediational hypotheses inherent in dynamic models. It will be important to evaluate in which treatments and across what time frames changes in self-understanding occur.

References

- Alden, L. E., Wiggins, J. S., & Pincus, A. L. (1990). Construction of circumplex scales for the Inventory of Interpersonal Problems. *Journal of Personality Assessment*, 55, 521-536.
- Barber, J. P., Crits-Christoph, P., & Luborsky, L. (1990). A guide to the CCRT standard categories and their classification. In L. Luborsky & P. Crits-Christoph (Eds.), Understanding transference: The CCRT method (pp. 37-50). New York: Basic Books.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893– 897.
- Beck, A. T., Steer, R. A., Epstein, N., & Brown, G. (1990). Beck Self-Concept Test. Journal of Consulting and Clinical Psychology, 2, 191–197.
- Bloch, S., & Reibstein, J. (1980). Perceptions by clients and therapists of therapeutic factors in group psychotherapy. *British Journal of Psychiatry*, 137, 274–278.
- Cohen, J. (1969). Statistical power analysis for the behavioral sciences. New York: Academic Press.
- Connolly, M. B., & Strupp, H. H. (1996). A cluster analysis of client reported psychotherapy outcomes. *Psychotherapy Re*search, 6, 30–42.
- Conte, H. R., Buckley, P., Picard, S., & Karasu, T. B. (1995). Relationships between psychological mindedness and personality traits and ego functioning: Validity studies. *Comprehensive Psychiatry*, 36, 11–17.
- Conte, H., Plutchik, R., Jung, B. B., Picard, S., Karasu, T. B., & Lotterman, A. (1990). Psychological mindedness as a predictor of psychotherapy outcome: A preliminary report. *Comprehen*sive Psychiatry, 31, 426–431.
- Costa, P. T., & McCrae, R. R. (1992). The NEO personality inventory manual. Odessa, FL: Psychological Assessment Resources Inc.
- Crits-Christoph, P., Connolly, M. B., Azarian, K., Crits-Christoph, K., & Shappell, S. (1996). An open trial of brief supportiveexpressive psychodynamic psychotherapy in the treatment of generalized anxiety disorder. *Psychotherapy*, 33, 418–430.
- Crits-Christoph, P., & Luborsky, L. (1990). The measurement of self-understanding. In L. Luborsky & P. Crits-Christoph (Eds.), Understanding transference: The CCRT method (pp. 189–196). New York: Basic Books.
- Crits-Christoph, P., Siqueland, L., Blaine, J., Frank, A., Luborsky, L., Onken, L. S., Muenz, L., Thase, M. E., Weiss, R. D., Gastfriend, D. R., Woody, G., Barber, J. P., Butler, S. F., Daley, D., Bishop, S., Najavits, L. M., Lis, J., Mercer, D., Griffin, M. L., Moras, K., & Beck, A. T. (1997). The NIDA collaborative cocaine treatment study: Rationale and methods. Archives of General Psychiatry, 54, 721–726.
- Crits-Christoph, P., Siqueland, L., Blaine, J., Frank, A., Luborsky, L., Onken, L. S., Muenz, L., Thase, M. E., Weiss, R. D., Gastfriend, D. R., Woody, G., Barber, J. P., Butler, S. F., Daley, D., Bishop, S., Najavits, L. M., Lis, J., Mercer, D., Griffin, M. L., Moras, K., & Beck, A. (1999). Psychosocial treatments for cocaine dependence: Results of the NIDA cocaine collaborative study. Archives of General Psychiatry, 56, 493-502.
- Cronbach, L., & Meehl, P. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281–302.
- Derogatis, L. R. (1977). The SCL-90: Administration, scoring, and procedures manual—I for revised version. Baltimore, MD: The Johns Hopkins Hospital.

- Derogatis, L. R. (1992). Brief Symptom Inventory. Baltimore, MD: Clinical Psychometric Research Incorporated.
- Dymond, R. F. (1948). A preliminary investigation of the relation of insight and empathy. *Journal of Consulting Psychology*, 12, 228-233.
- Eskey, A. (1958). Insight and prognosis. Journal of Clinical Psychology, 14, 426-429.
- Freud, S. (1958). Further recommendations in the technique of psycho-analysis II: Recollection, repeating and working through: Further recommendations in the technique of psycho-analysis. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 12, pp. 147-156). London: Hogarth Press. (Original work published 1914).
- Høglend, P., Engelstad, V., Sorbye, O., & Heyerdahl, O. (1994). The role of insight in exploratory psychodynamic psychotherapy. British Journal of Medical Psychology, 67, 305–317.
- Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of interpersonal problems: Psychometric properties and clinical applications. *Journal of Consulting and Clinical Psychology*, 56, 885–892.
- Husby, R., Dahl, A. A., Dahl, C. I., Heiberg, A. N., Olafsen, O. M., & Weisarth, L. (1985). Short-term dynamic psychotherapy: The Oslo group's form to score outcome, the reliability testing of this form and observer characteristics. *Psychotherapy & Psychosomatics*, 43, 1–7.
- Imber, S. D., Pilkonis, P. A., Sotsky, S. M., Elkin, I., Watkins, J. T., Collins, J. F., Shea, M. T., Leber, W. R., & Glass, D. R. (1990). Mode-specific effects among three treatments for depression. *Journal of Consulting and Clinical Psychology*, 58, 352–359.
- Jackson, D. (1970). A sequential system for personality scale development. In C. D. Spielberger (Ed.), *Current topics in clinical and community psychology* (Vol. 2, pp. 61–96). New York: Academic Press.
- Jackson, D. (1989). Personality research form manual. Port Huron, MI: Sigma Assessment Systems, Inc.
- Kapur, R., Miller, K., & Mitchell, G. (1988). Therapeutic factors within in-client and out-client psychotherapy group. *British Journal of Psychiatry*, 152, 229–233.
- Kelman, H. C., & Parloff, M. B. (1957). Interrelations among three criteria of improvement in group therapy: Comfort, effectiveness, and self-awareness. *Journal of Abnormal and Social Psychology*, 54, 281–288.
- Lotterman, A. C. (1979). A questionnaire measure of psychological mindedness and the capacity to benefit from psychotherapy. Unpublished manuscript.
- Luborsky, L. (1962). Research problems relating to measuring personality change in psychotherapy: The client's personality and psychotherapeutic change. In H. Strupp & L. Luborsky (Eds.), *Research in Psychotherapy* (Volume 2, pp. 115–133). Washington, DC: American Psychological Association.
- Luborsky, L. (1977). Measuring a pervasive psychic structure in psychotherapy: The core conflictual relationship theme. In N. Freedman & S. Grand (Eds.), *Communicative structures and psychic structures* (pp. 367–395). New York: Plenum.
- Luborsky, L. (1984). Principles of psychoanalytic psychotherapy: A manual for supportive-expressive treatment. New York: Basic Books.
- Luborsky, L., & Crits-Christoph, P. (1990). Understanding transference: The core conflictual relationship theme method. New York: Basic Books.
- Luborsky, L., Crits-Christoph, P., Mintz, J., & Auerbach, A. (1988). Who will benefit from psychotherapy? New York: Basic Books.
- Luborsky, L., Mintz, J., Auerbach, A., Christoph, P., Bachrach, H.,

Todd, T., Johnson, M., Cohen, M., & O'Brien, C. P. (1980). Predicting the outcome of psychotherapy: Findings of the Penn psychotherapy project. Archives of General Psychiatry, 37, 471-481.

- Macaskill, N. D. (1982). Therapeutic factors in group therapy with borderline clients. International Journal of Group Psychotherapy, 32(1), 61-73.
- MacKenzie, K. R. (1987). Therapeutic factors in group psychotherapy: A contemporary view. *Group*, 11, 26–34. Mann, J. H., & Mann, C. H. (1959). Insight as a measure of
- Mann, J. H., & Mann, C. H. (1959). Insight as a measure of adjustment in three kinds of group experience. Journal of Consulting Psychology, 23, 91.
- Rosenbaum, M., Friedlander, J., & Kaplan, S. M. (1956). Evaluation of results of psychotherapy. *Psychosomatic Medicine*, 18, 113-132.
- Schaffer, J. B., & Dreyer, S. F. (1982). Staff and inclient perceptions of change mechanisms in group psychotherapy. American Journal of Psychiatry, 139, 127–128.
- Sifneos, P. E. (1984). Short-term dynamic psychotherapy for clients with physical symptomatology. *Psychotherapy and Psychosomatics*, 42, 48–51.

- Smith, E. E. (1959). Defensiveness, insight, and the K scale. Journal of Consulting Psychology, 23, 275-277.
- Spitzer, R. L., Williams, J. B. W., Gibbon, M., & First, M. B. (1990). Structured Clinical Interview for DSM-III-R-client edition (with psychotic screen): SCID-P (w/psychotic screen) (version 1.0). Washington, DC: American Psychiatric Press.
- Strupp, H. H., & Binder, J. L. (1984). Psychotherapy in a new key: A guide to time-limited dynamic psychotherapy. New York: Basic Books.
- Tolor, A., & Reznikoff, M. (1960). A new approach to insight: A preliminary report. *The Journal of Nervous and Mental Disease*, 130, 286-296.
- Vargas, M. J. (1954). Changes in self-awareness during clientcentered therapy. In C. R. Rogers & R. F. Dymond (Eds.), *Psychotherapy and personality change* (pp. 145–166). Chicago: The University of Chicago Press.
- Weinberger, D. A. (1991). Social-emotional adjustment in older children and adults: I Psychometric properties of the Weinberger Adjustment Inventory. Manuscript submitted for publication.

Appendix

The Self-Understanding of Interpersonal Patterns (SUIP) Scale

To conserve space, we describe the 4-point self-understanding scale followed by each of the 19 interpersonal patterns for which it may be rated. In the standard format of the SUIP, each item is followed by a "yes" and "no" and by the 4-point selfunderstanding scale. The client is instructed to read each item and first circle "yes" or "no" to indicate whether the interpersonal pattern is relevant to their current life. They are then instructed to complete the 4-point self-understanding scale for each item for which they circle "yes." A complete copy of the measure can be obtained from the first author.

Self-Understanding Rating Scale

a) I recognize that I feel and act this way with a significant person in my life, but I don't know why.

b) I can see that this experience has become a pattern with multiple people in my life, but I don't know why.

c) I'm beginning to see a link between these experiences and past relationship experiences, but the connection is not yet clear.

d) I can clearly see that I feel and act this way because of past relationship experiences.

Interpersonal Patterns

1) I feel the need to "save" others when I see them having a tough time and therefore try to solve their problems for them.

2) I feel the need to guide others when I see them about to make a mistake and wind up telling them what to do.

3) I feel the need to please others and let them push me to do something I don't want to do.

4) I need someone to truly understand me, and feel hurt when he/she cannot relate to my feelings.

5) I feel the need to keep someone close, and do whatever is necessary to keep him/her with me even when they need to leave me. 6) I feel the need to change someone, and wind up helping him/her to think more like me even when he/she has beliefs or values different from mine.

7) I feel the need to be understood by others, and get defensive or angry when others are not able to see things like I see them.

8) I feel the need to be close to someone and have difficulty letting them have the space they need.

9) I am very dependent on others for approval, and feel hurt when they reject me.

10) I need to be trusted by someone, and feel rejected when they do not trust me.

11) I need to trust someone, yet I distance myself from that person when they act in a dishonest way.

12) I feel the need to be accepted by someone, and feel bad about myself when he/she doesn't like me.

13) I need someone to take care of me, and I feel abandoned when he/she is not helpful.

14) I need someone to be reliable, and I feel disappointed when he/she lets me down.

15) I need to feel accepted by others, and I feel bad when they oppose what I want to do.

16) I need to feel free of responsibility, and I distance myself from someone I care about because they are too dependent on me.

17) I need to be respected by someone, and I feel hurt when he/she does not approve of me.

18) I want to accept someone else, but I am forced to distance myself when they do not live up to my expectations.

19) I feel the need to avoid conflict, and keep quiet even when someone else mistreats me.

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