DEVELOPMENT OF A MEASURE OF NEGATIVE BELIEFS
ABOUT CHANGE IN PSYCHOTHERAPY

by

Gayane Minasian

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF SPECIAL EDUCATION, REHABILITATION, AND
SCHOOL PSYCHOLOGY
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

2004
INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI Microform 3158130
Copyright 2005 by ProQuest Information and Learning Company. All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346
As members of the Final Examination Committee, we certify that we have read the
dissertation prepared by Gayane Minasian
entitled DEVELOPMENT OF A MEASURE OF NEGATIVE BELIEFS ABOUT CHANGE IN
PSYCHOTHERAPY

and recommend that it be accepted as fulfilling the dissertation requirement for the
Degree of Doctor of Philosophy

Hal Arkowitz, Ph.D
Shitala Mishra, Ph.D
Lawrence Alemanni, Ph.D
Les McAllan, Ph.D
Carl Ridley, Ph.D

Final approval and acceptance of this dissertation is contingent upon the
candidate's submission of the final copies of the dissertation to the Graduate College.
I hereby certify that I have read this dissertation prepared under my direction and
recommend that it be accepted as fulfilling the dissertation requirement.

Dissertation Director: Hal Arkowitz / Shitala Mishra
STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgement of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgment the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED: [Signature]
ACKNOWLEDGEMENTS

Inexpressible appreciation and gratitude goes to Dr. Hal Arkowitz for helping to mold my development over the past six to seven years. His consistency, straightforwardness, sense of humor, and quiet, unswerving support have been invaluable. I would like to thank Dr. Shitala Mishra for his support and guidance to me in a multitude of ways throughout my graduate career. I would not have been able to get through the dissertation process without the ongoing support and belief in me of Dr. Arkowitz and Dr. Mishra. Many thanks are also extended to Dr. Lawrence Aleamoni, Dr. Les McAllan, and Dr. Carl Ridley for serving on my committee and contributing to my professional development. I would like to acknowledge Dr. Aleamoni’s support and assistance throughout the dissertation process. Thank you to the support staff at the University of Arizona who made it possible to complete a dissertation and schedule the final oral exam from across the nation.

I am thankful to my parents, Mr. Norik Minasian and Mrs. Azniv Minasian for creating a family of origin for me, and to my siblings- Raffi, Armen, and Maro- for sharing that nest with me. I would not have been able to complete graduate school without the support and love of my family. My fiancé, Raffi Azadian, has never stopped believing in me and my ability to get through this process successfully, even when I was facing my self-defeating thoughts. Raffi, thank you for all your pep talks. He showed his support in many ways, and this can only be repaid with a lifetime of love. I am also thankful to my 96-year-old grandmother, who has been patiently waiting for the dissertation process to be completed, so that I could “move onto other things in life”. I just wish my other grandparents were here today to share this accomplishment with me. My father’s father, Mr. Ashod Der-Minasian, would have been particularly happy to have witnessed this process. In many ways, I learned the concepts of tenacity and commitment from Mr. Der-Minasian.

A warm and wonderful group of friends, including my sister, has listened to my hopes, dreams, and worries throughout the dissertation process. Thank you, my dear friends, Maro Chalian, Liz Wieland, Eddie Alessi, Ani Pidedjian, Suzanne Iannuzzi, Anush Rush, Carol Shepherd, and Sophie Chahinian. Thanks for caring throughout a series of shared life changes.

Finally, I would like to thank all the staff and patients at Codac Behavioral Health, Inc. who participated in this study. Their willingness to share their time in a very personal way has made this dissertation possible.
TABLE OF CONTENTS

LIST OF TABLES .................................................................................................................. 10

ABSTRACT .......................................................................................................................... 12

CHAPTER 1 INTRODUCTION ............................................................................................ 14

Phenomenon of Resistance in Psychotherapy ................................................................. 15

Impact of Resistance ......................................................................................................... 15
Behaviors Constituting Resistance ...................................................................................... 17
Prevalence of Resistance in Psychotherapy ....................................................................... 19

CHAPTER 2 LITERATURE REVIEW ................................................................................... 23

Theories of Resistance ....................................................................................................... 23

The Psychoanalytic Perspective ......................................................................................... 23

Variants of Psychoanalytic Theory ...................................................................................... 27

The Humanistic-Experiential Perspective .......................................................................... 30

Integrative Perspective ....................................................................................................... 34

The Family Therapy Perspective ......................................................................................... 35

Three-Generational Approaches ......................................................................................... 37
Structural Approach ........................................................................................................... 38
Strategic Family Therapy ................................................................................................... 39
Anderson and Stewart’s Pragmatic Approach .................................................................... 40

Cognitive-Behavioral Theories of Resistance .................................................................... 41

Resistance .......................................................................................................................... 46
Beliefs or Attitudes of the Patient ....................................................................................... 48
Unrealistic Expectations ...................................................................................................... 50
Therapist Factors ................................................................................................................ 50
Insufficiency of the Model .................................................................................................. 51

Reactance Theory ............................................................................................................... 55
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptualization of Resistance</td>
<td>56</td>
</tr>
<tr>
<td>Resistance as a Process Variable and a Client-Therapist Matching Variable</td>
<td>59</td>
</tr>
<tr>
<td>Therapeutic Relationship</td>
<td>59</td>
</tr>
<tr>
<td>Therapist Directiveness as a Variable</td>
<td>59</td>
</tr>
<tr>
<td>Resistance Level of the Individual as a Variable</td>
<td>61</td>
</tr>
<tr>
<td>Interaction Between Client and Therapist Features</td>
<td>63</td>
</tr>
<tr>
<td>Resistance and Noncompliance in Healthcare</td>
<td>67</td>
</tr>
<tr>
<td>Phenomenon and Prevalence</td>
<td>67</td>
</tr>
<tr>
<td>Models of Healthcare Behaviors</td>
<td>69</td>
</tr>
<tr>
<td>Healthcare Providers' Behavior as a Variable Affecting Patient Compliance</td>
<td>72</td>
</tr>
<tr>
<td>Measurement of Resistance</td>
<td>74</td>
</tr>
<tr>
<td>Self-Report Questionnaires</td>
<td>74</td>
</tr>
<tr>
<td>Measures Based on Direct Observation</td>
<td>78</td>
</tr>
<tr>
<td>Behavioral Measures</td>
<td>80</td>
</tr>
<tr>
<td>Negative Beliefs About Change Questionnaire</td>
<td>81</td>
</tr>
<tr>
<td>Conclusion and Rationale for the Present Study</td>
<td>83</td>
</tr>
<tr>
<td>Project Overview and Hypotheses</td>
<td>85</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>86</td>
</tr>
<tr>
<td>Specific Prediction About the K Scale and the NBC</td>
<td>86</td>
</tr>
<tr>
<td>Specific Prediction About the Openness to Change Scale of the 16 PF and the NBC</td>
<td>86</td>
</tr>
<tr>
<td>Specific Prediction About the Working Alliance Inventory</td>
<td>86</td>
</tr>
<tr>
<td>therapist and client versions and the NBC</td>
<td>86</td>
</tr>
<tr>
<td>Specific Prediction About the SOC measure and the NBC</td>
<td>87</td>
</tr>
<tr>
<td>Specific Prediction About the TRS and the NBC</td>
<td>87</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>87</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS -- Continued

Specific Prediction About the NBC and the Brief Symptom Inventory .................................................. 87

CHAPTER 3 METHOD ...................................................................................................................... 89

Participants .......................................................................................................................................... 89

Drop-Outs ........................................................................................................................................... 92
Criteria for Inclusion and Exclusion ................................................................................................. 92

Therapists and Treatment ................................................................................................................ 93

Design and Procedure ..................................................................................................................... 94

Recruitment Procedure ................................................................................................................... 94
Prerequisites for Participation .......................................................................................................... 95
Data Collection .................................................................................................................................. 96

Measures ........................................................................................................................................... 97

Measure Under Psychometric Examination .................................................................................... 97

Negative Beliefs About Change Questionnaire (NBC) ................................................................. 97

Assessment Measures ..................................................................................................................... 100

Openness to Change Scale of the 16 Personality Factor Questionnaire (16PF) .......................... 100
K-Scale of the Minnesota Multiphasic Inventory-2 (MMPI-2) .................................................... 104
The Beck Depression Inventory, Second Version (BDI-II) .......................................................... 108
Stages of Change Questionnaire (SOC) ......................................................................................... 111

Outcome Measure ........................................................................................................................ 115

Global Severity Index (GSI) of the Brief Symptom Inventory (BSI) ............................................. 115

Process Measures ........................................................................................................................ 119

Working Alliance Inventory (WAI) ................................................................................................. 119
Therapist Rating Scale (TRS) ......................................................................................................... 122
TABLE OF CONTENTS – Continued

CHAPTER 4 RESULTS ........................................................................................................... 123

Description of the Sample.............................................................................................. 123

Construct Validity ........................................................................................................... 124

Reliability......................................................................................................................... 127

External Construct Validity ......................................................................................... 129

Predictive Validity ........................................................................................................... 143

- Setwise Multiple Regression Analyses ................................................................. 143
- Stepwise Multiple Regression Analyses ................................................................. 149

CHAPTER 5 DISCUSSION .................................................................................................. 154

Contributions of Findings .............................................................................................. 159

- Implications for the Mental Health System .......................................................... 161

Limitations and Future Research Directions ............................................................. 161

Conclusions .................................................................................................................... 165

APPENDIX A NEGATIVE BELIEFS ABOUT CHANGE MEASURE ......................... 167

APPENDIX B CODAC BEHAVIORAL HEALTH SERVICES, INC .......................... 168

APPENDIX C SUBJECT'S CONSENT FORM ............................................................. 169

APPENDIX D OPENNESS TO CHANGE SCALE ....................................................... 171

APPENDIX E K SCALE OF THE MMPI ................................................................. 173

APPENDIX F BECK DEPRESSION INVENTORY ....................................................... 175

APPENDIX G STAGES OF CHANGE ........................................................................... 177
TABLE OF CONTENTS -- *Continued*

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>BRIEF SYMPTOM INVENTORY</td>
<td>179</td>
</tr>
<tr>
<td>I</td>
<td>WORKING ALLIANCE INVENTORY (CLIENT VERSION)</td>
<td>181</td>
</tr>
<tr>
<td>J</td>
<td>WORKING ALLIANCE INVENTORY (THERAPIST VERSION)</td>
<td>183</td>
</tr>
<tr>
<td>K</td>
<td>THERAPIST RATING SCALE</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>REFERENCES</td>
<td>186</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1., Patient Demographic, Social, and Psychiatric Characteristics ........................................90
Table 2., Patient Psychiatric Diagnoses .........................................................................................91
Table 3., Factor Analysis .............................................................................................................126
Table 4., Reliability Coefficients for Factors .................................................................................127
Table 5., Pearson Correlations for NBC Factors ...........................................................................128
Table 6., Descriptive Statistics of the Three NBC Factors and the Overall 22-Item Score ................129
Table 7., Descriptive Statistics of Validation Criteria .....................................................................131
Table 8., Correlation Between Four Stages and Principal Component .......................................134
Table 9., Correlations Among Resistance Measures and Validation Criteria ...............................136
Table 10., Correlations Among Validation Criteria Measures ....................................................137
Table 11., Beck Depression Inventory Predicted from the NBC Factors ......................................139
Table 12., Relationship Between NBC Factors and Beck Depression Inventory .........................140
Table 13., Partial Correlation Coefficients Among NBC Measures and Validation Criteria Controlling for Beck Depression Inventory at Time 1 ..........................141
Table 14., Descriptive Statistics of the Global Severity Index of the BSI ....................................144
Table 15., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the “Overall” 22-Item NBC Score ...............................145
Table 16., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the NBC Three Factors ..................................................146
Table 17., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T3 Predicted from the “Overall” 22-Item NBC Score .....................................147
Table 18., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T3 Predicted from the NBC Three Factors ..................................................149
Table 19., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the “Overall” 22-Item NBC Score Utilizing Stepwise Regression

Table 20., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the NBC Three Factors Utilizing Stepwise Regression

Table 21., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the “Overall” NBC Score Utilizing Stepwise Regression

Table 22., Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the Three Factors Utilizing Stepwise Regression
ABSTRACT

This researcher examined the construct and predictive validities of the Negative Beliefs About Change Measure (NBC) in order to determine whether the NBC can serve as a measure of resistance. The NBC is composed of 22 items that are based on the cognitive-behavioral conceptualization of resistance to change. The participants included 72 adult outpatient psychotherapy patients (29 males and 43 females). Diagnoses included: 42% depressive disorder; 25% adjustment disorder; 17% anxiety disorder; and 16% bipolar disorder.

The following measures were administered: NBC; K Scale of the Minnesota Multiphasic Personality Inventory-II (MMPI-II); Openness to Change Scale of the 16 Personality Factor; Stages of Change (SOC); Working Alliance Inventory (WAI-client and therapist versions); Therapist Rating Scale; and the Brief Symptom Inventory (BSI). Data were collected at 3 time points- prior to the first psychotherapy session; between the 8th and 9th therapy sessions; and after the 16th therapy session. A four-factor structure was derived from the NBC. These factors included: Fear of Change, Hopelessness; Fear of Disappointing Self/Others; Noncompliance; they displayed satisfactory internal consistency.

The results indicated that the NBC Measure was related to the construct of readiness to change as measured by the SOC and the construct of forming a working relationship as measured by the WAI. The NBC Measure was a weak predictor of change in symptomatology, as measured by the BSI, from time 1 to time 2. The Hopelessness factor displayed a modest relationship with change in symptomatology from time 1 to
time 2. In sum, the data presented a "mixed picture" with regard to the ability of the NBC to serve as a measure of resistance.
CHAPTER 1
INTRODUCTION

In psychotherapy and medical care, a large percentage of people in distress actively seek professional help, and then engage in a variety of behaviors that interfere with the effectiveness of the very treatment that they sought, such as missing appointments, arguing with the clinician, not taking medication, or not complying with therapeutic tasks. These behaviors are overt in nature; often times, other behaviors interfering with treatment are covert in nature, such as failure to share relevant information or continual refusals to give up old expectations or behaviors. Patients who seek assistance from professionals and then reject their therapists' advice, fail to act in their own best interests, and do not respond to the most effective interventions that are developed on their behalf, have often been called resistant, noncompliant, reactionary, oppositional, intractable, and/or unmotivated (Beutler, Sadowicz, Fisher, & Albanese, 1996). The phenomenon of people seeking help, but engaging in help-interfering behaviors is referred to as resistance in the psychotherapy literature, while in the medical literature, it is referred to as “noncompliance” or “nonadherence”. Among the theories of psychotherapy, the behaviors used to indicate the presence of resistance cover a wide range of behaviors, and they offer different conceptualizations of the motivations and objectives of the process and suggest different methods of intervention. Clinicians often refer to many of their patients as “resistant” or difficult to treat; however, when
attempting to determine what makes these patients difficult to treat, we enter an area that is heavily discussed, but with little empirical underpinnings.

While there are many ways to conceptualize resistance, it continues to elude measurement. The importance of the concept of resistance cannot be stressed enough in the psychotherapy literature and secondarily in the healthcare compliance literature, yet there is no clearly validated instrument tapping into the construct of resistance. In an attempt to improve upon previous methods of studying resistance, in this study, the psychometric properties of a newly developed instrument entitled Negative Beliefs About Change (NBC) were examined. The NBC taps into resistance as conceptualized by the cognitive-behavioral perspective. What are the faulty cognitions and assumptions underlying the resistant behaviors? The conceptualization of resistance from the cognitive-behavioral model will be further reviewed later in this discussion. As background to the new scale, the theoretical and research literature relevant to resistance will be reviewed.

Phenomenon of Resistance in Psychotherapy

Impact of Resistance

Why study resistance? Resistance as a phenomenon is not limited to individuals seeking psychotherapeutic treatment or medical treatment. According to Anderson and Stewart (1983), it is a universal phenomenon in which resistance to being influenced or resistance to change is always evident when individuals, groups, and systems are required by circumstances to modify their behaviors. Unless there is an overwhelming need to change the behavior, such as exiting a building in response to a fire, people will resist
change in existing state of affairs. According to Engle and Arkowitz (in press), resistance to change is evident in the daily lives of people who are attempting to make lifestyle changes pertaining to difficulties such as overeating or smoking, yet not succeeding at making the change even with the availability of effective interventions.

Patient resistance interferes with the attainment of therapeutic goals (Beutler, Moleiro, & Talebi, 2002; Meichenbaum & Gilmore, 1982). While resistance is not necessarily reflective of pathology and may in fact be helpful in the face of threat or stress, according to Beutler et al. (2002), effective psychotherapy attempts to overcome and decrease patient resistance. Resistant patients experience less benefit and are more apt to terminate from treatment prematurely than patients who are compliant (Beutler, Clarkin, & Bongar, 2000). Regardless of how the patient's resistance originated, it will affect how and what interventions should be employed. For example, Beutler, Mohr, Grawe, Engle, and MacDonald (1991) found that resistance potential was differentially predictive of the use of directive and nondirective procedures. That is, the degree of structure and directiveness can be taken into consideration depending on the level of resistance displayed by the patient when planning and tailoring treatment to individual patient needs.

Regardless of their theoretical orientation, therapists must learn to expect resistance and to contend with it in order that their efforts to bring about change will not be futile. However, dealing with resistance and mastering this phenomenon which they encounter is difficult. Even when resistance is expected, it may frustrate therapists and in some cases lead to behaviors on the part of therapists ultimately resulting in treatment
failure. Inexperienced therapists may interpret the process as a confirmation of their lack of skill. Family therapists are challenged even more so because throughout the course of treatment, they must contend with each family member's various expressions of resistance to change while continuing to be aware of the function of the resistances for the family as a unit (Anderson & Stewart, 1983).

**Behaviors Constituting Resistance**

In psychotherapy, there is a range of behaviors or attitudes that may be referred to as resistant. According to Newman (1996), what various forms of patient resistance have in common is that they either temporarily or continuously distract or detract from the therapeutic change process. However, these attitudes or behaviors also provide information about the patient that is pertinent to the therapeutic process. The following forms of resistance can occur in any model of psychotherapy. Patients often repeatedly make decisions and take actions that are in opposition to what was agreed upon in session (Newman, 1996). Patients may also oppose advisement by refusing to comply with therapeutic tasks, which was mentioned earlier as a form of overt resistance. In cognitive-behavioral therapies, this would take on the form of refusal or other failure to follow through on therapy homework assignments (Newman, 1996). This phenomenon is significant given that outcome studies of cognitive therapy indicated that patients engaging in homework between sessions, showed more favorable outcomes than did those who were less involved (Burns & Nolen-Hoeksema, 1991). Gelso and Johnson (1983) compared patients who extended their therapeutic gains beyond termination with those who did not. Those who made changes in accordance with their treatment goals,
were actively engaged in their therapy during the time of treatment and performed numerous homework assignments between sessions.

In addition to overt behaviors, patients may display resistance via high levels of expressed emotion toward the therapist, ranging from excessive flirtation to overt hostility (Newman, 1996). Beutler et al. (2002) also described the expression of anger towards the therapy or therapist as cues for state-like manifestations of resistance, ranging from simple dissatisfaction with therapeutic progress to overt expressions of resentment and anger. Moreover, Anderson and Stewart (1983) described resistance as potentially manifesting itself as apparent indifference, skepticism, or even outright hostility. In addition, not quite arguing, but debating in an unwarranted manner is also a manifestation of resistance. For example, a patient may repeatedly respond to a therapist’s encouraging words with cynical replies, refusing to acknowledge or misinterpret (negatively skewed) the therapist’s accurate reflections. Resistance may also be evinced by inappropriateness of affect and excessive movements within the therapy hour.

In contrast to overt expression of anger described above, Newman (1996) also brought to light avoidances which take place during the session, such as lengthy silences, overuse of the answer “I don’t know” to the therapist’s questions, abrupt shifts away from important subject matter, and denial of awareness of experiences that seem apparent to the therapist or others in the patients life. Avoidance can also be seen in patients who interrupt the psychotherapeutic process by actually interrupting sessions or interspersing them, such as utilizing sessions only in response to crises, being late to sessions, reducing
the frequency of sessions, not returning the therapist's phone calls in an attempt to avoid
direct contact, or premature termination. Interestingly, patients can also evince resistance
by placing unreasonable demands on the therapist, such as expectations for rapid and
effortless cure and requests for extra-therapy assistance on inappropriate matters
perspective, included an even wider range of behaviors and attitudes that may be referred
to as resistant. That is, any expression of autonomy or self-assertiveness may be
interpreted as resistance. Seeking advice from individuals in the environment other than
the therapist may be viewed as resistance, that is, as an attempt to dilute the transference
(Saari, 1996). The most intense resistance may be seen in those patients who, despite
enduring psychic pain, refuse to seek out treatment (Dewald, 1982).

**Prevalence of Resistance in Psychotherapy**

Premature termination of psychotherapy, a form of resistance to change,
significantly hinders the process of effective mental health treatment. The importance and
seriousness of resistance in psychotherapy can be seen in the prevalence of the
phenomenon. Improving patient compliance with psychotherapy requires an
understanding of the nature and frequency of premature termination. Patients
prematurely terminating therapy pose clinical, morale, and fiscal problems for mental
health professionals. The construct of premature termination indicates that a patient has
left therapy before obtaining a requisite level of improvement or completing
psychotherapy goals. The studies investigating psychotherapy attrition rates have shown
upward of 50% of subjects who begin treatment may drop out (Jennings & Ball, 1982;
Pekarik & Stephenson, 1988). Aggregated U.S. community mental health center data indicated that 30% to 60% of psychotherapy outpatients terminated treatment prematurely (National Institute of Mental Health [NIMH], 1981). Philips' (1986) review on attrition from various types of psychotherapeutic interventions showed a negatively accelerating, declining curve across delivery systems (i.e., HMOs, community mental health centers, and private clinics) and across psychotherapeutic orientations (behavioral, psychodynamic, and eclectic). The results showed that for treatment projected to consist of 10 sessions, 70% of the patients had dropped out of treatment by the third session.

Pelham and Murphy (1986) found that up to one-half of parents discontinued behavior modification procedures for their children against therapeutic advice. A review encompassing 125 studies of child, adolescent, and adult treatment yielded a mean attrition rate of 46.9% of individuals who begin treatment (Wierzbicki & Pekarik, 1993). The studies, which were reviewed and yielded this figure, represented a wide range of settings, diagnoses, and treatments. The operational definition of premature termination in these studies varied. The various definitions included therapist judgement, duration criteria, or failure to attend the last scheduled appointment. Hatchett and Park (2003) compared four methods for classifying premature terminators: therapist judgement, failure to attend the last appointment, median-split procedure, and failure to return to therapy after the intake appointment. The median-split procedure was based “on the fact that” the participants completed a median of four sessions, which then served as a dividing point for assigning participants into termination categories. Participants who attended fewer than four sessions were classified as premature terminators, and those
who completed four or more sessions were classified as appropriate terminators. The results indicated that premature termination rates ranged from 17.6% to 53.1% across the four definitions. Two of the premature termination definitions (therapist judgement and missed last appointment) produced identical premature termination rates (40.8%). The median-split method resulted in a premature termination rate of 53.1%, while the intake-only definition resulted in the lowest premature termination rate at 17.6%. Group therapy attrition rates showed similar results. According to Klein and Carroll (1986), of those individuals initially referred for outpatient group therapy, 41% never attended a session and of those who attended, 25-57% dropped out prematurely. Again, these attrition rates underscore the phenomenon of resistance in psychotherapy.

Ensuring patients' adherence to treatment and appointments has also been found to be a problem in psychiatry as well as psychotherapy. More than a third of appointments for psychiatric care are missed. Noncompliance with psychotropic medication regimens has been linked to relapse, rehospitalizations, and poor outcome among patients with a major mental illness. Thus, patient noncompliance is a significant issue due to its consistent association with severe ratings of psychopathology (Fenton, Blyer, & Heinssenn, 1997). Psychotropic medication noncompliance can be intentional or unintentional. Unintentional noncompliance is related to inability to pay for medications, complex medication regimens, forgetfulness, and/or failure to understand instructions. However, Lehne, Moore, Crosby, and Hamilton (1994) found that 70% of noncompliance cases are intentional. According to Sotiropoulos, Poetter, and Napholz (1999), the patient's belief that the medication was not needed in the actual prescribed
dosage was the primary reason for intentional noncompliance. Moreover, the patient’s denial of the presence or severity of the mental illness, as well as unpleasant side effects, contribute to medication noncompliance (Crane, Kirby, & Kooperman, 1996). Many mental disorders are in need of more than a brief medication intervention, requiring several months or years of medication. The recommended treatment time for the first episode of depression is 6 to 12 months, however, half of patients discontinued their antidepressant medication within three months for various reasons (Lin, Von Korff, & Katon, 1995). Among bipolar affective patients, 9% to 57% terminate lithium carbonate medication at some point against medical advice (Cochran, 1986). Of outpatients diagnosed with schizophrenia, 15% to 55% do not even take the minimal amounts of neuroleptics prescribed for them (Boczkowski, Zeichner, & Desanto, 1985). It is apparent that resistance exists. In fact, virtually all theories of psychotherapy share similar views pertaining to the implications and effects of resistance. However, theories of psychotherapy vary with regard to explaining the causes of resistance, the motivations and objectives of the process, and the methods to work with resistant patients.
CHAPTER 2
LITERATURE REVIEW

Theories of Resistance

In the next section, the concept of resistance will be discussed from the perspectives of Psychoanalytic Theory; Gestalt-Experiential Perspective; Integrative Perspective; Family systems Theory; Cognitive-Behavioral Theory; and Reactance Theory. Emphasis will be placed on the cognitive-behavioral theoretical framework since the Negative Beliefs About Change defines resistance and taps into resistance from a cognitive-behavioral perspective. Knowledge about resistance is incomplete across the different schools of psychotherapy. They differ in describing what causes resistance, how to conceptualize it, and how to work with it. Differences exist in what manifestations of resistance are emphasized. The range of the kinds of changes is extraordinary, and hence some changes are emphasized and others are deemphasized by the differing theories.

The Psychoanalytic Perspective

According to the psychoanalytic perspective, resistance is one component of the clinical theory stemming from observing the phenomenon repeatedly in therapy sessions (Dewald, 1982). Until the early 1920s, resistance was conceptualized as a display of opposition to the therapist and the treatment, which interfered with treatment, and hence, had to be overcome. Since the patient’s resistance was understood to be under the control of the patient’s conscious mind, the patient’s resistance was presumed to serve the
purpose of acting in opposition to the recall of unconscious sexual material (Dewald, 1982). However, with increased observation and experience, the phenomenon of resistance took on a new meaning. That is, according to observation, many manifestations of resistance took place outside of awareness. As cited in Dewald (1982), these observations led Freud (1923/1961, 1926/1959) to modify his theoretical perspective and to conceptualize the phenomenon of resistance, aspects of mental functioning that interfered with therapeutic progress, as preconscious and unconscious mental functioning. The resistances were understood as serving a function; that is, the patient’s attempt in avoiding unpleasurable affect. Therapists accepted the displays of resistance and began to understand them as the patient’s way of coping with intrapsychic conflict.

Freud (1926/1959, as cited in Dewald, 1982) went on to describe five forms of resistance: repetition compulsion, transference; secondary gain; repression; and a sense of guilt and need for punishment. Repetition compulsion is the unconscious tendency to repeat patterns of behavior, in adult relationships, related to seeking satisfaction of childhood wishes and object choices. Transference refers to the patient’s manifestation of the repetition compulsion in the relationship with the therapist. Secondary gain is the phenomenon in which the individual receives some benefits from the symptom. Repression refers to keeping awareness of painful thoughts, fantasies, wishes, and feelings from conscious awareness. In addition to the various manifestations of resistance, the phenomenon also serves different functions. The patient’s extensive focus on current events may function to avoid confronting the patient’s past experiences and
mental processes. On the other hand, the patient’s extensive focus on past experiences and relationships may protect the patient from confronting current issues. Avoidance of affects and emotional isolation may serve a significant resistive function. However, there are also those patients who continually experience affective instability without occasionally observing themselves from a more remote cognitive and integrating position, which may also be a form of expressing resistance to treatment. While this is only a limited number of examples, it is evident that resistance from the psychoanalytic perspective is not limited to behaviors themselves. The context of the treatment process in which the behaviors occur, the nature of the patient’s preexisting characteristic adaptive and defensive functions, and the immediate tactical and strategic situation of the treatment process also constitute the framework resistance.

Currently, as conceptualized by the psychoanalytic perspective, resistance describes behaviors displayed by the patient that interfere with the process of bringing intrapsychic conflicts to the patient’s complete and emotional awareness. In “ego” and “object” terms, resistance refers to the habitual ways patients both reveal and maintain hidden aspects of themselves from the other, particularly as these behaviors occur in their relationship with the therapist (Messer, 1996). These behaviors function to facilitate the patient’s avoidance and lack of acknowledgement of those aspects of himself/herself, his or her past, his or her fantasies, wishes, motives, and actions of which the individual is afraid, guilty, ashamed, or provoke anxiety (Dewald, 1982; Messer, 1996). Eagle (1999) described this phenomenon as repression and the concurrent hesitation in becoming aware of one’s unconscious wishes and conflicts. Dewald (1982) referred to these as the
tactical resistances. Dewald (1982) also referred to another category of resistances, referred to as strategic resistances. That is, when conflicts are consciously manifest, resistance is also used to describe behaviors that interfere with the renunciation of inappropriate wishes, and the fantasies and object choices by which these are expressed. The patient is resisting relinquishing hope of gratifying infantile wishes (Eagle, 1999).

According to Freud, as cited in Eagle (1999), the instinctual drives to which these wishes are connected, are part of man's biological makeup, persisting and exerting pressure on behavior both inside and outside of treatment. The patient's hesitation in attempting new ways of adaptation and psychological organization is also understood to be resistant behavior. In the psychotherapeutic process, the strategic resistances are manifested as part of the transference relationship, as unconscious feelings and wishes toward the therapist and attempts to gain gratification of these wishes (Eagle, 1999). There is resistance to revealing feelings toward the therapist, and consequently the patient reenacts earlier ways of relating to others in the therapeutic relationship without recognizing that he or she is doing so.

In the transference relationship, suppression of angry feelings, for fear of the therapist's reaction, is also a form of resistance. The sum of these resistant behaviors functions to protect the patient from becoming anxious and consciously aware of unacknowledged and painful aspects of his or her psyche, while supporting the continual attempts at fulfilling inappropriate drives, fantasies, and relationships. In this way, the resistant behaviors facilitate the patient's avoidance of painful affect, such as anger and grief, associated with the renunciation of the previous forms of fulfillment. The pursuit
of wishes and the reluctance to become aware of them are expressions of the pleasure principle. Eagle (1999) succinctly captured this phenomenon in his description of the assumption of psychoanalytic theory as people avoid change due to their fear that changing their behavior will expose them to greater distress and danger than they are now experiencing. In addition to the avoidance of pain, resistances may function to maintain symptoms and behaviors, which result in immediate pleasure or relief of tension, such as compulsive gambling, overeating, substance abuse, and sexual promiscuity. Messer (1996) also brought to our attention that resistance also has an adaptive function in that it protects the patient's "sense of self" or "integrity of the self" (Eagle, 1999) and it is an expression of the need for autonomy, self-sufficiency, and self-efficacy. Finally, according to self psychology (Kohut, 1971), resistance is an outcome due to failure on the part of the therapist in understanding the patient's immediate needs.

Based on the psychoanalytic perspective of resistance, the resistant behaviors are not to therapeutic changes, but rather to experiencing negative affect. The behaviors keep certain material from conscious awareness, and interfere with the treatment. However, the patient's motivation is not to hinder therapeutic progress, but rather to avoid painful experiences (Eagle, 1999).

Variants of psychoanalytic theory. While the variants of psychoanalytic theory have different conceptions of the distress and danger that may face the individual, they share in common the understanding that the individual's fears regarding the danger brought about by the changes, obstructs the change process (Eagle, 1999). One such variant is the Control-Mastery Theory of Weiss and Sampson, as cited in Eagle (1999).
The primary emphasis of this theory is the individual's attempts at mastery of beliefs, which are unconscious and pathogenic, that were acquired from early interactions with parental figures. These beliefs are understood to be the source of distress and symptomatic behavior. Accordingly, resistant behaviors are the result of these beliefs, which have remained unconscious and unexamined, because of the individual’s fear that if his or her pathogenic beliefs are put to test, they may be confirmed. Hence, the theory does not assume that the behaviors are gratifying in themselves. The resistance to changing the symptomatic behaviors, functions to avoid anxiety and guilt. According to Control-Mastery Theory, an individual is likely to modify his or her behaviors via therapy if the therapist responds to the patient’s tests in a way that disconfirm his or her pathogenic beliefs.

The variants of psychoanalytic theory share the understanding that relationship patterns established early in life are repeated in the therapeutic relationship (transference). Given this understanding, Attachment Theory and Object Relations Theory emphasize the resistance manifested in relationship patterns that involve distress. According to Attachment Theory, the individual forms internal mental representations of the self, the caregiver, and of interactions with the caregiver. These representations are relatively stable and resistant to change; influence expectations and perceptions brought to new relationships; and consequently, relationships are formed and transformed in order to conform to expectations and schemas acquired earlier in life. That is, relationships are formed and transformed by behaving in specific ways that will elicit those responses from others, which perpetuate early relationship patterns. There is an unconscious loyalty
to early figures and interactional patterns even if it repeatedly brings distress (Fairbarn, 1952, as cited in Eagle, 1999).

Furthermore, the perpetuation of these patterns allows one to experience the world as predictable and more likely to resist changing these behaviors. These patterns are not conceptualized as the pursuit of infantile aims, as in Freudian formulation, since security and attachment needs are viewed as lifelong needs by post-psychoanalytic formulations. However, the pursuit is viewed as maladaptive. The individual experiences relating and living differently as: betrayal of early figures; inducing guilt; and a psyche that has been depleted of those self, object, and interactional representations that constitute one’s inner world and definition of self. This, according to Fairbarn (1952), represents extreme psychological danger that one cannot endure. Again, the fear is about having to confront greater distress and danger than the individual is currently enduring.

In sum, the differing psychoanalytic theories emphasize the utilization of the defense of resistance in the psychotherapeutic relationship and its significance in the psychoanalytic work. Since a major manifestation of resistance in psychoanalytic treatment is in the transference relationship, there is special consideration given to the analysis of the transference. An assumption common to the different theories is that a significant source of resistance to change is the individual’s fear that change will involve anxiety, danger, and pain. However, what constitutes the threat, leading to anxiety about change, is understood somewhat differently by the various psychoanalytic theories. Freud conceptualized resistance as a reluctance to become aware of and abdicate infantile wishes. Weiss and Sampson’s Control-Mastery Theory and Kohut’s self-psychology
understand resistance as an avoidance of retraumatization via the therapeutic relationship. Attachment and Object Relation theories conceptualize resistance as an unwillingness to relinquish established internal working models related to attachment patterns (Eagle, 1999).

**The Humanistic-Experiential Perspective**

The three major foundational schools of humanistic-experiential therapy evolved in the 1950s: client-centered, gestalt, and existential. The humanistic-experiential theories accentuate the need to recognize the emotional meaning of an experience. The patient is viewed as an expert on his or her own experience, as he or she has access to his or her own unique experience. The client’s processes of discovery and choice are of significance, rather than the therapist’s interpretation or advisement. The therapist emphasizes explaining implicit meaning rather than finding hidden meanings. Clients are encouraged to identify their own inner experience, rather than the therapist making connections between past and present experiences for the client. Hence, therapy is conceptualized as a process of facilitating choice and action by having clients confront their own experience (Elliot & Greenberg, 1995). Engle and Holiman (1996) conceptualized the client as having several experiences mediated by the desire to maintain what is familiar and the desire to seek out change, resulting in internal conflict. Hence, it is the therapist’s function to be understanding and empathic toward the various aspects of the client; to facilitate awareness of the internal conflicts; and to facilitate shifts in the schematic structure which includes cognition, affect, motivation, and behavior.
According to Carl Rogers’ client-centered therapy (as cited in Engle & Arkowitz, in press), resistance is conceptualized as resulting from an individual experiencing a threat to his or her organization of the self. The threat stems from the individual perceiving experiences that are contradictory to the current organization of the self. The individual is frightened and threatened by these perceived threats and consequently becomes defensive. That is, in order for the experiences to seem more consistent with self organization or to block them, the individual displays resistance by denying, distorting, or inadequately symbolizing the experiences.

When gestalt therapy evolved in the early 1950s, resistance was understood to be resistance to awareness, an unperceived conflict within an individual, due to a fear of unpleasant feelings, and an avoidance limiting the individual’s contact with self (Perls, Hefferline, & Goodman, 1951). Moreover, the individual is unaware of how this process affects his or her relationships with others. This conceptualization was later integrated into gestalt therapy as conflict between needs/desires and what the environment actually required, calling for a reorganization of the patient’s experiences. This adjustment was understood as consisting of obstructing awareness in order to accommodate environmental demands and to protect the individual from feeling negative emotions. Subsequently, this response may become habitual pattern outside of the individual’s awareness (Beutler et al., 1996). Gestalt therapy also takes into consideration the resistance that is displayed to the therapist’s efforts. However, resistance in this context, is recognized as a healthy display of self-assertion. Hence, it becomes the therapist’s responsibility to decrease the resistance by exhibiting acceptance and genuineness.
However, Polster and Polster (as cited in Engle & Arkowitz, in press) argued that the concept of resistance was not compatible with the humanistic-experiential approach. The authors conceptualized the cause of the internal conflict as a part of the individual, which needs to be integrated, rather than removed. Additionally, Polster and Polster (1973), discussed resistance to contact, referring to an individual’s resistance to contact with the environment. The individual partakes in several ways to avoid full experience and contact with the environment. Engle and Holiman (1996) argued that, in fact, resistance to awareness is manifested in daily life, via Polster and Polster’s (1973) resistance to contact, in an attempt to avoid unmanageable anxiety. For example, the depressed individual who is aware that he wants more social contact, but avoids opportunities due to fear of rejection, is displaying such resistance. Polster and Polster (1973) described five manifestations of resistance to contact: Introjector (passively incorporates what the environment provides); Projector (disowns aspects of self and ascribes them to the environment); Retroflector (forsakes any attempt to influence his or her environment by becoming self-sufficient and separate); Deflector (interacts with the environment in a hit or miss way); and Confluence (individual follows trends, resulting in little energy for personal choice).

Engle and Holiman (1996) conceptualized resistance as referring to two phenomena. First, the individual experiences an internal conflict involving two or more emotions, values, beliefs, or ways of relating to others; and second, the individual subsequently, focuses on methods to protect the self while experiencing such conflict. The authors argued that while experiencing such conflicts, a client vacillates between
preserving what is familiar/maintaining psychological stability and attempting new interactions and behaviors involving more risk. In other words, resistance displays itself as a state of ambivalence, in which part of the person desires to change (has the information and ability to make the change) while the other part does not want to change. Thus, two schematic structures may be functioning simultaneously. The resistance may be manifested in discrepancies between an individual’s verbal and nonverbal behaviors. From this perspective, the resistance is to awareness and it functions as a self-protective mechanism for the individual, avoiding anxiety relating to change. According to the authors, resistance is manifested in treatment in the ways in which the client is not in touch with his or her continuous experiences, as the resistant client often lacks awareness of his or her own processes.

As Engle and Arkowitz (in press) pointed out, similar to the psychoanalytic theories, humanistic-experiential theories view resistance as a protective function in the face of anxiety or threat. However, what constitutes an induction of anxiety or a threat differs, in that the humanistic-experiential theories emphasize the perceptions that are not congruent with the individual’s view of his self-organization. In addition, Gestalt therapies bring forth that the part of the individual that resists change is the threatening aspect and hence kept out of awareness. However, while kept out of awareness, this threatening part continues to impact the individual, resulting in an internal conflict of which the individual is unaware.
Integrative Perspective

Resistance has also been conceptualized from an integrative perspective by Engle and Arkowitz (in press). The integrative perspective is not a theory, but rather a framework for understanding and working with resistance. Since it has been influenced by the humanistic-experiential therapies, it has been included in this section. Arkowitz (1996) suggested that resistance may be present when patients have expressed some desire to change by their verbalizations or behaviors; have sought therapy that would be potentially helpful in making those changes; believe that the changes will lead to improved quality of life; and concurrently display vacillation between compliance and noncompliance with therapeutic tasks. Engle and Arkowitz (in press) described resistance as ambivalent behavior reflecting ambivalence about change or conflict about change. The integrative perspective is intended to help explore the self-schemas involved in the conflict. What factors are interfering with the patient’s desired changes? That is, while a part of the individual is motivated to change another part of the individual is resisting change, such as the conflict between the “desired self” and the “should self”. Yet another source of conflict may be between the desire to change and the fears about change. The behaviors indicating resistance from this perspective are the ambivalent behaviors, that is, the approach-avoidance behaviors. The approach-avoidance behaviors may be indicative of the patient’s views about the change process, such as “change is demanding”, as well as ambivalence about change. These behaviors are manifested both verbally and nonverbally. For example, voluntarily attending therapy sessions indicates the desire to change, while not trying to carry out the recommendations reflects resistance
to change. The conflict can also be displayed in the discrepancies between verbal and nonverbal cues. In sum, Engle and Arkowitz (in press) looked across the major theories of resistance to understand why resistance is occurring, rather than taking a specific stance on why the process is occurring.

The Family Therapy Perspective

Much like the evolution seen in the psychoanalytic perspective, the phenomenon of resistance also underwent a conceptual change in the family therapy perspective. Early family therapists conceptualized resistance as homeostasis, a force that opposed changes in systems (Nichols & Schwartz, 2001). More recently, family therapy theorists acknowledge that all human systems hesitate making changes that involve risk. The theorists bring attention to the fact that changes should be resisted by families until they are certain that the therapist can be trusted and that change is safe (Nichols & Schwartz, 2001). According to Engle and Arkowitz (in press), the conceptualization of resistance evolved from the stubbornness implied by homeostasis to resistance as having a self-protective function. Until recently, family therapists addressed the topic of resistance indirectly; that is, they described interventions to bring about change, which imply that resistance exists and must be addressed, without ever openly discussing the topic.

According to Anderson and Stewart (1983), this phenomenon stems from: the fact that the field of family therapy attempted to establish an identity different from that of the psychoanalytic approach, which defined resistance as an integral part of therapy; and the complexities of interpreting the original idea of resistance into a concept relevant to the treatment of the family system.
As Anderson and Stewart (1983) point out, change in families is constant. Hence, while there are attempts to resist change, families are forced to confront change. Moreover, there are various types of changes that need to be dealt with, both internal to the family structure and forces imposed from external sources. Changes require that the family unit adapt to changing needs of individual family members and maintain a sense of stability. This need for stability is quite strong and consequently, the family seeks treatment because adaptation to change is failing to take place, not because change is desired. That is, the changes are not desirable to the family unit or there is difficulty adjusting to these changes. Subsequently, the family will resist further change by resisting the therapist’s efforts. The family is not certain that their current reality is not better than what can result from change. Family members may undermine a therapist’s efforts when they fear that a change in an individual will threaten their own security, as is often observed in marital therapy (Lazarus & Fay, 1982). When considering that an individual is resistant or even ambivalent about seeking therapy, it becomes apparent that an entire family may display resistance when family therapy is recommended. The individual family members are now dealing with the notion that they may be relevant to the evolution of the identified patient’s problems.

Dealing with resistance experienced by family therapists is particularly difficult because some family members are more invested in change than others; some will resist change covertly while others overtly; and that overt resistance of some members may carry out a covert function for others. Furthermore, the family therapist is dealing with each family member’s multiple manifestations of resistance while having to be aware of
the function of resistances for the family in its entirety. Families tend to display resistance by engaging in longstanding relational patterns and ways of interacting that are related to unspoken family rules. There are several schools of family therapy. The following review will address four family approaches: Three-Generational Approaches, Structural Approach, Strategic Approach, and the Integrative Approach of Anderson and Stewart (1983). Because the psychoanalytic, experiential, and cognitive-behavioral approaches of family therapy are similar to the respective individual therapies, they are not included in this section.

**Three-generational approaches.** The three-generational approaches view pathology in current family relationships as being associated with unfinished business in family of origin relationships; hence, evaluation and intervention emphasizes examining transgenerational patterns (Bowen, 1978; Boszormenyi-Nagy & Sparks, 1973; Framo, 1981). According to Bowen (1978), the therapeutic goal is to increase differentiation among individuals within the family. That is, Bowen attempts to lessen an individual’s anxiety and reactivity in order to prevent the need for triangulation or shutting down emotionally, as these processes are viewed as resulting from high levels of anxiety. While Boszormenyi-Nagy (1973) also emphasized the family of origin relationships, he did so for different reasons. He viewed loyalty as the main motivating factor in life and health as being attained via establishing mechanisms toward loyalty to family and fulfillment of self. Thus, healing past unfinished relationships leads to bettering current relationships. Framo (1981) as cited in Anderson and Stewart (1983) viewed current marital or familial relational difficulties as stemming from attempts to master early
family of origin conflicts. He conceptualized children's problems as reflections of the quality of the marital relationship, which is related to each spouse's unresolved family of origin conflicts. The three approaches attempt to remove the past as a factor affecting current behavior in order that individuals cope with the present more effectively.

However, the three approaches of the Three-generational model address resistance differently. Boszormenyi-Nagy (1973) conceptualized resistance as an integral part of treatment and working through the resistance as necessary to its resolution. Framo (1981) as cited in Anderson and Stewart (1983) also conceptualized resistance as an integral part of treatment, which cannot be avoided, and as a reflection of the strength of the three-generational approach. However, Framo (1981), as cited in Anderson and Stewart (1983), did not stress the importance of working through the resistance, but rather minimizing it. Bowen (1978), on the other hand, conceptualized resistance as the responsibility of the family members. That is, they need to motivate themselves to overcome their resistance. He also deals with resistance by avoiding provoking it, as his approach is less directive and anxiety provoking. He also enters the family system through the least resistant family member; hence, initially the more resistant individuals gain insight vicariously and later the least resistant individual may function to motivate other family members.

**Structural approach.** The structural approach emphasizes: the boundaries within the family; the functioning of the subsystems within the family; the relationships between these subsystems; and how the family relates to its wider environment (Barker, 1981, as cited in Anderson & Stewart, 1983). This approach to family therapy describes an
individual’s symptoms as being a manifestation of a family’s failure to modify its structure to meet the developmental and environmental needs. Symptoms continue to be manifested due to the ways in which family members relate to one another. According to Aponte and Van Deusen (1981), regardless of what caused the familial problem, the dynamics that maintain the difficulty are part of the current transactional patterns. Hence, the therapist focuses on the continual dysfunctional patterns of the family, attempting to restructure how family members interrelate with each other.

While structural family therapists do not emphasize resistance in itself, they view families as resisting change and conceptualize resistance as a function of maintaining homeostatic balance (maintaining the status quo). Because families are viewed as resisting the influence of an individual outside the family system, such as a therapist, in addition to resisting change in general, therapists use interventions that minimize, avoid, or overcome resistance. Resistance is expected and the structural approach views the therapist as responsible for overcoming the family’s resistance.

**Strategic family therapy.** Strategic family therapists (Bateson, Jackson, Haley, & Weakland, 1956; Haley, 1976) view the family as functioning with interactional patterns that repeat themselves; these patterns constitute the unspoken rules of the family. While all families have unspoken rules, dysfunctional families are unable to adapt their rules to meet the individual and evolving needs of the individual family members. Rather than making modifications, the same coping strategies are used by the family, time and time again, although they have been ineffective in problem resolution. In fact, these ineffective attempts at problem solving are viewed as maintaining the problem. Hence,
resistance is integral to the dysfunctional family and the main focus; consequently, it is because of this resistance that the family is in need of treatment. Strategic family therapists utilize relabeling and reframing techniques and paradoxical interventions in attempting to change the perceived reality of individual family members.

**Anderson and Stewart's pragmatic approach.** According to Anderson and Stewart (1983), while it would behoove the family systems approach and the psychotherapeutic field, in general, if a coherent theory of resistance were developed, this currently does not exist. Therefore, they presented an integrative approach drawing on the diverse views and labeled it the Pragmatic Approach. Anderson and Stewart defined resistance as all the behaviors that interact in a therapeutic system in order to prevent the therapeutic system from attaining the family’s treatment goals. The therapeutic system, defined by Anderson and Stewart, includes family members, the therapist, and the institution in which treatment takes place. The authors proposed that resistance affects the system most strongly when it is present in all three dimensions of the therapeutic system and the resistances are interacting.

The Pragmatic Approach described the family as resisting change due to two fundamental reasons. First, the heritage of each spouse’s family of origin affects the habitual ways of relating and the habitual coping strategies for dealing with the differences. While these habits may not be benefiting the family, they are familiar and the aftermath is safe and predictable. Second, families organize themselves in ways that maintain the identities of individual family members and yet ensure the continuation of the family unit. These behaviors of the family unit stem from unexamined beliefs about
role behaviors and management of relationships. The beliefs then result in attribution of meaning to behavior; these attributions regulate familial emotions and interactions.

As can be seen from the various family systems approaches, many factors contribute to the resistance displayed by families. It is apparent that the family's fear of change and desire for stability are significant factors. Consequently, families maintain longstanding relational patterns and exhibit uncertainty about therapy since the process may be perceived as a loss of control or autonomy. Families, as individuals, differ in their levels of resistance and points in time, during the course of treatment, when they become more resistant. Each therapist, depending on his or her theoretical orientation, will utilize the resistance differently and attempt to overcome it differently.

**Cognitive-Behavioral Theories of Resistance**

The cognitive-behavioral model is central to this study since the newly developed scale—Negative Beliefs About Change—being examined in this study, measures resistance from the cognitive-behavioral perspective. The cognitive-behavioral model conceptualizes resistance as stemming from negative or faulty beliefs and the schemata that underlie the resistant behaviors. The model’s understanding of resistance will be further elaborated upon below, after describing the Cognitive-Behavioral theory.

The cognitive model asserts that affect and behavior are largely determined by the way an individual perceives and structures situations or events (Beck, 1967, 1979). The cognitive model does not assume that cognitions function exclusive of behavior or biochemistry in the etiology of psychopathology. Cognitions (thought or images) about an event are based on attitudes or assumptions (schemata) deduced from the previous
experience. These cognitions are used to classify, interpret, evaluate, and assign meaning to that event. The cognitive model has been assigned to a broad set of disorders.

Interpreting a potentially stressful situation entails a continual process of evaluating the external situation, his or her own coping skills, and the risks and benefits of various strategies. When the individual believes that vital interests are in jeopardy, the primitive cognitive system is set into motion resulting in extreme, absolutistic, and one-sided judgements. Conceptualizations of this sort include loss, danger, and self-enhancement respectively corresponding to dysphoria, anxiety, and affectation (Weishaar & Beck, 1986). Hence, the cognitive structuring of a situation triggers affect and behavioral mobilization or demobilization based on the schemata specific for the manifested disorder. While the cognitive content of disorders has the same theme as found in so called normal experiences, cognitive distortions are more extreme and consequently, so are the affect and the behavior.

Deviations in the thinking process contribute to affective and behavioral responses in different respects. As stated above, when vital interests are at stake, cognitive processing tends to be rigid and overinclusive. Moreover, there is a loss of willful control over thinking and a decreased ability to discontinue the schemata. Lastly, there is a decline in the ability to concentrate, recall, and reason. These factors, in combination with the fact that the individual's view of the event includes only a subset of information to begin with, may result in the maintenance and reinforcement of maladaptive cognitions (Weishaar & Beck, 1986).
According to Meichenbaum and Gilmore (1982), cognitive-behavioral therapy is intended to assist the client in identifying; reality-testing; and correcting maladaptive, distorted conceptualizations and dysfunctional beliefs. Clients are encouraged to examine the effects of their cognitions by: becoming aware of and monitoring the role, which negative and involuntary thoughts play in the maintenance of maladaptive behavior, and recognizing the connections among cognition, affect, and behavior and their resultant consequences. Equally important to the function of cognitions in various disorders, is the nature and strength of patients’ behavioral repertoire since it affects subsequent interpersonal and intrapersonal situations. The authors describe the cognitive-behavioral therapies as having taken on a reciprocal determinist view of change; that is, that behavioral change is a manifestation of the closely linked relationships among the client’s cognitive structures (schemata, beliefs), conscious cognitive processes (automatic thoughts, internal dialogue, images), interpersonal behaviors, and consequent intrapersonal and interpersonal issues. The cognitive-behavioral approach is just as concerned with patients’ affect. To some degree, affect is contingent upon what an individual believes about affect. These personal beliefs can be modified by exploring them and examining the truth value and psychological usefulness of the beliefs. Many patients believe that they do not have control over their affect when, in fact, affect is largely determined by previous affective experiences via mediating links of cognition (meaning applied to affect).

Cognitive-behavioral therapies do not distinguish between the processes of assessment and treatment. That is, the types of questions asked of the patient, behavioral
assignments given to them, and the rationale offered all contribute to the process of therapy. The patient’s expectations and attributions concerning his or her symptoms and expectations about therapy are of importance to the therapist at the start of treatment. Patients often enter therapy with feelings of hopelessness and helplessness, feeling like the maladaptive behaviors have taken control, and experiencing self-denigrating thoughts due their feelings and behaviors. Furthermore, these thoughts and feelings may lead to greater resistance. A primary goal of cognitive-behavioral therapy is to assist in the process of developing new conceptualizations of problems in order that patients’ symptoms can be understood as problems, which are specific and solvable, rather than ambiguous and overwhelming. Subsequently, treatment interventions will follow from these reconceptualizations (Young & Beck, 1982).

One of the basic principles of cognitive therapy is that there must be a collaborative working relationship between the patient and the therapist. This collaboration is essentially the therapeutic alliance in which the therapist and patient work together in decreasing the patient’s distress. The therapist structures the therapy while actively engaging in the patient and the patient engages in homework assignments between therapy sessions (Beck, Rush, Shaw, & Emery, 1979). A form of collaborative empiricism is in practice since the therapist encourages the patient to treat his or her beliefs as hypotheses to be examined. The therapist also encourages the patient to utilize his or her individual behaviors to produce the information necessary to examine those beliefs (Davis & Hollon, 1999). Hence, given its essence, progress in cognitive therapy requires that the patient be willing to participate in designated assignments. In fact, the
research indicates that those individuals who are more involved in the cognitive approach and comply with assignments, are more responsive to treatment (Neimeyer & Feixas, 1990). In other words, these patients are being asked to suspend their existing beliefs, which are consistent with prior experiences or perceptions of prior experiences, and to follow the recommendations of the therapist. Such an alliance requires a trusting, sincere, empathetic, and professional therapist. The therapeutic alliance helps to prevent misunderstandings and to ensure that the patient and the therapist agree on treatment objectives throughout the course of treatment. Furthermore, the collaboration helps to minimize patient resistance stemming from the patient’s view of the therapist as controlling or aggressive (Young & Beck, 1982).

Albert Ellis’s (1962) work on the relationship between dysfunctional beliefs and emotion provided another force in the development of cognitive therapy by emphasizing the importance of ‘irrational beliefs’ in depression. The clinical theory of Ellis’ Rational-Emotive therapy also maintains that maladaptive assumptions lead to cognitive distortions and that these cognitions determine how one feels and behaves. Ellis (1962), however, emphasized the importance of specific ‘irrational beliefs’. The theory posits an ABC model. That is, people generally start with goals to remain alive and to be reasonably happy and then often encounter activating events or adversities (A’s) that thwart their desires. They then tend to construct cognitive, emotive, and behavioral consequences (C’s) about these adversities, particularly self-defeating feelings such as dysphoria, as well as dysfunctional behaviors such as withdrawal. These consequences are largely constructed by their beliefs (B’s) which consist of first: rational beliefs,
preferences, and desires and second: irrational beliefs, dogmatic musts, and imperative demands. According to Ellis (1962), most people choose both rational and irrational beliefs when faced with diversity.

**Resistance.** In addition to various disorders, the cognitive-behavioral model has been applied to treatment resistance/noncompliance. While Golden (1983) indicated that resistance may stem from therapist factors, such as lack of rapport; environmental factors, such as family members; or client factors, in cognitive-behavioral therapy, resistance to treatment is mainly understood as a consequence of an interfering cognitive style, a set of dysfunctional beliefs, and/or as a result of interpersonal consequences that reinforce resistance. Anderson and Stewart (1983) pointed out that cognitive therapists conceptualize resistance as negative emotions regarding therapy, as evidenced by statements such as “therapy has never helped before” or “this won’t work”. Beck et al. (1979) indicated that a resistant client is an individual who does not feel change is possible because he or she perceives himself as incompetent and hopeless. To avoid resistance, these authors emphasized the importance of the working alliance and anticipation, by the therapist, of potential sources of noncompliance with the patient.

According to Meichenbaum and Gilmore (1982), resistance is both a motivational and a behavioral construct. The patient resists a change in his or her motivation to seek out and try different coping strategies, both behaviorally and cognitively. So while the affective manifestations, such as hostility, are not ignored, the cognitive and behavioral means to modifying the affect are emphasized. Although resistance can carry information that is conscious, preconscious, or unconscious, the authors emphasized
preconscious thinking, and behavior and information processing. Resistance may, in fact, provide opportunities to examine the patient's cognitions, affects, and behavior. For example, does the resistance represent false expectations, misinformation, method of coping, etc.? Resistance to change may be due to the patient's cognitions and expectations about others' reactions. For example, the patient may fear that change will threaten the relationship with his or her significant other. Resistance can occur at any time during the course of treatment. The initial phases of therapy are significant when examining resistance since it is during this period that patients drop out of treatment and misunderstandings develop, leading to resistance. Examining resistance during the termination phase of psychotherapy is also important according to Meichenbaum and Gilmore (1982). The patient's belief system may lead to the individual displaying resistance in his or her reluctance to end therapy or dependence upon the therapist.

Resistant behaviors are referred to as "technical problems", avoidance behaviors, passivity, and counter-therapeutic beliefs in cognitive therapy. How is resistance manifested from the CBT perspective? A patient becomes evasive when asked pertinent questions; tells lies; misses appointments or comes late; disagrees with the therapist's interpretations; fails to carry out homework assignments; fails to comply with a medication regimen; refuses to comply with the therapist's recommendations; withholds important information; or exhibits other oppositional tendencies (Lazarus & Fay, 1982). In fact, according to Meichenbaum and Gilmore (1982), resistance to doing homework assignments is a priority for cognitive-behavioral treatment. At times the patient may exhibit certain beliefs that call for an idiosyncratic response to the homework; for
example, an individual may not follow through with an assignment because compliance is construed as losing control. At times, when patients' views of their disorders (such as, "I must be flawed") or their views of the process of therapy (for example, "this must be the consequence for my flaws") act as a hindrance to the process of therapy.

Davis and Hollon (1999) purported that the issue of resistance can be restated in terms of two questions. First, "Why don't cognitive therapy patients always do what we ask them to do?" and second, "When they attempt to do so, why doesn't it always work?" (Davis & Hollon, 1999, p. 34). The authors described four reasons as to why patients don't improve or follow recommendations. First, the beliefs or attitudes of patients may interfere with the therapy process. While these patients are expressing a desire to improve, they fail to participate in the types of activities inherent in the cognitive-behavioral approach. According to Davis and Hollon (1999), the concept of resistance is most relevant to this subgroup. The second reason as to why patients do not show improvement is due to unrealistic expectations about the rate of change in therapy, especially when external complications already exist. Factors attributable to the therapist are the third reason for the interference with the process of therapy. Lastly, cognitive therapy may not be effective for all patients, as all disorders are not amenable to cognitive therapy. These four factors will be explained below.

**Beliefs or attitudes of the patient.** In describing the first factor that leads to resistance, Davis and Hollon (1999) pointed out the importance of distinguishing between active and passive noncompliance. Although these types of resistances may stem from different sources, they may both interfere with the treatment process. Passive resistance
refers to the situation in which the individual would like to carry out a therapeutic task, but fails to do so. According to Bandura (1977), passive noncompliance involves negative expectations or a lack of necessary skills, that is, a perceived state of low self-efficacy. While the patient would like to do what the therapist recommends, the patient believes that he or she is unable to do so or is uncertain that following the recommendations will resolve the problems. Hence, the requisite behaviors will not be activated if the individual perceives a small likelihood of success. Active resistance involves the situation in which the patient has a reason for not wanting to participate in the designated therapeutic task. Davis and Hollon (1999) described this as a more intricate phenomenon, but indicate that cognitive therapists do not assume that such resistance is always present as do other forms of psychotherapy. While it also involves problems regarding expectations, the resistance first displays itself as a motivational problem. That is, the patient may have a different agenda than the therapist, which is not openly discussed or easily recognized. In essence, while the patient and therapist may have agreed upon an objective, the patient is working towards a different outcome. This phenomenon is clearly disruptive to the therapeutic process. However, whether the resistance is active or passive in nature, the phenomenon of resistance can be utilized to identify and examine the patient’s beliefs, which also affect other facets of their lives.

Mahoney (1991) described the function of resistance in cognitive therapy as self-protective, impacting the rate and direction of change. Resistance functions to protect the patient from a loss of self-esteem or humiliation. From a biological perspective, it is evident that systems resist change and attempt to return to homeostasis. From this
perspective, resistance to change is not pathological, but rather serving an individual’s need to feel safe, viable, and secure. Change implies a lack of predictability and increased anxiety while maintaining the status quo, even if lacking in quality, implies predictability and familiarity.

**Unrealistic expectations.** Even when patients enter therapy without beliefs that interfere with progress in therapy, a slower than expected response rate or complicated external factors can be discouraging for both the therapist and the patient. Patients may become resistant if their expectations about the pace or nature of change are not held up. For example, patients, who have been diagnosed with an Axis I disorder as well as an Axis II disorder or with multiple Axis I disorders, are more difficult to treat and thus a slower rate of improvement does not necessarily imply that therapy is failing. However, the patient or the therapist can easily misconceptualize this as failure. Circumstances external to the patient such as financial stressors or other family members’ problems, may also interfere with therapeutic progress and result in misconstruing the therapeutic process as failing. While the patient can develop coping strategies for these stressors, using the cognitive model, failure to address such factors can actually lead to hopelessness and treatment termination (Davis & Hollon, 1999).

**Therapist factors.** Although factors attributable to the therapist, such as therapist limitations, do not represent resistance, they may be mistaken for them. The change process may be interrupted when therapists carry negative expectations regarding changes specific to patients, possibly resulting in a lack of effort or creativity by the therapists. There may also be a failure to produce change if the therapist inadequately
conceptualizes what the patient’s needs are and how to meet those needs. Such a failure may induce resistance in the patient who may not perceive the importance of participating in therapeutic activities. Change is also not produced when therapists work only within the confines of a nomothetic model rather than shaping the treatment to fit the patient as well. The last issue the authors bring to our attention is the situation in which the therapist imposes values or attitudes on the patient, rather than collaborating with the patient to examine beliefs, to negotiate goals, and to explore ways to achieve those goals. Failures to consider the aforementioned factors, may unnecessarily result in patient resistance.

**Insufficiency of the model.** There are various problems for which the cognitive model ineffective, such as acute psychosis or organic brain syndrome. Many disorders, such as depression, are heterogeneous in etiology and, hence, are heterogeneous in their responses to treatment. There are patients who are not displaying the phenomenon of resistance, yet they are not improving in treatment because they are not amenable to cognitive therapy. As indicated by Davis and Hollon (1999), the issue of which patients are appropriate for cognitive therapy needs further examination.

Leahy’s conceptualization (as cited in Engle & Arkowitz, in press) of resistance from the cognitive model included six types of resistances and what contributes to the particular form of resistance. He included the following forms of resistance:

- **Validation resistance:** Validation refers to the processes of empathy and acceptance. Leahy proposes that patients who require validation, yet do not receive it, may engage in different strategies in an effort to elicit validation from the therapist.
These strategies include rumination; devaluation of the therapist; noncompliance with homework; emotional distancing; increase in intensity; and splitting the transference.

Self-Consistency: In some cases, resistance stems from the inclination of people to maintain predictability, self-consistency, and control that is related to negative thinking. In this context, abdicating the negative cognitions will lead to uncomfortable states that are avoided by maintaining the status quo.

Schematic resistance: Leahy claims that schemas maintain themselves via selective attention and memory from becoming cognizant of information that challenges them. Consequently, attempts to modify the dysfunctional schemas may be met with resistance.

Moral resistance: When an individual views the therapist as challenging his or her moral or ethical beliefs ("shoulds"), he or she may feel compelled to adhere to these beliefs even if they are causing distress. Discussion based on rationality and utility will be ineffective in attempts to modify these beliefs.

Risk Aversion and Depressive resistance: According to Leahy, one way in which depressed people display resistance is by engaging different strategies, such as risk aversion, to avoid further loss.

Self-Handicapping: For self-protective purposes, patients may engage in behaviors involving negative and self-handicapping self-verification. The individual who avoids evaluating himself under optimal conditions, in order to avoid the distress that may stem from discovering that he or she does not live up to his or her standards, exemplifies this process.
Beck, Freeman, and Davis (2004) also discussed resistance in cognitive therapy; however, they utilized the term noncollaboration in order to make a distinction between the cognitive conceptualization and the more traditional one of resistance as an unconscious and expected phenomenon. The noncollaboration can be displayed through direct behaviors or can take the form of passivity. Direct behaviors refer to those behaviors which do not comply with agreed plans, such as tardiness, missing appointments, or withholding information in the treatment process. These behaviors are purported to trigger from negative personalized meanings. The authors described passive noncollaboration as arising from the patient's schema of low self-efficacy. The causes of noncollaboration are understood in terms of cognitions, skills, and environmental factors. Multiple causes can exist simultaneously for any given problem or given patient. The following is a list of these causal factors:

1. The patient may lack the skills to collaborate with the therapist.
2. The therapist may be lacking in skills to develop collaboration.
3. The role of the patient's culture may be underestimated by the therapist.
4. Dysfunctional behavior may be reinforced or change may be precluded by the beliefs of significant others.
5. Patients may hold ideas and beliefs regarding their potential failure in therapy, which may contribute to noncollaboration.
6. Patients resist noncollaboration because of beliefs that their changes will negatively affect the well-being of others.
7. The patient believes that collaboration with the therapist may lead to diminishing his or her sense of self.

8. The patient and the therapist may share a particular dysfunctional belief.

9. Patients who do not understand what is expected of them may have difficulty following treatment recommendations.

10. A patient may experience secondary gain from maintaining dysfunctional patterns.

11. When interventions are untimely or rushed, this may be a factor in noncollaboration.

12. Time limits of managed care impacts collaboration.

13. The goals of therapy may not be made explicit.

14. The goals of therapy may be ambiguous.

15. The goals of therapy may be unrealistic.

16. There may have been no agreement between the therapist and the patient about treatment objectives.

17. The patient is lacking in motivation.

18. The patient believes that therapy is a passive process.

19. The patient may have poor impulse control.

20. The patient’s rigidity may defeat compliance.

21. The therapist or patient may be frustrated due to a lack of treatment progress.

22. The patient has negative misperceptions of what it means to become a “patient.”
The aforementioned variations of the cognitive-behavioral theory bring to our attention that resistance is conceptualized as a phenomenon that interferes with the patient’s willingness to consider facets of reality that do not support their existing views of the world and themselves. Dysfunctional cognitions impact the individual’s affect and behavior. Patients’ countertherapeutic beliefs underlie their resistant behaviors which interfere with the process of constructive change, while providing therapists information about their patients, their patients’ distress, and what may be the most useful interventions for them. The cognitive-behavioral perspective of resistance is broader in its understanding of the phenomenon than are traditional perspectives. Cognitive, affective, and behavioral processes are addressed; state responses and trait dispositions are elucidated; and the construct of resistance is applied to clinical settings.

**Reactance Theory**

Because the construct of resistance has been widely recognized in social psychology, Brehm’s (1966) theory of *psychological reactance* merits some discussion. Furthermore, the term *reactance* is frequently utilized in the resistance literature. Psychological reactance was defined as a “state of mind aroused by a threat to one’s perceived legitimate freedom, motivating the individual to restore the thwarted freedom” (S. S. Brehm & J. W. Brehm, 1981, p. 4). Thus, an individual experiences psychological reactance when he or she believes or perceives that a threat exists to eliminate his or her free behaviors. According to Beutler et al. (2002), normal reactance inclinations are differentially responsive to a person’s tendency to perceive threat; they are also motivational since they guide the individual toward restoring the threatened behaviors.
When reactance is provoked, it is manifested as noncompliance, oppositional behavior, and rigidity (Tennen, Rohrbaugh, Press, & White, 1981). As Beutler et al. (1996) stated, reactance is an extreme form of resistance, whether related to character traits or in therapy states.

Brehm (1966) suggested that the amount of reactance generated is a function of four variables: (1) the importance of free behaviors that are threatened, (2) the expectation that the individual possesses freedom to begin with, (3) the magnitude of threat to begin with, and (4) the implication of the threat for the freedoms. According to reactance theory, resistance is a normal process intended to protect one’s sense of personal freedom. Therefore, according to the perspective of reactance theory, in the psychotherapeutic process, the clinician attempts to modify the patient’s ways of thinking, feeling, and behaving via social influence and persuasion. Subsequently, resistance is manifested in psychotherapy because the clinician’s directives or suggestions may be perceived as actual threats to the patient’s freedom (Tennen et al., 1981).

**Conceptualization of Resistance**

As psychoanalytic and other treatment theories have evolved over the past 100 years, the term resistance has continually been used but with less conceptual clarity (Saari, 1996). The various theoretical frameworks emphasize different aspects of the phenomenon. In the context of psychoanalytic theory, resistance to change is related to the individual’s fear that change will involve negative affect. In humanistic-experiential approaches, resistance arises from awareness of threatening material and complete
contact with the environment. Systems theories emphasize maintaining the status quo of their psychological lives. Cognitive-behavioral approaches shed light on faulty beliefs and assumptions held by patients underlying the resistant behaviors.

In conceptualizing resistance, it may be helpful to organize the phenomenon around certain questions. Engle and Arkowitz (in press) asked the following questions when conceptualizing resistance and discussing the various theories of resistance:

1. What changes are resisted?
2. What behaviors define the presence of resistance?
3. Why is resistance occurring?
4. How does the specific therapeutic approach work with resistance in clinical practice?

Beck et al. (2004) recommended asking the following questions when exploring and conceptualizing noncollaboration:

1. Are there skill deficits (either therapist’s or patient’s) contributing to the noncollaboration?
2. Do either the therapist or patient have interfering beliefs?
3. Are there setting conditions or contingencies interfering with progress?
4. In what ways are these problems combined?
5. What can be done about these various factors contributing to noncollaboration?

When conceptualizing resistance, it is also important that the therapist ask assessment questions, which help the therapist understand the nature of their patients’ resistance
without becoming annoyed or overwhelmed by the resistance. Newman (1996) suggested that therapists address some or all of the following eight assessment questions:

1. **What is the function of the patient’s resistance?**
2. **How does the patient’s current resistance fit into his or her developmental/historical resistance patterns?**
3. **What are some of the patient’s idiosyncratic beliefs that are contributing to the resistance?**
4. **What might the patient fear will happen if he or she participates in treatment?**
5. **How might the patient be characteristically misunderstanding or misconstruing the therapist’s suggestions, methods, and intentions?**
6. **What requisite skills does the patient lack that make it difficult for the patient to collaborate in treatment?**
7. **What factors in the patient’s natural environment may be punishing the patient’s attempts to change?**
8. **Does the therapist’s conceptualization of the case need to be revised?**

What still needs to be understood about the patient in order to make sense of his or her resistance?

Increasing conceptual clarity of the term *resistance* also requires that resistance be viewed as a process variable, not just a measure of immediate outcome (Bischoff & Tracey, 1995; Mahalik, 1994). Recent research (Beutler & Clarkin, 1990; Beutler et al., 2002; Mahalik, 1994; Shoham-Shoham & Hannah, 1991) has suggested that patient variables, therapist variables, and interactive processes between therapist and patient
variables have implications for understanding and conceptualizing the phenomenon of resistance.

**Resistance as a Process Variable and a Client-Therapist Matching Variable**

**Therapeutic Relationship**

The importance of the therapeutic relationship is reflected in most theoretical approaches. Furthermore, many studies have demonstrated that the establishment of a therapeutic alliance/working alliance has a consistent relationship with outcome in psychotherapy (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Klein et al., 2003; Martin, Garske, & Davis, 2000). The working alliance has been defined as the collaboration between the client and therapist based on their agreement on the goals and tasks of treatment and on the development of an affective and attachment bond (Bordin, 1979). Of the studies they reviewed, Orlinsky and Howard (1986) found that 80% of them showed a significant relationship between positive client outcome and the quality of the therapeutic relationship. In order to identify those features of the therapeutic relationship that contribute to successful outcome, researchers have often studied variables related either to the client, such as client openness in the relationship, or to the therapist, such as therapist engagement in the relationship. However, as will be seen later in this discussion, there has been an increasing interest in a broader perspective of the therapeutic relationship, that is, in the interactive nature of the relationship.

**Therapist Directiveness as a Variable**

Although the various theories view resistance as a protective function in the face of anxiety or threatening cognitions or affect, a few studies have considered resistance as
a process variable, beyond a measure of immediate outcome (Bischoff & Tracey, 1995; Mahalik, 1994). Interactional determinants, such as client variables, therapist behavior, stage of therapy, and outcome have been found to take on determining roles in the level of resistance and the therapeutic value of differing levels of resistance. Therapist directiveness has been the most common focus of interactional determinants of client resistance (Bischoff & Tracey, 1995). Patterson and Forgatch (1985) labeled the behaviors teach and confront as directive and the behaviors facilitate and support as nondirective. Bischoff and Tracey (1995) defined therapist directive behavior as any statement that leads, directs, or controls the verbal activity of therapy; or any statement that challenges or confronts the client. Therapist nondirective behavior was defined as any statement that: gives responsibility of decision for choice of area and direction of verbal activity to the client; that clarifies the client’s previous statement or affect in order that the therapist may increase his understanding of the client’s frame of reference; or that indicates encouragement or support for the client. Patterson and Forgatch (1985) found that in a sample of behavioral interventions with mothers of children with conduct problems, therapist directive behavior increased client resistance. Mahalik (1994), defining resistance from a psychodynamic perspective, found that all types of resistance were lower following nondirective therapist behavior.

Bischoff and Tracey (1995) examined the interactive processes in relation to resistance. They suggested that the display of client resistance is not independent of relationship events, but rather is modestly predicted by the therapist’s antecedent behavior. That is, therapist behaviors from the nondirective category will be less likely to
be followed by a display of resistance than therapist behaviors from the directive category. The authors argued that therapists should measure the proportion of directive versus nondirective behaviors in relation to resistance level. Unlike the relationship between client resistance and preceding therapist directiveness, there was no association found between therapist directiveness and client resistance. These findings may suggest that therapists tend to act more independently than their clients on the dimensions that were examined. Bischoff and Tracey (1995) suggested that these two findings—dependence for the client and relative independence for the therapist—support the notion that the therapist is dominant and the client’s resistant response is reactant, as opposed to independent or instrumental in the counseling process.

Social psychology has considered other client variables, such as locus of control (Rotter, 1966), which may have relevance to the client’s experience of the therapist directive and to the motivation to engage in resistant versus nonresistant responses. Other researchers, such as Messer and Meinster (1980), suggested that variables such as gender, diagnosis, ethnicity, and the severity of mental illness may impact the client’s response to therapist directive. Future directions for research should consider the relationship between patient variables, such as reactance potential; locus of control; gender; diagnosis; and severity of illness, and the interactional phenomenon of interest.

Resistance Level of the Individual as a Variable

Research (e.g., Chamberlain, Patterson, Reid, Kavanagh, & Forgatch, 1984; Tracey, 1986) has suggested that resistance level, and the implications for resistance level, may vary among clients. Client variables have been proposed that are associated
with the client's experience of therapist directive behavior. For example, Brehm (1976) has suggested that reactance, a motivation to protect available freedoms when experiencing a threat to freedoms, will differ from person to person as a result of varying perceptions regarding threats to interpersonal freedoms. Individuals high in reactance resist others' efforts to constrain their behavior; those low in reactance are thought to be less concerned with structure and direction provided by others. Rohrbaugh, Tennen, Press, & White (1981) describe reactance potential as a "person-in -situation" phenomenon in which both personality trait and situational determinants exist. When issues of freedom or autonomy exist, this personality style is expected to become most important in determining behavior. Hence, clients with high reactance potential would tend to defy therapeutic directives; therefore, they are expected to benefit from more paradoxical interventions, such as discouraging rapid change and symptom prescription, than from the other nonparadoxical interventions (Rohrbaugh et al., 1981).

Dowd et al. (1988) found that individuals high in reactance potential tend to do better in defiance-based therapeutic interventions, whereas those low in reactance tend to do better in compliance-based interventions. Beutler et al. (2002) reviewed four studies that have examined this issue in psychotherapy; all the studies supported the notion that paradoxical interventions may be more effective for resistant patients. Horvath and Goheen (1990, as cited in Beutler et al., 2002) found that patients with high levels of trait-like resistance improved with paradoxical interventions and maintained the changes after treatment. On the other hand, patients who were less resistant and underwent the
same paradoxical treatment deteriorated after the termination of treatment. Among those patients treated with nonparadoxical interventions, the reverse pattern emerged.

**Interaction Between Client and Therapist Features**

Attempts to account for therapeutic outcomes by either client characteristics or therapeutic features alone are conceptually unsatisfactory and yield weak results. Furthermore, when taken individually, neither variable can offer adequate explanations about how therapeutic change occurs. Hence, in attempting to predict and explain therapeutic processes and outcomes, it is necessary to take into account the interaction between client and therapeutic features (Shoham-Salomon & Hannah, 1991). In an effort to examine those patient characteristics that respond differently to defined aspects of various psychotherapy models, Beutler (1979) initially tabulated the patient characteristics that were present in studies when dynamic, cognitive, experiential, and behavioral psychotherapies were found to yield different outcomes. The author identified two reliably rated patient dimensions (coping style, reactance/resistance potential) and two characteristics of therapeutic procedure (insight vs. behavior change objectives, high vs. low therapist authoritative/directiveness) that interacted with each other. Beutler (1979) emphasized the dispositional tendency of a client to act in a reactant way rather than the situational determinants of reactance.

Beutler and Clarkin (1990) have brought forth an empirically grounded model of psychotherapy that emphasizes the prescriptive matching of client and therapists. This model elucidates three aspects of potential relevance. The first dimension is related to the complexity of the presenting problem, which may mediate the relative success of
focal, symptom-oriented treatments versus broad, conflict-centered modalities. The second dimension involves client coping style—internalizing versus externalizing. The third dimension refers to reactance potential, that is, sensitivity to threats of autonomy. The latter two dimensions may impact the relative effectiveness of exploratory versus directive therapies. For the purposes of this study, the last dimension is of significance, as resistance, state-like resistance or resistant traits, has a mediating effect on different treatments. Generally, resistance is viewed as a state that is identified independently of psychotherapy itself. However, recent applications of reactance theory (Brehm & Brehm, 1981) to predictions of differential psychotherapy outcomes suggested that the situational characteristics, that is external directives from an authoritative source, leading to resistant and oppositional behaviors are similar to features that distinguish different psychotherapies. Furthermore, clinical research has suggested that resistance also has trait properties, such as control needs or defensiveness, that predict responses to situational cues and can be assessed prior to the assignment of therapy (Beutler et al., 1991).

In fact, Beutler, Mohr, et al. (1991) examined the differential predictive power of two patient variables, coping styles and resistance potential, in relation to type of treatment—cognitive therapy; a form of experiential therapy; and supportive, self-directed therapy. The results indicated that the authority-directed treatments would yield poor results among individuals who tend to be defensive or resistant. Consistent with reactance theory, the results suggested that even directive interventions may be contraindicated among resistant patients, as evidenced by the lack of improvement in
high resistance prone patients in focused expressive therapy and to a lesser degree in cognitive therapy. The improvements demonstrated by patients in the supported, self-directed therapy suggested that further progress may be seen via nonauthoritative and non-directive treatments. Beutler et al. (2000) examined the role of patients' resistant traits as indicators of therapist directiveness via data in which actual in-therapy directiveness levels were measured from various sites. The treatment included three different versions of cognitive therapy and seven alternative treatments. The results strongly supported the notion that patient trait-like resistance acts as a negative prognostic indicator and as a significant consideration for the differential use of directive and nondirective interventions.

Beutler et al. (2002) reviewed 20 studies that examined the differential effects of therapist directiveness as moderated by patient resistance. Sixteen of the twenty studies reviewed found that directive interventions were most effective for patients who had relatively low levels of state or trait like resistance, while nondirective interventions were most effective for patients with relatively high levels of resistance. For example, in studying state-like patterns in individuals with drinking problems, it was found that therapist directiveness evoked high levels of patient state-like resistance. The directive interventions resulted in poorer outcomes than less directive interventions (Miller, Benefield, & Tonigan, 1993). These findings were consistent with those suggested by reactance theory. Interpretive (directive) and supportive (nondirective) therapies were compared among patients who differed on their attachment patterns and interpersonal receptivity (Piper, Joyce, McCallum, & Azim, 1998). The authors found that the
directive interventions were associated with higher levels of treatment dropout than the nondirective treatments. Furthermore, the patient quality of object relations, such as interpersonal receptivity, mediated these treatment effects. That is, among patients with high receptivity, the use of directive interventions resulted in positive effects, counteracting the propensity of these to be related with higher dropout rates.

Beutler et al. (2002) argued that trait-resistant patients have the propensity to avoid directive guidance; therefore, the amount of structure and directiveness incorporated in the treatment should be modified to a level that is appropriate for the patient's resistance level. According to Dowd, Wallbrown, Sanders and Yesenosky (1994), resistant patients are not as concerned about “impression management” as patients who are low in resistance. Therefore, the resistant patients are more likely, than those lower in resistance, to resist rules and social norms in various contexts, preferring to exercise personal freedom and initiative.

In sum, there is consistent support for the negative relationship between patient resistance and the working/therapeutic alliance. Resistance does not allow for strong working alliance between therapist and patient; a relationship exists between those behaviors that are conceptualized as resistant and the content of the therapeutic sessions. According to Beutler, Mohr, et al. (1991), resistant traits are observed and assessed by how easily resistance is displayed to external demands. That is, an individual who is high in trait-like resistance is easily provoked to behave in an oppositional manner to a situation. Since trait-like resistances result in vulnerability to state-like resistance, initially evaluating the patient’s trait-like resistance patterns is also important in
anticipating their state-like resistance. While the issue of resistance does not necessarily relate to psychopathology of origin, patient resistance impacts how and what interventions should be utilized (Beutler, Mohr, et al., 1991). Resistance has mediating effects on various treatments, whether the resistance is state-like or a trait of the patient. As the review of the research has elucidated, the degree of therapist control, structure, and directiveness the treatment consists of, should be appropriate for the level of the client’s resistance. That is, low trait-like resistance allows patients to be susceptible to benefit from directive interventions. On the other hand, high resistant traits result in vulnerability to authoritative and directive interventions, evoking resistant states which hinder progress, increase the risk of dropout, and decrease treatment effectiveness.

**Resistance and Noncompliance in Healthcare**

*Phenomenon and Prevalence*

In the healthcare literature, the phenomenon of resistance is referred to as noncompliance or nonadherence. As in the psychotherapy literature, treatment noncompliance is well recognized and contributes to poor treatment outcome in medical care. Nonadherence to medical regimens interferes with the delivery of health care (Dimatteo & DiNicola, 1982), and can result in a lack of therapeutic benefits and the need for additional medical services, medication, and diagnostic evaluations (Putnam, Finney, Barkley, & Bonner, 1994). Poor compliance is found in preventive regimens as well as in the self-management of treatment regimens for acute and chronic disease (Dunbar-Jacob, 1993). Noncompliance in the medical field manifests itself in various forms: premature dropping out of treatment; discharge against medical advice; failure to
keep appointments; failure to carry out proscribed behavior; failure to avoid health risk behaviors; or failure to adhere to prescribed treatment regimens (Meichenbaum & Turk, 1987; Ronis, 1992). According to Masek (1982), the most typical estimates of noncompliance range from 30% to 60% of patients. This range includes patients who: never complied with any feature of the treatment plan; followed some, but not all of the recommendations; initially followed the treatment plan but did not continue to do so; or performed suggested behaviors, but in an inappropriate manner.

Although noncompliance to treatment recommendations significantly limits the effectiveness of medical care, between 30% and 60% of all patients fail to take their prescribed medication (Luscher & Vetter, 1990). The problem of noncompliance is especially acute when patients are required to take several medication doses on a daily basis (DiMatteo et al., 1993) or to carry out primary prevention efforts or significant lifestyle changes. Patients instructed to engage in health-protective behaviors, such as smoking cessation, increased exercise, and dietary modification, tend to have lower initial compliance rates and higher relapse rates than those who have been prescribed medication (Brownell, Marlatt, Lichtenstein, & Wilson, 1986). When long-term treatments for chronic disease have been prescribed, as many as 80% of all patients fail to carry out at least one aspect of the regimen (Rosenstock, 1988). The impact of noncompliance is significant. For example, the primary reason for hospitalization for diabetic ketoacidosis among children is noncompliance (Drash, 1989, as cited in Dunbar-Jacob, 1993). Errors in medication management account for 5% to 15% of hospitalizations among the elderly (Dunbar-Jacob, 1993).
In addition to the incidence rates of noncompliance, there is another cause for concern. Despite its ubiquity, noncompliance is often undetected by health-care professionals, even those with considerable experience (Steele, Jackson, & Gutmann, 1990). Health care providers systematically overestimate the rate to which their patients comply with recommendations. They are often last to know about patient noncompliance since patients often withhold such information; health care providers frequently use unreliable procedures to assess adherence and health-care providers fail to inquire about compliance (Johnson, Tomer, Cunningham, & Henretta, 1990). The underestimation of nonadherence and the failure to recognize it also results from the limitations in understanding the factors that contribute to adherence and nonadherence (Meichenbaum & Turk, 1987).

Models of Healthcare Behaviors

Poor adherence is known to be multiply determined in the healthcare literature, however, the models of compliant behavior tend to focus on the patient (Dunbar-Jacob, 1993). The Health Decision Model; Cost-Benefit Models; Self-Efficacy Theory; Theory of Planning Behavior; and Health Belief Model are the major explanatory paradigms used in adherence studies. These models address patient beliefs and expectancies. Most of the research utilizing these models have focused on patients' personal and demographic characteristics; patients' cognitions; social influences; barriers; and past behavior (DiMatteo et al., 1993). The Health Decision Model (Eraker, Kirscht, & Becker, 1984) attempts to combine decision analysis, behavioral decision theory, and health beliefs to yield a model of health decisions and resultant behavior. Decision analysis provides a
quantitative means for patients to express their preferences regarding trade-offs between benefits and risks. *Behavioral Decision Theory* extends this quantitative emphasis by identifying general inferential rules that patients use to simplify difficult mental tasks to simpler ones. According to the *Theory Planning Behavior* of (Azjen, 1985), which is an extension of Ajzen and Fishbein's *Theory of Reasoned Action* (1980), performance of a behavior is a product of the strength of an individual’s attempt to perform the behavior and the degree of control (personal and external factors that influence the behavior) the individual has over that behavior. Intention to try to perform the behavior is the immediate determinant of an attempt to perform the behavior, but not the actual performance of the behavior. Intention is viewed as a function of an individual’s attitude toward trying and his subjective norm regarding trying. Thus, the Theory of Planned Behavior goes beyond the Theory of Reasoned Action in identifying the determinants of attitude involved in trying to perform a behavior.

Bandura (1977) has proposed distinguishing between *outcome expectations*—belief about whether a given behavior will lead to given outcomes or judgements of the likely consequences such behavior will produce and *efficacy expectations or perceived self-efficacy*—belief about how capable one is of performing the behavior that leads to those outcomes or judgements of their capabilities to execute a given level of performance. Therefore beliefs, that is perceptions, and not necessarily an individual’s true capabilities, that influence behavior. Self-efficacy beliefs regulate human functioning through cognitive, affective, motivational, and decisional processes (Bandura, 1997). Whatever other factors serve as motivators and guides, they stem from
the core belief that one has the power to produce desired effects; otherwise one has little
incentive to persevere or act when facing difficulties. Several meta-analyses have shown
that efficacy beliefs contribute to the level of motivation and performance in health
functioning and psychosocial functioning (Bandura & Locke, 2003). In assessing
adherence to a 10-day antibiotic regimen, Putnam et al. (1994) found that posttest self
efficacy was significantly correlated with patients' self-reported adherence. This finding
reflects Bandura's (1986) finding that recent behavioral experience with a regimen
influences self-efficacy.

The Health Belief Model (HBM; Rosenstock, 1966), a value-expectancy approach
to health-related decision making, is the most widely used psychological theory of health-
related behaviors. The HBM has received the most extensive research attention and has
been applied to diverse populations, settings, health conditions, and recommended health
behaviors (Ronis, 1992). There is a plethora of research to support the model's ability to
account for engaging in preventive health actions, seeking diagnoses, and complying with
recommendations. According to the HBM, an individual's decision about a preventive
action related to a disease is influenced by four beliefs: (1) severity – the perceived
seriousness of the disease, (2) susceptibility--the perceived risk of contracting the illness,
(3) perceived benefits of the preventive action, and (4) perceived barriers--that is, the
perceived psychological, financial and other costs of the action that outweigh the
benefits. The benefits of an action include desirable nonhealth outcomes and a reduction
of the health threat via decreased susceptibility and /or decreased severity of the illness.
An individual’s motivation to take a preventive action is hypothesized to be increased by
high susceptibility, high severity, high benefit, and low cost. Janz and Becker (1984) summarized findings from 18 prospective and 28 retrospective HBM-related studies; 24 of these explored preventive health behaviors, 19 investigated sick-role behaviors, and 3 examined clinic utilization. In the majority of cases, each HBM dimension was found to be significantly associated with the health-related behaviors under study. Overall, the significance ratio orderings were: “barriers” (89%); “susceptibility” 981%); “benefits” (78%); and “severity” (65%).

**Healthcare Providers’ Behavior as a Variable Affecting Patient Compliance**

While most of the research has focused on patient characteristics, particularly beliefs and attitudes, like noncompliance to psychotherapy, nonadherence to medical treatment is multiply determined. These determinants include the patient; the physician; the patient-physician relationship; the illness; organizational-structural factors; and whether treatment is prophylactic or remedial (DiMatteo & DiNicola, 1982). Recently, health-care providers’ behavior has been cited as a significant variable affecting patients’ willingness and ability to follow treatment advice (Armstrong, Glanville, Bailey, & O’Keefe, 1990; DiMatteo et al., 1993; Dunbar-Jacob, 1993). Patients have been more apt to fail to comply with treatment recommendations when their physicians have not provided clear explanations (Armstrong et al., 1990; Charles, Gafni, & Whelan, 1997) and patients are in need of better knowledge and understanding of the required treatment regimen (Steele, Jackson, & Gutmann, 1990). Hall, Roter, and Katz (1988) found a trend toward increased compliance among patients of health-care providers who expressed positive verbal communications (e.g., reassurance) and refrained from negative verbal
communications (e.g., anger) during the medical visit. The strength of the physician’s recommendation, that is, the firmness with which a physician suggests a course of treatment, has been associated with adherence to treatment recommendations in many chronic illnesses (Hall, Roter, et al., 1988). Health-care providers who reported doing more to promote patient compliance were found to ask more questions (Hall & Roter, 1988).

DiMatteo et al. (1993) examined the influence of physicians’ attributes and practice style on patients’ compliance with treatment in a 2-year longitudinal study of 186 physicians and their diabetic, hypertensive, and heart disease patients. More specifically, general adherence and adherence to exercise, medication, and diet recommendations were evaluated. The results showed that baseline adherence rates were related to adherence rates 2 years later. The number of patients seen per week, scheduling a follow-up appointment, physician specialty, and patient health distress were associated with adherence to medication recommendations. The tendency to answer patients’ questions and patient health distress were associated with adherence to exercise recommendations. The number of tests ordered, seriousness of illness, and physician specialty were related to adherence to diet recommendations. Lastly, physician job satisfaction was predictive of general adherence.

In sum, nonadherence to medical treatment is multiply determined and the various contributing factors, described the various models, ultimately influence patients’ perceptions. These perceptions, in turn, impact their intentions, beliefs, expectancies, and behaviors (Goldring, Taylor, Kemeny, & Anton, 2002). The belief and motivation
components of these models have been found to affect intentions to adhere to various health-related behaviors. Patients’ intentions subsequently impact their health-related behaviors (DiMatteo et al., 1993). In fact, when examining these models, it is apparent that the factors thought to influence health-related actions are related to the patient’s beliefs. For example, the *Theory of Reasoned Action* emphasizes the importance of an individual having the belief that his behaviors will lead to certain outcomes; the *Health Belief Model* identifies the “perceived benefits of action;” and the *Social Learning Theory* underscores the significance of “outcome expectations.”

**Measurement of Resistance**

In addition to the difficulties confronted in attempting to define and conceptualize resistance and noncompliance, there is yet the issue of operationalizing the construct. In fact, the major difficulty in conducting research on resistance is in the definition and operationalization of the construct. Beutler et al. (2002) have brought to our attention that besides the use of correlational studies, since experimental designs cannot be utilized, a significant limitation in studying resistance is the dearth of consensually accepted and recognized measures of trait-like resistance. Despite its significance and ubiquity, resistance has received little attention in the quantitative psychotherapy research literature.

**Self-Report Questionnaires**

The *Therapeutic Reactance Scale* (TRS) developed by Dowd, Milne, and Wise (1991) is a self-administered 28-item paper and pencil report, using a 4-point format from strongly disagree to strongly agree. The measure is designed to quantify the degree to
which an individual tends to assume negative motivational stance, i.e., an oppositional stance, based on the perception that their freedom of choice has been threatened or eliminated by an external agent. The 28 items are summed to yield a total reactance score and two correlated subscale scores (behavioral reactance and verbal reactance). When developing the measure, the authors conceptualized reactance as an individual difference variable that is relatively stable over time and across situations. The concept of psychological reactance is based on Brehm’s theory (1966) that reactance is a motivational state and is dependent on four factors: value assigned to particular freedom; belief that the individual possesses this specific freedom; degree of perceived threat to this freedom; and number of freedoms believed to be threatened (Brehm & Brehm, 1981). Internal consistency (.75 to .84) and test-retest reliabilities (.59 to .76) were adequate (Dowd et al., 1991). Support for the convergent validity of the instrument included reports of significant negative correlations between the TRS and K scale (defensiveness and desire to impress) of the MMPI and significant positive correlations between the behavioral subscale of the TRS and internal scores on Rotter’s (1966) locus of control scale (Morgan, 1986, as cited in Dowd et al., 1991). Divergent validity was supported by the low correlations of the total reactance scale with both scales of the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), the Beck Depression Inventory (Beck, 1967), and the Counselor Rating Form-Short (Corrigan & Schmidt, 1983). Results showed a relatively low correlation between the verbal and behavioral subscales (.37), indicating that they are somewhat discrete entities, yet high enough to justify the use of the total score as a meaningful construct (Dowd et al., 1991). However,
it was also found that the amount of variance accounted for by the TRS was only about 22%, indicating that reactance is only partly a trait-like variable. The measure requires further reliability and validity studies, and utility and theoretical applicability tests in differing therapeutic situations.

The Adherence Determinants Questionnaire (ADQ), a 38-item self-report instrument, was developed by DiMatteo et al. (1993) to assess a set of cognitive, motivational, social, and behavioral variables, conceptualized as relating to patient adherence in the medical care setting. Seven dimensions of patients’ adherence to medical treatment and prevention were evaluated, including: perceptions of interpersonal care; beliefs about susceptibility to disease; beliefs about severity of disease; assessments of perceived utility of adhering (efficacy and benefits vs. costs of adhering); perceptions of subjective social norms for adhering; intentions to adhere; and perceptions of supports available for and absence of barriers to adherence. The components of the ADQ were found to be generally reliable (median alpha reliability = .76). Some of the components, however, were not robustly correlated with adherence. The authors found that adherence was related most strongly to the presence of supports for and the absence of barriers to adherence.

Mahalik (1994) developed the Client Resistance Scale (CRS), which was intended to measure episodic resistance, that is interruption of the therapeutic process, and observable resistance, such as oppositional behavior. The measure was based on Greenson’s (1967) conceptualization of resistance as functioning to avoid painful affect and hence opposing: the patient’s recollection of therapeutic material, the therapist,
change, and insight. The CRS consists of five subscales reflecting the dimensions, as described above, which are being opposed. The CRS subscales have been found to be reliable; the subscales were highly related to each other, suggesting that the CRS is unidimensional. However, the subscales were also found to be differentially affected by the client, the therapist, and the therapist response mode, such as open question and closed question. This indicates that resistance may be a multidimensional phenomenon, as others have described, such as Schuller, Crits-Christoph, and Connolly (1991), and that the subscales require further examination. Each aspect of resistance may be susceptible to change when subjected to differing conditions.

The Irrational Health Belief Scale (IHBS) a 20-item scale, was developed by Christensen, Moran, and Wiebe (1999) in order to assess individual differences in the tendency to engage in health-related cognitive distortions. The measure was intended to provide investigators an alternative conceptualization of health-related cognitions that contrasts with more traditional measures of health-related appraisals. The IHBS was found to reflect a single, general distortion factor. While the authors have demonstrated that the measure is reliable and valid, further evaluation is necessary to determine the measure’s predictive validity.

Oreg (2003) developed the Resistance to Change Scale, a 16-item scale with four factors: routine seeking, emotional reaction to imposed change, short-term focus, and cognitive rigidity. These factors were conceptualized as reflecting behavioral, affective, and cognitive dimensions of change, respectively. The scale was designed to tap an individual’s tendency to resist or avoid making changes, to devalue change generally, and
to find change aversive across various contexts and forms of change. The measure was found to demonstrate convergent and discriminant validities and concurrent and predictive validities. The measure and its subscales demonstrated satisfactory reliabilities.

Measures Based on Direct Observation

Measurement of resistance from a psychoanalytic perspective has traditionally relied on rating scales (based on psychoanalytic formulations) of resistance, which are applied to tapes or transcripts of the therapy sessions (Engle & Arkowitz, in press). Graff and Luborsky (1977, as cited in Schuller et al., 1991) utilized a postsession checksheet, completed by the analyst, in order to examine the analyses and determine average ratings of resistance and transference. Luborsky, Bachrach, Graff, Pulver, and Christoph (as cited in Schuller et al., 1991), examined resistance by judging 250 words of patient speech before transference interpretations and 250 words following the interpretations on nine dimensions, including resistance. The dimensions were deemed by the authors as relevant to the theory of the timing and expected effect of interpretations.

While these measures utilized global judgements, Morgan, Luborsky, Crits-Christoph, Curtis, and Solomon (1982) developed the Patient Resistance Scale, a seven-item resistance scale based on behaviors which were considered to be resistant by psychoanalytic theory and observations. The authors rated transcripts of 20-minute psychotherapy segments from two early and two late sessions utilizing several scales, including the Patient Resistance Scale.
Utilizing transcripts from therapy sessions from 22 patients, Speisman (as cited in Schuller et al., 1991) examined the relationship between depth of therapist interpretations and verbal expressions of resistance in the statements following the interpretations. Depth was defined as the disparity between the therapist’s view of the patient’s affect and motivations and the patient’s self awareness of these. While six categories of resistance were defined: exploration, superficiality, self-orientation, self-scrutiny, opposition, and blocking, only opposition and exploration were found to be useful categories for future research. However, the author’s suggestion for future research has not been followed (Schuller et al., 1991).

Garduk and Haggard (1972, as cited in Schuller et al., 1991) chose 15 interpretations per case from four psychotherapy treatments, and each interpretation was paired with a noninterpretation from the same therapy session. The authors then evaluated the patients’ responses during the 5 minutes following each selected intervention (interpretation and noninterpretation) for various form and content qualities.

It is apparent that the research related to the psychoanalytic conceptualization of resistance, utilizing direct observation methods and rating scales, is fraught with methodological and conceptual problems. In order to begin addressing some of these problems, defining and measuring the phenomenon of resistance need to take precedence.

Schuller et al. (1991) attempted to improve upon the research by developing the Resistance Scale, a more comprehensive scale to evaluate quantitative and qualitative changes in resistance from a psychoanalytic perspective. The measure is a 19-item rating scale for assessing the frequency and intensity of various patient behaviors, which
represent resistance in psychoanalytic treatment. Their findings suggested that resistance is a multidimensional construct and the scale measures episodic existence and, to some degree, stable patient characteristics (characterological resistances). The factor analysis revealed four subtypes of resistance: Abrupt/Shifting, Flat/Halting, Oppositional, and Vague/Doubting.

**Behavioral Measures**

The *Client Resistance Coding System* is a mutually exclusive and exhaustive 8-category coding system intended to study client resistant behavior during therapy sessions. Chamberlain et al. (1984) simplified a thorough list of possibilities of client behavior into seven categories for resistance and one for cooperation. The seven categories for resistance included: Defend (self or other); Hopeless, Blame, and Complian; Challenge/Confront, Complain, and Disagree; Own Agenda and Sidetrack (avoidance of issues raised by therapist); Answer For (another family member); Intrafamily Conflict; and Disqualify (contradicting previous statements). The category for cooperative responses was labeled Nonresistant, referring to responses that were neutral, cooperative, or following the therapist’s direction. The authors found that the four categories labeled—Defend, Hopeless, Own Agenda, and Disqualify—formed a single cluster, referred to as *I can’t*. The median correlation among these variables was .30 (Chamberlain & Ray, 1988). The Challenge category was relabeled as *I won’t* as a second form of observed within-session resistance.

The coding system was used by Patterson and Chamberlain (1994) to conduct a functional analysis of client resistance encountered in parent training therapy of antisocial
children. Thus, the authors’ findings can only be applied to samples of the same type. Approximately 6% of the parents’ total behavior during treatment was coded as resistant, of which 60% consisted of “I can’t” responses. Parental resistance was found to be determined partially by the contextual circumstances (e.g., stress) and by the dispositions (e.g., depression) that clients brought into treatment. Furthermore, changes in resistance significantly covaried with changes in parenting practices, such as discipline and problem solving. That is, resistance decreased when more positive parenting skills were displayed. The authors’ findings showed that the therapists’ behaviors and feelings regarding clients were associated to the parents’ level of resistance during various treatment phases. While Patterson and Chamberlain (1991) pointed out that treatments for other forms of pathologies will face different displays of resistance, it is apparent that their work has shed light on parents of antisocial children. Hence, the understanding of resistance in other areas may be improved with the use of behavioral coding systems.

**Negative Beliefs About Change Questionnaire**

It is evident that the various measures that were described suffer for different reasons. Many of the self-report questionnaires require more validity and reliability studies. Some of the measures tap into one aspect of resistance, such as reactance. Others are specifically related to health-related behaviors. The measures based on direct observations are inadequate due to conceptual and methodological problems. Behavioral measures are in need of development. It is evident that there lacks consensually accepted and recognized measures of resistance. This interferes with conducting research on resistance, resulting in: a limited understanding of the meaning of resistance; difficulty
distinguishing between resistance and what appears to be resistance; a limited understanding of patients’ functioning; and the development of inadequate treatment interventions. With the development of stable and consistent predictive measures, we may see an increase in the amount of research conducted in the area of resistance.

The Negative Beliefs About Change Questionnaire (NBC) is a 22-item likert-scale self-report instrument designed to reflect reasons as to why people have difficulty making changes (see Appendix A). The measure is based on the cognitive-behavioral theory of resistance. The measure yields a score that reflects an individual’s level of resistance and hence, the likelihood of that person making some desired changes in their lives. The questions reflect the faulty beliefs and the schemata that underlie the individual’s resistant or noncompliant behaviors. The measure taps into dysfunctional cognitions regarding: the ability to make desired changes, having the requisite skills to make the changes, self-protectiveness, and the impact of change on the self and interpersonal relationships. Change in an interpersonal context is equally important, as it threatens an individual’s sense of emotional security. Can change result in a situation that is worse than the current one? Will something that is thought to be essential have to be given up? When asking these questions, it is apparent that people may become fearful and resistant.

The cognitive-behavioral theory states that affect and behavior are largely determined by cognitions. Accordingly, negative affect, such as hopelessness, and noncompliance with recommended tasks are also tapped into by the NBC. Unlike many of the aforementioned measures, the NBC is designed to measure resistance and predict the likelihood of change in a variety of areas, including self-care (e.g., reducing
smoking), psychotherapy (e.g., depression), and healthcare (e.g., compliance with medical regimen). In the five-point scoring system utilized in the NBC, 1 indicates that the individual disagrees strongly with the statement, 2 indicates that he somewhat disagrees with the statement, 3 indicates that he neither agrees or disagrees with the statement, 4 indicates that he somewhat agrees with the statement, and 5 indicates that he strongly agrees with the statement. Agreement with the statement is indicative of resistance and disagreement is indicative of a lack of resistance. The psychometric properties of the measure will be discussed in the results section.

**Conclusion and Rationale for the Present Study**

A review of the existing literature suggests that resistance in psychotherapy or noncompliance in medical care is a ubiquitous phenomenon. In fact, some degree of resistance is an inevitable aspect of the psychotherapeutic process. While the phenomenon interferes with the process of treatment, whether psychotherapeutic or medical, practitioners and researchers alike continue to lack a thorough understanding of resistant behaviors, their implications, and how to best decrease resistance. The complexity of the phenomenon is elucidated in the various ways in which it is defined, understood, and addressed by the different theories of psychotherapy. It is evident that a primary theoretical issue requiring further exploration is the conceptualization of the phenomenon. Different aspects of resistance are emphasized by the various theories. The many facets brought forth by the theories are somewhat diverse while sharing themes in common, such as attempting to prevent negative affect. Hence, while patient resistance is thought to derive from markedly distinct vantage points among the many
theories of psychotherapy, there appear to be behavior patterns and interpersonal processes that are common to most forms of resistance. According to Arkowitz (1996), some commonalities among the aforementioned approaches to resistance are seen in the assumptions that: (1) The indications of resistance are informative about important facets of the patient's functioning; (2) Many cases of resistance can be understood as conflict or ambivalence; (3) Many of these conflicts are between desires to change and fears or oppositional beliefs regarding change; and (4) a thorough understanding of resistance requires considering both intrapersonal and interpersonal contexts.

Research suggests that resistance is multidimensional in nature, including character traits and situation-induced states. Moreover, the research suggests that it may be helpful to distinguish between the general personality styles of resistance, such as anger and defensiveness, and in therapy states of resistance or noncompliance. Extreme forms of resistance have been referred to as reactance. Resistance or noncompliance is displayed in a multitude of behaviors, including nonverbal and verbal behaviors. Resistance is displayed cognitively, behaviorally, and affectively. Furthermore, recent research in psychotherapy outcome and behavioral health continues to discover that resistance is impacted by more than patient characteristics. Therapist/practitioner characteristics and environmental characteristics are important factors in the process, linearly as well as interactively. For example, while the trait of resistance reflects a style of coping which changes inconsistently during treatment, in-situation states of resistance may change in response to therapeutic interventions.
The ubiquity, significance, and intricacy of resistance necessitates further research in the area. Yet there is another problematic factor to take into consideration. How do we operationalize the complex construct of resistance? Consistent shortcomings of earlier work have included: difficulty capturing the various facets of resistance, methodological insufficiencies, and psychometric weaknesses. It is hoped that the proposed study will help research in the area of resistance through the development of a measure—Negative Beliefs About Change—tapping into resistance. The measure can potentially assist us in understanding what cognitions and beliefs underlie resistance and the affect and behaviors associated with the phenomenon. This may serve to enhance the conceptual clarity of resistance and its implications. What does resistance mean? How do we identify resistance? Who will benefit from treatment? What changes need to be made in the interventions in order that patients benefit from treatment?

**Project Overview and Hypotheses**

The present study focuses on evaluating the psychometric properties of the newly developed *Negative Beliefs About Change* (NBC) measure. An important feature of the present study is the exploration of how to conceptualize and to operationalize the construct of resistance. The specific goals of this study were the following: (1) to examine the structure of the measure in order to gain more information about the dimensions of resistance; (2) to evaluate the internal and external construct validities of the NBC; (3) to evaluate the reliability of the NBC; and (4) to assess the predictive validity of the NBC. To what degree does the NBC predict change? The hypotheses of
the study include: (1) resistance will correlate with related constructs and similar criteria and (2) resistance will correlate with changes in therapy.

*Hypothesis 1*

The NBC will display relationships with: defensiveness (as measured by the K-Scale of the Minnesota Multiphasic Personality Inventory-2; MMPI-2); openness to change (as measured by the 16 Personality Factor; 16PF); readiness to change (as measured by the Stages of Change measure; SOC); ability to form a working relationship (as measured by the Working Alliance Inventory; WAI- therapist and client versions); and cooperativeness (as measured by the Therapist Rating Scale; TRS).

*Specific prediction about the K Scale and the NBC.* It is predicted that there is a positive and significant relationship between the K Scale and the NBC. This prediction is based on the K Scale’s ability to tap into psychological defensiveness and denial. Individuals displaying defensiveness (higher scores) on the K-Scale tend to be resistant to treatment. Higher scores on the NBC indicate agreement with statements that reflect resistance. High negative beliefs about change will be correlated with defensiveness.

*Specific prediction about the Openness to Change Scale of the 16 PF and the NBC.* It is predicted that there is a negative and significant relationship between the Openness to Change Scale and the NBC. This prediction is based on the Openness to Change Scale’s capacity in measuring an individual’s inclination to make changes and to attempt new ways of approaching problems. Higher scores on the 16PF indicate openness to change.
Specific prediction about the Working Alliance Inventory- therapist and client versions and the NBC. It is predicted that there is a negative and significant relationship between the Working Alliance Inventory and the NBC. This prediction is based on the WAI’s ability to tap into the strength of the therapist’s and client’s working alliance. Higher scores on the WAI indicate a stronger working alliance.

Specific prediction about the SOC measure and the NBC. It is predicted that there is a negative and significant relationship between the SOC measure and the NBC. This prediction is based on the SOC measure’s capability in measuring readiness to change. Higher scores on the SOC composite score indicate greater readiness to change.

Specific prediction about the TRS and the NBC. It is predicted that there is a positive and significant relationship between the TRS and the NBC. This prediction is based on the TRS’s capacity to tap into therapists’ perception of the patient’s treatment compliance. Lower scores on the TRS indicate agreement with sentences reflecting compliance by the patient, according to the therapist.

Hypothesis 2

The NBC will correlate with changes in patient symptomatology (as measured by the Global Severity Index [GSI] of the Brief Symptom Inventory [BSI]) over the course of psychotherapy.

Specific prediction about the NBC and the Brief Symptom Inventory. It is predicted that the average NBC score will predict change in the BSI. Those who display higher scores on the NBC, reflecting higher levels of resistance, will show less change in symptomatology than those displaying less resistance on the NBC. It is predicted that the
NBC factors will predict change in the BSI. Those who display higher scores on the NBC factors, reflecting higher levels of resistance, will show less change in symptomatology than those displaying less resistance on the NBC.
Participants

Participants in the study were 29 male (40%) and 43 female (60%) outpatients who were accepted for outpatient mental health services, specifically individual therapy, at Codac Behavioral Health Services, Inc., a community mental health agency located in Tucson, Arizona. In addition to individual therapy, the agency’s outpatient mental health services included behavioral health assessments, case management, family therapy and group therapy. As seen in Table 1, the mean age of the participants was 35.3 (SD = 9.42). The participants’ self-described race/ethnicities included European-Americans (52%), Hispanic (25%), and African-American (23%). At the time of the data collection, 28% of the participants were married and co-habitating; 2.7% were married, but separated; 2.7% were widowed; 25% were single (never married); and 41.6% were divorced. Of the 72 participants, 60% had at least one child. Over half of the participants, 59.78%, had at least a high school education; 4.16% had some high school education; 19.4% had some college education; 12% were college graduates; and 4.16% had post-graduate education. Seventy-six percent of the participants were employed. In accordance with the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; American Psychiatric Association, 1994), and as seen in Table 1, Axis I psychiatric diagnoses included 42% depressive disorder, 25% adjustment disorder, 17% anxiety disorder, and 16% bipolar disorder. Table 2 displays the breakdown the specific
Table 1

*Patient Demographic, Social, and Psychiatric Characteristics (N = 72)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>M</th>
<th>%</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>35.23</td>
<td></td>
<td>9.42</td>
</tr>
<tr>
<td>Gender (% Male)</td>
<td></td>
<td>40.20</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>European American</td>
<td>52.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>23.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married and living together</td>
<td>28.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married, but separated</td>
<td>2.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>2.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>41.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents with children</td>
<td>60.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High school</td>
<td>4.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>59.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>19.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College graduate</td>
<td>12.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-graduate</td>
<td>4.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>76.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive disorder</td>
<td>42.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td>25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>17.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>16.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Assessment of Functioning (GAF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>14.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>55.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>17.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of psychiatric hospitalizations</td>
<td>20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotropic medication</td>
<td>80.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
disorders. For the purposes of this study, a control sample was not necessary since the psychometric properties of the *Negative Beliefs About Change Measure*, tapping into resistance to change in psychotherapy patients, were being evaluated.

Table 2

*Patient Psychiatric Diagnoses (N = 72)*

<table>
<thead>
<tr>
<th>Disorder</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Disorder</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Dysthymic Disorder</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Adjustment Disorder</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Anxiety Disorder</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Obsessive-Compulsive Disorder</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Bipolar I Disorder</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

Participants were given DSM-IV diagnoses by master's level or doctoral level therapists at the clinic, based on an extensive interview method which elicits information about the subjects' current symptomatology, current substance use, past psychiatric history, family history, substance abuse history, and legal history. Mental status exams are also conducted by the clinicians. Patients were also referred to one of the clinic psychiatrists for psychiatric evaluations in order to determine if psychopharmacological intervention was necessary. The psychiatrists also elicited information via the interview
method and gave DSM-IV diagnoses. For the purposes of this study, only the psychiatrists' diagnoses were utilized because of greater training in diagnosis.

**Drop-Outs**

Data were collected from 72 participants at Time 1 (prior to the first therapy session, but following the initial intake session). Seven of the participants decided they no longer wanted to participate in the study between the initial data collection and Time 2 (after the eighth therapy session) of the data collection. At Time 2 and Time 3 (after the sixteenth therapy session), 65 of the participants were still available for data collection. Four of the participants who dropped out of the study were women (three with diagnoses of Major Depressive Disorder and one with a diagnosis of Obsessive-Compulsive Disorder) and 3 were men (one with a diagnosis of Panic Disorder, one with a diagnosis of Bipolar I Disorder, and one with a diagnosis of Major Depressive Disorder).

**Criteria for Inclusion and Exclusion**

All patients who signed a consent form and demonstrated an understanding of what the study would entail were included. However, there were preexisting criteria for inclusion and exclusion since the agency had its own criteria for acceptance into individual therapy. Codac Behavioral Health Services, Inc. inclusion criteria included: a Global Assessment of Functioning Scale (GAF) (DSM-IV; American Psychiatric Association, 1994) rating of at least 45-50 in order to exclude those who were considered to be seriously mentally ill; a minimum age of 18; and a lack of financial resources or private insurance. The Global Assessment of Functioning Scale rating reflects the patient's overall functioning and is useful in following the patient's global progress. The
GAF Scale is reported on Axis V of the DSM-IV multiaxial assessment. The GAF Scale rating of 1 to 100 takes into account only psychological, social, and occupational functioning. The GAF was determined by both the therapists and psychiatrists during their respective interviews. For the purposes of this study, only the psychiatrists’ GAF Scale ratings were utilized. Exclusion criteria for patients included: crisis situations which necessitated that the individual have daily therapeutic contact; substance use and the unwillingness to terminate use; those with private insurance benefits unless the individual was willing to pay the full fee "out of pocket"; DSM-IV V codes; domestic violence perpetrators and victims; rape victims unless they were in need of medication management; and affective disorders with psychotic symptoms. Patients with these diagnoses were usually deemed more appropriate for longer term psychotherapy and were referred elsewhere. Much of the patient population at Codac Behavioral Health Services, Inc. consisted of college students, single parents, medically indigent, and those with low incomes.

**Therapists and Treatment**

The clinical staff of the outpatient mental health program providing individual therapy consisted of 10 therapists, eight of whom had master’s degrees in social work or counseling and two of whom were licensed psychologists. The therapists met as a group on a weekly basis in order to discuss their clinical cases and treatment issues. Furthermore, those with master’s degrees were also in supervision with a licensed psychologist, consisting of a weekly or bi-weekly 1 hour clinical supervision meeting. The therapists had an average of 13.5 years of postdegree clinical experience (range, 5 to
Patients were treated in individual therapy for as long as it was deemed necessary, with the average length of treatment being 10 months. The therapists utilized experiential and cognitive-behavioral approaches. While there were a number of avenues for intervention, the focus was changing overt behavior and negative automatic thoughts and dysfunctional core schema. Individual therapy sessions took place on a weekly basis for a duration of 45 to 50 minutes. Any homework assignments given by therapists were cognitive-behavioral oriented tasks.

**Design and Procedure**

**Recruitment Procedure**

Patients were required to complete intake paperwork before their first intake session. The intake packet included a demographic questionnaire; a medical questionnaire; a symptom checklist; and a financial questionnaire. A letter was included in the intake packet (see Appendix B) introducing: the purpose of the study, the requirements of individuals who chose to participate in the study, contact numbers for the graduate student and her advisor if questions remained or information was needed, and compensation for participation ($6.00 for completion of the questionnaires at each administration). The individual was asked to sign the letter and to provide a contact number if he or she had interest in participating in the study. Potential participants, those individuals who signed the letter and were accepted for treatment based on inclusionary and exclusionary criteria following their first intake session, were contacted. When potential participants were contacted by phone, they were asked if they still had interest in participating in the study. If the individual still expressed interest in participating, any
of his or her questions were answered and a meeting was scheduled prior to the individual's first psychotherapy session. The potential participant was informed that the first meeting may require an hour and a half of his or her time. Meetings took place at Codac Behavioral Health Services, Inc. An office was available for the meetings and data collection. Data collection took place in the same office for all participants and for all three time points of data collection.

**Prerequisites for Participation**

During the first meeting, the potential participant was greeted by the experimenter; verbally explained the purpose of the study and the requirements of the study; provided, again, with a contact number for Dr. Arkowitz; and informed that there was monetary compensation for participation. The potential participant was then asked to read and sign a statement of informed consent (Appendix C). In order to explain the purpose of the study, potential participants were informed that the investigator was attempting to learn: the degree to which people have made important personal changes with or without professional help and the obstacles encountered when trying to make those changes. Potential participants were informed that the requirements of the study included: completing questionnaires at three time points: before the first therapy sessions (Time 1), between the eighth and ninth sessions (Time 2), and between the sixteenth and seventeenth sessions (Time 3). Questionnaires would require 45 minutes to an hour to complete and all responses were confidential since participants were assigned a number. The questionnaires did not require identifying information. The consent form included
sections regarding: Purpose; Selection Criteria; Procedures; Risks; Benefits; and Confidentiality.

Data Collection

After signing the informed consent, the participant was given the questionnaires and the investigator left the office for one hour. Participants were informed where the examiner would be located if they had any questions or required less than an hour to complete the questionnaires. Following an hour, the investigator knocked on the door and entered the office where the participant was located. If the individual required more time, he or she was allotted additional time. Following the completion of the questionnaires, the participant was compensated with $6.00. This process took place at each administration (Times 1, 2, and 3) of the measures. Data collection time points were based on the research of Howard, Kopta, Krause, and Orlinsky (1986), introducing a psychotherapy dosage model in which dose was measured by the number of sessions and the effect of treatment was measured by the percentage of patients improved or the normalized probability of improvement for an individual patient. Howard et al. (1986) found a positive relationship characterized by a negatively accelerated curve; that is, the more psychotherapy, the greater the probability of improvement, with diminishing returns at higher doses. A linear dose-effect relationship was estimated so that after 8 weekly sessions, 53% of the patients improved; after 26 sessions, 74% of the patients improved; and after 52 sessions, 83% of the patients improved. Demographic, social, and psychiatric information was gathered from patients' charts. Therapist measures were
administered at Time 2 and Time 3. Participants were not informed that their therapists were administered questionnaires regarding their working alliance.

**Measures**

*Measure Under Psychometric Examination*

*Negative Beliefs About Change Questionnaire (NBC).* The Negative Beliefs About Change Questionnaire, the focus of this study, is a 22-item self-report questionnaire which is designed to measure resistance or noncompliance to change (see Appendix A). The NBC was administered at Times 1, 2, and 3. The composition of items included in the NBC was based on the questionnaire developer’s (Arkowitz, 1999) review of theoretical writings, expert opinion, and previous research. Each item is rated on a five-point scale: 1 indicates that the individual disagrees strongly with the statement; 2 indicates that the individual disagrees somewhat with the statement; 3 indicates that the examinee neither agrees or disagrees; 4 indicates that the participant agrees somewhat with the statement; and 5 indicates that the individual agrees strongly with the statement. Any of the following can be assumed to be an area of resistance if a score of 4 or 5 is indicated on the numbered item: 1. lack of prerequisite skills; 2. hopelessness; 3. lack of self-efficacy; 4. procrastination; 5. forgetfulness; 6. lack of knowledge; 7. lack of time; 8. lack of motivation; 9. disappointment in self; 10. fear of disappointing others; 11.lack of motivation; 12. lack of desire; 13. fear of disappointing self; 14.fear of future expectations; 15. fear of disappointing self; 16. fear of future expectations; 17. disappointment in self; 18. impact on relationship; 19. fear of change; 20. fear of change; and 21. lack of self-efficacy; and 22. fear of change. To calculate the score for
The NBC, the mean is calculated—the ratings for the 22 items are summed and divided by 22.

The measure represents an attempt to improve upon previous methods of studying resistance. As previously stated, consistent shortcomings of earlier work have included difficulty capturing the various facets of resistance and psychometric weaknesses. As seen in the psychotherapy literature and the medical noncompliance literature, it is evident that there is a need to operationalize the construct of resistance in order that the phenomenon can be identified, understood, and appropriately dealt with from a clinical perspective. Unlike other measure of resistance/noncompliance, the NBC is designed to measure resistance and predict the likelihood of change in a variety of areas, including self-care, psychotherapy, and healthcare.

The NBC is based on the cognitive-behavioral theory of resistance. The items reflect the faulty beliefs and the schemata that underlie the individual’s resistant or noncompliant behaviors. The measure taps into internal impediments to change, i.e. dysfunctional cognitions regarding: the ability to make desired changes; having the requisite skills to make the changes; self-protectiveness; and the impact of change on the self and interpersonal relationships. The cognitive-behavioral theory states that affect and behavior are largely determined by cognitions. Accordingly, negative affect, such as hopelessness, and noncompliance with recommended tasks are also tapped into by the NBC.

The purpose of this study was to examine the psychometric properties of the NBC. In order to do so, the construct validity, reliability, and predictive validity were
evaluated. The validity of a scale concerns what the test measures and how well it does so; it informs test users of what can be inferred from the test scores. The construct-related validity of a test is the extent to which the test measures a theoretical construct or trait (Anastasi, 1988). A construct is developed to explain and organize observed response consistencies. The issue of internal structure is very critical to the question of construct validation. Factor analysis is particularly relevant to construct validation, as it was developed as a means of identifying psychological traits. Factor analysis is a refined statistical technique for analyzing the interrelationships of behavior data. A major purpose of this statistical technique was to simplify the descriptions of behavior by decreasing the number of categories from an initial multiplicity of test variables to a few common factors or traits.

The internal consistency reliability estimate represents an estimate of the consistency or homogeneity of items representing a construct. The more homogeneous the domain, the higher the inter-item consistency (Anastasi, 1988). While the factor analysis taps into the correlation between items, the reliability estimate also takes into account the number of items in the factor. In addition to examining inter-item consistency, investigating the inter-factor correlations is also important in order to assess whether the factors underlying the NBC items conform to theoretical expectation (i.e., is an individual who is resistant to change as measured by one dimension also found to be resistant as measured by another NBC dimension?).

As Campbell and Fiske (1959) demonstrated, convergent and discriminant relationships between operational measures of constructs (e.g., psychological tests) and
other operational criteria are fundamental to establishing the network that forms the basis of construct validation. Scores from a test designed to measure a specific construct should correlate highly with other measures of that construct and should show relatively low correlations with measures of dissimilar constructs. Such a pattern of relationships must hold if the measure is to be considered a valid reflection of the construct.

Despite the scientific significance of construct validation, many clinical investigators are usually interested in the more practical side of test validity—predictive validity. Most test users are interested in the more practical issues of how well a test can register in psychological status from emotional disorders, stress-inducing life events, treatment interventions, or many other factors (Derogatis & Melisaratos, 1983). For the purposes of this study, the predictive validity issue is: does the NBC predict change in symptomatology?

Assessment Measures

*Openness to Change Scale of the 16 Personality Factor Questionnaire (16PF).*

The 16 PF Fifth Edition (Russell & Karol, 1994) contains 185 items that comprise the 16 primary personality factor scales as well as an Impression Management Index, assessing social desirability. The 16PF is designed to measure the broad range of normal adult personality. Each scale contains 10 to 15 items. The sixteen factor scales include: Warmth; Reasoning; Emotional Stability; Dominance; Liveliness; Rule-Consciousness; Social Boldness; Sensitivity; Vigilance; Abstractedness; Privateness; Apprehension; Openness to Change; Self-Reliance; Perfectionism; and Tension. The 16PF scales are bipolar in nature—both high and low scores have meaning. In addition to the primary
scales, the 16PF contains a set of five scales that combine related primary scales into global factors of personality. The global factors include: Extraversion; Anxiety; Tough-Mindedness; Independence; and Self-Control. A particular aspect of Cattell’s factor-analytic method (as cited in Russell & Karol, 1994) merits explanation, because it represents a departure from that used in the development of some other personality measures. Cattell anticipated that distinct personality traits may nonetheless be related to one another. Thus, rather than extracting factors forced to be independent of one another and consequently uncorrelated (orthogonal factors), Cattell chose to use oblique factors, allowing for intercorrelation. This assumption is reflected at the global factor level, where related primary factors cluster along the five global scales (Russell & Karol, 1994). The 16PF uses “standardized ten” (sten) score scales, which range from 1-10 with a mean of 5.5 and a standard deviation of 2. Internal consistency coefficient alpha reliabilities for the 16 primary factors average .74, with a range from .64 to .85. Test-retest reliability coefficients for the 16 primary factors average .80 for a 2-week interval, ranging from .69 to .87, and .70 for a 2-month interval, ranging from .56 to .79. For the two-week interval, coefficients for the global factors range from .84 to .91, with a mean of .87. For the 2-month interval, test-retest coefficients for the global factors range from .70 to .82, with a mean of .78.

The Openness to Change Scale, consisting of 14 items, was the only 16 PF factor utilized in this study since it was the only relevant factor (see Appendix D). Since the entire 16 PF measure was not administered, the validity of the Openness to Change Scale may have been modified since the psychometric properties are based on the entire
measure. However, the scale was utilized as one of the validation criteria for the NBC, and other validation criteria, tapping into the same construct, were also utilized. The 16PF was administered at Time 1. This trait is interpreted as a straightforward measure of an individual’s attitude toward change. According to the authors, based on the content of the 14 items and the Openness to Change Scale’s correlations with other scales of tests of normal personality (discussed below), those who score high tend to think of ways to improve things, are oriented towards trying something new, and tend to enjoy experimenting. A sten score in the range of 1 through 3.9 indicates that the individual is low in openness to change; those who score low prefer life to be familiar and predictable, even if life is not ideal. They tend to think more trouble arises from questioning and changing satisfactory methods than from rejecting promising new approaches. Low scores indicate problems with flexibility and adjustment. A sten score in the range of 4 through 6.9 is in the moderate range. A sten score in the range of 7 through 10 indicates that the individual is in the high range in openness to change; these individuals are inclined to change their ways if they perceive the status quo as dull or unsatisfactory (Russell & Karol, 1994). Those who score high, tend to say that they like thinking of new and better ways of doing things.

The test-retest reliability coefficient for the Openness to Change Scale is .83 at the 2-week interval and .70 at the 2-month interval. Cronbach’s coefficient alpha (internal reliability) is .64. The Openness to Change Scale (.49) contributes to the Independence global factor, as do the Dominance, Social Boldness, Vigilance primary factor scales. The Openness to Change Scale (.68) also contributes to the Receptive pole of the Tough-
Mindedness global factor, as do the Warmth, Sensitivity, and Abstractedness primary factor scales. The Openness to Change Scale’s elements of nonconformity and openness to new ideas are reflected in its correlations with the Expedience (-.25) and Abstractedness (.31) primary factors. Those who score low on the Expedience scale tend to be flexible and have a need for autonomy. Those who are high in abstractedness display thinking that is related to new approaches or unconventional solutions.

In order to provide evidence of convergent and discriminant validity, Conn and Rieke (1994) compared the 16PF to several tests of normal personality: the Personality Research Form (PRF; Jackson, 1970), the California Psychological Inventory (CPI; Gough, 1987), the NEO Personality Inventory (NEO PI-R; Costa & McCrae), and the Myers-Briggs Type Indicator (MBTI; Briggs & Myers). The link between openness to new ideas and perception by way of insight is shown in the Openness to Change Factor’s correlations with the PRF’s Understanding Scale ($r = .30, p<.01$), the MBTI’s Intuitive Scale ($r = .54, p<.01$), and the CPI’s Psychological-mindedness ($r = .35, p<.01$) and Intellectual Efficiency ($r = .26, p<.01$) scales. This openness is also reflected in the Openness to Change Scale’s positive correlations with the PRF’s Change ($r = .42, p<.01$) and Sentience ($r = .30, p<.01$) scales; CPI’s Flexibility Scale ($r = .26, p<.01$); and nearly all of NEO’s openness facets, including Fantasy ($r = .27, p<.01$), Aesthetics ($r = .40, p<.01$), Actions ($r = .43, p<.01$), Ideas ($r = .30, p<.01$), and Values ($r = .28, p<.01$). The facet of independent-mindedness in the Openness to Change Scale is shown in the correlations with the CPI’s Independence ($r = .25, p<.01$), Achievement via Independence ($r = .32, p<.01$), and Capacity for Status ($r = .28, p<.01$) scales, and in the
modest correlation with the PRF's Autonomy Scale ($r = .20$, $p<.01$) (Russell & Karol, 1994).

**K-Scale of the Minnesota Multiphasic Inventory-2 (MMPI-2).** The MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) is a broad-band standardized questionnaire designed to assess major patterns of personality and emotional disorders. The MMPI-2 consists of 567 items that could be answered “true” or “false.” The inventory consists of the following ten clinical/personality scales: Hypochondriasis (32 items); Depression (57 items); Hysteria (60 items); Psychopathic-Deviate (50 items); Masculinity-Femininity (56 items); Paranoia (40 items); Psychasthenia (48 items); Schizophrenia (78 items); Hypomania (46 items); and Social Introversion (69 items). The contents deal largely with psychological, psychiatric, physical symptoms, or neurological symptoms. The questionnaire also consists of seven validity scales: K (Correction Scale; 30 items); ? (Cannot Say Scale); L (Lie Scale; 15 items); F (Infrequency Scale; 60 items); VRIN (Variable Response Inconsistency Scale); TRIN (True Response Inconsistency Scale); and Fb (F back Scale; 40 items with low endorsement frequencies). The original MMPI consisted of the first four validity scales and the MMPI-2 consists of all seven validity scales. The VRIN and TRIN scales were designed to complement the traditional validity indicators; neither scale reflects a particular item content. The K Scale was relevant to this study, as it taps into defensiveness. The K Scale will be discussed in further detail following the description of the MMPI-2 in its entirety.
On the clinical scales, a T-score of 44 and below is in the low range; 41-55 is in the modal range; 56-65 is in the moderate range; 66-75 is in the high range; and 76 and above is in the very high range. Mean T-score elevations on the clinical scales over 65 suggest a generally high level of psychological problems being reported. On the F Scale, a T-score of 44 and below is in the low range (acceptable record); 45-55 is in the modal range (acceptable record); 56-70 is in the moderate range (probably valid); 71-90 is in the high range (questionable validity); and 91 and above is in the very high range (probably invalid). On the L Scale, a T-score of 49 and below is in the low range (possibly faking bad); 50-59 is in the modal range (valid); 60-69 is in the moderate range (probably valid); 70-79 is in the high range (questionable validity); and 80 and above is in the very high range (probably invalid). On the Cannot Say Scale, a T-score of 0-1 is in the low range (low); 2-10 is in the modal range (probably valid); 11-29 is in the moderate range (questionable validity); and 30 and above is in the high range (probably invalid). On the K Scale, a T-score of 40 and below is in the low range (fake bad responding); 41-55 is in the modal range (balance between self protectiveness and self-disclosure); 56-70 is in the moderate range (moderate defensiveness); and 71 and above is in the high range (faking good).

A meta-analysis of 403 control and psychiatric samples indicated that the original MMPI is effective in discriminating between psychiatric and control groups, neurotic and psychotic groups, as well as smaller factors relating to personality disorder and gender-role identification (Hathaway & McKinley, 1983). Raw scores on the standard validity and clinical scales of the MMPI-2 and of the original MMPI are remarkably similar. That
is, MMPI and MMPI-2 raw scores were correlated for normal and psychiatric subjects, and all correlations were greater than .98 (Graham, 1993). In terms of external correlates of MMPI-2 scores, basic clinical scale scores were correlated with behavioral ratings of subjects provided by their partners. The pattern of correlations suggested both convergent and divergent validity for the clinical scales of the MMPI-2. Most of the correlates are consistent with those previously reported for the original MMPI. There were differences, however, in correlates between men and women (Graham, 1993). In addition, Graham (1993) reported behavioral correlate data for psychiatric patients. Scores on the MMPI-2 clinical were correlated with ratings of symptoms that were completed by psychiatrists and psychologists who had observed and interviewed the patients. Again, the patterns of correlations suggested convergent and divergent validity, with differences in correlates between men and women.

Test-retest reliabilities at approximately one week for normative samples is in the modest range. Reliabilities for males ranged from a low of .67 for the Paranoia Scale to a high of .92 Social Introversion Scale. A parallel sample of females over the same retesting interval yielded similar reliabilities ranging from .58 for the Paranoia Scale to .91 for the Social Introversion Scale. Internal consistency coefficients for the MMPI-2 validity and clinical scales range from .34 to .85 for the normative sample of men and .37 to .87 for the normative sample of women. The Hypochondriasis, Psychasthenia, Schizophrenia, and Social Introversion scales appear to be the most internally consistent scales. The Hypomania, Masculinity-Femininity, and Paranoia scales appear to be the least internally consistent scales (Groth-Marnat, 1999).
The K Scale, which reflects an individual's degree of psychological defensiveness, is perhaps the most sophisticated of the validity scales of the MMPI-2 (Groth-Marnat, 1999). The K Scale is relevant to the current study and hence the only MMPI-2 scale utilized (see Appendix E). The K Scale was utilized as a validity criterion for the NBC and administered at Time 1 only. The 30 items of this scale were selected by comparing the responses of known psychiatric patients who still produced normal MMPIs (clinically defensive) with "true" normals who also produced normal MMPIs. Those items that differentiated between the two groups were included in the K Scale.

Test-retest coefficients for the K Scale are .84 for men and .81 for women (Butcher et al., 1989). Internal consistency coefficients are .74 for men and .72 for women (Butcher et al., 1989). Twenty-four of the 30 K Scale items are highly correlated with the Edward's Social Desirability Scale (Edwards, 1964), a measure of social favorability (Butcher, 1990).

As previously stated, a T-score of 40 and below is interpreted as "fake-bad" responding. That is, the score is indicative of inadequate defenses; the individual may be exaggerating problems as plea for help or may be experiencing confusion that is organic or functional in nature. A T-score of 41-55 is in the average range and interpreted, as stated before, as a healthy balance between self-protectiveness and self-disclosure or between self-evaluation and self-criticism. Examinees producing scores in this range tend to be well adjusted and to display few signs of emotional disturbance. They are self-reliant and capable of dealing with daily problems. A T-score of 56-70 may indicate moderate defensiveness and no acknowledgement of distress. Finally, a T-score of 71 or
above is indicative of "faking good"—an invalid profile and a reliance on denial. Accordingly, scores above the mean on the K Scale may reflect the tendency to slant one's answers in a direction that minimizes implications of poor emotional control and ineffectiveness (Graham, 1993). According to Butcher (1990), these scores reveal attitudes that are contrary to easy engagement in therapy. If interpreted properly, the K Scale can be a useful indicator of treatment readiness or, in some cases, resistance to becoming involved in treatment (Butcher, 1990). For the purposes of this study, the K Scale as an indicator of profile validity is not relevant since the other scales of the MMPI-2 are not being examined. However, the level of defensiveness indicated by the individual's K Scale T-score is of central importance since it is being used as a validation criteria for the NBC.

*The Beck Depression Inventory, Second Version (BDI-II).* The BDI-II (Beck, Steer, & Brown, 1996) is a 21-item self-report measure designed to assess the cognitive, affective, motivational, and physiological symptoms of depression (see Appendix F). Each item is comprised of four statements reflecting the severity level (on a scale of 0 to 3) and individuals are asked to select the statement that best describes their recent feelings (i.e., the past 2 weeks) and their experiences. Any of the following can be assumed to be an area of difficulty if a score of 3 is indicated on the numbered item: 1. sadness; 2. pessimism; 3. sense of failure; 4. dissatisfaction; 5. guilt; 6. expectation of punishment; 7. dislike of self; 8. self-accusation; 9. suicidal ideation; 10. episodes of crying; 11. irritability; 12. social withdrawal; 13. indecisiveness; 14. change in body image; 15. retardation in work; 16. insomnia; 17. fatigability; 18. loss of appetite; 19.
loss of weight; 20. somatic preoccupation; and 21. low level of energy. The following scores are used to indicate the general level of depression: 5 to 9 indicates no or minimal depression; 10 to 18 indicates mild to moderate depression; 19 to 29 indicates moderate to severe depression; 30 to 63 indicates severe depression; below 4 indicates faking good; lower than usual scores for normals; and above 40 indicates significantly above even severely depressed persons, suggesting possible exaggeration of depression; possibly characteristic of histrionic or borderline personality disorders (Groth-Marnat; 1999).

Factor analytic studies indicate two factors. The first factor is considered to represent a Somatic-Affective dimension of self-reported depression. The items loading on this dimension include: Loss of Pleasure; Crying; Agitation; Loss of Interest; Indecisiveness; Loss of Energy; Changes in Sleeping Pattern; Irritability; Changes in Appetite; Concentration Difficulty; Tiredness or Fatigue, and Loss of Interest in Sex. The highest loadings on this factor are for Tiredness or Fatigue (.84) and Loss of Energy (.71), but this factor also contains other somatic symptoms, such as Crying and Irritability. The second factor is considered to reflect a Cognitive dimension of self-reported depression. The second factor’s salient symptoms are for Sadness, Pessimism; Past Failure; Guilty Feelings; Punishment Feelings; Self-Dislike; Self-Criticalness; Suicidal Thoughts or Wishes, and Worthlessness. With the exception of Sadness, which also tends to load on the first factor 9.33), all of these symptoms are cognitive and psychological in nature. The highest loadings on this factor are for Past Failure (.81) and Worthlessness (.73) (Beck, Steer, & Brown, 1996).
Internal consistency coefficients for the BDI-II are very good-.92 for psychiatric patients and .93 for normal controls. The test-retest correlation (1 week apart) of .93 is significant (p<.001). With regard to convergent validity of the BDI-II, the data indicate that the BDI-II is positively (p<.001) related to both the Beck Hopelessness Scale (BHS; Beck & Steer, 1988) (r = .68) and the Scale for Suicide Ideation (SSI; Beck, Kovacs, & Weissman, 1979) (r = .37). The two psychological constructs measured by the BHS and the SSI have been described as positively related to depression (Beck & Steer; 1987, 1988, 1991). Moderate correlations have been found with similar scales that also rate depression, such as the Hamilton Psychiatric Rating Scale for Depression, r = .71 (HRSD; Hamilton, 1960). Whereas the BDI-II seems to measure primarily cognitive and affective aspects of depression (negative self focus, anhedonia, functional impairment), the Hamilton Rating Scale for Depression measures predominantly somatic symptoms (anxiety, weight, sleep, anhedonia/energy) (Brown, Schulberg, & Madonia, 1995). The correlation between the BDI-II and the Hamilton Rating Scale for Anxiety (HARS; Hamilton, 1959) is .47 (p<.01). The correlation between the HRSD-R and HARS-R is .51 (p<.0001). These findings indicate a robust discriminant validity between depression and anxiety. The BDI has also been able to discriminate psychiatric from nonpsychiatric populations.

For the purposes of this study, the Beck Depression Inventory-II was utilized in order to attain a general depression score and to ensure that the NBC is measuring resistance to change rather than depression (discriminant validity criterion). The BDI-II was administered at Time 1. The two constructs are related since individuals who are
ill exhibiting symptoms of depression tend to resist change for various reasons ranging from fatigue to indecisiveness. Hence, the strongest case for the validity of the NBC can be made if it correlates with the array of validation criteria independent of the examinees' level of depression.

*Stages of Change Questionnaire (SOC).* The stages of change construct and subsequently, the questionnaire, were formulated as a fundamental part of a transtheoretical therapy model which has been developed as an integrative model of change since the field of psychotherapy is rather fragmented (Prochaska & DiClemente, 1983). The Transtheoretical Model of Change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1998) is an integrative model of behavior change, involving emotions, cognitions, and behavior, which describes how people modify a problem behavior or develop a positive behavior. The stages of change is the central organizing construct of the model. The model also includes a series of outcome measures, including the Decisional Balance and the Temptation scales and a series of independent variables, the Processes of Change—10 cognitive and behavior activities that facilitate change. The Transtheoretical Model is a model of intentional change focusing on the decision making of the individual. The primary focuses of other models of health promotion have included social influences on behavior and biological influences on behavior.

The stage construct is the central organizing construct of the model because it represents a temporal dimension. Change implies phenomena occurring over time; however, this facet was largely ignored by other change theories. That is, behavior
change has often been construed as an event, such as quitting smoking or overeating. The Transtheoretical Model, on the other hand, understands change as a process involving progress through a series of five stages: Precontemplation; Contemplation; Preparation; Action; and Maintenance. Precontemplation is the stage in which the individual does not intend to take action in the foreseeable future (next six months). The individual may be in this stage because he or she is uninformed or not completely informed about the consequences of his or her behavior. He or she may have attempted to change several times and become demoralized about his or her ability to change. When individuals in this stage present for psychotherapy, they often do so due to pressure from others, such as a spouse who threatens to leave. Individuals in this stage tend to avoid discussing or thinking about their behaviors. They are often characterized in other theories as unmotivated, resistant, or not ready for health promotion programs.

Contemplation is the stage in which the individual is aware that a problem exists and is seriously thinking about overcoming it in the next six months, but has not yet made a commitment to take action. The individual is more aware of the pros of changing, but is also struggling with his or her positive assessments of the dysfunctional behavior and the requisite effort, energy, and loss to overcome the behavior. The balance between the costs and benefits of changing may result in ambivalence about taking action and remaining in this stage for a lengthy time period. Preparation is a stage which combines behavioral criteria and intention. In this stage, the individual intends to take action in the immediate future (next month) and has made some small behavioral changes in the past year. For example, an individual may have delayed his first cigarette of the day by 30
minutes. Although there has been a reduction in the problem behavior, he has not yet reached a criterion for effective action, such as abstinence from smoking (DiClemente et al., 1991). Action is the stage in which the individual has made specific overt modifications in his or her life-style, i.e., behavior, experiences, and/or environment, within the past six months. This stage involves the most overt behavioral changes and requires significant amounts of time and energy. Individuals are classified in the action stage if they have successfully modified the dysfunctional behavior (met a specific criterion) for a time period of one day to six months. Maintenance is the stage in which individuals are working to prevent relapse, but without applying change processes as frequently as do individuals in the action stage. Individuals in this stage struggle less with relapse and become increasingly confident that they can continue their change. In sum, two different concepts are utilized in the temporal dimension of the model. Before the target behavior change takes place, the temporal dimension is conceptualized in terms of behavioral intention and after the change has occurred, it is conceptualized in terms of duration of behavior. Regression occurs when the individual reverts to an earlier stage of change; relapse is one form of regression, involving regression from the Action or Maintenance stage to an earlier stage. However, individuals can regress from any stage to an earlier one (Velicer, Prochaska, Fava, Norman, & Redding, 1998).

As previously stated, the Transtheoretical Model also involves a series of intermediate/outcome measures that are sensitive to progress through all stages. These constructs include the Decisional Balance Scale, Self-efficacy or Temptation, and the target behavior. The Decisional Balance construct reflects the individual’s relative
weighing of the pros and cons of changing derived from the model of decision making (Janis & Mann, 1977). The weighting of the importance of the pros and cons involves cognitive changes. Self-efficacy/Temptations construct represents the individual’s situation specific confidence that he or she can cope with high-risk situations without relapsing to his or her unhealthy behaviors. This construct was adapted from Bandura’s self-efficacy theory (Bandura, 1977, 1982). The Temptation construct reflects the intensity of urges to engage in a specific behavior when in the midst of difficult situations; it is in effect the converse of the self-efficacy construct. Three factors reflect the most common types of tempting situations: negative affect or emotional distress; positive social situations; and craving (Velicer, DiClemente, Rossi, & Prochaska, 1990). The Transtheoretical Model also includes independent variables, that is processes of change. These are the covert and overt activities that individuals use to progress through the stages. Ten processes have received empirical support (Prochaska, Velicer, DiClemente, & Fava, 1988); the first five are classified as “Experiential Processes” and are utilized mostly for the early stage transitions and the last five are classified as “Behavioral Processes” and are utilized primarily for the later stage transitions. The “Experiential Processes” include: increasing awareness; emotional arousal; social reappraisal; environmental opportunities; and self reappraisal. The “Behavioral Processes” include: stimulus control; helping relationship; counter conditioning; rewarding; and committing.

The Stages of Change Questionnaire is designed to be a continuous measure and consists of 32 items comprising four scales (see Appendix G). The four scales are: Pre-
Contemplation (items 1, 5, 11, 13, 23, 26, 29, 31); Contemplation (items 2, 4, 8, 12, 15, 19, 21, 24); Action (items 3, 7, 10, 14, 17, 20, 25, 30); and Maintenance (items 6, 9, 16, 18, 22, 27, 28, 32). The SOC Questionnaire was administered at all 3 time points and utilized as a validity criterion for the NBC. Each scale consists of eight items; the items all loaded heavily on their respective scales, with no loadings on other components. Preparation is not included as a scale in the questionnaire since the item loadings showed that it was not measuring a separate, distinct stage. These four components account for 58% of the variance. The following Coefficient Alphas were determined for the scales: Pre-Contemplation, .88; Contemplation, .88; Action, .89; and Maintenance, .88 (McConnaughy, Prochaska, & Velicer, 1983). A Likert-type, five-point response format is utilized with 1 being strongly disagree, 2 indicating disagree, 3 being undecided, 4 being agree, and 5 being strongly agree. Since the stages are considered to be continuous and not discreet, an individual can score high on more than one of the four stages. Individual stage scores can be determined or profiles which emerge from the sample can be examined.

Outcome Measure

Global Severity Index (GSI) of the Brief Symptom Inventory (BSI). The BSI (Derogatis, 1992), which is a 53-item self-report symptom inventory, is designed to reflect the psychological symptom patterns of psychiatric and medical patients as well as nonpatient respondents (see Appendix H). The BSI is essentially the brief form of the Symptom Checklist-90-Revised (SCL-90-R) scale. Each item of the BSI is rated on a five-point scale of distress (0-4), with 0 indicating "not at all," 1 indicating "a little bit," 2
being "moderate," 3 indicating "quite a bit," and 4 being "extremely." The BSI consists of nine primary symptom dimensions: Somatization (7 items); Obsessive-Compulsive (6 items); Interpersonal Sensitivity (4 items); Depression (6 items); Anxiety (6 items); Hostility (5 items); Phobic Anxiety (5 items); Paranoid Ideation (5 items); and Psychoticism (5 items). A T-score above 63 on any symptom dimension indicates high problem severity. In addition to the nine primary symptom dimensions, the BSI is also scored and profiled in terms of three global indices of distress. The global indices are: the Global Severity Index (GSI), a weighted frequency score based on the sum of the ratings the individual has assigned to each symptom; the Positive Symptom Total (PST), a frequency count of the number of symptoms the subject reported; and the Positive Symptom Distress Index (PSDI), a score reflecting the intensity of distress, corrected for the number of symptoms endorsed (Boulet & Boss, 1991). Research with the global indices has confirmed that the indices reflect distinct aspects of psychological disorder (Wood, 1986). They were developed and added to provide more flexibility in overall evaluation of the patient’s psychopathological status and to provide psychometric appraisal at a more general level of psychological well-being. The 53 items, nine dimensions, and three global indices reflect three levels of interpretation of the BSI from individual symptoms, through syndromal representations, to general evaluation of psychological status (Derogatis, 1992).

Internal consistency coefficients for the nine primary dimensions of the BSI are quite good, ranging from a low of .71 on the Psychoticism dimension to a high of .85 on Depression (Derogatis, 1992). Test-retest coefficients over a period of two weeks range
from a low of .68 for Somatization to a high of .91 for Phobic Anxiety. The global indices display very good test-retest coefficients, ranging from a low of .80 on the Positive Symptom Total to a high of .90 on the Global Severity Index, providing strong evidence that the BSI represents consistent measurement across time (Derogatis, 1992).

Correlations between the BSI and the SCL-90-R across the nine primary symptom dimensions they share are very high ranging from .92 to .99. There is evidence for convergent validity for the BSI with: the clinical scale of the MMPI (Dahlstrom, 1969), with coefficients ranging from .32 to .55; the Wiggins content scales of the MMPI (Wiggins, 1996), with coefficients ranging from .30 to .72; and the Tryon cluster score (Tryon, 1966), with coefficients ranging from .30 to .67. The following BSI symptom dimensions: Interpersonal Sensitivity; Depression; Anxiety; Paranoid Ideation; and Psychoticism demonstrate maximum correlations with MMPI scales that are clearly convergent. The Psychasthenia Scale of the MMPI correlates with: the Interpersonal Sensitivity dimension (.55), Depression dimension (.46), Anxiety dimension (.48), and Psychoticism dimension (.38). The Schizophrenia Scale of the MMPI correlates with: the Interpersonal Sensitivity dimension (.49), Depression dimension (.52), Anxiety dimension (.48), and Psychoticism dimension (.48). The Social Introversion Scale of the MMPI correlates with the Interpersonal Sensitivity dimension (.44). The Paranoia Scale of the MMPI correlates with the Paranoid Ideation dimension (.35). The Psychopathic Deviate Scale of the MMPI correlates with the Psychoticism dimension (.40).

Seven of the nine hypothesized symptom constructs of the BSI emerged as factors. The factor analysis produced the following nine factors: Psychoticism;
Somatization; Depression; Hostility; Phobic Anxiety; Obsessive-Compulsive; Anxiety (Panic Anxiety); Paranoid Ideation; and Anxiety (General Anxiety). High loadings are shown on the Somatization; Depression, Hostility; Obsessive-Compulsive; and Paranoid Ideation factors, demonstrating well-defined dimensions. Four of the five items included in the Psychoticism dimension load on the empirically derived Psychoticism Factor. Two items assigned to the Interpersonal Sensitivity dimension also correlate highly with this factor, as does an item from the Depression dimension. The loadings on the Phobic Anxiety Factor are substantial. The Anxiety dimension split into two more specific component dimensions of "Panic Anxiety" and "General Anxiety." One of the Interpersonal Sensitivity dimension items loads on the Depression Factor. Thus, there are only minor divergences between the empirical factor structure and the dimensional structure. Seven of the nine symptom constructs are reproduced. The Anxiety dimension is split into two well-defined clinical component dimensions, and the Interpersonal Sensitivity dimension is not well represented by a linear combination, which may be related to the dimension being defined by a limited set of four items.

For the purposes of this study, the GSI was utilized as a measure of general symptomatic severity of psychiatric disturbance. The measure served as an assessment of general and global changes and was administered at all 3 time points. The GSI was utilized as a predictive validity criterion. The GSI combines information on both the numbers of symptoms and the intensity of perceived distress. The GSI is the single best indicator of current distress level and is utilized in most instances where a single summary measure is required (Derogatis & Melisaratos, 1983). High level of distress is
suggested if the GSI is above a T-score of 63. As previously stated, the GSI has a high test-retest coefficient of .90.

**Process Measures**

*Working Alliance Inventory (WAI)*. In an attempt to measure Bordin’s (1979) integrative model of the alliance, Horvath and Greenberg developed the WAI (Horvath & Greenberg, 1986). Their goal in creating a new alliance measure was threefold: to measure alliance factors in all types of therapy, to document the relation between the alliance measure and the theoretical constructs underlying the measure, and to connect the alliance measure to a general theory of therapeutic change (Horvath, 1994). The WAI was developed to measure Bordin’s pantheoretical, dyadic, and tripartite conceptualization of the therapeutic alliance: the bond (interpersonal attachments, liking, trusting, etc.), the agreement on goals (consensus on the short-and long-term outcome expectations between the therapist and the client), and the agreement on tasks (agreements or consensus between therapist and client with respect to “what is to be done” in therapy and how various activities in therapy will contribute to the resolution of the client’s problem; the in-counseling behaviors and cognitions that are essential to the counseling process). The alliance, as conceptualized by Bordin, was both a facilitative condition that allowed the implementation of a variety of therapeutic tasks effectively while being a beneficial therapeutic agent on its own (Horvath, 1995). Bordin’s conceptualization differed from previous conceptualizations since it emphasized the client-therapist interdependence. The scale provides both an overall alliance score and also an assessment of Bordin’s three aspects of the alliance. The WAI also provides an
evaluation of Horvath and Luborsky's (1993) two core facets of the alliance measured by most scales: (1) therapist-patient affective attachments and (2) willingness or collaboration to invest in the therapy process (Martin, Garske, & Davis, 2000).

The WAI is a 36-item self-report instrument; each item is rated on a 7-point scale (1 = never, 7 = always), with higher scores reflecting a better alliance and 4 reflecting a moderate working alliance. Recently, others have developed a shortened version of these scales (Tracey & Kokotovic, 1989). The WAI consists of three 12-item subscales: Goals, Bond, and Tasks as described above. The WAI is composed of a primary general alliance factor and three secondary specific factors (three subscales). For the purposes of this study, the general alliance factor was of interest, which is best represented by the WAI total score. In order to measure the alliance from different perspectives, Horvath and his colleagues developed patient-, therapist-, and independent observer-rated versions of the WAI. The WAI client and therapist versions were utilized for this study (see Appendices I and J). The WAI client and therapist versions were administered at Time 2 and Time 3. These measures also acted as validation criteria for the NBC.

Reliability estimates for the whole instrument, based on item homogeneity (Cronbach’s Alpha) range from .84 to .93. The client’s version of the instrument has an estimated alpha of .93 and the therapist’s version of the WAI has a reliability estimate of .87. The individual scales are also reasonably stable. The client’s version of the instrument has an estimated alpha of .85 to .92 for the Bond scale and .92 for the Task scale. The therapist’s version of the Goal and Task scales is satisfactory (.82 to .87). However, the Bond scale’s reliability estimate is .68. Test-retest reliability for the whole
scale across a 3-week interval is .80; the range is between .66 and .74 for the component scales (Plotnicov, 1990). The three WAI dimensions—Bond, Goal, and Task—are strongly correlated, with intercorrelations ranging from .60s to .80s.

There is also support for the convergent and discriminant validity of the WAI. The WAI correlates positively with other alliance measures. Safran and Waller (1991) reported correlations between the global California Psychotherapy Alliance Scale (CALPAS) scores and the WAI of .84, .79, and .72 for the Goal, Task, and Bond scales respectively. The correlations between the WAI (client’s version) and the Helping Alliance and the Vanderbilt scales are also significant although slightly lower (Tichenor & Hill, 1989). Somewhat lower overlap exists between the WAI and more global measures, such as the Relationship Inventory (RI; Barrett-Lennard, 1962) of the therapeutic relationship. The Task dimension is the most independent of most independent of empathy, positive regard, unconditionality, and congruence (correlations ranging from .3 to .49); the Goal dimension is more overlapping (correlations ranging from .43 to .59); and the Bond dimension is the most correlated (.6 to .74) to the RI scales (Jones; 1988). The question of discriminant validity has also been examined. The WAI’s relation to the Counselor Rating Form (CRF; LaCrosse, 1980)—a measure assessing relationship dimensions of expertness, attractiveness, and trustworthiness—based on Strong’s (1968) Interpersonal Influence Model. The overlap among the CRF scales and the WAI dimensions range from 6% in some studies to 40% in other studies, indicating that the relation between these two measures is significantly lower than the relation between the WAI and other alliance measures. Furthermore, the results indicated that the
two instruments (WAI and CRF) correlate with different measure of outcome (Safran & Wallner, 1991).

**Therapist Rating Scale (TRS).** The TRS is an eight item self-report therapist likert-like scale designed to measure the therapist’s perception of the patient’s compliance or noncompliance in treatment (see Appendix K). The statements tap into treatment compliance and the openness and motivation of the patient. The items are rated on a 4-point scale (1 to 4), reflecting degrees of agreement with the individual statements, ranging from strongly agree to strongly disagree. Agreement with the statement is indicative of the therapist perceiving the patient as being compliant with treatment. The scale was developed by the graduate student conducting this study in order that a measure, in addition to the WAI, tap into the working relationship between the therapist and the patient. The scale was intended to be comparable to a checklist, requiring only a few minutes to complete, since the WAI consists of 36 items and each item requires more time to read than the TRS items. There is no information available on the psychometric properties of this scale. The TRS was administered to the therapists at Time 2 and Time 3, also acting as a validation criterion for the NBC.
CHAPTER 4
RESULTS

Description of the Sample

In order to evaluate the psychometric properties of the newly constructed measure—*Negative Beliefs about Change*—data were collected from outpatients currently in psychotherapy. Seventy-two subjects contributed data at Time 1 (prior to first therapy session, but following the initial intake session). Sixty-five of these subjects were still available at Time 2 (after the eighth therapy session) and Time 3 (after the sixteenth session). Stated somewhat differently, 7 subjects dropped out of treatment by Time 2 of the study.

The sample included 29 male (40%) and 43 female (60%) psychiatric outpatients (see Table 1). The mean age of patients was 35.3 (SD = 9.42). Self-described race/ethnicity included 52% European-Americans, 25% Hispanics, and 23% African-Americans. Psychiatric diagnoses consisted of 42% depressive disorder, 25% adjustment disorder, 17% anxiety disorder, and 16% bipolar disorder. On the Global Assessment of Functioning Scale, 13.5% of the participants had a rating of 45; 14% had a rating of 50; 55.5% had a rating of 55; and 17% had a rating of 60. One-fifth of the subjects had a history of at least one psychiatric hospitalization, and 80% of the participants were on anti-depressive and anti-anxiety medication during data collection.

In order to evaluate the difference between the NBC scores of the 7 participants (M = 2.90, S.D. = .29) who dropped out of the study and the 65 participants (M = 2.54,
S.D. = .91) who completed questionnaires at all three time points, a t-test was conducted. The mean difference of -.36 was significant (t = -2.31, p = .03).

**Construct Validity**

At the time that this study of the psychometric properties of the *Negative Beliefs about Change* (NBC) was being developed, it was one of the few measures under construction which sought to assess resistance or noncompliance to treatment. In order to evaluate whether the NBC measures what it purports to measure, i.e., to evaluate its validity, the first step undertaken here is to evaluate its construct validity. Hence, factor analysis is applied to the 22 items of the NBC in order to assess whether they reflect the “core” domains, or dimensions, of resistance as defined from a cognitive-behavioral perspective.

The set of 22 NBC items, utilizing the 5-point scoring system developed for the measure, were submitted to a common factor analysis (Kim & Mueller, 1978) rather than a principal components analysis. While both methods identify the underlying constructs represented in a given set of items, the rationale for this choice was that since these items presumably tap a common core of content, i.e., resistance to change, the common factor model was a more appropriate tool for deriving the dimensions underlying them than was principal components analysis. The principal components analysis involves a mathematical reexpression of the “information,” i.e., the common and unique variation, in the original set of items into a smaller, more fundamental set of dimensions. The common factor model works only on the common, or “shared,” variance among a set of items. Given that fact, the derived factors are more likely to better reflect the content and
"structure" of the theoretical construct which presumably gave rise to the items in the first place.

A four-factor solution explaining more than 57% of the variance in these items seemed to sensibly and parsimoniously summarize the fundamental dimensions of the measure. A factor loading of .30 was utilized as the minimum necessary to consider an item as contributing to the definition of a factor (Hair, Tatham, Anderson & Black, 1992).

As seen in Table 3, the first of these factors, Hopelessness, consists of six items, NBC 1, NBC 2, NBC 3, NBC 4, NBC 8, and NBC 21, with factor loadings ranging from .53 to .85. The second factor, Fear of Change, is composed of nine items, NBC 9, NBC 10, NBC 11, NBC 12, NBC 17, NBC 19, NBC 20, NBC 21, and NBC 22. The factor loadings for these nine items range from .50 to .68. The third factor derived, Fear of Disappointing Oneself and Others, consists of four items, NBC 13, NBC 14, NBC 15, and NBC 16, with the factor loadings of these items ranging from .55 to .79. The fourth and final factor, Noncompliance, is composed of only two items, NBC 5 and NBC 7. The two factor loadings for these items are .64 and .66. Because this last factor consists of two items only and does not account for the variance, it will not be included in the remaining analyses.

These factors reflect the construct of resistance as defined from a cognitive-behavioral perspective, which conceptualizes it as negative beliefs about change and subsequently noncompliant behaviors. Items 6 and 18 are not included in any of the factors because, as can be seen in Table 3, they are not pure indicators of any one factor. That is, these items split on two factors. See Appendix A describing these items.
Table 3

*Factor Analysis*

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Four Factors of the NBC</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>of NBC at</td>
<td>Hopelessness</td>
<td>Fear of Change</td>
<td>Fear of Disappointing Self and Others</td>
<td>Noncompliance</td>
<td></td>
</tr>
<tr>
<td>Time 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_2</td>
<td>*.854</td>
<td>.318</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_3</td>
<td>*.846</td>
<td>.318</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_8</td>
<td>*.715</td>
<td>.466</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_1</td>
<td>*.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_21</td>
<td>*.647</td>
<td>**.502</td>
<td></td>
<td>.351</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_4</td>
<td>*.527</td>
<td>.391</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_6</td>
<td>.464</td>
<td></td>
<td>.411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_9</td>
<td></td>
<td></td>
<td>**.681</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_22</td>
<td>.388</td>
<td>**.625</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_19</td>
<td>.342</td>
<td>**.595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_11</td>
<td>.513</td>
<td>**.586</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_20</td>
<td></td>
<td></td>
<td>**.564</td>
<td>.305</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_10</td>
<td></td>
<td></td>
<td>**.558</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_12</td>
<td></td>
<td></td>
<td>**.512</td>
<td>.352</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_17</td>
<td></td>
<td></td>
<td>**.495</td>
<td>.303</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_18</td>
<td>.376</td>
<td>.423</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_16</td>
<td></td>
<td></td>
<td>***.791</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_14</td>
<td></td>
<td></td>
<td>***.635</td>
<td>.292</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_15</td>
<td></td>
<td></td>
<td>***.590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_13</td>
<td>.333</td>
<td></td>
<td>***.551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBCT 1_5</td>
<td>.327</td>
<td></td>
<td>.383</td>
<td>****.663</td>
<td></td>
</tr>
<tr>
<td>NBCT 1_7</td>
<td></td>
<td>.318</td>
<td></td>
<td>****.638</td>
<td></td>
</tr>
</tbody>
</table>

*Note*

* Indicator of Factor 1
** Indicator of Factor 2
*** Indicator of Factor 3
**** Indicator of Factor 4
Reliability

Because the three derived factors of the NBC appear to provide support for the internal construct validity of the NBC, reliability analyses were undertaken to estimate their internal consistency. It should be noted that factor analysis does not necessarily guarantee reliability as the latter is not only a function of the correlation between items, which the factor analysis also taps, but also the number of items in the factor.

Cronbach’s alpha coefficients were computed for the set of items operationally defining each factor (see Table 4). All four factors displayed evidence of satisfactory reliability. The reliabilities of the Hoplessness (.92) and Fear of Change (.87) factors were quite good. The reliability of Fear of Disappointing Self and Others factor (.77) was certainly serviceable (George & Mallery, 1999; Nunnally, 1978).

Table 4

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopelessness</td>
<td>.92</td>
</tr>
<tr>
<td>Factor 2</td>
<td></td>
</tr>
<tr>
<td>Fear of Change</td>
<td>.87</td>
</tr>
<tr>
<td>Factor 3</td>
<td></td>
</tr>
<tr>
<td>Fear of Disappointing Self and Others</td>
<td>.77</td>
</tr>
</tbody>
</table>

As can be seen in Table 5, the correlations between the three factors of the NBC were positive, and generally of moderate size with the exception of the correlation
between the Hopelessness and Fear of Change factors which was strong (.68). These correlations indicate that individuals who report higher scores on any one of these factors tend to report higher scores on all of the others (all, p = .01). Stated somewhat differently, these correlations suggest that the factors underlying the 22 NBC items conform to theoretical expectation. That is to say, individuals who are resistant to change as measured by any one dimension tend to be resistant to change as defined by any of the two remaining dimensions.

Table 5

_Pearson Correlations for NBC Factors_

<table>
<thead>
<tr>
<th></th>
<th>Factor 1 Hopelessness</th>
<th>Factor 2 Fear of Change</th>
<th>Factor 3 Fear of Disappointing Self and Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 Hopelessness</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2 Fear of Change</td>
<td>0.68*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Factor 3 Fear of Disappointing Self and Others</td>
<td>0.38*</td>
<td>0.49*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 6 presents the descriptive statistics, i.e., means and standard deviations of the three NBC factors and the “overall” NBC average, i.e., 22-item score. In the five-point scoring system utilized in the NBC, 1 indicates that the individual disagrees strongly with the statement, 2 indicates that he somewhat disagrees with the statement, 3 indicates that he neither agrees or disagrees, 4 indicates that he somewhat agrees with the
statement, and 5 indicates that he agrees strongly with the statement. Agreement with the statement is indicative of resistance or noncompliance and disagreement is indicative of a lack of resistance. As can be seen below, on average, the 72 respondents show modest levels of hopelessness, but moderate levels of fear of change and fear of disappointing themselves and/or others. The overall level of resistance is in the moderate range.

Table 6

<table>
<thead>
<tr>
<th>NBC Factor</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hopelessness (H)</td>
<td>2.45</td>
<td>1.18</td>
</tr>
<tr>
<td>2. Fear of Change (FC)</td>
<td>2.62</td>
<td>.99</td>
</tr>
<tr>
<td>3. Fear of Disappointing Self &amp; Others (FDSO)</td>
<td>2.93</td>
<td>1.08</td>
</tr>
<tr>
<td>4. Overall NBC 22-Item Score</td>
<td>2.57</td>
<td>.87</td>
</tr>
</tbody>
</table>

**External Construct Validity**

In order to demonstrate construct validity, concurrent validity must also be shown; that is to say, in the present context it must also be demonstrated that the NBC correlates highly with other measures presumably measuring the same construct, i.e., resistance. There are five validation criteria available for use in this investigation. These measures included: (1) the Openness to Change Scale of the Sixteen PF (SXPFT1), (2) the K Scale of the MMPI which has been used to characterize defensiveness on the part
of MMPI-2 respondents, (3) the Stages of Change Measure (SOC) which evaluates readiness to change, (4) the Working Alliance Inventory (therapist and patient versions) which assesses how well the therapeutic dyad is doing in conducting the work of the treatment, and (5) the Therapist Rating Scale for Patient Compliance which is a screening tool for assessing patient resistance. Each of these measures were correlated with the average or “overall” score of the 22 NBC items as well as the scores on the three NBC factors—(1) Hopelessness, (2) Fear of Change, and (3) Fear of Disappointing Self and Others.

In Table 7 the descriptive statistics, i.e., means and standard deviations of the measures constituting the validation criteria are presented. On the MMPI-2, a T-score between 41 and 55 is in the average range and interpreted as a healthy balance between self-protectiveness and self-disclosure or between self-evaluation and self-criticism. A T-score of 40 and below is indicative of inadequate defenses; that is, subjects may be exaggerating problems as a plea for help or they are experiencing confusion that may be organic or functional in nature. A T-score between 56 and 70 may indicate moderate defensiveness and no acknowledgement of distress. The scores are indicative of a defensiveness that needs to be taken into account in interpreting other MMPI-2 scores, especially scores above 65 which strongly suggest a response set that invalidates the profile. T-scores of 71 and above is indicative of “faking-good” invalid profile and a reliance on denial (Graham, 1993). As can be seen in Table 7, on average, the 72 respondents are in the average range of defensiveness, displaying a healthy balance between self-protectiveness and self-disclosure.
Table 7

Descriptive Statistics of Validation Criteria

<table>
<thead>
<tr>
<th>Validation Criteria</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMPI-2- K Scale</td>
<td>45.65</td>
<td>8.73</td>
<td>72</td>
</tr>
<tr>
<td>16 PF-Openness to Change Scale</td>
<td>5.51</td>
<td>2.05</td>
<td>72</td>
</tr>
<tr>
<td>Beck Depression Inventory</td>
<td>21.25</td>
<td>12.05</td>
<td>72</td>
</tr>
<tr>
<td>Stages of Change- Pre-contemplation</td>
<td>2.09</td>
<td>.73</td>
<td>72</td>
</tr>
<tr>
<td>Stages of Change- Contemplation</td>
<td>3.92</td>
<td>.63</td>
<td>72</td>
</tr>
<tr>
<td>Stages of Change- Action</td>
<td>3.68</td>
<td>.88</td>
<td>72</td>
</tr>
<tr>
<td>Stages of Change- Maintenance</td>
<td>3.08</td>
<td>.84</td>
<td>72</td>
</tr>
<tr>
<td>Therapist Rating Scale (Time 2)</td>
<td>2.39</td>
<td>.45</td>
<td>65</td>
</tr>
<tr>
<td>Working Alliance Inventory--therapist (Time 2)</td>
<td>4.74</td>
<td>.73</td>
<td>65</td>
</tr>
<tr>
<td>Working Alliance Inventory--client (Time 2)</td>
<td>5.53</td>
<td>.77</td>
<td>65</td>
</tr>
</tbody>
</table>

On the 16PF, a stanine score in the range of 1 through 3.9 indicates that the individual is low in openness to change, preferring life to be predictable and familiar, even if life is not ideal. A stanine score in the range of 4 through 6.9 is in the moderate range. A stanine score in the range of 7 through 10 indicates that the individual is in the high range in openness to change; these individuals are inclined to change their ways if they perceive the status quo as dull or unsatisfactory (Russell & Karol, 1994). As can be seen in Table 7, on the average, the 72 respondents are in the moderate levels in their openness to change.

On the Beck Depression Inventory, a score in the range of 5 to 9 indicates no or minimal depression; a score in the range of 10 to 18 indicates mild to moderate
depression; a score in the range of 19 to 29 indicates moderate to severe depression; a score in the range of 30 to 63 indicates severe depression; and a score above 40 is significantly above even severely depressed persons, suggesting possible exaggeration of depression. However, significant levels of depression are still possible. A score below 4 indicates a possible denial of depression, “faking good” (Groth-Marnat, 1999). As can be seen in Table 7, on the average, the 72 respondents are in the moderate to severe level of depression.

On the Stages of Change (SOC) measure, 1 indicates that the individual strongly disagrees with the statement, 2 indicates that he or she disagrees with the statement, 3 indicates that he or she neither agrees or disagrees (undecided), 4 indicates that he or she agrees with the statement, and 5 indicates that he or she strongly agrees with the statement. On the Pre-contemplation items, agreement with the items indicates that the individual is not yet in the Pre-contemplation stage; agreement with the Contemplation, Action, or Maintenance items indicates that he or she is in that particular stage or stages (Prochaska, Diclemente, & Norcross, 1998). As can be seen in Table 7, on the average, the 72 respondents disagree with the Pre-contemplation items, agree with the Contemplation items, agree with the Action items, and are undecided about the Maintenance items.

The remaining three measures were applied to 65 subjects only because their first administration was at time 2, when there were 65 subjects remaining in the study. On the Therapist Rating Scale, 1 indicates that the respondent (therapist) strongly agreed with the statement, 2 indicates that he or she agreed with the statement, 3 indicates that he or
she disagreed with the statement, and 4 indicates that he or she strongly disagreed with the statement. Agreement with the statement is indicative of the therapist perceiving the patient as being compliant with treatment and disagreement is indicative of the therapist perceiving the patient as being resistant to treatment. As can be seen in Table 7, on average, the 8 therapists rating 65 subjects perceive their clients as being somewhat compliant with treatment.

On the Working Alliance Inventory, both therapist and client forms, 1 indicates that the client or therapist believed that the process (development of therapeutic bond, agreement on tasks, or agreement on goals) described in the statement never takes place, indicating a lack of a working alliance; 2 indicates that the respondent believed that the process described in the statement rarely takes place; 3 indicates that the respondent believed that the process described in the statement occasionally takes place; 4 indicates that the respondent believed that the process described in the statement sometimes takes place, a moderate working alliance; 5 indicates that the respondent believed that the process described in the statement often takes place; 6 indicates that the respondent believed that the process described in the statement very often takes place; and 7 indicates that the respondent believed that the process always takes place, indicating a very strong working alliance (Horvath, 1994). As can be seen in Table 7, on average, the 8 therapists rating the 65 patient subjects on the WAI-therapist version, perceived their working alliance with their clients as being moderate. On average, the 65 respondents on the WAI-client version perceived their working alliance with their therapists to be moderately strong.
Prior to conducting this validation analysis, the four “stages” of the Prochaska Stages of Change measure—(1) Precontemplation, (2) Contemplation, (3) Action, and (4) Maintenance—were submitted to a principal components analysis in order to reduce these four measures to a single composite, if possible. This analysis did, in fact, yield a single component, which accounted for 59% of the variation in the four individual stage measures. A principal component summary score was utilized in order to make use of all of the information and to summarize the information in the items into a single summary score. The purpose is not to explain the structure of the measure, but rather to simplify and summarize the information. The principal component summary score was then correlated with each of the original stage measures used in the principal components analysis (Dunteman, 1989). These correlations are displayed in Table 8. These correlations indicated that the resultant component is clearly, and sensibly, interpretable.

Table 8

<table>
<thead>
<tr>
<th>Correlation Between Four Stages and Principal Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1</td>
</tr>
<tr>
<td>Stages of Change Contemplation</td>
</tr>
<tr>
<td>Stages of Change Action</td>
</tr>
<tr>
<td>Stages of Change Maintenance</td>
</tr>
<tr>
<td>Stages of Change Pre-contemplation</td>
</tr>
</tbody>
</table>

That is to say, higher scores on the principal component identify subjects who were “ready to change” as indicated by substantial positive “loadings” (correlations) between the Contemplation ($r = .91$), Action ($r = .79$), and Maintenance ($r = .69$) scores...
and the derived component as well as a substantial negative correlation ($r = -0.65$) between Precontemplation and the derived component. (nb: this negative correlation implies that higher scores on the component are associated with subjects who, even in the Precontemplation stage, endorse statements indicative of a readiness to change).

Table 9 presents the correlations among the resistance measures and the measures included to establish construct validity. As seen in Table 9, the K Scale of the MMPI is significantly and negatively correlated negatively with the overall Negative Beliefs about Change score ($r = -0.23$, $p<0.05$) and the NBC Fear of Disappointing Others component ($r = -0.25$, $p<0.04$). These correlations are counterintuitive, since it was expected that those who were higher in resistance to change on the NBC, would also score higher on the K Scale, reflecting increased defensiveness. None of the correlations between any of the NBC measures and the 16 PF Openness to Change Scale are statistically significant. The greatest number of significant relationships at the .01 level are displayed among the NBC measures and the Stages of Change measure. That is, the derived Stages of Change composite score is significantly and negatively correlated with the Overall NBC measure ($r = -0.33$, $p<0.01$) and two of the three NBC components (Hopelessness, $r = -0.43$, $p<0.01$, and Fear of Change, $r = -0.34$, $p<0.01$). That is to say, for the most part, those individuals who report themselves to be resistant to change based on the array of NBC measures also deny a readiness to change as recorded by the Stages of Change measure. The Working Alliance Inventory- therapist version also displays a significant correlational relationship with the Fear of Change component of the NBC ($r = -0.28$, $p<0.05$). Those individuals who report themselves to be resistant to change based on the
Table 9

**Correlations Among Resistance Measures and Validation Criteria**

<table>
<thead>
<tr>
<th></th>
<th>r</th>
<th>p</th>
<th>K Scale Time 1</th>
<th>16 PF Time 1</th>
<th>Stages of Change Composite Score</th>
<th>Working Alliance Inventory-Therapist Time 2</th>
<th>Working Alliance Inventory-client Time 2</th>
<th>Therapist Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Score:</td>
<td>- .23</td>
<td>&lt; .05</td>
<td>.13</td>
<td>-.33</td>
<td>-.22</td>
<td>-.33</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>22 NBC Items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC: Hopelessness</td>
<td>- .22</td>
<td>.07</td>
<td>-.13</td>
<td>-.43</td>
<td>-.16</td>
<td>-.22</td>
<td>.07</td>
<td>.56</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>.26</td>
<td>&lt; .01</td>
<td>.19</td>
<td>.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC: Fear of Change</td>
<td>- .17</td>
<td>.17</td>
<td>-.09</td>
<td>-.34</td>
<td>-.28</td>
<td>-.36</td>
<td>.17</td>
<td>.19</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>.45</td>
<td>&lt; .01</td>
<td>&lt; .05</td>
<td>&lt; .01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC: Fear of Disappointing Self/Others</td>
<td>- .25</td>
<td>&lt; .04</td>
<td>-.15</td>
<td>.09</td>
<td>-.01</td>
<td>-.29</td>
<td>-.10</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>.21</td>
<td>.48</td>
<td>.97</td>
<td>&lt; .02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>72</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

r = Pearson Correlation  
p = Significance Level  
n = Number of Cases

Fear of Change component, also report a weaker working alliance with their therapists based on their therapists’ ratings of the alliance. The Working Alliance Inventory-client version is significantly, and negatively, correlated with the Overall NBC measure (r = -.33, p<.01), the Fear of Change component (r = -.36, p<.01), and the Fear of Disappointing Self and Others component (r = -.29, p<.02). None of the correlations
between any of the NBC measures and the Therapist Rating Scale are statistically significant.

Table 10 presents the correlations among the various validation criteria. As can be seen in Table 10, the K Scale of the MMPI-2 significantly, and negatively, correlates with the Openness to Change Scale of the 16PF ($r = -.26$, $p<.03$). That is, those who

Table 10

*Correlations Among Validation Criteria Measures*

<table>
<thead>
<tr>
<th>Validation Criteria</th>
<th>Validation Criteria</th>
<th>KSCALE</th>
<th>SXPFT1</th>
<th>SOC Composite Score T1</th>
<th>WA12-T</th>
<th>WA12-C</th>
<th>Therapist Rating Scale T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSCALE1</td>
<td>r</td>
<td>1</td>
<td>-.26</td>
<td>-.15</td>
<td>-.32</td>
<td>-.02</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>&lt;.03</td>
<td>.22</td>
<td>&lt;.01</td>
<td>.88</td>
<td>&lt;.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>SXPFT1</td>
<td>r</td>
<td>1</td>
<td>.17</td>
<td>.08</td>
<td>.25</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.15</td>
<td>.53</td>
<td>&lt;.05</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>72</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>SOC Composite Score</td>
<td>r</td>
<td>1</td>
<td>.17</td>
<td>.05</td>
<td>-.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.18</td>
<td>.72</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>72</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>WA12-T</td>
<td>r</td>
<td>1</td>
<td>.50</td>
<td>-.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>WA12-PT</td>
<td>r</td>
<td>1</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapist Rating Scale T2</td>
<td>r</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>

$r = $ Pearson Correlation  
$p = $ Significance Level  
$n = $ Number of Cases
display higher levels of defensiveness on the K Scale also display lower levels of openness to change on the Openness to Change Scale. The K Scale of the MMPI-2 also significantly, and negatively, correlates with the WAI-therapist version ($r = -.32, p<.01$). Respondents who display higher levels of defensiveness on the K Scale, are also perceived by their therapists as having a poorer working alliance. The WAI-client version is significantly correlated with the Openness to Change of the 16PF ($r = .25, p<.05$) and the WAI-therapist version ($r = .50, p<.01$). That is, displaying more openness to change is associated with respondents perceiving themselves as having a stronger working alliance with their therapists. Furthermore, both the therapists and the patients agree on the strength of their working alliance. The Therapist Rating Scale ($r = .30, p<.02$) significantly correlates with the K Scale of the MMPI-2. That is, those respondents who display higher levels of defensiveness on the K Scale, are also rated by their therapists as being more resistant to treatment, according to the Therapist Rating Scale. The Therapist Rating Scale also significantly, and negatively, correlates with the Working Alliance Inventory –client version ($r = -.32, p = .01$) and the therapist version ($r = -.76, p = .01$). Those patients who are rated as less resistant by their therapists on the Therapist Rating Scale, also report a stronger working alliance with their therapists as rated by themselves and their therapists.

Since the strongest case for the validity of the NBC can be made if it displays statistically significant, sizeable, and interpretable correlations with the array of validation criteria independent of the respondents’ levels of depression, a partial correlation analysis was employed. Before exploring these correlations, a regression
analysis was conducted in which the Beck Depression Inventory at time 1 was predicted from the four principal components of the NBC. In fact, as can be seen in Table 11 a regression analysis in which the Beck Depression Inventory at T1 was predicted from the four principal components of the NBC generated a multiple correlation coefficient (R) of .65 between these two measures indicating that these two constructs, i.e., depression and resistance (NBC 1: Hopelessness; NBC 2: Fear of Change; and NBC 3: Fear of Disappointing Self and Others) are strongly correlated with each other.

Table 11

Beck Depression Inventory Predicted from the NBC Factors

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.65</td>
<td>.43</td>
<td>.39</td>
<td>9.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R² Change</th>
<th>F change</th>
<th>df₁</th>
<th>df₂</th>
<th>Sig. F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>.43</td>
<td>12.44</td>
<td>4</td>
<td>67</td>
<td>.002</td>
</tr>
</tbody>
</table>

Interestingly, however, as can be seen in Table 12, only the Hopelessness component displayed a statistically significant, unique relationship to the BDI (β = .59, p<.01). This suggests that the aforementioned strong relationship between depression and resistance is largely driven by Hopelessness per se. The other two NBC components--Fear of Change, and Fear of Disappointing Self and Others--which are related to Hopelessness, are apparently not uniquely related to depression suggesting that these two constructs, resistance and depression, are related.
Hopelessness, are apparently not uniquely related to depression suggesting that these two constructs, resistance and depression, are related.

Table 12

*Relationship Between NBC Factors and Beck Depression Inventory*

<table>
<thead>
<tr>
<th>NBC Factor 1</th>
<th>Std. Coefficients</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopelessness</td>
<td>.58</td>
<td>.00</td>
</tr>
<tr>
<td>NBC Factor 2</td>
<td>.02</td>
<td>.92</td>
</tr>
<tr>
<td>Fear of Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC Factor 3</td>
<td>.10</td>
<td>.36</td>
</tr>
<tr>
<td>Fear of Disappointing Self/Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC Factor 4</td>
<td>.03</td>
<td>.77</td>
</tr>
<tr>
<td>Noncompliance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P = significance level

Table 13 presents partial correlations between the “overall” (22-item average) Negative Beliefs about Change measure as well as the three components derived from a principal components analysis of the 22 items of this measure (Hopelessness, Fear of Change, and Fear of Disappointing Self and Others) and each of the aforementioned validation criteria, controlling for the Beck Depression Inventory scores at T1.

As can be seen in Table 13, the “overall” NBC measure and each of the three NBC components are unrelated to the K Scale of the MMPI-2, the Openness to Change Scale
Table 13

**Partial Correlation Coefficients Among NBC Measures and Validation Criteria**

**Controlling for Beck Depression Inventory at Time 1**

<table>
<thead>
<tr>
<th>NBC MEASURES</th>
<th>K Scale Time 1</th>
<th>16 PF Time 1</th>
<th>Stages of Change Composite Score</th>
<th>Working Alliance Inventory-Therapist Time 2</th>
<th>Working Alliance Inventory-Client Time 2</th>
<th>Therapist Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson r df</td>
<td>Pearson r df</td>
<td>Pearson r df</td>
<td>Pearson r df</td>
<td>Pearson r df</td>
<td>Pearson r df</td>
</tr>
<tr>
<td></td>
<td>sig. level</td>
<td>sig. level</td>
<td>sig. level</td>
<td>sig. level</td>
<td>sig. level</td>
<td>sig. level</td>
</tr>
<tr>
<td>NBC Total</td>
<td>-.09 (69) .45</td>
<td>-.07 (69) .55</td>
<td>-.35 (69) &lt;.01</td>
<td>-.30 (62) &lt;.02</td>
<td>-.39 (62) &lt;.01</td>
<td>.12 (62) .35</td>
</tr>
<tr>
<td>Factor 1</td>
<td>-.06 (69) .63</td>
<td>-.07 (69) .55</td>
<td>-.49 (69) .00</td>
<td>-.24 (62) &lt;.06</td>
<td>-.27 (62) .03</td>
<td>.09 (62) .46</td>
</tr>
<tr>
<td>Hopelessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>-.04 (69) .71</td>
<td>-.04 (69) .76</td>
<td>-.34 (69) .00</td>
<td>-.33 (62) &lt;.01</td>
<td>-.39 (62) .00</td>
<td>.19 (62) .14</td>
</tr>
<tr>
<td>Fear of Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>-.17 (69) .16</td>
<td>-.12 (69) .34</td>
<td>.12 (69) .31</td>
<td>-.02 (62) &lt;.02</td>
<td>-.30 (62) &lt;.02</td>
<td>-.11 (62) .40</td>
</tr>
<tr>
<td>Fear of Disappointing Self/Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.16 (69) .34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = degrees of freedom

of the Sixteen PF, or The Therapist Rating Scale (all, p>.05). On the other hand, most of these same four measures exhibit statistically significant, interpretable relationships with the Stages of Change Composite score and both the Working Alliance Inventory scores provided by the patient and therapist. More specifically, the Stages of Change composite score displays weak to moderate, negative correlations with the “overall” NBC measure (r = -.35, p<.01), the Hopelessness component (r = -.49, p<.01), and the Fear of Change
component \( (r = -.34, p<.01) \). Not only are these correlations generally statistically significant and of reasonable strength, but they also exhibit the anticipated signs. That is to say, individuals who are resistant on these measures are less ready to make therapeutic change. This same pattern of findings also applies to both the therapist and patient Working Alliance Inventory scores. Most of the same NBC measures also exhibit weak to moderate, negative correlations with each of these two validation criteria. That is, the WAI-therapist version relates weakly to moderately to the "overall" NBC measure \( (r = -.30, p<.02) \) and the Fear of Change component \( (r = -.33, p<.01) \). Again, these correlations indicate that there is an association between patients displaying more resistance and these same patients being rated by their therapists as having a poorer working alliance. Moreover, these characterizations are corroborated by the patients. More Specifically, the WAI-client version displays weak to moderate, negative correlations with the "overall" NBC measure \( (r = -.39, p<.01) \), the Hopelessness component \( (r = -.27, p<.04) \), the Fear of Change \( (r = -.39, p<.01) \), and the Fear of Disappointing Self/Others \( (r = -.30, p<.02) \). Again, these correlations indicate that there is an association between patients displaying more resistance and their reporting the quality of the working alliances with their therapists to be poorer. Taken together, these findings provide a "mixed picture" of the validity of the NBC. For three of the six validation measures, there is no discernible relationship to the NBC. For the remaining three measures, there is a fairly clear, consistent and compelling relationship to the overall NBC and most of its components.
Predictive Validity

The next step in the process of attempting to validate the NBC was to evaluate whether it was able to predict change in symptomatology. In order to assess the predictive validity of the NBC, eight regression models were executed—four simultaneous multiple regression analyses and four stepwise multiple regression analyses. Both setwise and stepwise strategies were utilized in order to conduct an exhaustive analysis of the predictive validity. The simultaneous regression analyses will be described in this section.

Setwise Multiple Regression Analyses

The first two are residualized change score models in which change in the BSI global symptom rating scale from T1 (pre-treatment) to T2 (eight weeks) is predicted from the (1) “overall” NBC average, i.e., 22-item, score and (2) the three factors derived from these same items. The next two residualized change score models address the same questions but over a longer time interval, i.e., from T1 (pre-treatment) to T3 (sixteen weeks). For all four models, simultaneous multiple regression analysis, that is a hierarchical, setwise regression modeling strategy is used (Cohen, Cohen, West, & Aiken, 2003). Specifically, the T1 or “pre-treatment” measure of the BSI global symptom rating scale is entered as the first “stage” of the model building process. In the next stage, the three NBC factors are entered, as a set, into the regression model. The factors are entered as a set because they are three interrelated aspects of the construct of resistance that are being examined as one conceptual whole. The logic of the analyses dictates hierarchical, setwise regression modeling, as it imposes order on the analysis in
order that the effects of time 1 can be partialed out of time 3. Table 14 presents the
descriptive statistics, i.e., means and standard deviations of the BSI. On the BSI, a
Global Severity Index T-score of 50 is the mean. If the respondent has a GSI score
greater than or equal to 63, then the individual will be considered a positive diagnosis or
case (Deragotis, 1992). As can be seen below, on the average, the 72 respondents are
symptomatic enough to be considered as having positive diagnoses.

Table 14

*Descriptive Statistics of the Global Severity Index of the BSI*

<table>
<thead>
<tr>
<th>Predictive Criterion</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI</td>
<td>65.64</td>
<td>10.78</td>
<td>72</td>
</tr>
</tbody>
</table>

The purpose of this first analysis was to evaluate the relationship between the
average NBC score and change in the BSI from time 1 to time 2. As displayed in Table
15, the T1 measure of the BSI is a strong predictor of its T2 counterpart ($\beta = .84$, $F =
146.41, p<.01$). Stated somewhat differently, the BSI at Time 1 “explains” 70% of the
variance in its Time 2 counterpart. The sign of this variable’s standardized partial
regression coefficient indicates that participants who were more symptomatic at T1
remain more symptomatic at T2. The 22-Item NBC Score is also significantly related to
change in the BSI Global Rating Scale from time 1 to time 2, but as is displayed in the
table, it accounts for only an additional 2% of the variation in the Time 2 BSI measure
[R^2 Incremental = .02, F = 4.21, df = (1, 62), p<.05]; Cohen et al. (2003) suggest that variance increments of this magnitude are “small.”

Table 15

*Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale T2 Predicted from the “Overall” 22-Item NBC Score*

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>F</th>
<th>p</th>
<th>R^2 Incremental</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale_{T1}</td>
<td>.84</td>
<td>146.44</td>
<td>&lt;.01</td>
<td>.70</td>
<td>&lt;.01</td>
</tr>
<tr>
<td><strong>Stage 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale_{T1}</td>
<td>.77</td>
<td>107.35</td>
<td>&lt;.01</td>
<td></td>
<td>&lt;.01</td>
</tr>
<tr>
<td>22-Item NBC Score</td>
<td>.15</td>
<td>4.21</td>
<td>&lt;.05</td>
<td>.02</td>
<td>&lt;.05</td>
</tr>
<tr>
<td><strong>Total Model</strong></td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Again, stated somewhat differently, the weak relationship between the 22-Item NBC Score and the change in the BSI score from time 1 to time 2 is reflected in the “modest” beta weight (β = .15, F = 4.21, p<.05) assigned to this predictor.

In this next analysis, the relationship between change in the BSI from time 1 to time 2 and the NBC was again investigated, however, utilizing the three factors instead of the average score. As displayed in Table 16, like Table 15, the T1 measure of the BSI is a strong predictor of its T2 counterpart (β = .84, F = 146.44, p<.01). Stated somewhat
Table 16

*Residualized Change Score Model of Change in the BSI "Global" Symptom Rating Scale*<sub>T2</sub> Predicted from the NBC Three Factors

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>F</th>
<th>P</th>
<th>R&lt;sup&gt;2&lt;/sup&gt;</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale&lt;sub&gt;T1&lt;/sub&gt;</td>
<td>.84</td>
<td>146.44</td>
<td>&lt;.01</td>
<td>.70</td>
<td>&lt;.01</td>
</tr>
<tr>
<td><strong>Stage 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale&lt;sub&gt;T1&lt;/sub&gt;</td>
<td>.76</td>
<td>106.50</td>
<td>&lt;.01</td>
<td></td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>.21</td>
<td>4.92</td>
<td>&lt;.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of Change</td>
<td>-.14</td>
<td>2.09</td>
<td>&lt;.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of Disappointing Self and Others</td>
<td>.13</td>
<td>2.28</td>
<td>&lt;.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Model</td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>&lt;.06</td>
</tr>
</tbody>
</table>

differently, the BSI at Time 1 “explains” 70% of the variance in its Time 2 counterpart.

Again, the sign of this variable’s standardized partial regression coefficient indicates that participants who were more symptomatic at T1 continue to be more symptomatic at T2.

The relationship between the regressed change score of the BSI from time 1 to time 2 and the three NBC factors was evaluated next. Taken together the three NBC factors are not related to change in the BSI Global Rating Scale at time 2 [R<sup>2</sup><sub>Incremental</sub> = .04, F = 2.41, df = (4,59), p<.06]. However, upon inspecting the beta weights for each of the three NBC
factors, it is evident that Hopelessness displayed a statistically significant, albeit modest, relationship to change in the BSI from time 1 to time 2 (β = .21, F = 4.92, p<.03).

As in the first analysis, the relationship between the average NBC score and change in the BSI score was evaluated, but over a longer period of time, i.e., from time 1 to time 3 (week 16). As can be seen in Table 17, the level of symptomatology at time 1 was a strong predictor of the level of symptomatology at time 3 (β = .77, F = 91.09, p<.01). Stated somewhat differently, the BSI at Time 1 "explains" 59% of the variance in its Time 3 counterpart. The sign of this variable's standardized partial regression coefficient indicates that subjects who were more symptomatic at time 1, again, remain

Table 17

*Residualized Change Score Model of Change in the BSI "Global" Symptom Rating Scale* Predicted from the "Overall" 22-Item NBC Score

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>F</th>
<th>P</th>
<th>R² Incremental</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating</td>
<td>.77</td>
<td>91.09</td>
<td>&lt;.01</td>
<td>.59</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Scale₉₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stage 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating</td>
<td>.73</td>
<td>67.58</td>
<td>&lt;.01</td>
<td></td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Scale₉₁</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-Item NBC Score</td>
<td>.09</td>
<td>.97</td>
<td>&lt;.33</td>
<td>.01</td>
<td>&lt;.33</td>
</tr>
<tr>
<td>Total Model</td>
<td></td>
<td></td>
<td></td>
<td>.60</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
more symptomatic at time 3. The addition of the NBC overall score to the model failed to make a statistically significant, incremental contribution to the variation explained in the Time 3 measure of the BSI \( R^2_{\text{incremental}} = 0.01, F = 0.97, df = 1,62, p<0.33 \). Alternatively put, the beta weight for this variable is essentially not discriminable from zero indicating that this variable does not predict change in the BSI over the sixteen week interval from the beginning of treatment to week 16, \( \beta = 0.09, F = 0.97, p<0.33 \).

Table 18 presents the results from the last of the four setwise regression models. As displayed in Table 18, and not surprisingly, the T1 measure of the BSI is a strong predictor of its T3 counterpart (\( \beta = 0.77, F = 91.09, p<0.01 \)). The sign of this variable’s standardized partial regression coefficient indicates that participants who were more symptomatic at T1 continue to be more symptomatic at T2. The relationship between the regressed change score of the BSI from time 1 to time 2 and the three NBC factors was evaluated next. Taken together the three NBC factors are not related to change in the BSI Global Rating Scale at time 2 \( R^2_{\text{incremental}} = 0.04, F = 2.41, df = 4,59, p<0.06 \). However, upon inspecting the beta weights for each of the three NBC factors, it is evident that Hopelessness displayed a statistically significant, albeit modest, relationship to change in the BSI from time 1 to time 2 (\( \beta = 0.21, F = 4.92, p<0.03 \)).

As in the first analysis, the relationship between the average NBC score and change in the BSI score was evaluated, but over a longer period of time, i.e., from time 1 to time 3 (week 16). As can be seen in Table 17, the level of symptomatology at time 1 was a strong predictor of the level of symptomatology at time 3 (\( \beta = 0.77, F = 91.09 \), symptomatic at T1 remain more symptomatic at T3. Stated somewhat differently, the
BSI at Time 1 “explains” 59% of the variance in its Time 3 counterpart. Turning to the three NBC factors taken together, they are not significantly related to change in the BSI Global Rating Scale at Time 3 \( \text{R}^2_{\text{Incremental}} = .04, \ F = 1.36, \ df = (4,59), \ p<.26 \).

Table 18

*Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale\(_{T3}\) Predicted from the NBC Three Factors*

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>( \beta )</th>
<th>( F )</th>
<th>( P )</th>
<th>( \text{R}^2_{\text{Incremental}} )</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale(_{T1})</td>
<td>.77</td>
<td>91.09</td>
<td>&lt;.01</td>
<td>.59</td>
<td>&lt;.01</td>
</tr>
<tr>
<td><strong>Stage 2:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI Global Rating Scale(_{T1})</td>
<td>.71</td>
<td>65.27</td>
<td>&lt;.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopelessness</td>
<td>.19</td>
<td>2.70</td>
<td>&lt;.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of Change</td>
<td>-.15</td>
<td>1.58</td>
<td>&lt;.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fear of Disappointing</td>
<td>.17</td>
<td>2.82</td>
<td>&lt;.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self and Others</td>
<td></td>
<td></td>
<td></td>
<td>.04</td>
<td>&lt;.26</td>
</tr>
<tr>
<td><strong>Total Model</strong></td>
<td></td>
<td></td>
<td></td>
<td>.63</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

*Stepwise Multiple Regression Analyses*

In addition to utilizing a hierarchical, setwise regression modeling strategy, the data was also analyzed utilizing a stepwise regression modeling strategy. Again, in order to assess the predictive validity of the NBC, 4 stepwise regression models were executed.
The first two are residualized change score models in which change in the BSI global symptom rating scale from T1 (pre-treatment) to T2 (eight weeks) is predicted from the (1) "overall" NBC average, i.e., 22-item, score and (2) the three factors derived from these same items. The next two residualized change score models address the same questions but over a longer time interval, i.e., from T1 (pre-treatment) to T3 (sixteen weeks). For the next set of four models, a hierarchical, stepwise regression modeling strategy is used.

The purpose of the first analysis of the stepwise regression analyses was to evaluate the relationship between the average NBC score and change in the BSI from time 1 to time 2. As can be seen in Table 19, there are no differences between the results found in the setwise analysis (Table 15) and the stepwise analysis. As stated before, the BSI at Time 1 "explains" 70% of the variance in its Time 2 counterpart and the 22-Item NBC Score accounts for only an additional 2% in the Time 2 BSI measure.

Table 19

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>F</th>
<th>P</th>
<th>R² Incremental</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI Global Rating</td>
<td>.77</td>
<td>107.35</td>
<td>&lt;.01</td>
<td>.70</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Scale_T1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-Item NBC Score</td>
<td>.15</td>
<td>4.21</td>
<td>&lt;.05</td>
<td>.02</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Total Model</td>
<td></td>
<td></td>
<td></td>
<td>.72</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
In this next analysis, the relationship between change in the BSI from time 1 to time 2 and the NBC was again investigated, however, utilizing the three factors instead of the average score. Results were similar to those found using the setwise regression strategy (Table 16). As can be seen in Table 20, the T1 measure of the BSI is a strong predictor of its time 2 counterpart ($\beta = .78, F = 118.54, p<.01$) and the Hopelessness Factor is a modest predictor of change in the BSI from time 1 to time 2 ($\beta = .17, F = 5.97, p<.02$). The Fear of Change, and Fear of Disappointing Self and Others do not predict change in the BSI from time 1 to time 2.

Table 20

*Residualized Change Score Model of Change in the BSI “Global” Symptom Rating Scale*<sub>T2</sub> Predicted from the NBC Three Factors Utilizing Stepwise Regression

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>$\beta$</th>
<th>F</th>
<th>P</th>
<th>$R^2_{\text{Incremental}}$</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI Global Rating Scale&lt;sub&gt;T1&lt;/sub&gt;</td>
<td>.78</td>
<td>118.54</td>
<td>&lt;.01</td>
<td>.70</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Hopelessness Factor</td>
<td>.17</td>
<td>5.97</td>
<td>&lt;.02</td>
<td>.03</td>
<td>&lt;.02</td>
</tr>
<tr>
<td>Total Model</td>
<td></td>
<td></td>
<td></td>
<td>.73</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

As in the first stepwise multiple regression analysis, the relationship between the average NBC score and change in the BSI score was evaluated, but over a longer period of time, i.e., from time 1 to time 3 (week 16). As can be seen from Table 21, the level of
symptomatology at time 1 was a strong predictor of the level of symptomatology at time 3 (β = .77, F = 91.09, p < .01). Again, as with the setwise analysis seen in Table 17, the BSI at Time 1 “explains” 59% of the variance in its Time 3 counterpart. Like the results of the setwise analysis, the NBC overall score failed to make a statistically significant contribution to the variation explained in the Time 3 measure of the BSI.

Table 21

Residualized Change Score Model of Change in the BSI “Global” Symptom Rating

Scale T3 Predicted from the “Overall” 22-Item NBC Score Utilizing Stepwise Regression

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>β</th>
<th>F</th>
<th>P</th>
<th>R^2 Incremental</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI Global Rating Scale T1</td>
<td>.77</td>
<td>91.09</td>
<td>&lt; .01</td>
<td>.59</td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>

Table 22 presents the results from the last of the four stepwise regression models. Again, the T1 measure of the BSI is a strong predictor of its T3 counterpart (β = .77, F = 91.09, p < .01). None of the NBC factors are significantly related to change in symptomatology from time 1 to time 3, as variables that do not display p < .05 are not considered to be significant. Like the findings displayed in the setwise model in Table 18, the BSI at Time 1 “explains” 59% of the variance in its Time 3 counterpart.
Table 22

Residualized Change Score Model of Change in the BSI “Global” Symptom Rating

Scale \( T_3 \) Predicted from the NBC Three Factors Utilizing Stepwise Regression

<table>
<thead>
<tr>
<th>Predictor Variables</th>
<th>( \beta )</th>
<th>( F )</th>
<th>( P )</th>
<th>( R^2_{\text{Incremental}} )</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI Global Rating Scale ( T_1 )</td>
<td>.77</td>
<td>91.09</td>
<td>&lt;.01</td>
<td>.59</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
CHAPTER 5
DISCUSSION

The purpose of this project was to establish and examine the construct and predictive validities of the NBC Measure. The present study examined whether the NBC Measure is correlated with related measures of defensiveness and the therapist/client working relationship and whether the NBC Measure can predict change in therapy. The NBC demonstrated internal construct validity as evidenced by the four derived factors (Hopelessness; Fear of Change; Fear of Disappointing Self and Others; Noncompliance) and the satisfactory internal consistency of these factors. However, the NBC displayed “a mixed picture” with regard to its relationship with the various validation criteria and its ability to predict change in therapy. Thus, while some of the data support the NBC as a meaningful measure of resistance, a portion of the data does not support the NBC as a measure of resistance.

It was expected that those patients who score higher on the NBC Measure would also display higher scores on the K Scale of the MMPI, indicative of psychological defensiveness. Higher scores on the K Scale reveal attitudes that are indicative of resistance to becoming involved in treatment (Butcher, 1990). However, the relationship between the measures was found to be counterintuitive. That is, those participants who scored higher on the NBC Measure also scored lower on the K Scale, indicating lower levels of defensiveness. This finding is consistent with those of Dowd, Milne, and Wise (1991). The authors described the development of the Therapeutic Reactance Scale (TRS), which was designed to measure psychological reactance as defined by Brehm
(1966). High scores on the TRS, indicating high levels of psychological reactance, were found to be related to lower scores on the K Scale. Those who were higher in psychological reactance were lower in psychological defensiveness. Since the K Scale reflects defensiveness vs. openness, people who were open, indicated by a low score on the K Scale, may have been more willing to express negative beliefs about change on the NBC Measure than those displaying higher scores on the K Scale. Individuals who are open are more willing to disclose information about their thoughts, behaviors, and feelings, even when perceived as negative in nature.

While the NBC Measure did not display a relationship with the Openness to Change Scale of the 16 PF, a measure of openness and willingness to attempt new approaches, it demonstrated relationships with other constructs related resistance--readiness to change and the working relationship. The 16 PF may be tapping into that dimension of openness or lack thereof, which is related to every day decision-making when confronted with various choices. While an individual may be flexible enough to be open to new approaches to every day problems, he or she may still hold negative beliefs about change that involves one's psychological organization and/or cognitions that impact various areas of his/her life. In other words, an individual displaying openness on the Openness to Change Scale may still hold onto his/her negative beliefs and be interested in maintaining the status quo of his/her "psychological life."

Negative beliefs about change was strongly related to the construct of readiness to change. Those participants who were not ready for change (i.e., only somewhat aware or unaware of their problems; having no intention to change; or seriously thinking about
overcoming the problem without any commitment to taking action) also displayed high levels of negative beliefs about change. As expected, individuals who hold negative beliefs about change are not yet ready to make changes. The specific factors of the NBC Measure which related to the Stages of Change Measure were Hopelessness and Fear of Change. Why did these specific dimensions of the measure relate to readiness for change? Perhaps, at the start of treatment, feelings of hopelessness and fear of change are the negative beliefs and emotions that specifically contribute to an individual’s inability to progress to the next stage of change (as defined by Prochaska’s Stages of Change Measure), such as from pre-contemplation to contemplation. As there are various stages of change during treatment, different negative beliefs about change may be more salient at various stages of treatment.

The other measure which related to the NBC Measure was the WAI. As expected, those patients who displayed lower scores on the NBC Measure also perceived their working relationships with their therapists to be stronger. However, the participants in this study perceived their working alliances with their therapists to be stronger than did the therapists. Interestingly, patients’ reports of alliance tend to predict psychotherapy outcome somewhat more strongly than therapist reports (Horvath & Luborsky, 1993). Many studies have demonstrated that the therapeutic alliance has a consistent relationship with outcome in psychotherapy (Barber et al., 2000). As previously stated, the working alliance involves the collaboration between the client and the therapist with regard to goals, tasks, and affective/attachment bond (Bordin, 1979).
The finding that the participants in this study perceived their working alliances to be stronger than did the therapists is an interesting one, as it leads to an important question. Did the therapists contribute to the patients' negative beliefs about change by perceiving them as noncompliant or resistant? That is, when a therapist perceives his or her patient as resistant, this may result in the therapist challenging, confronting, or directing the patient at inappropriate times. The patient may experience feelings of being misunderstood, mistrusted, or constrained. If the patient does not hold high levels of negative beliefs about change, the therapist's perception and subsequent behavior may impact the patient, such that there is an increase in negative beliefs. Did a phenomenon—negative beliefs about change—which therapists aim to induce as little as possible of, inadvertently increase?

As a measure which is able to predict change, once again, the NBC presented “a mixed picture.” That is, while the NBC Measure did not predict change in therapy (change in symptomatology) over 16 weeks of psychotherapy, it is a weak predictor of change over the short-term (first 8 weeks of therapy). Moreover, the Hopelessness factor is a modest predictor of change in therapy over the first 8 weeks. Hence, while the NBC Measure is not able to predict change over longer periods of treatment, it does display weak/modest predictive validity over the short-term.

If there is change to be predicted after 8 weeks, why is the NBC Measure unable to predict change over 16 weeks? Perhaps, change does not take place in a linear fashion, but rather in phases; there may have not been significant amounts of change to predict from week 8 to week 16. There may not have been enough variability in the GSI to
predict. At the beginning of treatment (up to 8 weeks), a patient may begin to feel better or experience some relief in acute symptoms due to the anticipation of help. In fact, according to Howard, Leuger, Maling, and Martinovich (1993), the first stage of psychotherapy outcome is improvement in subjectively experienced well-being rather than actual reduction in symptomatology. Following this initial decrease in symptomatology, patients may not show any significant or detectable improvement in chronic distress symptoms until after 16 weeks. Hence, the 16th week time point may be too soon to predict change in psychotherapy; patients may still be recognizing and understanding what the problem is. The finding that the Hopelessness factor is a moderate predictor of change over the short-term (8 weeks) is consistent with the above interpretation.

It may also be possible that as therapy progressed, patients’ negative beliefs were reduced. Perhaps negative beliefs decreased over time due to factors relating to the psychotherapeutic process, such as the development of a working alliance between patient and therapist. While a patient’s negative beliefs functioned to impact treatment during the beginning of therapy (e.g., first 8 weeks), as therapy progressed and changes occurred, possibly, the initial status of the individual’s negative beliefs changed (i.e., decreased). With the change in status of the negative beliefs, the NBC Measure may have not been a very reliable predictor of change that extends beyond the beginning of therapy. Future studies will benefit from measuring patients’ negative beliefs more frequently in order to assess the changes in resistance and their impact on change.
While the NBC Measure was not able to predict change at 16 weeks (time 3), it is important to note that the Hopelessness and the Fear of Disappointing Self and Others factors displayed nearly significant relationships with change in psychotherapy at time 3. Subjects who displayed more hopelessness or fear of disappointing themselves or others were also higher in symptomatology. Future research should further explore these constructs and their relationship to change, as questions about these findings come to mind. Why is the Hopelessness dimension the only factor that shows some degree of relationship to change at both time 2 and time 3? Why does the Fear of Disappointing Self/Others factor show a nearly significant relationship to change at time 3, but no relationship to change at time 2? How do the different factors relate to the various stages of treatment?

Contributions of Findings

According to the findings, resistance is not a unidimensional construct, elucidating the complexity of the phenomenon. Many of the established measures, tapping into the construct of resistance, are inadequate due to their limited unidimensional perspectives of resistance. The dimensions of the NBC Measure included hopelessness; fear of change; fear of disappointing self and others; and noncompliance. These facets reflect the cognitive, affective, and behavioral components of resistance. Resistance is understood to refer to a wide range of behaviors. Unidimensional perspectives of resistance are based on theories that cannot adequately address the question of why people don’t change. The multidimensional nature of resistance reflected by the NBC Measure is consistent with the conceptualization of resistance
according to the cognitive-behavioral perspective, which addresses the cognitive, behavioral, affective components of change and resistance. This finding suggests that future research should explore other dimensions underlying the construct of resistance, rather than just focusing on unidimensional measures.

The findings elucidate the importance of certain dimensions of resistance via the derived factor structure, which can inform therapists and allow for individualized treatment planning. Previously developed measures tapping into resistance or noncompliance do not reflect the importance of cognitions, behaviors, and affect related to hopelessness. One measure, The Client Resistance Coding System, includes items relating to hopelessness; however, the category of hopelessness is part of a cluster comprising of four other categories. While the fear of disappointing self or others dimension showed some relationship to change and the fear of change dimension did not display a relationship to change, they contribute to our understanding of the meaning of resistance, as previously developed measures do not reflect these processes. Thus, the NBC can be utilized as an overall measure to assess negative beliefs about change, thereby informing treatment providers about the patient’s needs in terms of treatment modality and therapist variables. The individual factors may provide information about specific areas with which the individual is struggling and need to be addressed in the psychotherapeutic process. If administered frequently, the NBC may shed light on the particular negative beliefs the patient is experiencing.
Implications for the Mental Health System

In the era of short-term treatment and managed mental health care, a valid and reliable measure designed to measure resistance has potential use for identifying patients who would be likely to deplete psychotherapeutic resources while achieving little or no benefit. A reliable system of predicting high resistance to change in treatment, even for a percentage of patients, would improve the allocation and use of resources for behavioral health system, leading to a more efficient and efficacious system. This comment is not to advocate that identification of these patients be used to deny treatment to the neediest individuals who are typically the more symptomatic and lower functioning of the patient population. Rather, identification of these patients at intake may be utilized to transfer them into more promising therapeutic alternatives, such as psychotropic medication or group psychotherapy. Other less resistant patients, who are expected to succeed but are struggling in treatment due to resistance to change, may have their treatment reviewed in order to determine the what is contributing to the resistance, such as patient, therapist, treatment, or interactional determinants. A review of the treatment may then lead to modification of the treatment or specific components of the treatment, such as therapist-patient match. Currently, the findings are too mixed to recommend the NBC Measure for clinical assessment and decision making. A valid and reliable measure is still needed; perhaps further research on the NBC Measure can develop it into that what is needed.

Limitations and Future Research Directions

While the current study has contributed to our understanding of resistance, there are some limitations that should inform the direction of future research. First, the sample
size was small. The original number of participants was 72, with only 65 participants remaining in the study at time 2 and time 3. Moreover, the sample consisted of patients from one community mental health clinic, which only accepted patients who were lacking in financial resources or did not have private insurance. In addition, they represented a subset of all patients who were assessed at the outpatient clinic, that is, those who were suitable for some form of weekly cognitive-behavioral and/or experiential psychotherapy. All of these factors limit the extent to which the findings can be generalized. It is unknown whether the same factor structure would have been derived if the measure was administered to a different population sample. Because this sample is representative of a clinic population presenting with multiple stressors, such as financial, employment, and parenting problems, the derived factor structure may not be representative of psychotherapy patients in general. Validation of the NBC Measure utilizing different population samples remains a task for future research. Different factor structures would provide useful information about the construct of resistance and may demonstrate different findings regarding the NBC Measure's predictive validity. This study is a start to the examination of the NBC and its psychometric properties.

It is evident that the hopelessness dimension is a significant component of the NBC Measure in predicting change. While the cognitions and affect involving how change will impact the self and others (Fear of Disappointing Self/Others factor) may have the potential to predict change in therapy over 16 weeks, the fear of change and noncompliance dimensions of the NBC Measure are not able to predict change. In order to determine whether these dimensions are able to predict change, a few points need
clarification. Future research would need to begin with administering the measure to
different population samples in order to determine if these factors are derived. If they are
derived, utilizing other validation criteria should be considered. While the NBC Measure
related to the working relationship and the readiness for change constructs, it displayed
no relationship with the defensiveness construct. Does it relate to other validation
criteria? Perhaps what seemed like a counterintuitive relationship with the construct of
defensiveness (measured by the K Scale) is in fact a component of resistance needing
further exploration. While resistant patients may struggle with making change, they may
still be willing to be open about their problems.

As another step in the validation process and in order to provide more information
about the construct, the NBC should be compared to other behavioral measures and self-
report questionnaires tapping into resistance, such as the TRS and the CRS. If the NBC
continues to demonstrate a “mixed picture,” the core dimensions and individual items
require reassessment. Another consideration is that the NBC Measure, as does the TRS,
recognizes resistance as a trait and hence assumes trait-like consistency of resistance
across situations. While some theorists conceptualize resistance as a trait, others, such as
Brehm (Reactance Theory) and Shoham-Salomon recognize resistance as situational or
state-like. Perhaps, resistance is situation specific and elicited by certain situational
factors rather than being a cross situational trait. As a trait-type measure, the NBC may
have difficulty tapping into resistance and can benefit from dimensions reflecting state-
like resistance. In fact, according to Beutler et al. (2002), both manifestations of
resistance should be recognized by therapists and initially assessing the level of trait-like resistance patterns assists in anticipating the state-like reactions.

Perhaps future research should modify the items of the NBC so that they are situation specific, such as beliefs about quitting smoking, rather than about general change. While an individual may carry negative beliefs about change with regard to one problem, he or she may be open to change in another area. Hence, a general measure may result in inconsistent responses from the examinee. The K Scale and the Openness to Change Scale may also be too general, leading to inconsistent responses on the various measures and a lack of correlation between the NBC and the validation criteria.

Future research can also simply attempt to predict change utilizing the NBC as it is, but at different time points. The measure assessing change, such as the BSI, should be administered more frequently and extend beyond 16 weeks. Can the NBC predict change at time points differing from those used in this study? If change works in phases rather than linearly, there may be some change to tap into that was not robust enough to be detected. Future studies may also consider including other measures of change in addition to a symptom measure. Perhaps, change would be detected by another measure which extends itself beyond psychiatric symptoms.

In addition to examining the NBC as a measure of resistance, there is also a need to consider the interactive processes of differing variables, such as stage of therapy, client variables, and therapist behavior in relation to resistance. Perhaps these variables impact the level or a specific aspect of resistance during mid-treatment, so the initial measurement of resistance cannot independently reliably predict change in the long term.
If these variables are also dynamic in nature, they may interact with resistance in distinct ways at different time points, complicating the process even more so. Is resistance a dynamic factor that changes throughout therapy, therefore calling for more frequent measurement of the construct in order to assess resistance across the course of treatment? Perhaps, change requires more frequent measurement in order to investigate the pattern of recovery in therapy. If the process of change and the phenomenon of resistance work in phases, these two constructs need to be examined in relation to each other every few weeks in an attempt to detect patterns.

**Conclusions**

The need for further investigation in the area of resistance cannot be stressed enough. A large percentage of people in distress seek medical care and/or psychotherapy, yet engage in a variety of behaviors that interfere with the effectiveness of the very treatment they sought. High levels of resistance have been found to be related with negative outcome in psychotherapy (Beutler et al., 1996). As seen in this study, on the average, patients’ symptoms did not change significantly over time. This study elucidates the difficulty in conceptualizing, defining, and measuring the phenomenon of resistance. The complexity of the phenomenon reiterates the importance of asking specific research questions.

Linking negative beliefs to change may be considered one step in the gradual understanding of the psychotherapeutic process. More empirical attention to the construct of resistance is needed in order to understand the structure, function, and impact of this central concept in psychotherapy. Despite the limitations of this study, the results
are encouraging in that they have contributed to our understanding of the components of resistance and its multi-dimensional nature. The NBC Measure sheds light on the qualitative and quantitative facets of negative beliefs about change; the current study underscores the importance of exploring both facets rather than just focusing on one. While the manifestation of resistance may change for various reasons, across the course of treatment, the intensity may also wax and wane with various successes and stressors which are encountered. The interactive relationship between the quality and quantity of resistance also remains a task for future investigation.

There are three general conclusions that may be drawn from this study. First, we can confidently say that the NBC Measure is related to measures tapping into readiness for change and the therapeutic alliance. Second, the overall NBC score weakly predicts change from time 1 to time 2 (week 1 to week 8). Third, the Hopelessness factor displays a modest relationship with change from time 1 to time 2. Although the process of predicting change via the NBC Measure is a complicated one for the various reasons which have been discussed, the measure provides us with some information about the meaning of resistance and the change process.
APPENDIX A

NEGATIVE BELIEFS ABOUT CHANGE MEASURE

1= disagree strongly
2= disagrees somewhat
3= neither agree nor disagree
4= agree somewhat
5= agree strongly

1. I felt like there was nothing I could do that would make me change. 1 2 3 4 5
2. I felt hopeless about making the change. 1 2 3 4 5
3. I didn’t think I’d be able to do the things I needed to do in order to change. 1 2 3 4 5
4. I kept putting off doing things I needed to do to make the change. 1 2 3 4 5
5. I kept forgetting to do the things I needed to do to change. 1 2 3 4 5
6. I didn’t know exactly what I needed to do in order to change. 1 2 3 4 5
7. I was too busy to do the things I needed to do in order to change. 1 2 3 4 5
8. I felt like I just couldn’t get myself to do the things I needed to do to change. 1 2 3 4 5
9. I didn’t like admitting to myself that I needed to change. 1 2 3 4 5
10. I didn’t like admitting to others that I needed to change. 1 2 3 4 5
11. I didn’t feel like doing what I needed to do in order to change. 1 2 3 4 5
12. Although I knew I needed to change, there were many times that I just didn’t want to. 1 2 3 4 5
13. I was afraid that I would get upset with myself if I tried to change and didn’t succeed. 1 2 3 4 5
14. I was afraid that others would get upset with me if I tried to change and didn’t succeed. 1 2 3 4 5
15. I was afraid that I would demand more of myself if I succeeded in changing. 1 2 3 4 5
16. I was afraid that others would demand more of me if I succeeded in changing. 1 2 3 4 5
17. I didn’t want to do things that reminded me that I had something I needed to change. 1 2 3 4 5
18. I thought that if I did change, it might have a bad effect on a relationship that was important to me. 1 2 3 4 5
19. I was afraid that if I did change, it might make my life worse in some ways. 1 2 3 4 5
20. I was afraid that changing might mean that I would have to give up some of the things I enjoyed. 1 2 3 4 5
21. I didn’t think I’d be successful in changing if I tried. 1 2 3 4 5
22. I was afraid that in some ways I’d feel worse and not better if I made the change. 1 2 3 4 5
Dear Client:

I am writing to request your participation in a study we are conducting in the Psychology Department and School Psychology Department at the University of Arizona regarding how people change. I am a graduate student working on my dissertation and I am in the process of collecting data. We are hoping to find out: 1) the degree to which people have made important personal changes; 2) whether they have made these changes with or without professional assistance; and 3) the obstacles that people encounter when they do try to make changes.

The questionnaires ask you questions about those three areas. Additionally, there are two questionnaires that ask you about how you are feeling. These questionnaires will take about 45 minutes to an hour to complete. Your participation is entirely voluntary. You may refuse to participate at any time. This will in no way jeopardize the behavioral health care you are receiving at CODAC. The questionnaires do not require your name or any specific identifying information, so your responses are completely confidential.

These questionnaires need to be administered three to four times throughout your behavioral healthcare at CODAC. Prior to participation in the research, you will be provided with a written informed consent form describing the nature of the study and how you will participate in it, if you decide to do so. Signing the form will indicate that you have been so informed and that you give your consent.

I have funds to pay for your participation. At each administration, I will give you $6 upon completion of the questionnaires. A summary of the results will be available. If you wish to participate, please sign this form and provide me with a phone number so I may contact you. If you do not wish to leave me your phone number, but are still interested in participating, please indicate that on the form. I can be reached at (520)408-1151. If you have any questions and would like to speak to my advisor – Dr. Hal Arkowitz, he can be reached at (520) 621-3382.

Sincerely,

Gayane Minasian, M.A.

CLIENT SIGNATURE

email: Gayane@u.arizona.edu

PLEASE PRINT NAME: __________________________________________

PHONE NUMBER: __________________________________________
APPENDIX C

SUBJECT'S CONSENT FORM

Development of a Measure of Negative Benefits About Change in Psychotherapy

I AM BEING ASKED TO READ THE FOLLOWING MATERIAL TO ENSURE THAT I AM INFORMED OF THE NATURE OF THIS RESEARCH STUDY AND OF HOW I WILL PARTICIPATE IN IT, IF I CONSENT TO DO SO. SIGNING THIS FORM WILL INDICATE THAT I HAVE BEEN SO INFORMED AND THAT I GIVE MY CONSENT. FEDERAL REGULATIONS REQUIRE WRITTEN INFORMED CONSENT PRIOR TO PARTICIPATION IN THIS RESEARCH STUDY SO THAT I CAN KNOW THE NATURE AND RISKS OF MY PARTICIPATION AND CAN DECIDE TO PARTICIPATE OR NOT PARTICIPATE IN A FREE AND INFORMED MANNER.

PURPOSE
I am being invited to participate voluntarily in the above-titled research project. The purpose of this project is to evaluate a newly developed scale measuring negative beliefs about change and to evaluate the scale's ability to specifically predict outcome with regard to psychotherapy.

SELECTION CRITERIA
I am being invited to participate because I have met CODAC Behavioral Health’s inclusion criteria for counseling in their psychotherapy services which include: a minimum age of 18, a lack of financial resources or a HMO, and an overall level of functioning which is conducive to participation in psychotherapy and because I do not have psychotic symptoms and I am not in a situation which requires me to be seen daily. Approximately 60 subjects will be enrolled in this study.

PROCEDURES
If I agree to participate, I will be asked to consent to the following: complete 3 questionnaires about change and 2 questionnaires about how I am feeling prior to my first counseling session. This will require 45 minutes. After eight counseling sessions, I will be asked to complete these same questionnaires. In addition, I will be asked to complete a questionnaire about my relationship with my therapist and another questionnaire about change. This will require approximately 1 hour. After my sixteenth therapy session, I will be asked to complete these same questionnaires.

RISKS
There are no known psychological or physical risks involved in participating in this study. However, there is the risk that I may have an emotional response to the questionnaires I am being asked to complete. I am able to contact the researcher (Gayane Minasian at (520) 408-1151) or my therapist at CODAC Behavioral Health at any time to discuss questions or concerns (emotional or otherwise).
BENEFITS
There will be no direct benefit to me from participating in this research. The investigators may learn more about measuring negative beliefs about change and predicting treatment outcome in psychotherapy.

Gayane Minasian has explained this study to me and has answered my questions. If I have other questions or research related problems, I may reach Dr. Hal Arkowitz at (520) 621-3382 or the Human Subjects Committee at (520) 626-6721. Participation in research is entirely voluntary. I may refuse to participate or withdraw at any time without jeopardy to the behavioral health care I will receive at this clinic.

CONFIDENTIALITY
Research records will be kept confidential to the extent provided by the law. An ID# (composed of 4 random digits) rather than my name will be used to identify my data and demographic information. The investigator, Gayane Minasian, her supervisor Dr. Arkowitz, and the student who will be acting as Gayane’s research assistant are the only individuals who have access to the gathered data.

I agree to participate.

________________________  _____________________  ________________
Subject's signature        Witness                    Date
APPENDIX D

OPENNESS TO CHANGE SCALE

1. I’d prefer to deal with people who are:
   a. conventional and polite in what they say;
   b. ?
   c. direct and speak up about problems they see.

2. I like to think up better ways of doing things rather than to follow well-tried ways.
   a. true;
   b. ?
   c. false.

3. If I had to cook or build something, I’d follow the directions exactly.
   a. true, why take chances;
   b. ?
   c. false, I’d usually find them interesting.

4. I don’t really like people who are “different” or unusual.
   a. true, I usually don’t;
   b. ?
   c. false, I usually find them interesting.

5. I’m more interested in:
   a. seeking personal meaning in life;
   b. ?
   c. a secure job that pays well.

6. What this world needs is:
   a. more steady, solid citizens;
   b. ?
   c. more reformers with opinions about how to improve the world.

7. I find people more interesting if their views are different from most people’s.
   a. true
   b. ?
   c. false.

8. I like people who:
   a. are stable and conventional in their interests;
   b. ?
   c. seriously think through their views about life.
9. Work that is familiar and routine makes me feel:
   a. bored and sleepy;
   b. ?
   c. secure and confident.

10. I like to think out ways in which our world could be changed to improve it.
    a. true;
    b. ?
    c. false.

11. In my newspaper, I’d rather read:
    a. articles on current social problems;
    b. ?
    c. all the local news.

12. More trouble arises from people:
    a. questioning and changing methods that are already satisfactory;
    b. ?
    c. turning down promising, new approaches.

13. When I find I differ with someone on social views, I prefer to:
    a. discuss what our basic differences mean;
    b. ?
    c. discuss something else.

14. I most enjoy a meal if it consists of familiar, everyday foods rather than new, unusual foods.
    a. true;
    b. ?
    c. false.
APPENDIX E

K SCALE OF THE MMPI

T  F  1. At times I feel like swearing.
T  F  2. At times I feel like smashing things.
T  F  3. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others.
T  F  4. It takes a lot of argument to convince most people of the truth.
T  F  5. I have very few quarrels with members of my family.
T  F  6. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it.
T  F  7. Often I can't understand why I have been so irritable and grouchy.
T  F  8. At times my thoughts have raced ahead faster than I could speak them.
T  F  9. Criticism or scolding hurts me terribly.
T  F  10. I certainly feel useless at times.
T  F  11. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.
T  F  12. I have never felt better in my life than I do now.
T  F  13. What others think of me does not bother me.
T  F  14. It makes me uncomfortable to put on a stunt at a party even when others are doing that same sort of thing.
T  F  15. I find it hard to make talk when I meet new people.
T  F  16. I am against giving money to beggars.
T  F  17. I frequently find myself worrying about something.
T F 18. I get mad easily and then get over it soon.
T F 19. When in a group of people I have trouble thinking of the right things to talk about.
T F 20. I have periods in which I feel unusually cheerful without any special reason.
T F 21. I think nearly anyone would tell a lie to keep out of trouble.
T F 22. I worry over money and business.
T F 23. At times I am all full of energy.
T F 24. People often disappoint me.
T F 25. I have sometimes felt that difficulties were piling up so high that I could not overcome them.
T F 26. At periods my mind seems to work more slowly than usual.
T F 27. I have often met people who were supposed to be experts who were no better than I.
T F 28. I often think, “I wish I were a child again.”
T F 29. I find it hard to set aside a task that I have undertaken, even for a short time.
T F 30. I like to let people know where I stand on things.
### APPENDIX F

#### BECK DEPRESSION INVENTORY

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0</td>
<td>I do not feel sad.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I feel sad.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I am sad all the time and I can’t snap out of it.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I am so sad or unhappy that I can’t stand it.</td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>I am not particularly discouraged about the future.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I feel discouraged about the future.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I feel I have nothing to look forward to.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I feel that the future is hopeless and that things cannot improve.</td>
</tr>
<tr>
<td>3.</td>
<td>0</td>
<td>I do not feel like a failure.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I feel I have failed more than the average person.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>As I look back on my life, all I can see is a lot of failure.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I feel I am a complete failure as a person.</td>
</tr>
<tr>
<td>4.</td>
<td>0</td>
<td>I get as much satisfaction out of things as I used to.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I don’t enjoy things the way I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I don’t get real satisfaction out of anything anymore.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I am dissatisfied or bored with everything.</td>
</tr>
<tr>
<td>5.</td>
<td>0</td>
<td>I don’t feel particularly guilty.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I feel guilty a good part of the time.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I feel quite guilty most of the time.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I feel guilty all of the time.</td>
</tr>
<tr>
<td>6.</td>
<td>0</td>
<td>I don’t feel I am being punished.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I feel I may be punished.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I expect to be punished.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I feel I am being punished.</td>
</tr>
<tr>
<td>7.</td>
<td>0</td>
<td>I don’t feel disappointed in myself.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I am disappointed in myself.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I am disgusted with myself.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I hate myself.</td>
</tr>
<tr>
<td>8.</td>
<td>0</td>
<td>I don’t feel I am any worse than anybody else.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I am critical of myself for my weaknesses or mistakes.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I blame myself all the time for my faults.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I blame myself for everything bad that happens.</td>
</tr>
<tr>
<td>9.</td>
<td>0</td>
<td>I don’t have any thoughts of killing myself.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I have thoughts of killing myself, but I would not carry them out.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I would like to kill myself.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I would kill myself if I had the chance.</td>
</tr>
<tr>
<td>10.</td>
<td>0</td>
<td>I don’t cry any more than usual.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I cry more now than I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I cry all the time now.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I used to be able to cry, but now I can’t cry even though I want to.</td>
</tr>
<tr>
<td>11.</td>
<td>0</td>
<td>I am no more irritated now than I ever am.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I get annoyed or irritated more easily than I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I feel irritated all the time now.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I don’t get irritated at all by the things that used to irritate me.</td>
</tr>
<tr>
<td>12.</td>
<td>0</td>
<td>I have not lost interest in other people.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I am less interested in other people than I used to be.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I have lost most of my interest in other people.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I have lost all of my interest in other people.</td>
</tr>
<tr>
<td>13.</td>
<td>0</td>
<td>I make decisions about as well as I ever could.</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>I put off making decisions more than I used to.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>I have greater difficulty in making decisions than before.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I can’t make decisions at all anymore.</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>-------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>14.</td>
<td>I don't feel I look any worse than I used to.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am worried that I am looking old or unattractive.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel that there are permanent changes in my appearance that make me look unattractive.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I believe that I look ugly.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I can work about as well as before.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It takes an extra effort to get started at doing something.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have to push myself very hard to do anything.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I can't do any work at all.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I can sleep as well as usual.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I don't sleep as well as I used to.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I wake up several hours earlier than I used to and cannot get back to sleep.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I don't get more tired than usual.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I get tired more easily than I used to.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I get tired from doing almost anything.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am too tired to do anything.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>My appetite is no worse than usual.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My appetite is not as good as it used to be.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My appetite is much worse now.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have no appetite at all anymore.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I haven't lost much weight, if any lately.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have lost more than 5 pounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have lost more than 10 pounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have lost more than 15 pounds.</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I am no more worried about my health than usual.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am worried about physical problems such as aches and pains; or upset stomach; or constipation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am very worried about physical problems and it's hard to think of much else.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am so worried about my physical problems that I cannot think about anything else.</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I have not noticed any recent change in my interest in sex.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am less interested in sex than I used to be.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am much less interested in sex now.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I have lost interest in sex completely.</td>
<td></td>
</tr>
</tbody>
</table>

__________________________ Subtotal Page 2
__________________________ Subtotal Page 1
__________________________ Total Score
1 Strongly Disagree  2 Disagree  3 Undecided  4 Agree  5 Strongly Agree

1. As far as I’m concerned, I don’t have any problems that need changing …… 1 2 3 4 5
2. I think I might be ready for some self-improvement .......................... 1 2 3 4 5
3. I am doing something about the problems that had been bothering me …… 1 2 3 4 5
4. It might be worthwhile to work on my problem .............................. 1 2 3 4 5
5. I’m not the problem one. It doesn’t make much sense for me to be here …… 1 2 3 4 5
6. It worries me that I might slip back on a problem I have already changed, so I am here to seek help ......................................................... 1 2 3 4 5
7. I am finally doing some work on my problem ............................... 1 2 3 4 5
8. I’ve been thinking that I might want to change something about myself …… 1 2 3 4 5
9. I have been successful in working on my problem but I’m not sure I can keep up the effort on my own ......................................................... 1 2 3 4 5
10. At times my problem is difficult, but I’m working on it .................... 1 2 3 4 5
11. Being here is pretty much a waste of time for me because the problem doesn’t have to do with me ......................................................... 1 2 3 4 5
12. I’m hoping this place will help me to better understand myself .......... 1 2 3 4 5
13. I guess I have faults, but there’s nothing that I really need to change …… 1 2 3 4 5
14. I am really working hard to change .............................................. 1 2 3 4 5
15. I have a problem and I really think I should work on it .................... 1 2 3 4 5
16. I’m not following through with what I had already changed as well as I had hoped, and I’m here to prevent a relapse of the problem ...................... 1 2 3 4 5
17. Even though I'm not always successful in changing, I am at least working on my problem ................................................................. 1 2 3 4 5

18. I thought once I had resolved the problem I would be free of it, but sometimes I still find myself struggling with it ......................................................... 1 2 3 4 5

19. I wish I had more ideas on how to solve my problem ........................................ 1 2 3 4 5

20. I have started working on my problems but I would like help .......................... 1 2 3 4 5

21. Maybe this place will be able to help me ...................................................... 1 2 3 4 5

23. I may need a boost right now to help me maintain the changes I've already made........................................................................................................................................................................... 1 2 3 4 5

23. I may be part of the problem, but I don't really think I am ......................... 1 2 3 4 5

24. I hope that someone here will have some good advice for me ...................... 1 2 3 4 5

25. Anyone can talk about changing; I'm actually doing something about it ........ 1 2 3 4 5

26. All this talk about psychology is boring. Why can't people just forget about their problems? .................................................................................................................. 1 2 3 4 5

27. I'm here to prevent myself from having a relapse of my problem ................ 1 2 3 4 5

28. It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved ................................................................................................. 1 2 3 4 5

29. I have worries but so does the next guy. Why spend time thinking about them? ......................................................................................................................... 1 2 3 4 5

30. I am actively working on my problem ............................................................ 1 2 3 4 5

31. I would rather cope with my faults than try to change them ...................... 1 2 3 4 5

32. After all I had done to try and change my problem, every now and again it comes back to haunt me ................................................................. 1 2 3 4 5
APPENDIX H

BRIEF SYMPTOM INVENTORY

Key:
0 = Not at all
1 = A little bit
2 = Moderately
3 = Quite a bit
4 = Extremely

<table>
<thead>
<tr>
<th>How much were you distressed by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 0 1 2 3 4 Nervousness or shakiness inside</td>
</tr>
<tr>
<td>2. 0 1 2 3 4 Faintness or dizziness</td>
</tr>
<tr>
<td>3. 0 1 2 3 4 The idea that someone else can control your thoughts</td>
</tr>
<tr>
<td>4. 0 1 2 3 4 Feeling others are to blame for most of your troubles</td>
</tr>
<tr>
<td>5. 0 1 2 3 4 Trouble remembering things</td>
</tr>
<tr>
<td>6. 0 1 2 3 4 Feeling easily annoyed or irritated</td>
</tr>
<tr>
<td>7. 0 1 2 3 4 Pains in heart or chest</td>
</tr>
<tr>
<td>8. 0 1 2 3 4 Feeling afraid in open spaces or on the streets</td>
</tr>
<tr>
<td>9. 0 1 2 3 4 Thoughts of ending your life</td>
</tr>
<tr>
<td>10. 0 1 2 3 4 Feeling that most people cannot be trusted</td>
</tr>
<tr>
<td>11. 0 1 2 3 4 Poor appetite</td>
</tr>
<tr>
<td>12. 0 1 2 3 4 Suddenly scared for no reason</td>
</tr>
<tr>
<td>13. 0 1 2 3 4 Temper outbursts that you could not control</td>
</tr>
<tr>
<td>14. 0 1 2 3 4 Feeling lonely even when you are with people</td>
</tr>
<tr>
<td>15. 0 1 2 3 4 Feeling blocked in getting things done</td>
</tr>
<tr>
<td>16. 0 1 2 3 4 Feeling lonely</td>
</tr>
<tr>
<td>17. 0 1 2 3 4 Feeling blue</td>
</tr>
<tr>
<td>18. 0 1 2 3 4 Feeling no interest in things</td>
</tr>
<tr>
<td>19. 0 1 2 3 4 Feeling fearful</td>
</tr>
<tr>
<td>20. 0 1 2 3 4 Your feelings being easily hurt</td>
</tr>
<tr>
<td>21. 0 1 2 3 4 Feeling that people are unfriendly or dislike you</td>
</tr>
<tr>
<td>22. 0 1 2 3 4 Feeling inferior to others</td>
</tr>
<tr>
<td>23. 0 1 2 3 4 Nausea or upset stomach</td>
</tr>
<tr>
<td>24. 0 1 2 3 4 Feeling that you are watched or talked about others</td>
</tr>
<tr>
<td>25. 0 1 2 3 4 Trouble falling asleep</td>
</tr>
<tr>
<td>26. 0 1 2 3 4 Having to check and double check what you do</td>
</tr>
<tr>
<td>27. 0 1 2 3 4 Difficulty making decisions</td>
</tr>
<tr>
<td>28. 0 1 2 3 4 Feeling afraid to travel on buses, subways, or trains</td>
</tr>
<tr>
<td>29. 0 1 2 3 4 Trouble getting your breath</td>
</tr>
<tr>
<td>30. 0 1 2 3 4 Hot or cold spells</td>
</tr>
<tr>
<td>31. 0 1 2 3 4 Having to avoid certain things, places, or activities because they frighten you</td>
</tr>
<tr>
<td>32. 0 1 2 3 4 Your mind going blank</td>
</tr>
<tr>
<td>33. 0 1 2 3 4 Numbers or tingling in parts of your body</td>
</tr>
<tr>
<td>34. 0 1 2 3 4 The idea that you should be punished for you sins</td>
</tr>
<tr>
<td>35. 0 1 2 3 4 Feeling hopeless about the future</td>
</tr>
<tr>
<td>36. 0 1 2 3 4 Trouble concentrating</td>
</tr>
</tbody>
</table>
37. 0 1 2 3 4 Feeling weak in parts of your body
38. 0 1 2 3 4 Feeling tense or keyed up
39. 0 1 2 3 4 Thoughts of death or dying
40. 0 1 2 3 4 Having urges to beat, injure or harm someone
41. 0 1 2 3 4 Having urges to break or smash things
42. 0 1 2 3 4 Feeling very self-conscious with others
43. 0 1 2 3 4 Feeling uneasy in crowds, such as shopping or at a movie
44. 0 1 2 3 4 Never feeling close to another person
45. 0 1 2 3 4 Spells of terror or panic
46. 0 1 2 3 4 Getting into frequent arguments
47. 0 1 2 3 4 Feeling nervous when you are left alone
48. 0 1 2 3 4 Others not giving you proper credit for your achievements
49. 0 1 2 3 4 Feeling so restless you couldn’t sit still
50. 0 1 2 3 4 Feelings of worthlessness
51. 0 1 2 3 4 Feeling that people will take advantage of you if you let them
52. 0 1 2 3 4 Feelings of guilt
53. 0 1 2 3 4 The idea that something is wrong with your mind
APPENDIX I

WORKING ALLIANCE INVENTORY
(CLIENT VERSION)

1= never
2= rarely
3= occasionally
4= sometimes
5= often
6= very often
7= always

1. I feel uncomfortable with _______. 1 2 3 4 5 6 7
2. ______ and I agree about the things I will need to do in therapy to help improve my situation. 1 2 3 4 5 6 7
3. I am worried about the outcome of these sessions. 1 2 3 4 5 6 7
4. What I am doing in therapy gives me new ways of looking at my problems. 1 2 3 4 5 6 7
5. ______ and I understand each other. 1 2 3 4 5 6 7
6. ______ perceives accurately what my goals are. 1 2 3 4 5 6 7
7. I find what I am doing in therapy confusing. 1 2 3 4 5 6 7
8. I believe ______ likes me. 1 2 3 4 5 6 7
9. I wish ______ and I could clarify the purpose of our sessions. 1 2 3 4 5 6 7
10. I disagree with ______ about what I ought to get out of therapy. 1 2 3 4 5 6 7
11. I believe the time ______ and I are spending together is not spent efficiently. 1 2 3 4 5 6 7
12. ______ does not understand what I am trying to accomplish in therapy. 1 2 3 4 5 6 7
13. I am clear on what my responsibilities are in therapy. 1 2 3 4 5 6 7
14. The goals of these sessions are important for me. 1 2 3 4 5 6 7
15. I find what ______ and I are doing in therapy is unrelated to my concerns. 1 2 3 4 5 6 7
16. I feel that the things I do in therapy will help me to accomplish the changes that I want. 1 2 3 4 5 6 7
17. I believe ______ is genuinely concerned for my welfare. 1 2 3 4 5 6 7
18. I am clear as to what ______ wants me to do in these sessions. 1 2 3 4 5 6 7
19. ______ and I respect each other. 1 2 3 4 5 6 7
20. I feel that ______ is not totally honest about his/her feelings toward me. 1 2 3 4 5 6 7
21. I am confident in ______'s ability to help me. 1 2 3 4 5 6 7
22. ______ and I are working towards mutually agreed upon goals. 1 2 3 4 5 6 7
23. I feel that ______ appreciates me. 1 2 3 4 5 6 7
24. We agree on what is important for me to work on. 1 2 3 4 5 6 7
25. As a result of these sessions I am clearer as to how I might be able to change. 1 2 3 4 5 6 7
26. ______ and I trust one another. 1 2 3 4 5 6 7
27. ______ and I have different ideas on what my problems are. 1 2 3 4 5 6 7
28. My relationship with ______ is very important to me. 1 2 3 4 5 6 7
29. I have the feeling that if I say or do the wrong things, ______ will stop working with me. 1 2 3 4 5 6 7
30. ________ and I collaborate on setting goals for my therapy. 1 2 3 4 5 6 7
31. I am frustrated by the things I am doing in therapy. 1 2 3 4 5 6 7
32. We have established a good understanding of the kind of changes that would be good for me.
   1 2 3 4 5 6 7
33. The things that ________ is asking me to do don't make sense. 1 2 3 4 5 6 7
34. I don't know what to expect as the result of my therapy. 1 2 3 4 5 6 7
35. I believe the way we are working with my problem is correct. 1 2 3 4 5 6 7
36. I feel ________ cares about me even when I do things that he/she does not approve of.
   1 2 3 4 5 6 7
APPENDIX J

WORKING ALLIANCE INVENTORY
(Therapist Version)

1= never
2= rarely
3= occasionally
4= sometimes
5= often
6= very often
7= always

1. I feel uncomfortable with __________. 1 2 3 4 5 6 7
2. __________ and I agree about the steps to be taken to improve his/her situation. 1 2 3 4 5 6 7
3. I have some concerns about the outcome of these sessions. 1 2 3 4 5 6 7
4. My client and I both feel confident about the usefulness of our current activity in therapy. 1 2 3 4 5 6 7
5. I feel I really understand __________. 1 2 3 4 5 6 7
6. __________ and I have a common perception of her/his goals. 1 2 3 4 5 6 7
7. __________ finds what we are doing in therapy confusing. 1 2 3 4 5 6 7
8. I believe __________ likes me. 1 2 3 4 5 6 7
9. I sense a need to clarify the purpose of our session(s) for __________. 1 2 3 4 5 6 7
10. I have some disagreements with __________ about the goals of these sessions. 1 2 3 4 5 6 7
11. I believe the time __________ and I are spending together is not spent efficiently. 1 2 3 4 5 6 7
12. I have doubts about what we are trying to accomplish in therapy. 1 2 3 4 5 6 7
13. I am clear and explicit about what __________'s responsibilities are in therapy. 1 2 3 4 5 6 7
14. The current goals of these sessions are important for __________. 1 2 3 4 5 6 7
15. I find what __________ and I are doing in therapy is unrelated to his/her current concerns. 1 2 3 4 5 6 7
16. I feel confident that the things we do in therapy will help __________ to accomplish the changes that he/she desires. 1 2 3 4 5 6 7
17. I am genuinely concerned for __________'s welfare. 1 2 3 4 5 6 7
18. I am clear as to what I expect __________ to do in these sessions. 1 2 3 4 5 6 7
19. __________ and I respect each other. 1 2 3 4 5 6 7
20. I feel that I am not totally honest about my feelings toward __________. 1 2 3 4 5 6 7
21. I am confident in my ability to help __________. 1 2 3 4 5 6 7
22. We are working towards mutually agreed upon goals. 1 2 3 4 5 6 7
23. I appreciate __________ as a person. 1 2 3 4 5 6 7
24. We agree on what is important for __________ to work on. 1 2 3 4 5 6 7
25. As a result of these sessions __________ is clearer as to how she/he might be able to change. 1 2 3 4 5 6 7
26. __________ and I have built a mutual trust. 1 2 3 4 5 6 7
27. __________ and I have different ideas on what his/her real problems are. 1 2 3 4 5 6 7
28. Our relationship is important to __________. 1 2 3 4 5 6 7
29. __________ has some fears that if she/he says or does the wrong things, I will stop working with him/her. 1 2 3 4 5 6 7
30. __________ and I have collaborated in setting goals for these sessions. 1 2 3 4 5 6 7
31. _______ is frustrated by what I am asking her/him to do in therapy. 1 2 3 4 5 6 7
32. We have established a good understanding between us of the kind of changes that would be good for _______. 1 2 3 4 5 6 7
33. The things that we are doing in therapy don’t make much sense to _______. 1 2 3 4 5 6 7
34. _______ doesn’t know what to expect as the result of therapy. 1 2 3 4 5 6 7
35. _______ believes the way we are working with her/his problem is correct. 1 2 3 4 5 6 7
36. I respect _______ even when he/she does things that I do not approve of. 1 2 3 4 5 6 7
APPENDIX K

THERAPIST RATING SCALE

1 = strongly agree  
2 = agree  
3 = disagree  
4 = strongly disagree

1. The patient was cooperative with the tasks of therapy. 1 2 3 4
2. The patient seemed genuinely receptive to therapy. 1 2 3 4
3. The patient seemed motivated to change. 1 2 3 4
4. The patient considered the therapy sessions to be beneficial (regardless of actual change in symptomatology). 1 2 3 4
5. The patient seemed to think about what was discussed in the sessions outside the therapy sessions. 1 2 3 4
6. The patient seemed open to suggestions during the therapy sessions. 1 2 3 4
7. The patient did not cancel appointments frequently and when he/she did cancel, sufficient notification was given. 1 2 3 4
8. The patient did not miss appointments. 1 2 3 4
REFERENCES


Steele, D. J., Jackson, T. C., & Gutmann, M. C. (1990). Have you been taking your pills? The Journal of Family Practice, 30, 294-299.


